

India
OVERWEIGHT *(Initiating coverage)*

Oil & Gas – Overall

Positioned for demand recovery

Highlighted Companies

Reliance Industries

Reduce, TP 1,360, Rs2,026.9 close

We initiate on RIL with a Reduce rating and a SOP-based TP of Rs1,360. We believe the stock is too expensive as it is based on the acquisition of minority stakes by private equity/strategic investors in its businesses.

Indian Oil Corp

Add, TP Rs135, Rs78.4 close

We initiate with an Add rating and TP of Rs135 based on 1.1x Sep FY22F P/BV, 16% ROE in FY23F. We expect a recovery in profits led by demand growth from 2HFY21F and refining margins from FY22F.

GAIL India

Add, TP Rs140, Rs83.4 close

We initiate with an Add rating and TP of Rs140 based on 1.1x Sep FY22F P/BV, 12% ROE in FY23F. A recovery in global oil prices would allay concerns on losses on gas trading and lead to stock re-rating.

- The sector is currently at trough valuations due to low oil/gas pricing and refining margins along with GOI inability to execute a strategic sale of BPCL.
- We are Overweight on the sector with an Add on refiners BPCL/HPCL/IOC due to oil demand recovery and on GAIL/ONGC/OIL due to higher oil prices.
- We have a Reduce rating on Reliance Industries due to its high valuations.

Optimistic on oil price

Broadly in line with the Brent oil futures curve, we forecast price at US\$40/45/50 per barrel over FY21F/22F/23F. However, we believe, domestic gas prices are likely to remain depressed unless the current pricing formula is amended. We forecast gas prices at US\$2.3/2.1/3 per mmbtu over FY21F/22F/23F. We expect no material increase in domestic oil and gas production from ONGC and OIL over FY21F/22F/23F.

Focus on integrated margins

Global gross refining margin (GRM) trends remain extremely weak on the back of poor oil demand recovery which will negatively impact the oil marketing companies (OMCs) as well as Reliance Industries, in our view. However, the OMCs have focused on integrated margins by raising marketing margins (MMs) on auto fuels to 25% over FY20 average levels in 2QFY21. Note that 1QFY21 MMs were 68% above the FY20 average to compensate for the large inventory losses in 4QFY20.

Demand recovery in 2HFY21F would be critical

We expect India oil demand to turn positive yoy in 2HFY21F as Covid-19 related lockdowns cease, which would result in better sales volumes and higher utilisation levels for the OMCs. This would lower the current high inventory levels and result in a sharp decline in debt levels. Note that subsidy on cooking fuels has virtually disappeared and subsidy dues from the India government (GOI) should drop to historically low levels in FY21F, lowering working capital, in our view.

Buy on expectations of demand recovery

The OMCs (BPCL/HPCL/IOC) have managed to improve auto fuel MMs to partly compensate for the refining pain. Our Add ratings on the OMCs as well as Castrol reflects our expectations of recovery in domestic demand in 2HFY21F. We expect oil prices to rise and hence have Add ratings on the beneficiaries (GAIL/ONGC/OIL). We find PLNG attractively valued given the defensive nature of its net profits. Lower than expected oil/gas prices, refining margins, and domestic oil demand are key risks for the sector.

Summary Valuation Metrics

P/E (x)	Mar-21F	Mar-22F	Mar23F
Reliance	30.60	22.10	19.60
Indian Oil	6.20	4.40	3.70
GAIL	6.00	6.30	5.40
P/BV (x)	Mar-21F	Mar-22F	Mar23F
Reliance	2.00	1.80	1.70
Indian Oil	0.60	0.60	0.50
GAIL	0.70	0.60	0.60
Dividend yield	Mar-21F	Mar-22F	Mar23F
Reliance	0.35%	0.37%	0.39%
Indian Oil	6.38%	9.57%	15.31%
GAIL	4.79%	4.79%	4.79%

Analyst(s)



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Reliance Industries valuation is unattractive

RIL's share price rally has been driven by the valuations of its businesses, based on minority stakes being acquired or to be acquired by private equity/strategic investors. We prefer not to depend on external valuations and use our own estimates to get to our SOP-based TP of Rs1,360.

Figure 1: Valuation Summary

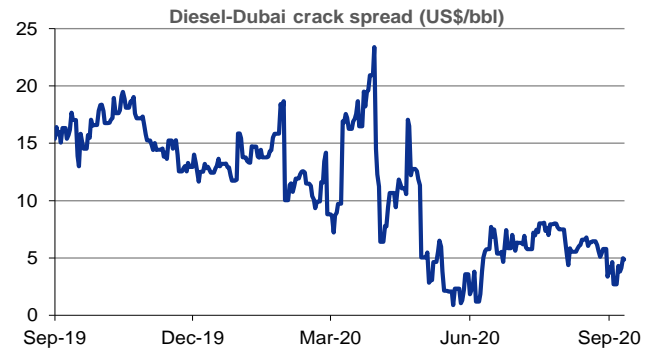
Company Names	Bloomberg Ticker	Rating	Closing Price	Target Price	P/E (x)		P/BV (x)	
					FY21F	FY22F	FY21F	FY22F
Reliance Industries	RIL IN	REDUCE	2,027	1,360	30.6	22.1	2.0	1.8
Indian Oil	IOCL IN	ADD	78	135	6.2	4.4	0.6	0.6
Bharat Petroleum	BPCL IN	ADD	342	450	8.7	6.5	1.6	1.4
Hindustan Petroleum	HPCL IN	ADD	180	260	6.4	4.7	0.8	0.7
Oil & Natural Gas	ONGC IN	ADD	64	107	9.8	6.2	0.3	0.3
Oil India	OINL IN	ADD	86	155	5.9	4.5	0.3	0.3
GAIL India	GAIL IN	ADD	83	140	6.0	6.3	0.7	0.6
Petronet LNG	PLNG IN	ADD	230	300	11.7	10.7	2.9	2.6
Castrol India	CSTRL IN	ADD	115	150	24.4	14.8	7.2	6.6

SOURCE: EIP RESEARCH ESTIMATES, COMPANY REPORTS, BLOOMBERG PRICED AS AT CLOSE OF 29TH OCT 2020

KEY CHARTS

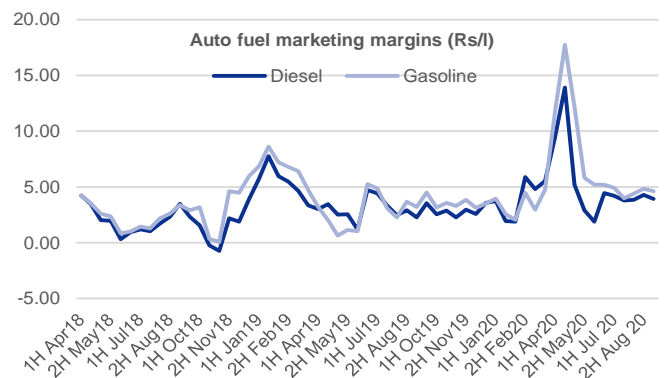
Refining margins, especially for diesel, have disappointed

The rollout of the International Maritime Organisation's (IMO) new fuel specifications from Jan 2020 did not lead to any sharp rise in diesel spreads as the refining industry managed to implement the transition relatively smoothly. The outbreak of Covid-19 has led to a sharp fall in oil demand negatively impacting margins on virtually all refined products. Margins for diesel (the largest product for Indian refiners) remain weak. While jet fuel margins remain in negative territory given the absence of demand recovery for airline travel, diesel margin recovery also remains difficult given the ability of refiners to partially move production from jet fuel to diesel.



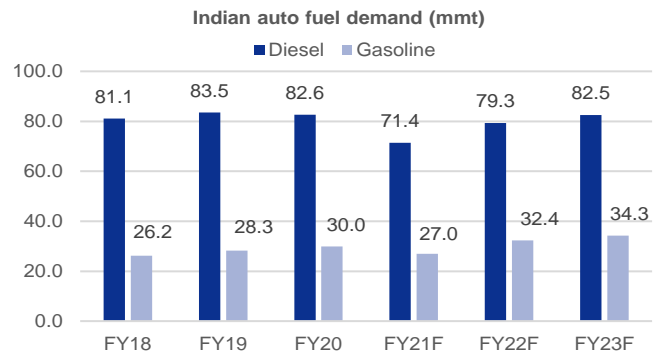
Positive surprise from auto fuel marketing margins

Post the official deregulation of auto fuels in Oct 2014, refining margins remained strong in FY16-18, and the OMCs largely maintained their auto fuel MMs at earlier historical (regulated) levels. However, based on the pricing data, it has been clear that the OMCs have been trying to target some level of integrated margins (combined refining and marketing) for some quarters. In FY20, MMs were around 25% above the FY16-18 average levels as refining margins were under pressure. So even in 2QFY21 when refining margins hit new lows, we estimate MMs averaged around 25% above FY20 average levels.



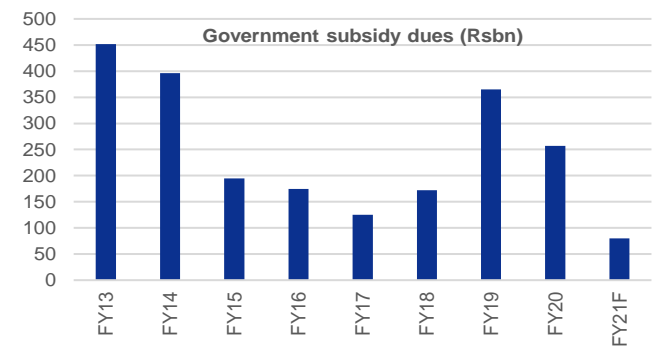
Slow recovery in demand

Indian diesel demand dropped by 1% yoy in FY20 to 82.6mmt. We expect a further sharp fall to 71.4mmt in FY21F, and then recovery to 79.3mmt in FY22F and to 82.5mmt in FY23F i.e. FY23F still not reaching actual FY19 levels. We are more optimistic on gasoline whose volumes increased by 6% to 30mmt in FY20. While we expect a 10% yoy decline in FY21F, volumes should recover to 114% of actual FY20 levels by FY23F. However, volume growth for the OMCs will be lower than industry growth due to loss of market share to new private players.



Subsidy issue no longer a concern

For the past near 20 years, valuations for the entire basket of government-owned oil companies have been constrained by fears of subsidy losses on cooking fuels borne by the OMCs and their possible sharing by upstream companies. A combination of a sharp fall in oil price and some pricing action by the government has ensured that this concern is no longer valid. The government's subsidy dues to the OMCs dropped sharply from Rs365bn in Mar 2019 to Rs257bn in Mar 2020, and we expect a further fall to Rs80bn in Mar 2021F.



SOURCES: EIP RESEARCH ESTIMATES, PETROLEUM PLANNING AND ANALYSIS CELL, BLOOMBERG, COMPANY REPORTS

Figure 2: India oil/gas valuation comparisons

Company	Bloomberg Ticker	Recom.	Closing Price (Local Curr)	Target Price (Local Curr)	MktCap (US\$bn)	PER (x)			P/BV (x)			ROE			EV/EBITDA (x)			Dividend Yield		
						FY21F	FY22F	FY23F	FY21F	FY22F	FY23F	FY21F	FY22F	FY23F	FY21F	FY22F	FY23F	FY21F	FY22F	FY23F
Reliance Industries	RIL IN	REDUCE	2026.9	1360.0	180.0	30.6	22.1	19.6	2.0	1.8	1.7	8.0%	6.0%	5.0%	16.1	11.6	10.4	0.3%	0.4%	0.4%
Indian Oil Corp	IOCL IN	ADD	78.4	135.0	10.0	6.2	4.4	3.7	0.6	0.6	0.5	12.0%	15.0%	16.0%	5.3	4.4	3.9	6.4%	9.6%	15.3%
Bharat Petroleum	BPCL IN	ADD	341.8	450.0	10.0	8.7	6.5	5.9	1.6	1.4	1.2	20.0%	24.0%	23.0%	6.8	6.1	6.2	3.8%	5.3%	6.4%
Hindustan Petroleum	HPCL IN	ADD	179.6	260.0	3.7	6.4	4.7	4.3	0.8	0.7	0.6	13.0%	16.0%	16.0%	6.5	5.2	4.2	5.6%	7.8%	7.8%
Oil & Natural Gas	ONGC IN	ADD	64.4	107.0	10.9	9.8	6.2	3.8	0.3	0.3	0.3	4.0%	6.0%	9.0%	4.1	3.3	2.4	3.1%	6.2%	10.9%
Oil India	OINL IN	ADD	85.5	155.0	1.3	5.9	4.5	3.8	0.3	0.3	0.3	6.0%	7.0%	8.0%	-2.6	-2.2	-2.1	1.2%	2.3%	4.7%
GAIL India	GAIL IN	ADD	83.4	140.0	5.1	6.0	6.3	5.4	0.7	0.6	0.6	12.0%	11.0%	12.0%	4.8	4.7	3.9	4.8%	4.8%	4.8%
Petronet LNG	PLNG IN	ADD	230.4	300.0	4.7	11.7	10.7	10.1	2.9	2.6	2.4	26.0%	26.0%	25.0%	7.8	7.2	6.7	5.9%	6.5%	6.9%
Castrol India	CSTR IN	ADD	114.7	150.0	1.5	24.4	14.8	13.0	7.2	6.6	6.0	32.0%	47.0%	49.0%	15.2	9.3	8.1	2.6%	4.4%	5.2%

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS, BLOOMBERG (AS ON 29TH OCT 2020)

Positioned for demand recovery

Optimistic on oil price

Brent crude oil was traded at around US\$55-60/bbl in early 2020 prior to the Covid-19 outbreak. Given the disruptions in economic activity arising from Covid-19, Brent oil plunged in early Mar 2020, especially due to initial signals from Saudi Aramco that it would raise supply. As the full implications of the global economic lockdowns became apparent, the OPEC+ group started implementing a production cut of nearly 10m b/d from May 2020.

Crude oil prices remain extremely volatile as they handle the twin forces of demand and supply. While demand dropped by nearly 25-30% in Apr/May 2020 due to countrywide lockdowns, the supply response was initially late. But by Jun 2020, Brent had rallied sharply from US\$24/bbl at the start of May 2020 to nearly US\$40/bbl i.e. a rally of 67% in a month. Since then, it has traded in a relatively limited band of US\$40-45/bbl, with every fall driven by fears of further weakness in global economic growth on the back of another outbreak of Covid-19.

We have no special insight on the absolute level of oil prices and have always relied on the futures curve to forecast prices. Accordingly, we forecast price at US\$40/45/50 per barrel over FY21F/22F/23F.

The domestic gas pricing policy announced by the Indian government in Oct 2014 linked the domestic gas price (currently applicable to production from all nominated fields) 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 the formula resulted in a relatively lower gas price. The current gas price (applicable for 2HFY21F) is US\$2/mmbtu on a net calorific value (NCV) basis.

Two of the four benchmarks (HH and NBP) have a futures market and using this, we forecast gas prices at US\$2.3/2.1/3 per mmbtu over FY21F/22F/23F. These prices would be very low by international standards. On 9 Oct 2020, ONGC's CEO mentioned at its AGM that the company expects a loss of Rs60bn-70bn in its gas business as gas prices are way below its cost of production of US\$3.5-3.7/mmbtu. He mentioned that the government had formed a committee to look into the pricing mechanism and there was talk of a floor price.

Focus on integrated margins

Refining is bearish in the short term

There was a sharp downturn in GRMs immediately post-Covid-19 outbreak, given the drop in global oil demand due to lockdowns in various countries. However, despite relaxation of the lockdowns in most countries, GRMs continued to remain extremely weak in 2QFY21 as well. While jet fuel margins remain in negative territory given the absence of demand recovery for airline travel, diesel margin recovery also remains difficult given the ability of refiners to partially move production from jet to diesel. Overall, all product cracks remain under pressure. The worst impact has been on more complex refiners like Reliance Industries (RIL) due to a collapse in crude differentials. The spread between Arab Light and Arab Heavy was US\$0.30/bbl in 2QFY21, the lowest in the past 20 years.

For GRMs to improve materially over recent low levels, there needs to be some recovery in oil demand in the short term and, perhaps, more refinery closures in the long term.

Contrary to the industry trend, we expect a sharp uplift in GRMs of the refineries located in the North East, as they enjoy a tax benefit linked to the level of excise duties (which the government raised by near 100% on auto fuels earlier this year). Consequently, for separate unlisted companies like Numaligarh Refinery (NRL, subsidiary of BPCL), we expect the GRM benefit due to tax benefit to rise from US\$16/bbl in FY20 to around US\$32/bbl over FY21-23F. This benefit will also be

enjoyed by three refineries on IOC's own balance sheet and will be reported as part of IOC's overall GRM.

Figure 3: Reported GRMs vs Singapore GRMs and product cracks (US\$/bbl)

	1QFY20	2QFY20	3QFY20	4QFY20	1QFY21	2QFY21
Singapore Cracking GRM	3.51	6.49	1.60	1.09	-0.94	-0.50
Singapore Simple GRM	0.95	3.84	-5.93	-2.06	-1.96	-1.20
<u>Spreads over Dubai crude</u>						
Diesel	12.93	15.90	14.89	13.84	6.32	5.86
Jet Fuel	10.62	14.19	12.69	11.17	0.65	0.80
Naphtha	-8.50	-7.68	-5.29	-2.88	-3.80	0.34
Furnace Oil	-8.08	-5.49	-21.98	-10.46	-3.97	-5.53
Gasoline	4.92	6.64	7.18	6.90	-3.18	1.04
LPG	-22.14	-27.65	-26.09	-6.02	-1.87	-12.83
<u>Crude differentials</u>						
Arab Light - Heavy Differential	1.74	1.54	2.31	3.13	0.46	0.30
Brent-Dubai differential	1.24	1.07	1.19	-0.20	-0.06	0.24
Brent-Maya differential	6.50	5.24	9.53	9.29	7.05	3.63
<u>Reported GRMs</u>						
IOC	4.69	1.28	4.09	-9.64	-1.98	
HPCL	0.75	2.83	1.79	-1.23	0.04	
BPCL	2.81	3.38	3.23	0.75	0.39	
<u>Inventory impact</u>						
IOC	1.11	-1.70	2.11	-17.90	-6.40	
HPCL	-2.56	0.28	0.34	-10.62	0.90	
BPCL	-0.87	-0.44	1.03	-6.69	-1.54	
<u>GRMs ex-inventory</u>						
IOC	3.58	2.98	1.98	8.26	4.42	
HPCL	3.31	2.55	1.45	9.39	-0.86	
BPCL	3.68	3.82	2.20	7.44	1.93	
IOC CP GRM	2.27	4.00	2.15	2.15	4.27	
SOURCES: EIP RESEARCH, REUTERS, BLOOMBERG, COMPANY REPORTS						

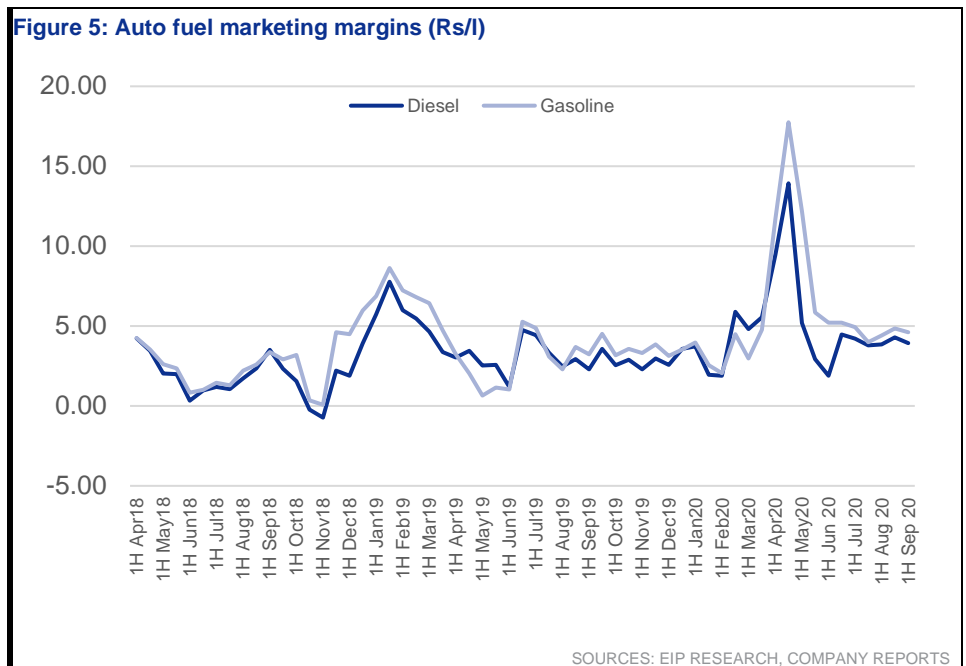
Figure 4: Impact of North East tax benefit for NRL

Y/E Mar	2019	2020	2021F	2022F	2023F
NRL GRM (US\$/bbl)	26.50	23.62	37.33	39.25	40.99
NRL NE benefit (US\$/bbl)	15.2	16.0	32.3	31.2	32.0
ROE	37.9%	28.2%	51.9%	43.6%	34.8%
SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS					

Sharp rise in marketing margins to counter GRM weakness

Based on pricing data, it has been clear to us that the OMCs have been trying to target some level of integrated margins (combined refining and marketing) for some quarters. Post the official deregulation of auto fuels in Oct 2014, refining margins remained strong in FY16-18, and the OMCs largely maintained their auto fuel MMs at a steady level of around Rs1.55/l for diesel and Rs2.5/l for gasoline on an annual basis.

However, in the past six quarters or so, when refining margins were under pressure, the OMCs resorted to sharply raising MMs. In FY20, MMs were around 25% above the earlier historical (FY16-18) average levels, as per our estimates. Actual MMs rose further in the past two quarters. In 1QFY21, the OMCs kept retail prices of auto fuels unchanged for around five weeks to recoup the large inventory losses they incurred in 4QFY20. Hence, we estimate 1QFY21 MMs were 68% above average FY20 levels, but we had expected this to be a one-off. However, even post-normalisation back to the trend of daily price change, MMs in 2QFY21 averaged around 25% above FY20 average levels. This clearly indicates that the OMCs were targeting some level of integrated margins. We believe that MMs will remain at current high levels as long as GRMs remain depressed.



We expect demand recovery in 2HFY21F

Aside from the poor GRMs, the OMCs have also been hit by the negative trend in domestic oil demand. The monthly yoy trend in Indian oil demand was -48.7% in Apr 2020, -19.4% in May 2020 and -9% in Jun 2020. Despite some lifting of lockdowns, oil demand declined yoy by 12.1% in Jul 2020 and 16% in Aug 2020. However, Sep 2020 has turned out to be better for oil demand. Diesel sales volumes dropped by only 6% yoy (rising 13.2% over the prior month), while gasoline volumes rose by 3.3% on a yoy basis.

Aside from impacting sales volumes of the OMCs, this negative trend in oil demand has also forced them to run their refineries at lower utilisation levels. Both BPCL and IOC are largely self-sufficient in terms of their refining capacity. HPCL, on the other hand, is quite short of products and has been better placed in terms of not having to materially cut the operating rate of its refineries. OMCs have opted to lower their utilisation rates rather than engage in higher exports, where pricing is lower.

Given the sharp downturn in oil demand, inventory levels of the OMCs have also remained above normal levels, raising working capital levels and short-term debt.

Given the encouraging trend in Sep 2020, we expect India oil demand to recover in 2HFY21F. Note that sales volume growth in auto fuels for the OMCs will remain below industry levels as we expect the market share of private sector players like Reliance Industries to rise over FY21-23F.

Recovery in oil demand in 2HFY21F would result in better sales volumes and higher refinery utilisation levels for the OMCs. This would also lower the current high inventory levels and result in a sharp decline in debt levels. Bloomberg has reported on 16 Oct 2020 that based on sales of the OMCs, in 1H Oct 2020, demand for gasoline was up 1.6% yoy while diesel was up by 8.8% yoy (sharp swing of 24.3% mom).

Figure 6: Impact of private retailers on OMC's auto fuel sales

Year to 31 Mar	2019	2020	2021F	2022F	2023F
Diesel					
<u>Sales (mmt)</u>					
BPCL	20.42	19.86	17.03	18.79	19.44
HPCL	18.12	17.69	15.17	16.74	17.31
IOC	37.08	36.18	31.02	34.24	35.41
Private companies	7.90	8.85	8.21	9.51	10.31
Total	83.52	82.58	71.43	79.29	82.46
<u>Market shares</u>					
BPCL	24.4%	24.0%	23.8%	23.7%	23.6%
HPCL	21.7%	21.4%	21.2%	21.1%	21.0%
IOC	44.4%	43.8%	43.4%	43.2%	42.9%
Private companies	9.5%	10.7%	11.5%	12.0%	12.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Diesel OMC sales (mmt)	75.62	73.73	63.22	69.77	72.15
Growth for industry	3.0%	-1.1%	-13.5%	11.0%	4.0%
Growth for OMCs	1.7%	-2.5%	-14.3%	10.4%	3.4%
Gasoline					
<u>Sales (mmt)</u>					
BPCL	7.43	7.81	6.94	8.27	8.66
HPCL	6.94	7.26	6.45	7.68	8.05
IOC	11.60	12.15	10.79	12.86	13.48
Private companies	2.32	2.76	2.81	3.56	4.12
Total	28.28	29.98	26.98	32.37	34.32
<u>Market shares</u>					
BPCL	26.3%	26.1%	25.7%	25.5%	25.2%
HPCL	24.5%	24.2%	23.9%	23.7%	23.5%
IOC	41.0%	40.5%	40.0%	39.7%	39.3%
Private companies	8.2%	9.2%	10.4%	11.0%	12.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Gasoline OMC sales (mmt)	25.97	27.22	24.17	28.81	30.20
Growth for industry	8.1%	6.0%	-10.0%	20.0%	6.0%
Growth for OMCs	6.7%	4.8%	-11.2%	19.2%	4.8%

SOURCE: EIP RESEARCH ESTIMATES, PETROLEUM PLANNING AND ANALYSIS CELL. COMPANY REPORTS

Subsidy is no longer a concern

Subsidy on cooking fuels used to be the historical negative factor for the OMCs, as rising subsidy dues from the government hit the OMC balance sheets, forcing them to seek short-term debt. This is no longer the case. Kerosene is no longer subsidised, while the LPG subsidy has been virtually nil in recent months due to low international prices. Consequently, we expect OMC subsidy dues to drop sharply to Rs80bn in FY21F, compared with Rs257bn in Mar 2020 and Rs365bn in Mar 2019, thereby improving working capital levels.

Figure 7: Quarterly subsidy on cooking fuels (Rs bn)

	1QFY20	2QFY20	3QFY20	4QFY20	1QFY21
Brent US\$/bbl	68.5	61.8	62.7	50.8	31.6
INR/USD	69.5	70.4	71.2	72.4	75.9
Kerosene	9.4	4.1	3.0	1.8	0.0
LPG DBTL	79.2	33.3	41.0	72.9	14.6
LPG PMUY	1.9	9.8	0.8	0.1	0.0
Grand total	90.5	47.1	44.8	74.8	14.6

SOURCES: EIP RESEARCH ESTIMATES, PETROLEUM PLANNING AND ANALYSIS CELL, BLOOMBERG

Figure 8: Subsidy payments due from government (Rs bn)

Y/E 31 Mar	2017	2018	2019	2020	2021F
IOC	77	94	191	133	50
BPCL	24	39	87	60	15
HPCL	24	39	87	64	15
Total	125	172	365	257	80

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

Buy on expectations of demand recovery

Valuations for most government-owned stocks in the sector remain close to trough levels, reflecting the extremely negative near-term trends in oil and gas demand (with resultant impact on global oil/gas prices and on refining and petrochem margins). Delay in government plans to execute strategic sale of BPCL has also been a negative development, in our view. However, we note that OMCs have managed to improve auto fuel MMs to partly compensate for the refining pain.

We expect domestic demand to recover in 2HFY21F, which will result in higher sales volumes for the OMCs and even lubricant players like Castrol. Higher volumes would reduce inventory of the OMCs and hence debt levels. Over FY22-23F, a recovery in GRMs would be a key re-rating catalyst. We initiate coverage with Add ratings on IOC (IOCL IN, TP Rs135), BPCL (BPCL IN, TP Rs 450), HPCL (HPCL IN, TP Rs 260) and Castrol (CSTRL IN, TP Rs150).

Given our expectations of a rise in Brent crude prices, we initiate with Add ratings on the exploration and production (E&P) players – ONGC (ONGC IN, TP Rs107) and OIL (OINL IN, TP Rs155) as well as on GAIL (GAIL IN, TP Rs140), as the latter's gas trading earnings are massively leveraged to higher oil prices.

We initiate with Add rating on PLNG (PLNG IN, TP Rs300) as we find valuations attractive given the defensive nature of its earnings and attractive dividend yield (5.9%). PLNG derives its earnings mostly from take or pay contracts and hence is relatively unimpacted from the volatility in global oil and gas prices.

The main risks to our sector view are as follows:

Lower oil/gas prices and margins: Our Add ratings on the two E&P players (ONGC and OIL) and GAIL are completely underpinned by our bullish forecasts of the global crude oil price. We expect the Brent oil price to rise from an average of US\$40/bbl in FY21F to US\$45/bbl in FY22F and US\$50/bbl from FY23F. Since E&P companies are valued on their reserves, the long-term oil price (US\$50/bbl)

is what matters the most. Similarly for GAIL, since its US LNG contracts are for 20 years, long-term oil prices matter more than short-term. As explained earlier, we base our forecasts on the futures curve. The current expectations of rising oil price are based on hopes of demand recovery in a post Covid world and curtailment of supply due to financial strains faced by oil producers, in our view. If recovery in oil demand is lower than current expectations, then oil prices may remain lower than our estimates, negatively impacting our valuation.

For OMCs (BPCL/HPCL/IOC), it is refining and marketing margins that matter more than just the oil price. For these companies, the crude oil price is largely a pass-through and hence irrelevant. However, it becomes relevant only when it starts going up so much that it becomes difficult to pass on the cost to consumers due to largely government political pressure. So broadly the risk to OMCs as well as Castrol is if oil prices go well above their historical trading range (say above US\$60-70/bbl). That high level of price could well result in negative impact on demand and marketing margins. Similar to the oil price, we have assumed a rise in refining margins over FY21-23F. The risk for the OMCs is that the rise is far lower than our expectations mainly due to lower uptick in global demand.

Lower demand for oil products: Operations for the OMCs as well as Castrol critically depend on the level of demand for oil products, which in turn largely depend on overall levels of economic activity. For OMCs, the level of demand is important as it is related to utilisation level of its refineries and inventories and ultimately to the level of short-term debt. Indian oil demand growth has been negative yoy from Mar 2020 to Sep 2020 due to the impact of Covid-19. The silver lining has been that demand appears to be recovering in recent months. We have assumed demand growth to turn positive yoy from 2HFY21F and a poor demand recovery would be a key risk for the OMCs and Castrol.

Reliance valuation is unattractive

Over the last six months, RIL's share price has gone up 44% while the Bombay Stock Exchange Sensex is up by 26%. This may seem surprising given the pressure that the business has been under. As explained earlier, both refining and petchem margins have been at several-year lows in the last six months. While the retail business may hold promise, we believe the current reality is that it is struggling given the Covid-19 impact on the non-grocery operations. Even in telecom, we believe the increase in average revenue per user (ARPU) is yet to materialise. As such, we believe the share price rally is purely being driven by private equity and strategic investors acquiring or being in talks to acquire a minority stake in RIL's businesses at (in our view) generous valuations.

In Aug 2019 RIL announced it was in discussions to sell a 20% stake in its refining and petrochem business to Saudi Aramco (ARAMCO AB, NR, CP SAR 33.95) for an enterprise value (EV) of US\$75bn. That deal has not progressed and in Jul 2020, RIL stated that it was no longer pursuing this deal.

In 1HFY21, RIL raised Rs1520bn by selling a 32.97% stake in Jio Platforms (its subsidiary which owns its digital business). This stake was sold to strategic investors like Facebook (FB US, NR, CP US\$268) and Google (GOOGL US, NR, CP US\$1,510) for an EV of US\$63bn and to private equity investors for an EV of US\$67bn.

In Sep/Oct 2020, RIL also sold a 8.48% stake in its retail business to private equity investors for an EV of US\$56bn. However, the bigger news reported by The Economic Times on 10 Sep 2020 was that RIL has offered to sell a 40% stake in the retail business to Amazon (AMZN US, NR, CP US\$3,163) at an EV of US\$50bn.

In principle, we believe it would be inappropriate to base our valuations on the EV implied by these transactions. Strategic investors base their decisions on different criteria, rather than just the expected cash flows from the businesses being acquired (virtually the sole criteria for minority investors). So, for example, a Google or a Facebook or Aramco would consider the impact of the acquisition on their own operations while making investment decisions. The private equity model

may work on the high-risk principle of getting a few winners right (even at the cost of losing money on others). We believe such risk-taking view is inappropriate for minority investors.

Even if we combine these implied valuations (US\$75bn for refining/chemicals, US\$67bn for digital, now 67% owned and US\$56bn for retail), RIL's enterprise value would be US\$173bn. Assuming zero net debt (which is not the case if vendor financing and spectrum liability are considered), implied market cap would be US\$173bn. The stock is already trading 5% above this implied market cap, implying that RIL has sold below fair value. We prefer not to outsource valuation and use our own estimates for earnings and cash flow. We initiate with a Reduce rating (RIL IN, TP Rs 1,360).

Stock valuations and risks

Reliance Industries

We value RIL on a SOP basis given that it has built a digital and retail business in recent years in addition to its historical businesses of oil/gas, refining and petchem. Our EPS estimates and valuation are based on net shares outstanding (post rights issue) of 6.349m, i.e. excluding treasury shares of 412.8m. Given that funds from the rights issue will partially come in FY22F, we have initially valued the company using Mar 2022F net debt and FY23F EBITDA estimates. Based on peer group valuations, we assign EV/EBITDA multiples of 7x for the commodity businesses (petchem/refining/E&P), 8x for digital and 19x for retail to the FY23F EBITDA estimates of each segment, to arrive at the enterprise value. We have adjusted for our estimate of debt for the telecom fibre assets (an off-balance liability) and the debt related to the one-third minority interest in Jio Platforms. Thus, our equity valuation works out to Rs1,429 as on Mar 2022F. Discounting at 10% brings down the 12-month forward target price of Rs1,360 (Sep 2021F valuation).

The main risk to our valuation is further stake sales by RIL in the retail business to a strategic investor like Amazon which is already a prominent online retail player in the Indian market. That could materially re-rate RIL's existing retail business as it would remove a potential competitor and improve RIL's retail market share. Our estimates assume that most of the revenue and profits in the digital business come from the traditional telecom businesses of mobile telephony and home broadband. The upside risk is if RIL is able to monetise its suite of digital apps to build a truly new stream of digital revenue, in addition to its telecom revenue.

Figure 9: Sum-of-parts valuation on FY23F estimates

Sector	EBITDA Rs bn	RIL		Valuation		
		stake %	EV/EBITDA (x)	(Rsbn)	US\$bn	s/share
Petrochemicals	306	100.0%	7	2,110	28	332
Refining & Marketing	243	100.0%	7	1,676	22	264
E&P	29	100.0%	7	200	3	31
Digital services	585	67.0%	8	3,137	42	494
Retail	184	94.5%	19	3,280	44	517
Total enterprise value				10,403	139	1,638
Consolidated debt incl vendor financing -Mar22				-682	-9	-108
Adjustment for debt in JPL (minority interest)				118	2	19
Adjustment for Digital Fibre SPV debt				-763	-10	-120
Target equity value for Mar22				9,075	121	1,429
Target equity value discounted at 10% for Sep21				8,643	115	1,360

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS

The OMCs

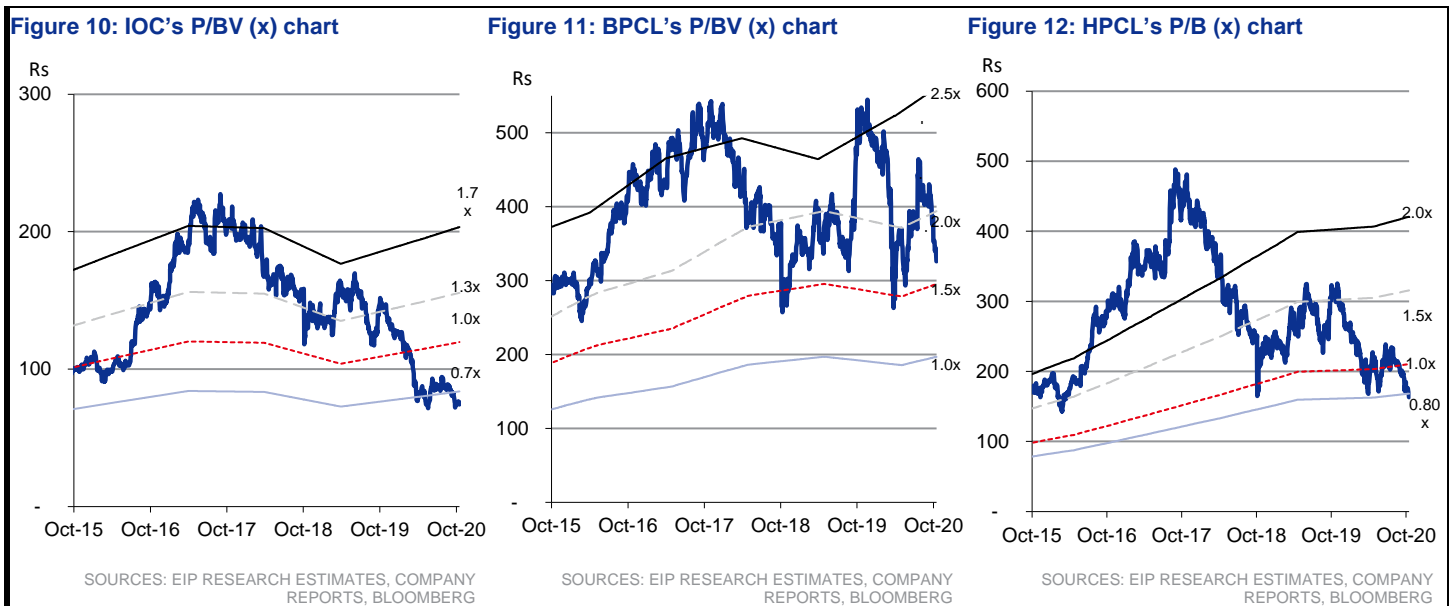
We value the OMCs on P/BV as net profit in this business are volatile due to wide fluctuations in GRMs and MMs. Post the sharp corrections over the past 12 months, valuations for IOC/HPCL on a P/BV basis are now down to their lowest levels (0.7/0.8x Mar 2021F) since sector deregulation in Oct 2014. Even BPCL valuations have corrected in recent weeks due to further delays in government plans to execute a strategic sale of its holdings.

We value IOC at Rs135/share based on 1.1x Sep 2022F P/BV, 16% ROE in FY23F. Its valuations have been capped by prospects of an additional government stake sale, in our view. We value HPCL at Rs260/share based on 1x Sep 2022F P/BV, 16% ROE in FY23F. Its high off-balance sheet gearing limits its valuation, in our view. We value BPCL's refining and marketing business at Rs428/share based on 1.7x Sep 2022F P/BV, 23.5% ROE in FY23F. We add Rs22/share as option value for its Mozambique gas assets (valuing reserves at US\$2/boe) taking the total valuation to Rs450.

We believe the current low valuation is largely cyclical and driven by poor margins in refining and petchem on the back of drop in demand. Hence, it could reverse or at least improve relative to recent trough levels as demand picks up in 2HFY21F.

Main risks to our rating are:

- Any sharp spurt in global oil prices which could force the government to indirectly control domestic retail prices, thereby squeezing marketing margins.
- No major improvement in domestic oil demand and refining margins.
- Government inability to execute BPCL strategic sale would also negatively impact sentiment for all three OMCs.



The E&Ps

Valuations for the two exploration and production companies, ONGC and OIL, have corrected sharply due to poor growth prospects for production, a dip in global oil prices (not just for spot but also future expectations) and the current policy on domestic gas which has resulted in very low prices for ONGC/OIL.

Based on the Brent futures curve, we are optimistic on oil prices rising to US\$50/bbl from FY23F. The long-term oil price assumption (US\$50/bbl) is what matters for valuation as the core E&P business is valued based on a DCF model of its reserves. However, in addition to their domestic reserves, both ONGC and

OIL have stakes in other businesses and, hence, we use a SOP-based target price for both companies.

As mentioned earlier, reports by The Economic Times dated 28 Sep 2020 indicate the government has formed a committee to look into the issue of a floor price for domestic gas which, if implemented, could be positive for the E&P companies (not considered in our valuation).

Our SOP-based target price is Rs107 for ONGC which values the domestic reserves on a DCF basis using 11% discount rate and applies a 20% to the market price for its sizeable investments in its subsidiary (HPCL) and other oil/gas companies (IOC/GAIL).

Figure 13: ONGC SOP valuation

	Valuation		per share Reserves Value		
	Rs m	US\$m	Rs	m boe	US\$/boe
Valuation of domestic P1 reserves	16,79,764	22,397	134	4,842	4.6
Valuation of overseas P1 reserves	4,20,744	5,610	33		
Subsidiary HPCL shares at 20% discount to market price	1,24,615	1,662	10		
Investments (IOC/GAIL/MRPL) at 20% discount to market price	1,83,111	2,441	14		
Net cash/(debt) (excluding abandonment deposits)	-10,57,471	-14,100	-84		
Target price			107		

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS, BLOOMBERG

Our SOP-based target price is Rs155 for OIL which values the domestic reserves on a DCF basis using 11% discount rate, the Russian E&P assets at cost, the Mozambique gas reserves at US\$2/boe, the stake in Numaligarh Refinery (Unlisted) at its book value and applies a 20% to the market price for its sizeable investments in IOC.

Figure 14: Oil India SOP valuation

	Rsm	Rs/share	Value (US\$/boe)
DCF value of domestic proved reserves	97,909	90	4.5
Net cash	-81,067	-75	
NRL stake at book value	22,378	21	
IOC stake at discount to market value	34,186	31	
Mozambique valuation	22,500	21	
Russian assets at cost	72,225	67	
Total	1,68,131	155	

SOURCES: EIP RESEARCH ESTIMATES, COMPANY REPORTS, BLOOMBERG

The risks for both E&P companies are:

- No improvement or even drop in the global oil price which remains volatile. Every US\$1/bbl change in oil price can impact FY23F EPS by around 4% for both companies.
- While we have assumed minimal to no growth in oil/gas production volumes, based on historical trends, volumes coming in lower than our expectations are a significant risk.
- Both companies may end up overpaying for overseas E&P assets.

GAIL

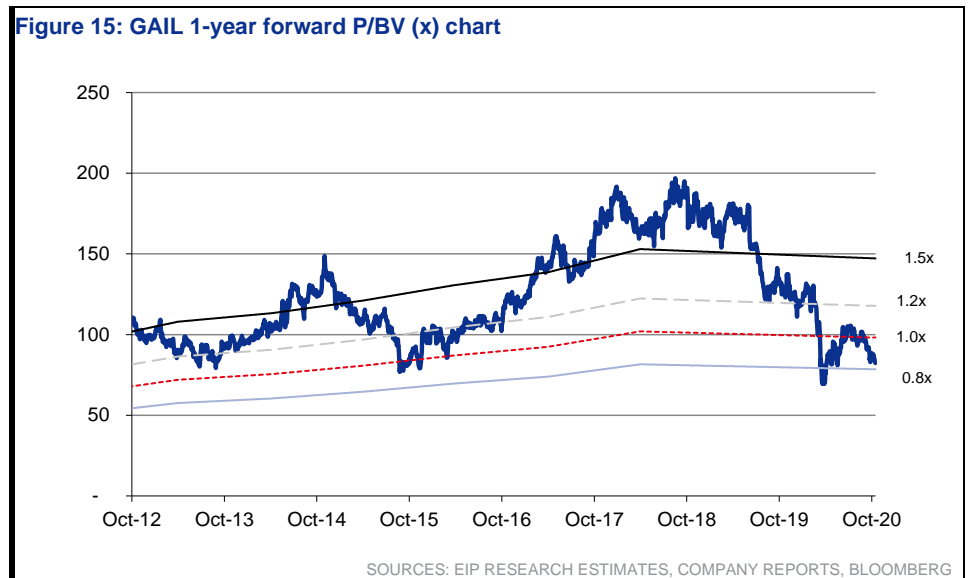
We value GAIL on a P/BV basis given its asset base is still largely the regulated pipeline business. In recent quarters, the gas trading business has assumed greater importance given its rising contribution and volatility. The stock currently trades at historical low valuations mainly due to concerns of significant losses on

its gas trading business. At the core of the trading business is the US LNG contract where GAIL has a 20-year contract to buy 5.8mmt of US LNG at Henry Hub-linked gas pricing. GAIL aims to sell this entire gas volume in the Indian market at oil-linked pricing. So the trading business is a pure play on global oil prices with the contract potentially generating high trading profits if oil prices rise and vice versa. Given our optimistic view on oil prices, we initiate coverage on GAIL with an Add rating. Our TP of Rs140 values the company at 1.1x Sep 2021F P/BV, 12% ROE in FY23F.

The main risks are:

Lower oil prices pose the main downside risk to our earnings as it would lead to significant trading losses on the US LNG contracts. Our estimates and valuation are built on Brent oil price recovering to US\$50/bbl in FY23F while we estimate the US LNG contracts broadly break even at a Brent price of around US\$45/bbl. Hence a lower oil price would make a material negative impact on earnings and valuation.

Poor growth in Indian gas demand is also a risk given that GAIL is building new pipelines to expand its capacity. A lower utilisation of its pipeline network will directly impact the returns of the pipeline business.



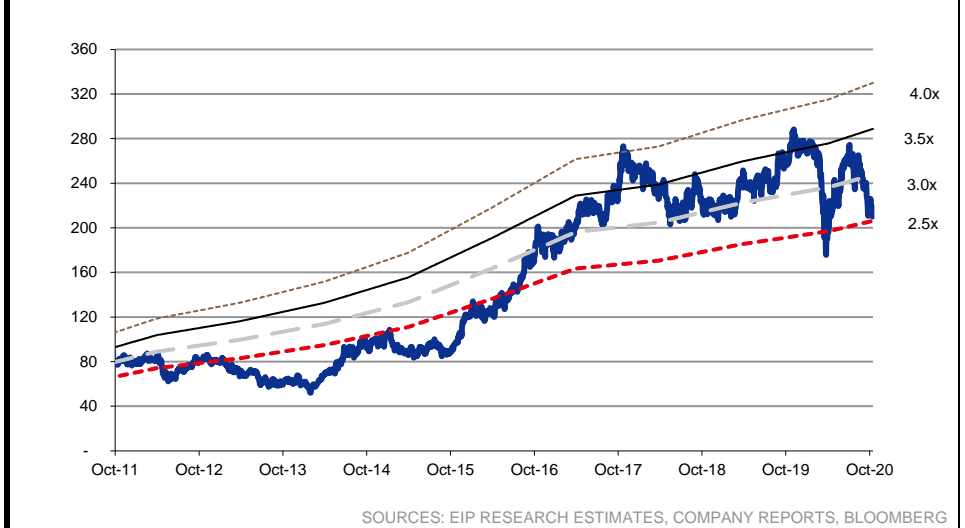
Petronet LNG

We value PLNG on a P/BV basis given that its business is largely about generating regas income at its two terminals. While the business is not regulated, PLNG has signed long-term contracts with its customers for the use of its terminals wherein the regas tariff is pre-determined. So earnings are relatively unimpacted against the sharp volatility in oil and gas prices making PLNG a relatively defensive stock. We find PLNG valuations attractive and, hence, initiate with an Add rating. Our TP of Rs300 values the company at 3.5x FY3/22F P/BV, 26% ROE in FY22. The main attraction for the stock currently is its relatively lower risk, free cash flow generation potential and resultant ability to pay high dividends (payout was 70% in FY19 and FY20).

Since the large relatively risk-free cash inflows are the main attraction, any large new capex and/or low resultant dividend payout are key downside risks. The main overhang on the stock is the MoU that it has signed with US-based Tellurian (TELL US, NR, CP US\$0.85) that is valid till 31 Dec 2020. This MoU, if executed, would entail PLNG making significant investments to buy gas from Tellurian. This would be a major risk since there is no clarity that PLNG will be able to sign a back-to-back agreement with any gas consumer in India or abroad to take this gas.

The other risk is a very large increase in domestic gas production which could potentially result in a sharp decrease in LNG imports.

Figure 16: PLNG P/BV (x) chart



Castrol India

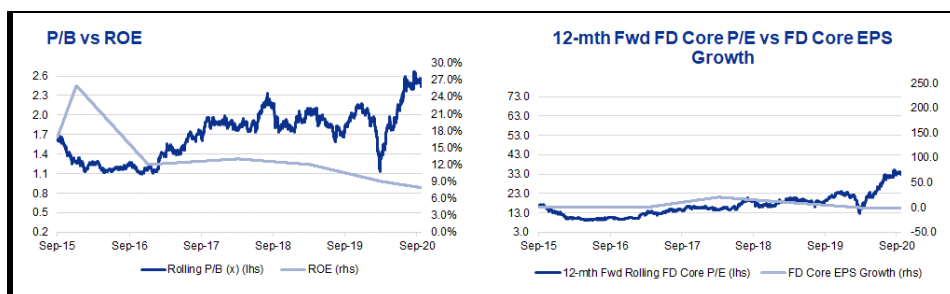
Castrol’s lubricant business is similar to most consumer businesses with low capex and high ROCE based on strong brand-driven sales volumes. The stock has derated materially over the last few years due to the company’s inability to grow lubricant volumes. While the company targets long-term volume growth at 4-5%, the business has been facing headwinds in recent years due to the slowing down of the Indian economy. The impact of Covid-19 has been negative as lubricant demand has turned negative in line with collapse of transportation volumes.

We believe that lubricant volumes will pick up in line with our estimate of growth in oil demand and we initiate coverage on Castrol India with an Add rating. We are assuming that Castrol volumes would recover from CY21F based on growth in transportation volumes and some gains in market share for Castrol. Our target price of Rs150 values the company at 18x 1-year forward P/E, which is its average valuation over last two years, pre-Covid period.

Main risk is no recovery in lubricant volumes as a result of sluggish economic growth. Another major risk is a sharp spike in global oil prices which would result in high cost of its main raw material (base oil, derived from oil refining) which could result in margin pressure.



BY THE NUMBERS (Reliance Industries)



Profit & Loss

(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Net Revenues	5,671,350	5,967,430	5,125,736	6,264,095	7,020,515
Gross Profit	1,714,080	1,861,600	1,891,354	2,402,312	2,626,606
Operating EBITDA	839,180	828,740	861,141	1,189,377	1,329,129
Depreciation And Amortisation	(209,340)	(222,030)	(256,388)	(315,456)	(355,968)
Operating EBIT	629,840	606,710	604,753	873,921	973,161
Financial Income/(Expense)	(164,950)	(220,270)	(238,404)	(229,709)	(231,752)
Pretax Income/(Loss) from Assoc.	1,030	1,070	1,070	1,070	1,070
Non-Operating Income/(Expense)	86,350	139,560	178,847	220,479	257,628
Profit Before Tax (pre-EI)	552,270	527,070	546,266	865,761	1,000,107
Exceptional Items					
Pre-tax Profit	552,270	527,070	546,266	865,761	1,000,107
Taxation	(153,900)	(128,270)	(140,412)	(216,673)	(249,199)
Exceptional Income - post-tax	672		49,660		
Profit After Tax	398,370	398,800	455,514	649,088	750,907
Minority Interests	(2,490)	(5,260)	(57,373)	(81,073)	(94,988)
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	395,880	393,540	398,141	568,015	655,919
Recurring Net Profit	395,880	393,540	348,481	568,015	655,919
Fully Diluted Recurring Net Profit	395,880	393,540	348,481	568,015	655,919

Cash Flow

(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
EBITDA	839,180	828,740	861,141	1,189,377	1,329,129
Cash Flow from Inv. & Assoc.	94,190	145,410	163,747	221,549	258,698
Change In Working Capital	(62,811)	687,484	(89,955)	(42,156)	(22,381)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense					
Other Operating Cashflow					
Net Interest (Paid)/Received	(164,950)	(220,270)	(238,404)	(229,709)	(231,752)
Tax Paid	(116,830)	(77,310)	(72,336)	(186,646)	(215,905)
Cashflow From Operations	588,779	1,364,054	624,192	952,414	1,117,789
Capex	(35,550)	(897,340)	(701,833)	(752,984)	(690,422)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/Investments	(1,009,190)	(224,550)	(101,932)		
Other Investing Cashflow					
Cash Flow From Investing	(1,044,740)	(1,121,890)	(803,765)	(752,984)	(690,422)
Debt Raised/(repaid)	678,710	631,510	(497,881)	60,387	(99,194)
Proceeds From Issue Of Shares	1,360	236	132,811	398,432	
Shares Repurchased					
Dividends Paid	(42,820)	(46,337)	(38,522)	(42,225)	(47,618)
Preferred Dividends					
Other Financing Cashflow	567,210	329,492	1,542,934	68,354	82,270
Cash Flow From Financing	1,204,460	914,900	1,139,342	484,947	(64,542)
Total Cash Generated	748,499	1,157,064	959,770	684,378	362,826
Free Cashflow To Equity	222,749	873,674	(677,453)	259,817	328,174
Free Cashflow To Firm	(291,011)	462,434	58,832	429,139	659,119

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS...cont'd

Balance Sheet

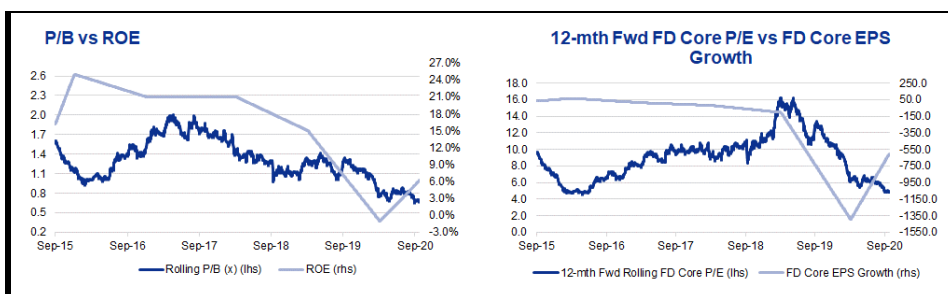
(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Cash And Equivalents	1,330,270	1,752,590	2,464,155	3,065,326	3,330,822
Total Debtors	300,890	196,560	214,907	259,309	290,691
Inventories	675,610	739,030	717,867	825,115	914,914
Total Other Current Assets	752,850	1,142,810	1,188,687	1,260,551	1,303,608
Total Current Assets	3,059,620	3,830,990	4,585,616	5,410,302	5,840,036
Fixed Assets	5,696,980	6,372,290	6,817,736	7,255,264	7,589,718
Total Investments	1,099,730	1,324,280	1,426,212	1,426,212	1,426,212
Intangible Assets	119,970	102,590	102,590	102,590	102,590
Total Other Non-Current Assets					
Total Non-current Assets	6,916,680	7,799,160	8,346,537	8,784,065	9,118,519
Short-term Debt	644,360	937,860	969,401	963,451	843,492
Current Portion of Long-Term Debt					
Total Creditors	2,451,950	2,759,000	2,556,846	2,737,837	2,879,289
Other Current Liabilities	14,229	30,572	32,372	34,172	35,972
Total Current Liabilities	3,096,310	3,696,860	3,526,246	3,701,288	3,722,782
Total Long-term Debt	2,432,780	2,770,790	2,241,369	2,307,705	2,328,470
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities					
Total Non-current Liabilities	2,432,780	2,770,790	2,241,369	2,307,705	2,328,470
Total Provisions	493,290	549,030	515,704	543,963	575,322
Total Liabilities	6,022,380	7,016,680	6,283,319	6,552,956	6,626,574
Shareholders' Equity	3,871,120	4,533,310	5,992,958	6,906,671	7,504,463
Minority Interests	82,800	80,160	655,876	734,740	827,519
Total Equity	3,953,920	4,613,470	6,648,835	7,641,411	8,331,981

Key Ratios

	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Revenue Growth	44.8%	5.2%	(14.1%)	22.2%	12.1%
Operating EBITDA Growth	30.8%	(1.2%)	3.9%	38.1%	11.7%
Operating EBITDA Margin	14.8%	13.9%	16.8%	19.0%	18.9%
Net Cash Per Share (Rs)	(294.79)	(330.06)	(124.20)	(33.18)	25.02
BVPS (Rs)	653.26	764.93	996.96	1,113.36	1,181.98
Gross Interest Cover	3.82	2.75	2.54	3.80	4.20
Effective Tax Rate	27.9%	24.3%	25.7%	25.0%	24.9%
Net Dividend Payout Ratio	11.7%	9.8%	12.1%	8.4%	7.7%
Accounts Receivables Days	15.33	15.21	14.65	13.82	14.30
Inventory Days	59.21	62.88	82.21	72.92	72.27
Accounts Payables Days	226.4	231.6	299.9	250.2	233.3
ROIC (%)	8.9%	8.0%	7.1%	9.1%	9.4%
ROCE (%)	10.9%	9.1%	8.2%	10.1%	10.5%
Return On Average Assets	5.6%	5.1%	4.6%	5.9%	6.2%

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS (Indian Oil Corp)



Profit & Loss

(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Net Revenues	5,281,490	4,843,622	3,163,814	3,727,240	3,983,911
Gross Profit	860,522	579,281	671,385	772,371	840,064
Operating EBITDA	369,646	117,610	273,573	342,889	393,306
Depreciation And Amortisation	(85,074)	(123,702)	(99,872)	(103,948)	(110,756)
Operating EBIT	284,572	(6,092)	173,701	238,941	282,549
Financial Income/(Expense)	(48,880)	(65,787)	(54,648)	(59,564)	(59,384)
Pretax Income/(Loss) from Assoc.	13,844	13,661	8,719	9,811	10,793
Non-Operating Income/(Expense)	9,733	(13,552)	23,056	25,340	23,712
Profit Before Tax (pre-EI)	259,269	(71,770)	150,827	214,528	257,670
Exceptional Items					
Pre-tax Profit	259,269	(71,770)	150,827	214,528	257,670
Taxation	(86,531)	53,007	(39,984)	(54,654)	(64,462)
Exceptional Income - post-tax	672				
Profit After Tax	172,739	(18,763)	110,844	159,874	193,208
Minority Interests	1,029	9,832	4,780	1,931	(251)
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	173,767	(8,931)	115,624	161,805	192,957
Recurring Net Profit	173,767	(8,931)	115,624	161,805	192,957
Fully Diluted Recurring Net Profit	173,767	(8,931)	115,624	161,805	192,957

Cash Flow

(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
EBITDA	369,646	117,610	273,573	342,889	393,306
Cash Flow from Invt. & Assoc.	9,733	(13,552)	23,056	25,340	23,712
Change In Working Capital	(157,059)	20,048	251,276	(11,063)	56,894
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	41,419	(50,704)	(577)	50	525
Other Operating Cashflow	(28,606)	(103,934)	978	733	405
Net Interest (Paid)/Received	(48,880)	(65,787)	(54,648)	(59,564)	(59,384)
Tax Paid	(86,531)	53,007	(39,984)	(54,654)	(64,462)
Cashflow From Operations	99,722	(43,312)	453,674	243,731	350,996
Capex	(266,881)	(313,832)	(251,574)	(276,226)	(268,976)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/Investments	6,775	92,290	(4,489)	(6,000)	(1)
Other Investing Cashflow					
Cash Flow From Investing	(260,106)	(221,542)	(256,063)	(282,226)	(268,977)
Debt Raised/(repaid)	311,153	330,253	(160,644)	99,823	18,556
Proceeds From Issue Of Shares					
Shares Repurchased	(44,350)				
Dividends Paid	(116,568)	(58,023)	(41,315)	(66,563)	(106,041)
Preferred Dividends					
Other Financing Cashflow					
Cash Flow From Financing	150,235	272,230	(201,959)	33,260	(87,486)
Total Cash Generated	(10,150)	7,375	(4,348)	(5,235)	(5,467)
Free Cashflow To Equity	150,768	65,398	36,967	61,328	100,574
Free Cashflow To Firm	(111,505)	(199,068)	252,259	21,069	141,403

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS...cont'd

Balance Sheet

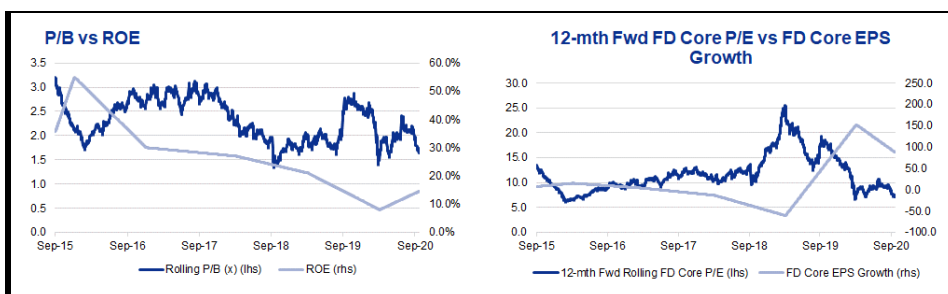
(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Cash And Equivalents	123,290	144,326	148,697	153,273	158,599
Total Debtors	157,977	132,595	93,053	108,187	109,719
Inventories	771,265	670,108	524,089	639,049	664,037
Total Other Current Assets	350,930	304,413	223,178	225,166	227,193
Total Current Assets	1,403,463	1,251,442	989,018	1,125,674	1,159,548
Fixed Assets	1,621,445	1,811,575	1,963,277	2,135,554	2,293,774
Total Investments	326,633	234,343	238,832	244,832	244,833
Intangible Assets	10	10	16,606	16,606	16,606
Total Other Non-Current Assets					
Total Non-current Assets	1,948,089	2,045,928	2,218,715	2,396,992	2,555,213
Short-term Debt	535,593	698,974	393,707	491,530	503,235
Current Portion of Long-Term Debt					
Total Creditors	951,477	810,267	794,992	916,009	1,001,450
Other Current Liabilities	14,229	30,572	32,372	34,172	35,972
Total Current Liabilities	1,487,070	1,509,241	1,188,699	1,407,538	1,504,686
Total Long-term Debt	432,058	598,929	743,551	745,551	752,401
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities					
Total Non-current Liabilities	432,058	598,929	743,551	745,551	752,401
Total Provisions	288,958	226,455	225,634	225,684	226,209
Total Liabilities	2,208,085	2,334,625	2,157,884	2,378,774	2,483,296
Shareholders' Equity	1,124,692	953,979	1,046,123	1,142,261	1,229,746
Minority Interests	18,774	8,766	3,822	1,728	1,816
Total Equity	1,143,466	962,745	1,049,945	1,143,989	1,231,561

Key Ratios

	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Revenue Growth	25.1%	(8.3%)	(34.7%)	17.8%	6.9%
Operating EBITDA Growth	(11.1%)	(68.2%)	132.6%	25.3%	14.7%
Operating EBITDA Margin	7.0%	2.4%	8.6%	9.2%	9.9%
Net Cash Per Share (Rs)	(91.97)	(125.65)	(107.67)	(118.05)	(119.49)
BVPS (Rs)	122.50	103.91	113.94	124.42	133.94
Gross Interest Cover	5.82	-0.09	3.18	4.01	4.76
Effective Tax Rate	33.4%		26.5%	25.5%	25.0%
Net Dividend Payout Ratio	40.5%	(76.1%)	29.5%	31.8%	42.8%
Accounts Receivables Days	9.15	10.95	13.02	9.85	9.98
Inventory Days	60.97	61.69	87.44	71.84	75.64
Accounts Payables Days	74.3	75.4	117.5	105.7	111.3
ROIC (%)	14.6%	(-0.3%)	8.6%	10.8%	12.2%
ROCE (%)	14.0%	0.9%	8.4%	11.0%	12.0%
Return On Average Assets	9.8%	(-0.2%)	6.3%	8.1%	8.8%

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS (Bharat Petroleum)



Profit & Loss

(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Net Revenues	2,982,256	2,845,719	1,677,856	1,988,125	2,231,260
Gross Profit	370,831	306,694	349,985	394,167	412,023
Operating EBITDA	158,198	93,018	158,733	191,208	201,250
Depreciation And Amortisation	(34,178)	(46,741)	(42,504)	(46,843)	(49,540)
Operating EBIT	124,020	46,277	116,229	144,364	151,710
Financial Income/(Expense)	(17,640)	(26,370)	(24,957)	(24,666)	(24,496)
Pretax Income/(Loss) from Assoc.	9,373	14,007	11,429	18,001	22,191
Non-Operating Income/(Expense)	13,300	2,602	14,473	15,562	15,971
Profit Before Tax (pre-EI)	129,054	36,516	117,174	153,262	165,375
Exceptional Items					
Pre-tax Profit	129,054	36,516	117,174	153,262	165,375
Taxation	(43,775)	142	(26,757)	(34,424)	(36,421)
Exceptional Income - post-tax	672				
Profit After Tax	85,279	36,658	90,417	118,838	128,955
Minority Interests	(7,256)	(6,104)	(13,296)	(15,443)	(16,143)
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	78,023	30,554	77,121	103,395	112,812
Recurring Net Profit	78,023	30,554	77,121	103,395	112,812
Fully Diluted Recurring Net Profit	78,023	30,554	77,121	103,395	112,812

Cash Flow

(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
EBITDA	158,198	93,018	158,733	191,208	201,250
Cash Flow from Invt. & Assoc.	13,300	2,602	14,473	15,562	15,971
Change In Working Capital	(26,540)	(1,090)	90,105	3,960	(5,497)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense					
Other Operating Cashflow	(2,063)	581	(11,411)	(3,495)	(4,282)
Net Interest (Paid)/Received	(17,640)	(26,370)	(24,957)	(24,666)	(24,496)
Tax Paid	(43,775)	142	(26,757)	(34,424)	(36,421)
Cashflow From Operations	81,480	68,883	200,187	148,145	146,525
Capex	(110,332)	(197,000)	(123,315)	(195,740)	(195,310)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/Investments	(4,236)	(31,211)	(5,997)	(8,875)	(7,125)
Other Investing Cashflow					
Cash Flow From Investing	(114,568)	(228,211)	(129,312)	(204,615)	(202,435)
Debt Raised/(repaid)					
Proceeds From Issue Of Shares					
Shares Repurchased					
Dividends Paid	(41,883)	(57,423)	(23,012)	(34,420)	(42,484)
Preferred Dividends					
Other Financing Cashflow					
Cash Flow From Financing	(41,883)	(57,423)	(23,012)	(34,420)	(42,484)
Total Cash Generated	(74,972)	(216,750)	47,863	(90,890)	(98,394)
Free Cashflow To Equity	(33,088)	(159,327)	70,875	(56,470)	(55,910)
Free Cashflow To Firm	(15,449)	(132,957)	95,832	(31,804)	(31,414)

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS...cont'd

Balance Sheet

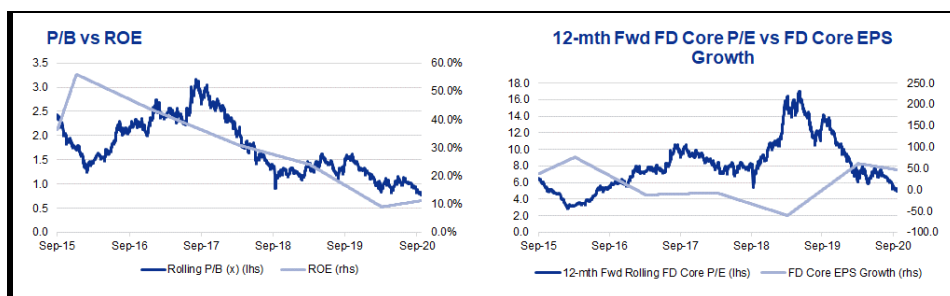
(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Cash And Equivalents	68,706	63,733	77,063	73,980	67,703
Total Debtors	69,063	53,780	43,572	57,651	64,345
Inventories	229,349	222,426	178,251	221,572	245,111
Total Other Current Assets	184,122	169,127	103,169	111,488	119,766
Total Current Assets	551,239	509,066	402,055	464,691	496,925
Fixed Assets	631,076	781,335	862,145	1,011,042	1,156,812
Total Investments	186,989	218,200	224,197	233,072	240,197
Intangible Assets	1,993	2,134	2,134	2,134	2,134
Total Other Non-Current Assets					
Total Non-current Assets	818,065	999,535	1,086,342	1,244,114	1,397,009
Short-term Debt	5,547	14,320	14,320	14,320	14,320
Current Portion of Long-Term Debt					
Total Creditors	405,671	369,672	339,437	409,115	442,129
Other Current Liabilities	14,229	30,572	32,372	34,172	35,972
Total Current Liabilities	405,671	369,672	339,437	409,115	442,129
Total Long-term Debt	448,391	654,755	609,537	694,252	781,725
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities					
Total Non-current Liabilities	448,391	654,755	609,537	694,252	781,725
Total Provisions	106,895	98,286	98,526	98,827	99,143
Total Liabilities	960,956	1,122,713	1,047,499	1,202,194	1,322,998
Shareholders' Equity	387,647	365,325	411,338	466,584	519,744
Minority Interests	20,700	20,563	29,561	40,027	51,193
Total Equity	408,348	385,888	440,898	506,611	570,937

Key Ratios

	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Revenue Growth	26.4%	(4.6%)	(41.0%)	18.5%	12.2%
Operating EBITDA Growth	3.5%	(41.2%)	70.6%	20.5%	5.3%
Operating EBITDA Margin	5.3%	3.3%	9.5%	9.6%	9.0%
Net Cash Per Share (Rs)	(193.04)	(300.49)	(270.72)	(315.36)	(363.03)
BVPS (Rs)	197.09	185.74	209.13	237.22	264.25
Gross Interest Cover	7.03	1.75	4.66	5.85	6.19
Effective Tax Rate	33.9%		22.8%	22.5%	22.0%
Net Dividend Payout Ratio	63.9%	141.7%	36.6%	37.8%	42.3%
Accounts Receivables Days	7.41	7.88	10.59	9.29	9.98
Inventory Days	31.77	32.47	55.07	45.78	46.82
Accounts Payables Days	53.0	55.7	97.5	85.7	85.4
ROIC (%)	11.5%	3.5%	9.0%	9.5%	8.7%
ROCE (%)	14.2%	4.6%	10.5%	12.2%	11.3%
Return On Average Assets	7.5%	3.7%	7.1%	8.4%	8.0%

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS (Hindustan Petroleum)



Profit & Loss

(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Net Revenues	2,754,734	2,690,915	1,742,901	2,116,074	2,218,708
Gross Profit	212,746	151,614	169,593	200,999	233,355
Operating EBITDA	121,478	55,350	84,349	108,297	133,236
Depreciation And Amortisation	(30,853)	(33,699)	(35,600)	(43,221)	(50,082)
Operating EBIT	90,625	21,651	48,749	65,076	83,154
Financial Income/(Expense)	(7,856)	(11,389)	(12,404)	(12,186)	(24,957)
Pretax Income/(Loss) from Assoc.	9,297	(4,582)	1,799	5,943	7,052
Non-Operating Income/(Expense)	8,326	8,062	17,840	15,525	16,267
Profit Before Tax (pre-EI)	100,392	13,743	55,984	74,360	81,516
Exceptional Items					
Pre-tax Profit	100,392	13,743	55,984	74,360	81,516
Taxation	(33,486)	12,644	(13,465)	(17,051)	(18,575)
Exceptional Income - post-tax	672				
Profit After Tax	66,906	26,387	42,519	57,309	62,941
Minority Interests					
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	66,906	26,387	42,519	57,309	62,941
Recurring Net Profit	66,906	26,387	42,519	57,309	62,941
Fully Diluted Recurring Net Profit	66,906	26,387	42,519	57,309	62,941

Cash Flow

(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
EBITDA	121,478	55,350	84,349	108,297	133,236
Cash Flow from Invt. & Assoc.	8,326	8,062	17,840	15,525	16,267
Change In Working Capital	(27,119)	4,395	67,461	404	3,528
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense					
Other Operating Cashflow	4,223	(22,385)	(2,070)	(2,041)	(4,686)
Net Interest (Paid)/Received	(7,856)	(11,389)	(12,404)	(12,186)	(24,957)
Tax Paid	(27,481)	(1,670)	(13,358)	(16,916)	(18,428)
Cashflow From Operations	71,571	32,364	141,817	93,085	104,962
Capex	(117,283)	(181,917)	(110,055)	(101,148)	(87,998)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments	(13,311)	1,629	(62,604)	(46,259)	(42,970)
Other Investing Cashflow					
Cash Flow From Investing	(130,593)	(180,287)	(172,659)	(147,407)	(130,968)
Debt Raised/(repaid)	62,395	158,100	47,816	63,752	40,436
Proceeds From Issue Of Shares					
Shares Repurchased					
Dividends Paid	(16,533)	(17,251)	(18,667)	(15,238)	(21,334)
Preferred Dividends					
Other Financing Cashflow					
Cash Flow From Financing	45,862	140,849	29,149	48,514	19,102
Total Cash Generated	(13,160)	(7,075)	(1,693)	(5,808)	(6,904)
Free Cashflow To Equity	3,373	10,176	16,974	9,430	14,430
Free Cashflow To Firm	(51,166)	(136,535)	(18,437)	(42,136)	(1,050)

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS...cont'd

Balance Sheet

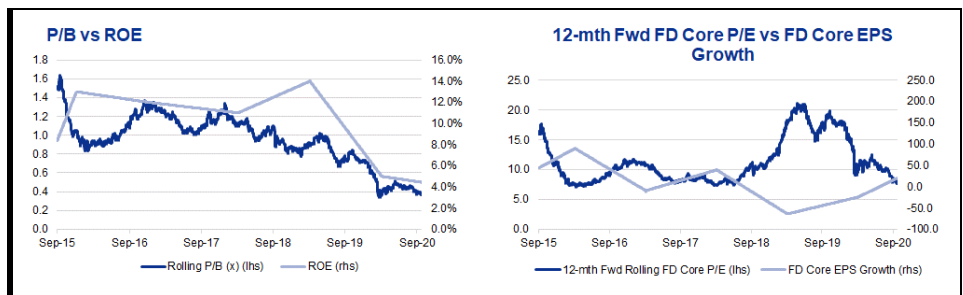
(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Cash And Equivalents	53,023	55,680	55,680	55,680	55,680
Total Debtors	56,674	39,342	30,561	37,121	38,925
Inventories	204,436	193,260	163,253	195,362	216,472
Total Other Current Assets	151,240	126,981	79,110	80,060	81,029
Total Current Assets	465,373	415,263	328,603	368,222	392,106
Fixed Assets	514,907	663,125	737,580	795,506	833,421
Total Investments	92,137	90,508	153,112	199,371	242,341
Intangible Assets	167	167	167	167	167
Total Other Non-Current Assets					
Total Non-current Assets	607,210	753,799	890,858	995,044	1,075,929
Short-term Debt	5,547	14,320	14,320	14,320	14,320
Current Portion of Long-Term Debt					
Total Creditors	383,613	333,805	314,606	354,628	382,040
Other Current Liabilities	14,229	30,572	32,372	34,172	35,972
Total Current Liabilities	383,613	333,805	314,606	354,628	382,040
Total Long-term Debt	281,915	440,015	487,831	551,583	592,019
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities					
Total Non-current Liabilities	281,915	440,015	487,831	551,583	592,019
Total Provisions	103,049	85,436	85,543	85,678	85,826
Total Liabilities	768,577	859,256	887,980	991,890	1,059,885
Shareholders' Equity	304,007	309,806	331,482	371,376	408,150
Minority Interests					
Total Equity	304,007	309,806	331,482	371,376	408,150

Key Ratios

	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Revenue Growth	25.5%	(2.3%)	(35.2%)	21.4%	4.9%
Operating EBITDA Growth	13.4%	(54.4%)	52.4%	28.4%	23.0%
Operating EBITDA Margin	4.4%	2.1%	4.8%	5.1%	6.0%
Net Cash Per Share (Rs)	(150.21)	(252.22)	(283.60)	(325.43)	(351.97)
BVPS (Rs)	199.50	203.31	217.53	243.71	267.85
Gross Interest Cover	11.54	1.90	3.93	5.34	3.33
Effective Tax Rate	33.4%		24.1%	22.9%	22.8%
Net Dividend Payout Ratio	43.8%	56.3%	35.8%	37.2%	33.9%
Accounts Receivables Days	7.46	6.51	7.32	5.84	6.26
Inventory Days	28.04	28.58	41.35	34.17	37.86
Accounts Payables Days	50.9	51.6	75.2	63.8	67.7
ROIC (%)	10.9%	2.1%	4.6%	5.6%	6.9%
ROCE (%)	16.5%	4.1%	7.9%	8.7%	9.8%
Return On Average Assets	7.3%	3.0%	4.2%	5.1%	5.6%

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS (Oil & Natural Gas)



Profit & Loss

(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Net Revenues	4,214,760	3,966,013	2,029,812	2,708,577	3,359,473
Gross Profit	838,647	617,283	424,744	507,534	657,577
Operating EBITDA	746,441	527,049	348,768	428,558	578,601
Depreciation And Amortisation	(256,172)	(346,599)	(244,880)	(256,134)	(268,094)
Operating EBIT	490,269	180,450	103,888	172,424	310,507
Financial Income/(Expense)	(58,367)	(69,998)	(71,434)	(73,867)	(81,399)
Pretax Income/(Loss) from Assoc.					
Non-Operating Income/(Expense)	81,488	69,690	85,226	91,316	99,075
Profit Before Tax (pre-EI)	513,389	180,142	117,680	189,873	328,183
Exceptional Items					
Pre-tax Profit	513,389	180,142	117,680	189,873	328,183
Taxation	(208,802)	(75,080)	(42,629)	(62,169)	(119,837)
Exceptional Income - post-tax	672				
Profit After Tax	304,587	105,062	75,051	127,704	208,346
Minority Interests	(33,920)	(6,530)	(19,891)	(27,086)	(29,762)
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax	34,283	10,544	27,343	28,507	29,625
Net Profit	304,950	109,076	82,503	129,125	208,209
Recurring Net Profit	304,950	109,076	82,503	129,125	208,209
Fully Diluted Recurring Net Profit	304,950	109,076	82,503	129,125	208,209

Cash Flow

(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
EBITDA	746,441	527,049	348,768	428,558	578,601
Cash Flow from Invt. & Assoc.	81,488	69,690	85,226	91,316	99,075
Change In Working Capital	(89,964)	66,421	49,137	3,214	(6,210)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	53,886	(17,177)	7,703	12,309	22,425
Other Operating Cashflow	16,285	(30,986)	27,705	27,546	25,685
Net Interest (Paid)/Received	(58,367)	(69,998)	(71,434)	(73,867)	(81,399)
Tax Paid	(208,802)	(75,080)	(42,629)	(62,169)	(119,837)
Cashflow From Operations	540,965	469,919	404,476	426,908	518,341
Capex	(450,649)	(537,090)	(423,171)	(434,150)	(441,000)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/Investments	(22,987)	(27,122)	(58,869)	(58,859)	(56,072)
Other Investing Cashflow					
Cash Flow From Investing	(473,636)	(564,212)	(482,039)	(493,009)	(497,072)
Debt Raised/(repaid)	19,666	155,216	44,708	57,857	33,687
Proceeds From Issue Of Shares					
Shares Repurchased	(40,220)				
Dividends Paid	(112,796)	(87,505)	(21,386)	(46,547)	(82,401)
Preferred Dividends					
Other Financing Cashflow					
Cash Flow From Financing	(133,351)	67,711	23,321	11,310	(48,713)
Total Cash Generated	(66,022)	(26,582)	(54,242)	(54,792)	(27,445)
Free Cashflow To Equity	86,995	60,923	(32,855)	(8,245)	54,956
Free Cashflow To Firm	125,696	(24,295)	(6,129)	7,765	102,667

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS...cont'd

Balance Sheet

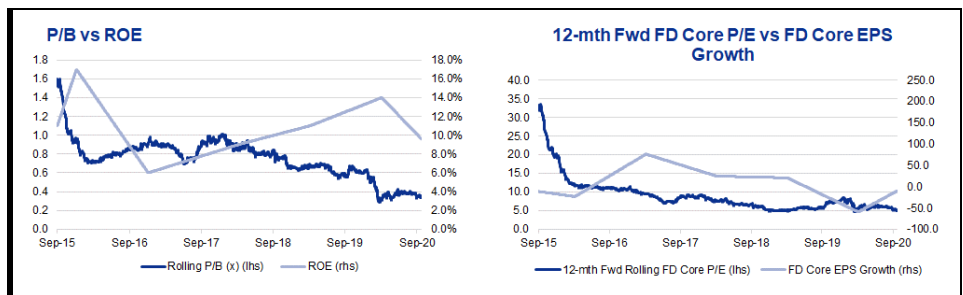
(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Cash And Equivalents	101,703	144,972	152,781	160,039	194,644
Total Debtors	161,942	110,751	82,804	105,025	132,124
Inventories	345,609	363,764	244,349	302,611	350,444
Total Other Current Assets	490,124	488,997	451,136	458,442	465,918
Total Current Assets	1,099,378	1,108,484	931,070	1,026,117	1,143,129
Fixed Assets	2,640,163	2,794,773	2,912,762	3,030,477	3,143,082
Total Investments	806,979	834,100	892,969	951,828	1,007,900
Intangible Assets	140,884	140,884	140,884	140,884	140,884
Total Other Non-Current Assets					
Total Non-current Assets	3,588,025	3,769,756	3,946,615	4,123,189	4,291,866
Short-term Debt	470,376	454,395	467,491	485,526	484,213
Current Portion of Long-Term Debt					
Total Creditors	705,783	740,544	604,458	695,461	771,659
Other Current Liabilities	14,229	30,572	32,372	34,172	35,972
Total Current Liabilities	1,176,160	1,194,939	1,071,950	1,180,988	1,255,872
Total Long-term Debt	610,867	782,064	813,675	853,497	888,498
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities					
Total Non-current Liabilities	610,867	782,064	813,675	853,497	888,498
Total Provisions	538,223	518,543	526,246	538,555	560,980
Total Liabilities	2,325,249	2,495,546	2,411,871	2,573,039	2,705,350
Shareholders' Equity	2,181,930	2,207,583	2,279,185	2,369,247	2,502,541
Minority Interests	180,224	175,113	186,630	207,019	227,105
Total Equity	2,362,155	2,382,696	2,465,815	2,576,267	2,729,646

Key Ratios

	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Revenue Growth	30.6%	(5.9%)	(48.8%)	33.4%	24.0%
Operating EBITDA Growth	27.9%	(29.4%)	(33.8%)	22.9%	35.0%
Operating EBITDA Margin	17.7%	13.3%	17.2%	15.8%	17.2%
Net Cash Per Share (Rs)	(77.86)	(86.76)	(89.69)	(93.72)	(93.64)
BVPS (Rs)	173.44	175.48	181.17	188.33	198.93
Gross Interest Cover	8.40	2.58	1.45	2.33	3.81
Effective Tax Rate	40.7%	41.7%	36.2%	32.7%	36.5%
Net Dividend Payout Ratio	35.4%	69.4%	30.5%	39.0%	42.3%
Accounts Receivables Days	13.75	12.55	17.40	12.66	12.88
Inventory Days	35.20	38.66	69.14	45.35	44.11
Accounts Payables Days	72.4	78.8	152.9	107.8	99.1
ROIC (%)	10.4%	3.7%	2.1%	3.4%	5.9%
ROCE (%)	15.1%	6.3%	4.6%	6.2%	9.2%
Return On Average Assets	8.3%	3.4%	3.1%	4.1%	5.5%

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS (Oil India)



Profit & Loss

(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Net Revenues	137,805	121,666	79,546	85,227	97,107
Gross Profit	64,307	44,033	26,275	30,021	32,237
Operating EBITDA	55,905	32,138	17,452	21,878	24,469
Depreciation And Amortisation	(15,407)	(15,368)	(15,375)	(15,944)	(16,377)
Operating EBIT	40,498	16,770	2,077	5,934	8,092
Financial Income/(Expense)	(6,235)	(6,446)	(5,902)	(6,023)	(6,509)
Pretax Income/(Loss) from Assoc.					
Non-Operating Income/(Expense)	1,001	11,508	6,669	7,915	9,782
Profit Before Tax (pre-EI)	35,263	21,831	2,844	7,826	11,365
Exceptional Items					
Pre-tax Profit	35,263	21,831	2,844	7,826	11,365
Taxation	(14,394)	3,149	(1,519)	(3,010)	(3,901)
Exceptional Income - post-tax	672				
Profit After Tax	20,869	24,981	1,325	4,816	7,463
Minority Interests					
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax	11,509	13,175	14,220	15,555	16,587
Net Profit	32,378	38,156	15,545	20,371	24,050
Recurring Net Profit	32,378	38,156	15,545	20,371	24,050
Fully Diluted Recurring Net Profit	32,378	38,156	15,545	20,371	24,050

Cash Flow

(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
EBITDA	55,905	32,138	17,452	21,878	24,469
Cash Flow from Invt. & Assoc.	1,001	11,508	6,669	7,915	9,782
Change In Working Capital	5,443	1,121	1,350	(779)	(472)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	185	(4,944)	12	24	31
Other Operating Cashflow	(10,597)	(55,130)	(10,102)	(11,437)	(12,469)
Net Interest (Paid)/Received	(6,235)	(6,446)	(5,902)	(6,023)	(6,509)
Tax Paid	(11,394)	(1,032)	(1,507)	(2,986)	(3,871)
Cashflow From Operations	34,307	(22,785)	7,972	8,592	10,961
Capex	(22,200)	(24,000)	(22,000)	(24,000)	(24,000)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/Investments	(1,465)	28,000	(3,750)	(15,000)	(22,500)
Other Investing Cashflow					
Cash Flow From Investing	(23,665)	4,000	(25,750)	(39,000)	(46,500)
Debt Raised/(repaid)	27,844	(27,147)	(6,592)	11,250	7,500
Proceeds From Issue Of Shares					
Shares Repurchased	(10,857)				
Dividends Paid	(12,997)	(14,131)	(1,735)	(2,819)	(3,904)
Preferred Dividends					
Other Financing Cashflow					
Cash Flow From Financing	3,990	(41,278)	(8,327)	8,431	3,596
Total Cash Generated	14,632	(60,063)	(26,106)	(21,977)	(31,943)
Free Cashflow To Equity	38,487	(45,932)	(24,371)	(19,158)	(28,039)
Free Cashflow To Firm	16,878	(12,339)	(11,877)	(24,385)	(29,030)

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS...cont'd

Balance Sheet

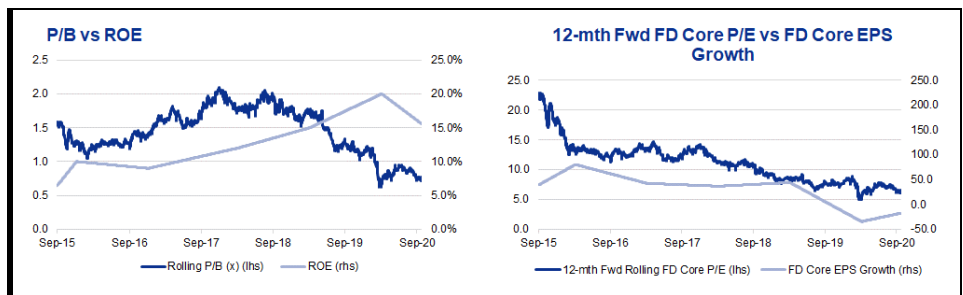
(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Cash And Equivalents	79,895	44,540	36,331	33,827	22,008
Total Debtors	13,177	10,011	6,580	7,047	8,024
Inventories	12,199	12,443	12,692	12,946	13,205
Total Other Current Assets	32,902	35,887	35,887	35,887	35,887
Total Current Assets	138,173	102,881	91,491	89,708	79,123
Fixed Assets	132,073	132,388	134,390	138,503	142,558
Total Investments	248,767	230,500	236,059	252,395	275,927
Intangible Assets	1,993	2,134	2,134	2,134	2,134
Total Other Non-Current Assets					
Total Non-current Assets	380,840	362,887	370,450	390,898	418,485
Short-term Debt	5,547	14,320	14,320	14,320	14,320
Current Portion of Long-Term Debt					
Total Creditors	22,733	23,917	22,085	22,027	22,790
Other Current Liabilities	14,229	30,572	32,372	34,172	35,972
Total Current Liabilities	22,733	23,917	22,085	22,027	22,790
Total Long-term Debt	151,137	123,990	117,398	128,648	136,148
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities					
Total Non-current Liabilities	151,137	123,990	117,398	128,648	136,148
Total Provisions	55,399	50,455	50,467	50,491	50,522
Total Liabilities	229,268	198,362	189,950	201,166	209,460
Shareholders' Equity	289,745	267,407	271,991	279,440	288,149
Minority Interests					
Total Equity	289,745	267,407	271,991	279,440	288,149

Key Ratios

	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Revenue Growth	28.8%	(11.7%)	(34.6%)	7.1%	13.9%
Operating EBITDA Growth	42.3%	(42.5%)	(45.7%)	25.4%	11.8%
Operating EBITDA Margin	40.6%	26.4%	21.9%	25.7%	25.2%
Net Cash Per Share (Rs)	(65.70)	(73.27)	(74.76)	(87.44)	(105.26)
BVPS (Rs)	267.19	246.59	250.82	257.69	265.72
Gross Interest Cover	6.49	2.60	0.35	0.99	1.24
Effective Tax Rate	40.8%		53.4%	38.5%	34.3%
Net Dividend Payout Ratio	43.1%	36.3%	7.0%	10.6%	18.0%
Accounts Receivables Days	36.17	34.78	38.06	29.18	28.32
Inventory Days	57.07	57.93	86.11	84.75	73.57
Accounts Payables Days	115.4	109.7	157.6	145.8	126.1
ROIC (%)	15.8%	6.6%	0.8%	2.3%	3.0%
ROCE (%)	8.9%	6.3%	2.1%	3.2%	4.0%
Return On Average Assets	7.3%	8.6%	4.2%	5.2%	5.8%

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS (GAIL India)



Profit & Loss

(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Net Revenues	761,899	725,084	487,318	539,120	587,079
Gross Profit	141,880	131,105	125,868	130,270	146,853
Operating EBITDA	96,676	90,250	75,999	78,331	92,835
Depreciation And Amortisation	(16,666)	(20,802)	(19,828)	(22,943)	(24,499)
Operating EBIT	80,009	69,448	56,171	55,388	68,335
Financial Income/(Expense)	(1,592)	(3,089)	(2,574)	(4,998)	(5,365)
Pretax Income/(Loss) from Assoc.	7,752	22,466	10,000	10,000	10,000
Non-Operating Income/(Expense)	12,143	15,464	10,134	10,407	11,206
Profit Before Tax (pre-EI)	98,312	104,289	73,731	70,798	84,177
Exceptional Items					
Pre-tax Profit	98,312	104,289	73,731	70,798	84,177
Taxation	(32,784)	(9,143)	(11,919)	(11,180)	(14,551)
Exceptional Income - post-tax	672				
Profit After Tax	65,528	95,146	61,812	59,618	69,625
Minority Interests	(70)	(926)	(90)	(90)	(90)
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	65,457	94,220	61,722	59,528	69,536
Recurring Net Profit	65,457	94,220	61,722	59,528	69,536
Fully Diluted Recurring Net Profit	65,457	94,220	61,722	59,528	69,536

Cash Flow

(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
EBITDA	96,676	90,250	75,999	78,331	92,835
Cash Flow from Invt. & Assoc.	12,143	15,464	10,134	10,407	11,206
Change In Working Capital	509	9,928	(13,413)	4,731	(2,945)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	14,708	(24,707)	5,620	100	127
Other Operating Cashflow	(10,768)	3,576	(35,434)	(14,006)	(14,007)
Net Interest (Paid)/Received	(1,592)	(3,089)	(2,574)	(4,998)	(5,365)
Tax Paid	(32,784)	(9,143)	(11,919)	(11,180)	(14,551)
Cashflow From Operations	78,891	82,279	28,413	63,387	67,299
Capex	(79,479)	(106,501)	(10,130)	(56,172)	(56,246)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments	5,553	(7,328)	6,905		
Other Investing Cashflow					
Cash Flow From Investing	(73,926)	(113,829)	(3,225)	(56,172)	(56,246)
Debt Raised/(repaid)	(9,961)	46,878	(6,234)	5,337	1,510
Proceeds From Issue Of Shares					
Shares Repurchased					
Dividends Paid	(20,906)	(39,543)	(13,530)	(18,041)	(18,041)
Preferred Dividends					
Other Financing Cashflow					
Cash Flow From Financing	(30,867)	7,335	(19,764)	(12,704)	(16,530)
Total Cash Generated	(25,901)	(24,215)	5,424	(5,489)	(5,477)
Free Cashflow To Equity	(4,995)	15,328	18,954	12,551	12,564
Free Cashflow To Firm	6,558	(28,461)	27,762	12,212	16,418

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS...cont'd

Balance Sheet

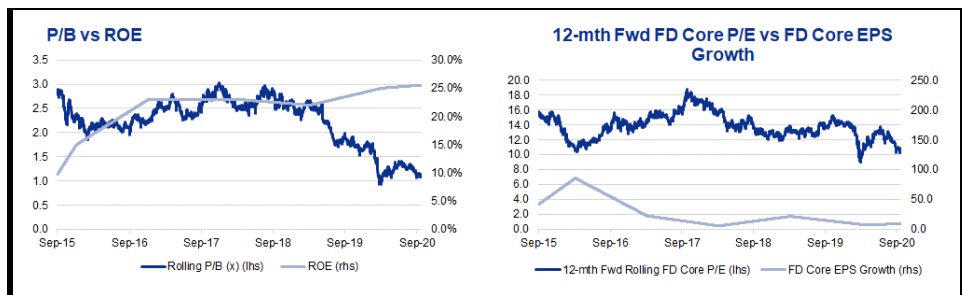
(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Cash And Equivalents	14,251	12,502	27,926	32,436	36,959
Total Debtors	53,753	58,483	36,922	40,835	44,437
Inventories	25,026	31,830	20,082	22,193	24,113
Total Other Current Assets	59,422	47,805	84,665	84,665	84,665
Total Current Assets	152,452	150,620	169,594	180,128	190,173
Fixed Assets	425,365	499,592	503,004	537,141	569,795
Total Investments	106,257	98,930	105,834	105,834	105,834
Intangible Assets	1,993	2,134	2,134	2,134	2,134
Total Other Non-Current Assets					
Total Non-current Assets	531,622	598,522	608,839	642,975	675,629
Short-term Debt	5,547	14,320	14,320	14,320	14,320
Current Portion of Long-Term Debt					
Total Creditors	121,667	132,946	124,156	134,911	137,487
Other Current Liabilities	14,229	30,572	32,372	34,172	35,972
Total Current Liabilities	121,667	132,946	124,156	134,911	137,487
Total Long-term Debt	22,237	69,115	62,881	68,218	69,728
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities					
Total Non-current Liabilities	22,237	69,115	62,881	68,218	69,728
Total Provisions	79,669	53,529	58,075	58,176	58,303
Total Liabilities	223,573	255,589	245,112	261,304	265,518
Shareholders' Equity	460,041	492,683	532,388	560,867	599,353
Minority Interests	460	870	870	870	870
Total Equity	460,501	493,553	533,259	561,737	600,223

Key Ratios

	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Revenue Growth	39.8%	(4.8%)	(32.8%)	10.6%	8.9%
Operating EBITDA Growth	24.3%	(6.6%)	(15.8%)	3.1%	18.5%
Operating EBITDA Margin	12.7%	12.4%	15.6%	14.5%	15.8%
Net Cash Per Share (Rs)	(1.77)	(12.55)	(7.75)	(7.93)	(7.27)
BVPS (Rs)	102.00	109.24	118.04	124.36	132.89
Gross Interest Cover	50.26	22.48	21.82	11.08	12.74
Effective Tax Rate	33.3%	8.8%	16.2%	15.8%	17.3%
Net Dividend Payout Ratio	33.2%	36.8%	29.2%	30.3%	25.9%
Accounts Receivables Days	23.48	28.25	35.73	26.32	26.51
Inventory Days	13.05	17.47	26.21	18.87	19.20
Accounts Payables Days	65.0	78.2	129.8	115.6	112.9
ROIC (%)	12.2%	9.3%	7.3%	6.8%	7.9%
ROCE (%)	17.6%	14.8%	10.6%	10.0%	11.4%
Return On Average Assets	10.3%	13.6%	8.3%	7.9%	8.7%

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS (Petronet LNG)



Profit & Loss

(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Net Revenues	383,954	354,520	254,756	301,702	318,144
Gross Profit	39,785	49,561	52,593	56,312	58,874
Operating EBITDA	32,935	39,174	46,005	49,326	51,406
Depreciation And Amortisation	(4,112)	(7,761)	(7,832)	(7,893)	(7,904)
Operating EBIT	28,822	31,413	38,173	41,433	43,502
Financial Income/(Expense)	(989)	(4,032)	(3,537)	(3,511)	(3,486)
Pretax Income/(Loss) from Assoc.	796	148	400	400	400
Non-Operating Income/(Expense)	4,458	3,726	4,010	4,384	4,768
Profit Before Tax (pre-EI)	33,087	31,254	39,046	42,706	45,184
Exceptional Items					
Pre-tax Profit	33,087	31,254	39,046	42,706	45,184
Taxation	(10,782)	(4,131)	(9,739)	(10,661)	(11,286)
Exceptional Income - post-tax	672				
Profit After Tax	22,306	27,123	29,307	32,045	33,898
Minority Interests					
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	22,306	27,123	29,307	32,045	33,898
Recurring Net Profit	22,306	27,123	29,307	32,045	33,898
Fully Diluted Recurring Net Profit	22,306	27,123	29,307	32,045	33,898

Cash Flow

(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
EBITDA	32,935	39,174	46,005	49,326	51,406
Cash Flow from Invt. & Assoc.	5,254	3,873	4,410	4,784	5,168
Change In Working Capital	(3,963)	(4,840)	1,585	(2,612)	(2,138)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense					
Other Operating Cashflow	(30)				
Net Interest (Paid)/Received	(989)	(4,032)	(3,537)	(3,511)	(3,486)
Tax Paid	(7,903)	(8,608)	(9,661)	(10,577)	(11,196)
Cashflow From Operations	25,304	25,567	38,802	37,411	39,754
Capex	(1,620)	(39,515)	(3,500)	(8,200)	(8,200)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments	(737)	(34)	(400)	(400)	(400)
Other Investing Cashflow					
Cash Flow From Investing	(2,357)	(39,550)	(3,900)	(8,600)	(8,600)
Debt Raised/(repaid)	(7,197)	32,997	(6,217)	(6,217)	(6,217)
Proceeds From Issue Of Shares					
Shares Repurchased					
Dividends Paid	(18,083)	(18,083)	(22,650)	(21,600)	(23,400)
Preferred Dividends					
Other Financing Cashflow					
Cash Flow From Financing	(25,280)	14,914	(28,867)	(27,817)	(29,617)
Total Cash Generated	(2,332)	932	6,035	994	1,538
Free Cashflow To Equity	15,751	19,015	28,685	22,594	24,938
Free Cashflow To Firm	23,937	(9,950)	38,438	32,322	34,640

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS...cont'd

Balance Sheet

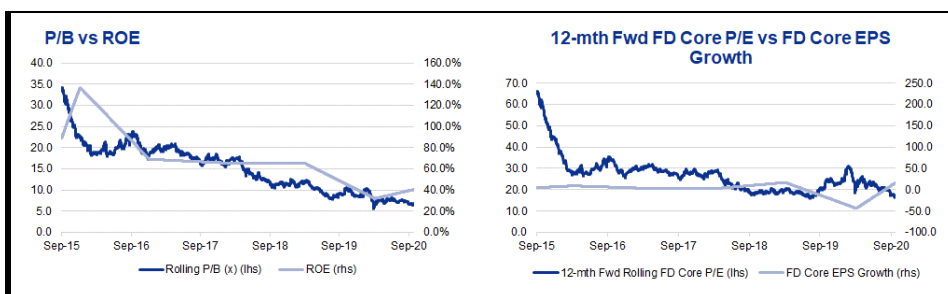
(Rsm)	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Total Cash And Equivalents	45,872	46,667	52,725	53,719	55,257
Total Debtors	13,825	16,026	10,469	12,399	13,074
Inventories	5,694	4,809	3,454	4,083	4,309
Total Other Current Assets	3,638	5,915	6,467	7,074	7,741
Total Current Assets	69,029	73,416	73,116	77,275	80,381
Fixed Assets	80,175	111,929	107,596	107,904	108,200
Total Investments	3,289	3,323	3,723	4,123	4,523
Intangible Assets	1,993	2,134	2,134	2,134	2,134
Total Other Non-Current Assets					
Total Non-current Assets	83,464	115,252	111,320	112,027	112,723
Short-term Debt	5,547	14,320	14,320	14,320	14,320
Current Portion of Long-Term Debt					
Total Creditors	29,215	27,916	23,142	23,695	23,126
Other Current Liabilities	14,229	30,572	32,372	34,172	35,972
Total Current Liabilities	29,215	27,916	23,142	23,695	23,126
Total Long-term Debt	7,334	40,331	34,115	27,898	21,682
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities					
Total Non-current Liabilities	7,334	40,331	34,115	27,898	21,682
Total Provisions	13,639	9,213	9,290	9,375	9,464
Total Liabilities	50,188	77,460	66,547	60,968	54,272
Shareholders' Equity	102,304	111,208	117,865	128,310	138,808
Minority Interests					
Total Equity	102,304	111,208	117,865	128,310	138,808

Key Ratios

	Mar-19A	Mar-20A	Mar-21F	Mar-22F	Mar-23F
Revenue Growth	25.5%	(7.7%)	(28.1%)	18.4%	5.4%
Operating EBITDA Growth	(0.6%)	18.9%	17.4%	7.2%	4.2%
Operating EBITDA Margin	8.6%	11.0%	18.1%	16.3%	16.2%
Net Cash Per Share (Rs)	25.69	4.22	12.41	17.21	22.38
BVPS (Rs)	68.20	74.14	78.58	85.54	92.54
Gross Interest Cover	29.14	7.79	10.79	11.80	12.48
Effective Tax Rate	32.6%	13.2%	24.9%	25.0%	25.0%
Net Dividend Payout Ratio	81.1%	66.7%	77.3%	67.4%	69.0%
Accounts Receivables Days	14.42	15.37	18.98	13.83	14.61
Inventory Days	5.62	6.29	7.46	5.61	5.91
Accounts Payables Days	33.6	34.2	46.1	34.8	33.0
ROIC (%)	38.9%	28.4%	36.4%	38.4%	26.7%
ROCE (%)	27.0%	24.8%	26.3%	28.1%	28.8%
Return On Average Assets	15.0%	18.3%	17.6%	19.0%	19.0%

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS (Castrol India)



Profit & Loss

(Rsm)	Dec-18A	Dec-19A	Dec-20F	Dec-21F	Dec-22F
Total Net Revenues	39,046	38,768	26,022	34,430	36,939
Gross Profit	19,434	21,755	13,938	19,449	21,201
Operating EBITDA	10,708	11,530	6,415	10,367	11,589
Depreciation And Amortisation	(556)	(697)	(845)	(955)	(1,079)
Operating EBIT	10,152	10,833	5,570	9,411	10,510
Financial Income/(Expense)	(11)	(12)	(44)	(44)	(44)
Pretax Income/(Loss) from Assoc.					
Non-Operating Income/(Expense)	843	648	734	948	1,259
Profit Before Tax (pre-EI)	10,984	11,469	6,260	10,315	11,725
Exceptional Items					
Pre-tax Profit	10,984	11,469	6,260	10,315	11,725
Taxation	(3,901)	(3,195)	(1,612)	(2,656)	(3,019)
Exceptional Income - post-tax	672				
Profit After Tax	7,084	8,274	4,648	7,659	8,706
Minority Interests					
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	7,084	8,274	4,648	7,659	8,706
Recurring Net Profit	7,084	8,274	4,648	7,659	8,706
Fully Diluted Recurring Net Profit	7,084	8,274	4,648	7,659	8,706

Cash Flow

(Rsm)	Dec-18A	Dec-19A	Dec-20F	Dec-21F	Dec-22F
EBITDA	10,708	11,530	6,415	10,367	11,589
Cash Flow from Inv. & Assoc.	843	648	734	948	1,259
Change In Working Capital	(1,630)	120	1,858	(712)	122
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense					
Other Operating Cashflow	55	(64)	47	77	88
Net Interest (Paid)/Received	(11)	(12)	(44)	(44)	(44)
Tax Paid	(3,901)	(3,195)	(1,612)	(2,656)	(3,019)
Cashflow From Operations	6,064	9,027	7,398	7,979	9,994
Capex	(804)	(756)	(800)	(900)	(1,000)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/Investments					
Other Investing Cashflow					
Cash Flow From Investing	(804)	(756)	(800)	(900)	(1,000)
Debt Raised/(repaid)					
Proceeds From Issue Of Shares					
Shares Repurchased					
Dividends Paid	(5,664)	(6,250)	(2,967)	(5,953)	(7,143)
Preferred Dividends					
Other Financing Cashflow					
Cash Flow From Financing	(5,664)	(6,250)	(2,967)	(5,953)	(7,143)
Total Cash Generated	(404)	2,020	3,630	1,127	1,851
Free Cashflow To Equity	5,260	8,270	6,598	7,079	8,994
Free Cashflow To Firm	5,271	8,282	6,642	7,123	9,038

SOURCES: EIP RESEARCH, COMPANY REPORTS

BY THE NUMBERS...cont'd

Balance Sheet

(Rsm)	Dec-18A	Dec-19A	Dec-20F	Dec-21F	Dec-22F
Total Cash And Equivalents	7,439	9,460	13,089	14,216	16,067
Total Debtors	3,918	4,820	2,994	3,773	3,542
Inventories	4,568	3,047	2,495	3,019	3,238
Total Other Current Assets	2,400	2,106	1,491	1,897	2,018
Total Current Assets	18,324	19,433	20,069	22,904	24,865
Fixed Assets	2,211	2,270	2,225	2,169	2,090
Total Investments					
Intangible Assets	1,993	2,134	2,134	2,134	2,134
Total Other Non-Current Assets	533	585	538	461	373
Total Non-current Assets	2,744	2,855	2,763	2,630	2,463
Short-term Debt	5,547	14,320	14,320	14,320	14,320
Current Portion of Long-Term Debt					
Total Creditors	8,844	7,947	6,812	7,808	8,039
Other Current Liabilities	14,229	30,572	32,372	34,172	35,972
Total Current Liabilities	8,844	7,947	6,812	7,808	8,039
Total Long-term Debt	45,561	53,319	33,319	28,319	28,319
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities					
Total Non-current Liabilities	45,561	53,319	33,319	28,319	28,319
Total Provisions	567	671	671	671	671
Total Liabilities	9,411	8,618	7,483	8,479	8,711
Shareholders' Equity	11,657	13,670	15,350	17,056	18,619
Minority Interests					
Total Equity	11,657	13,670	15,350	17,056	18,619

Key Ratios

	Dec-18A	Dec-19A	Dec-20F	Dec-21F	Dec-22F
Revenue Growth	8.9%	(0.7%)	(32.9%)	32.3%	7.3%
Operating EBITDA Growth	3.6%	7.7%	(44.4%)	61.6%	11.8%
Operating EBITDA Margin	27.4%	29.7%	24.7%	30.1%	31.4%
Net Cash Per Share (Rs)	7.52	9.56	13.23	14.37	16.24
BVPS (Rs)	11.78	13.82	15.52	17.24	18.82
Gross Interest Cover	931.39	910.33	126.59	213.89	238.87
Effective Tax Rate	35.5%	27.9%	25.7%	25.7%	25.7%
Net Dividend Payout Ratio	84.0%	79.1%	76.8%	77.7%	82.0%
Accounts Receivables Days	31.63	41.13	54.80	35.87	36.14
Inventory Days	72.25	81.69	83.70	67.17	72.56
Accounts Payables Days	164.6	180.1	222.9	178.1	183.8
ROIC (%)	143.3%	149.9%	128.4%	181.1%	220.3%
ROCE (%)	100.6%	90.7%	43.4%	63.9%	66.0%
Return On Average Assets	34.7%	38.2%	20.7%	31.8%	33.0%

SOURCES: EIP RESEARCH, COMPANY REPORTS

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Corporate Governance Report:

The disclosure of the survey result of the Thai Institute of Directors Association ("IOD") regarding corporate governance is made pursuant to the policy of the Office of the Securities and Exchange Commission. The survey of the IOD is based on the information of a company listed on the Stock Exchange of Thailand and the Market for Alternative Investment disclosed to the public and able to be accessed by a general public investor. The result, therefore, is from the perspective of a third party. It is not an evaluation of operation and is not based on inside information.

The survey result is as of the date appearing in the Corporate Governance Report of Thai Listed Companies. As a result, the survey result may be changed after that date. CGS-CIMB Thailand does not confirm nor certify the accuracy of such survey result.

Score Range:	90 - 100	80 – 89	70 - 79	Below 70 or	No Survey Result
Description:	Excellent	Very Good	Good	N/A	

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Corporate Governance Report of Thai Listed Companies (CGR). CG Rating by the Thai Institute of Directors Association (Thai IOD) in 2019, Anti-Corruption 2019

ADVANC – Excellent, Certified, **AEONTS** – Good, n/a, **AH** – Very Good, n/a, **AMATA** – Excellent, Declared, **ANAN** – Excellent, Declared, **AOT** – Excellent, n/a, **AP** – Excellent, Certified, **ASP** – Very Good, Certified, **BAM** – not available, n/a, **BANPU** – Excellent, Certified, **BAY** – Excellent, Certified, **BBL** – Very Good, Certified, **BCH** – Good, Certified, **BCP** – Excellent, Certified, **BCPG** – Excellent, Certified, **BDMS** – Very Good, n/a, **BEAUTY** – Good, n/a, **BEC** – Very Good, n/a, **BGRIM** – Very Good, Declared, **BH** – Good, n/a, **BJC** – Very Good, n/a, **BJCHI** – Very Good, Certified, **BLA** – Very Good, Certified, **BPP** – Very Good, Declared, **BR** – Good, n/a, **BTS** – Excellent, Certified, **CBG** – Very Good, n/a, **CCET** – Good, n/a, **CENDEL** – Very Good, Certified, **CHAYO** – Good, n/a, **CHG** – Very Good, Declared, **CK** – Excellent, n/a, **COL** – Excellent, Declared, **CPALL** – Excellent, Certified, **CPF** – Excellent, Certified, **CPN** – Excellent, Certified, **CPNREIT** – not available, n/a, **CRC** – not available, n/a, **DELTA** – Excellent, Declared, **DEMCO** – Excellent, Certified, **DDD** – Very Good, n/a, **DIF** – not available, n/a, **DREIT** – not available, n/a, **DTAC** – Excellent, Certified, **EA** – Excellent, n/a, **ECL** – Very Good, Certified, **EGCO** – Excellent, Certified, **EPG** – Very Good, n/a, **ERW** – Very Good, n/a, **GFPT** – Excellent, Certified, **GGC** – Excellent, Certified, **GLOBAL** – Very Good, n/a, **GLOW** – Very Good, Certified, **GPSC** – Excellent, Certified, **GULF** – Very Good, n/a, **GUNKUL** – Excellent, Certified, **HANA** – Excellent, Certified, **HMPRO** – Excellent, Certified, **HUMAN** – Good, n/a, **ICHI** – Excellent, Declared, **III** – Excellent, n/a, **INTUCH** – Excellent, Certified, **IRPC** – Excellent, Certified, **ITD** – Very Good, n/a, **IVL** – Excellent, Certified, **JASIF** – not available, n/a, **BJC** – Very Good, n/a, **JMT** – Very Good, n/a, **KBANK** – Excellent, Certified, **KCE** – Excellent, Certified, **KKP** – Excellent, Certified, **KSL** – Excellent, Certified, **KTB** – Excellent, Certified, **KTC** – Excellent, Certified, **LH** – Excellent, n/a, **LPN** – Excellent, Certified, **M** – Very Good, Certified, **MACO** – Very Good, n/a, **MAJOR** – Very Good, n/a, **MAKRO** – Excellent, Certified, **MALEE** – Excellent, Certified, **MC** – Excellent, Certified, **MCOT** – Excellent, Certified, **MEGA** – Very Good, n/a, **MINT** – Excellent, Certified, **MK** – Very Good, n/a, **MTC** – Excellent, n/a, **NETBAY** – Very Good, n/a, **OSP** – Very Good, n/a, **PLANB** – Excellent, Certified, **PLAT** – Very Good, Certified, **PR9** – Excellent, n/a, **PSH** – Excellent, Certified, **PSTC** – Very Good, Certified, **PTT** – Excellent, Certified, **PTTEP** – Excellent, Certified, **PTTGC** – Excellent, Certified, **QH** – Excellent, Certified, **RATCH** – Excellent, Certified, **ROBINS** – Excellent, Certified, **RS** – Excellent, n/a, **RSP** – not available, n/a, **S** – Excellent, n/a, **SAPPE** – Very Good, Declared, **SAT** – Excellent, Certified, **SAWAD** – Very Good, n/a, **SC** – Excellent, Certified, **SCB** – Excellent, Certified, **SCC** – Excellent, Certified, **SCN** – Excellent, Certified, **SF** – Good, n/a, **SHR** – not available, n/a, **SIRI** – Very Good, Certified, **SPA** – Good, n/a, **SPALI** – Excellent, n/a, **SPRC** – Excellent, Certified, **STA** – Very Good, Certified, **STEC** – Excellent, n/a, **SVI** – Excellent, Certified, **SYNEX** – Excellent, Certified, **TASCO** – Excellent, Certified, **TCAP** – Excellent, Certified, **THANI** – Excellent, Certified, **TIPCO** – Very Good, Certified, **TISCO** – Excellent, Certified, **TKN** – Very Good, n/a, **TMB** – Excellent, Certified, **TNR** – Very Good, Certified, **TOP** – Excellent, Certified, **TPCH** – Good, n/a, **TPIPP** – Good, n/a, **TRUE** – Excellent, Certified, **TU** – Excellent, Certified, **TVO** – Excellent, Declared, **UNIQ** – not available, n/a, **VGI** – Excellent, Certified, **WHA** – Excellent, Certified, **WHART** – not available, n/a, **WICE** – Excellent, Certified, **WORK** – Good, n/a.

1 CG Score 2019 from Thai Institute of Directors Association (IOD)

2 AGM Level 2018 from Thai Investors Association

3 Companies participating in Thailand's Private Sector Collective Action Coalition Against Corruption programme (Thai CAC) under Thai Institute of Directors (as of November 30, 2018) are categorised into:

companies that have declared their intention to join CAC, and companies certified by CAC.

4 The Stock Exchange of Thailand : the record of listed companies with corporate sustainable development "Thai sustainability Investment 2018" included:

SET and mai listed companies passed the assessment conducted by the Stock Exchange of Thailand: THSI (SET) and THSI (mai)

SET listed companies passed the assessment conducted by the Dow Jones Sustainability Indices (DJSI)

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.
<i>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.</i>	
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.