Aegis Logistics

Estimate change	⟷
TP change	⟷
Rating change	⟷

Bloomberg	AGIS IN
Equity Shares (m)	334
M.Cap.(INRb)/(USDb)	71.4 / 1
52-Week Range (INR)	267 / 108
1, 6, 12 Rel. Per (%)	-14/5/22
12M Avg Val (INR M)	61

Financials & Valuations (INR b)

Y/E March	2020	2021E	2022E
Sales	71.8	46.4	78.4
EBITDA	2.8	4.3	6.5
Adj. PAT	1.0	2.3	4.1
Adj. EPS (INR)	3.0	6.8	12.1
EPS Gr.%	-55.0	128.5	78.2
BV/Sh.INR	49.5	54.8	64.3
Ratios			
Net D:E	0.0	-0.1	-0.3
RoE (%)	6.5	13.1	20.4
RoCE (%)	9.0	14.1	20.4
Payout (%)	65.6	22.3	22.3
Valuation			
P/E (x)	69.8	30.5	17.1
P/BV (x)	4.2	3.8	3.2
EV/EBITDA (x)	24.9	16.0	9.8
Div. Yld (%)	0.8	0.6	1.1
FCF Yld (%)	-3.9	2.6	7.9

Shareholding pattern (%)

As On	Sep-20	Jun-20	Sep-19
Promoter	58.7	59.7	59.6
DII	2.5	2.8	2.5
FII	13.7	12.8	12.2
Others	25.1	24.8	25.7

FII Includes depository receipts

CMP: INR207 TP: INR251 (+21%) Buy

Liquids division supports, Gas logistics revive

- **AGIS reported slight beat on EBITDA due to continued strong performance by the liquids division and revival in the gas logistics business. Sourcing business remains the most affected, while the distribution segment is expected to take some more time to return to normalized levels (AGIS expects two more quarters for this).**
- **Development of all projects is on track; however, guidance for volume boost is delayed further by a quarter to 4QFY21. This is because the Uran-Chakan pipeline continues to face minor technical challenge while the Pipavav railway gantry is expected to be completed by Nov-Dec'20.**
- **Considering the guidance, we model in normalization of the logistics business/distribution volumes in 3QFY21/4QFY21 and record growth from new projects starting 4QFY21.**
- **Despite some minor delay in project developments due to COVID-19-led challenges, the company is still expected to see gas throughput jump by ~2.0mmtpa over the next two years (on base of 3.0mmtpa in FY20).**
- **We remain positive on the company's gas division and reiterate Buy.**

Slight beat on EBITDA with revival in gas logistics business…

- AGIS reported EBITDA beat of 7% at INR1,023m (v/s loss of INR281m in 2QFY20 due to high ESOP expenses and gain of INR674m in 1QFY21).
- The company recognized ESOP expenses of INR140m during the quarter (thus only INR0.55b of ESOP charges remain of the total INR3.35b).
- Other expenditure also includes INR30m provisions of commission to its Managing Directors (recognized INR60m in 1HFY21 v/s INR80m in FY20).
- AGIS enjoys net interest income of INR26m due to benefits of lower interest rates and continued higher cash generation – expect it to remain the same going forward.
- PAT for the quarter stood at INR570m (v/s est. +13% and loss of INR414m in 2QFY20 and gain of INR298m in 1QFY21), with tax rate at 26.1%.

…while liquid division holds fort – Segmental analysis

- **Gas division's normalized EBITDA stood at INR850m (-15% YoY; +9% QoQ).**
  - LPG logistics volumes were down 4% YoY to 722.5tmt; however, the business segment revived 3% QoQ as all terminals, except Pipavav were operating at 90-95%. Mumbai was operating at 100%.
  - LPG distribution volumes stood at 32.9tmt (-21% YoY, +155% QoQ), as demand from auto sales, commercial and industrial customers increased with gradual lifting of the lockdowns. AGIS expects retail and commercial volumes to normalize over the next two quarters. AGIS added two new LPG stations during the quarter, totaling to 120 outlets.
  - LPG sourcing volumes stood at 142.9tmt (-74% YoY, -10% QoQ), as the OMCs restricted procurement of additional cargos via private players.
- **Liquid division's normalized EBITDA stood at INR395m (+21% YoY, flat QoQ)**. Good performance of liquid division continues owing to better demand for storage during the current COVID times.

Swarnendu Bhushan- Research Analyst (Swarnendu.Bhushan@MotilalOswal.com)
Sarfraz Bhimani - Research Analyst (Sarfraz.Bhimani@MotilalOswal.com)

Gas logistics – The next leg of profitability

- The government is projecting growth of 6% in LPG consumption for FY21 and AGIS' expectations are in line with the same.
- The company has been a key beneficiary of the government's initiative to boost penetration of LPG in the country. Although, for AGIS, investors have been wary of capacity utilization amid the increasing competition.
- In light of the same, we highlight the potential for increase in LPG imports (by ~2.7x to 36.5mmtpa) despite a rise expected in domestic refining capacity (by ~1.5x to 367mmtpa) by FY31. Moreover, per connection consumption of gas by domestic consumers could boost demand incrementally by 6.7mmtpa (click to read our report).
- **AGIS' current EBITDA break-up: 75% gas and 25% liquids. We believe that the EBITDA pie is set to incline more toward the gas segment (~80%)**, which enjoys benefits of increasing impetus by the government. AGIS is also planning to set up an additional LPG terminal in South India.
- Logistics is expected to contribute ~60% to the gas division's total EBITDA in FY22-23E, led by improving utilization at Mumbai, Pipavav and Haldia LPG terminals. Kandla will add to the sales volumes from FY22E as the company is already in talks with the OMCs to pre-book the volumes.
- **Even on a conservative basis, we expect logistics volumes to record CAGR of 16% over FY20-FY23, with logistics EBITDA CAGR of ~17% over the same period.** Logistics enhancement is also expected to help the company ramp up its domestic market share.
- **We expect strong free cash flow generation of ~INR13.2b in FY21-23 combined (FCF yield of ~19%). Return ratios are likely to improve above 20% over the same period.** Also, the non-cash expense overhang of ESOPs at ~INR3.35b is behind, with only INR0.55b remaining to be recognized.
- AGIS trades at 17.1x FY22E EPS of INR12.1 and 9.8x FY21E EV/EBITDA. We value AGIS using the DCF methodology to arrive at a fair value of INR251/share. **Maintain Buy**.

Consolidated - Quarterly Earning Model **(INR Million)**

Y/E March	FY20				FY21				FY20	FY21E	FY21	Var vs
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q			2Q	est (%)
Net Sales	**19,553**	**18,177**	**21,686**	**12,417**	**6,364**	**6,504**	**12,453**	**21,108**	**71,833**	**46,429**	**15,575**	**-58%**
YoY Change (%)	92.3	27.5	64.2	-33.0	-67.5	-64.2	-42.6	70.0	27.9	-35.4	-14.3	
EBITDA	**1,020**	**-281**	**1,096**	**930**	**674**	**1,023**	**1,114**	**1,444**	**2,765**	**4,253**	**959**	**7%**
Margins (%)	5.2	-1.5	5.1	7.5	10.6	15.7	8.9	6.8	3.8	9.2	6.2	
Depreciation	159	170	172	187	176	180	195	231	687	781	195	-8%
Interest	85	74	94	79	47	41	58	85	331	230	95	-57%
Other Income	62	26	46	195	50	66	70	93	328	279	98	-32%
PBT before EO expense	**839**	**-499**	**876**	**860**	**501**	**868**	**931**	**1,221**	**2,076**	**3,521**	**767**	**13%**
PBT	**839**	**-499**	**876**	**860**	**501**	**868**	**931**	**1,221**	**2,076**	**3,521**	**767**	**13%**
Rate (%)	25.7	31.5	32.4	45.8	26.5	26.1	25.2	25.2	35.5	25.6	25.2	
MI & P/L of Asso. Cos.	54	72	93	125	70	72	72	129	344	344	70	3%
Reported PAT	**570**	**-414**	**499**	**341**	**298**	**570**	**624**	**784**	**996**	**2,276**	**504**	**13%**
YoY Change (%)	10.3	-184.6	-15.6	-44.7	-47.6	-237.7	25.1	129.7	-55.0	128.5	-221.7	

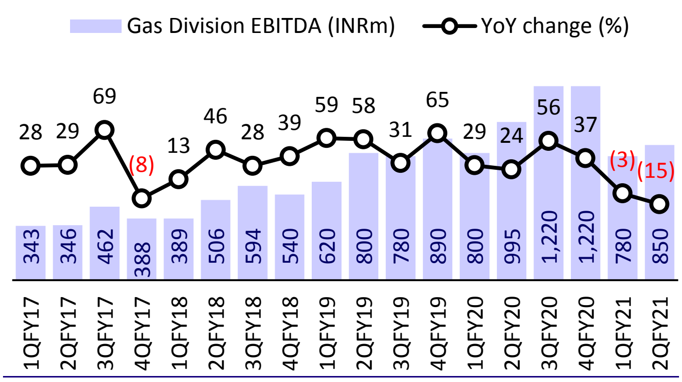
E: MOFSL Estimates

Major capacity commissioning in 4QFY21

- **Mumbai –** HPCL's Uran-Chakan pipeline was commissioned in Jun'20. Since then, there has been gradual increase in LPG throughput. AGIS expects incremental annualized volumes of ~0.5mmtpa starting 4QFY21 as further technical debottlenecks are cleared by HPCL and AGIS.
- **Pipavav –** The company is building a Railway Gantry (and two additional spheres of 1,900mt each). The project is expected to be completed in Nov-Dec'20. AGIS is expecting an incremental throughput of ~0.5mmtpa via the rail route starting 4QFY21. The Pipavav gantry project will be cost lucrative for the OMCs' bottling plants in North India.
- **Kandla –** The construction of a new LPG project at Kandla with static capacity of 45,000mt is going on well and commissioning is expected by end-4QFY21; any earnings impact would only come in FY22E. The project is on the grid of Jamnagar-Loni Pipeline (JLPL) and the proposed KGPL pipeline. Throughput of ~1mmtpa is expected in the first full year of operation (i.e. FY22), and another ~0.7mmtpa will be the potential off-take by the OMCs once the pipeline is commissioned.
- BPCL's Haldia terminal is likely to be commissioned over the next six months. However, for AGIS' Haldia – HPCL is the biggest anchor customer (throughput mix of 80% for HPCL and 20% for BPCL). Panagarh bottling plant is currently operating only at 50% capacity, and thus, even if 20% of BPCL goes away, the ramp-up at Panagarh should offset the impact for AGIS.
- **Liquid capacity expansion on track – all volumes are pre-sold, earnings impact to come in FY22.** Haldia's 12,000KL expansion is expected to be completed by 4QFY21, Kochi 20,000KL and Mangalore 50,000KL should be completed by end-FY21.
- AGIS has additional land at its Kandla and Haldia terminal (thus, has an option to set up additional liquid terminal projects of 100,000/30,000KL respectively) – thus, taking the total liquid division capacity to ~940,000-950,000KL over the next 3-4 years.

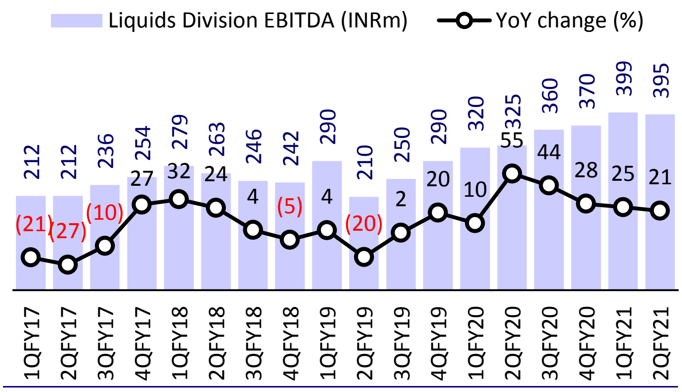
Key charts from the quarter

Exhibit 1: Gas division's EBITDA down 15% YoY to INR850m



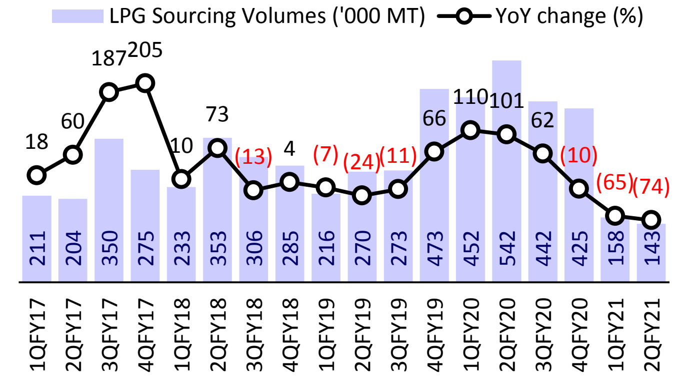
Source: Company, MOFSL

Exhibit 2: Liquids division EBITDA up 21% YoY to INR395m



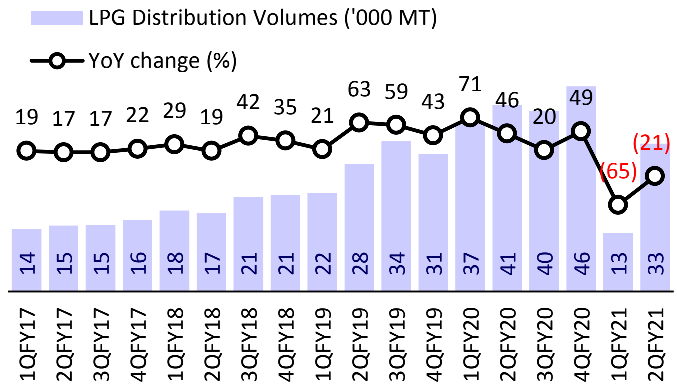
Source: Company, MOFSL

Exhibit 3: LPG sourcing volumes down 74% YoY



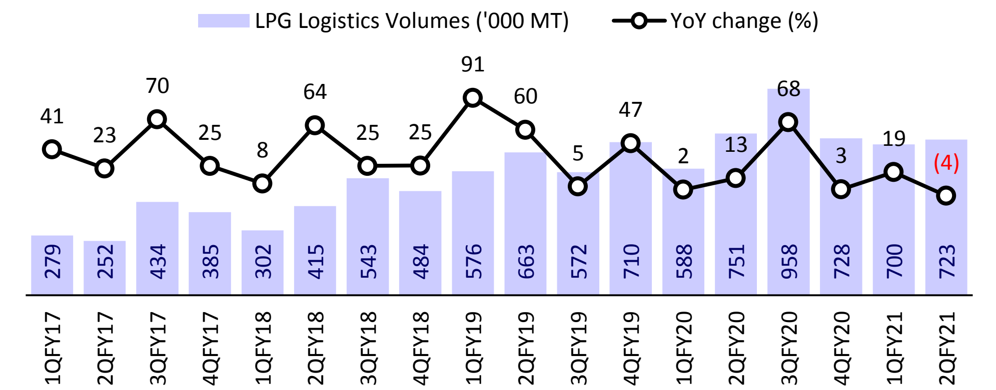
Source: Company, MOFSL

Exhibit 4: LPG distribution volumes down 21% YoY



Source: Company, MOFSL

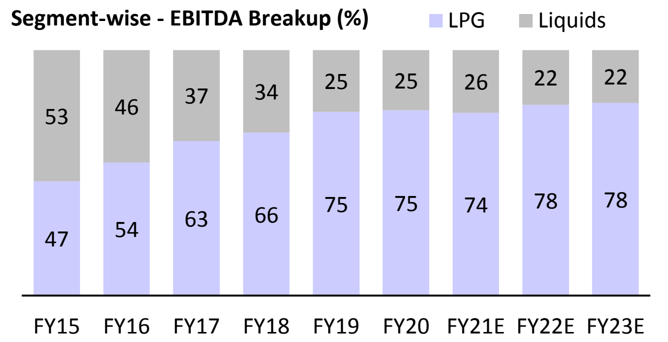
Exhibit 5: LPG logistics volumes down 4% YoY, up 3% QoQ



Source: Company, MOFSL

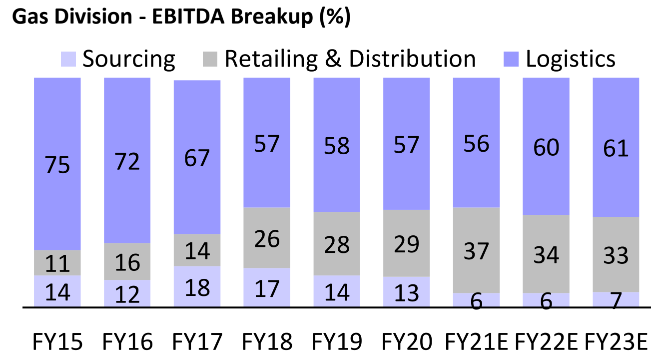
Story in charts

Exhibit 1: Gas division's EBITDA mix to improve…



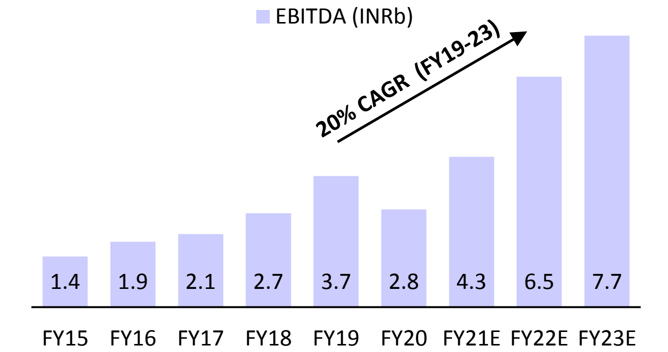
Source: Company, MOFSL

Exhibit 2: …with logistics contributing 60% of gas business



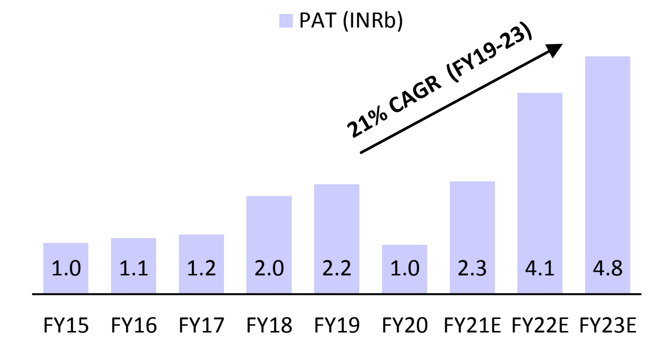
Source: Company, MOFSL

Exhibit 3: EBIDTA CAGR of 20% over FY19-22…



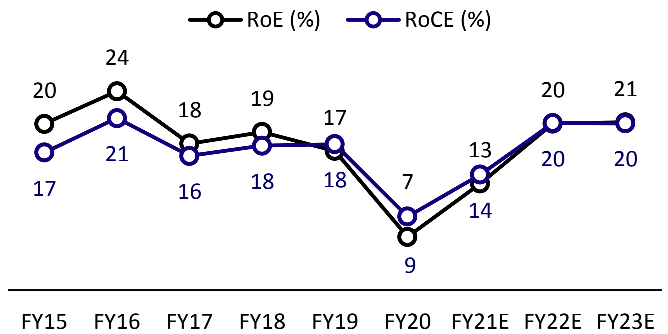
Source: Company, MOFSL

Exhibit 4: …followed by similar PAT CAGR



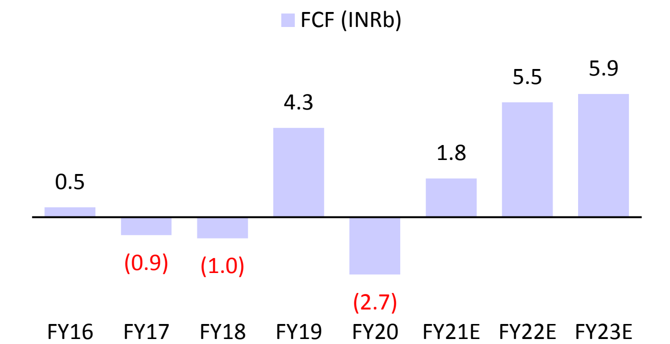
Source: Company, MOFSL

Exhibit 5: Return ratios to hover around +20%



Source: Company, MOFSL

Exhibit 6: Strong FCF yield (~19%) over FY21-23E



Source: Company, MOFSL

Financials and Valuations

Consolidated - Income Statement								(INR Million)
Y/E March	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21E**	**FY22E**	**FY23E**
Total Income from Operations	**22,132**	**39,328**	**47,910**	**56,158**	**71,833**	**46,429**	**78,420**	**89,196**
Change (%)	-43.5	77.7	21.8	17.2	27.9	-35.4	68.9	13.7
EBITDA	**1,853**	**2,069**	**2,660**	**3,709**	**2,765**	**4,253**	**6,514**	**7,669**
Margin (%)	8.4	5.3	5.6	6.6	3.8	9.2	8.3	8.6
Depreciation	234	243	343	505	687	781	845	1,056
EBIT	**1,619**	**1,826**	**2,317**	**3,203**	**2,078**	**3,472**	**5,669**	**6,614**
Int. and Finance Charges	177	161	152	262	331	230	259	288
Other Income	85	52	84	82	328	279	471	535
PBT bef. EO Exp.	**1,527**	**1,717**	**2,248**	**3,023**	**2,076**	**3,521**	**5,880**	**6,861**
PBT after EO Exp.	**1,527**	**1,717**	**2,248**	**3,023**	**2,076**	**3,521**	**5,880**	**6,861**
Total Tax	265	377	110	502	736	901	1,482	1,729
Tax Rate (%)	17.4	22.0	4.9	16.6	35.5	25.6	25.2	25.2
Minority Interest	128	137	160	307	344	344	344	344
Reported PAT	**1,133**	**1,203**	**1,978**	**2,214**	**996**	**2,276**	**4,055**	**4,788**
Change (%)	43.4	6.1	64.5	11.9	-55.0	128.5	78.2	18.1
Margin (%)	5.1	3.1	4.1	3.9	1.4	4.9	5.2	5.4

Consolidated - Balance Sheet								(INR Million)
Y/E March	**FY16**	**FY17**	**FY18**	**FY19**	**FY20**	**FY21E**	**FY22E**	**FY23E**
Equity Share Capital	334	334	334	334	340	340	340	340
Total Reserves	4,711	8,038	11,739	13,579	16,206	17,975	21,126	24,847
Net Worth	**5,045**	**8,372**	**12,073**	**13,913**	**16,546**	**18,315**	**21,466**	**25,187**
Minority Interest	393	292	697	748	906	906	906	906
Total Loans	1,883	2,548	2,824	1,865	2,156	2,446	2,736	3,026
Deferred Tax Liabilities	229	879	705	834	309	309	309	309
Capital Employed	**7,550**	**12,092**	**16,299**	**17,361**	**19,917**	**21,975**	**25,417**	**29,428**
Gross Block	6,951	10,078	15,756	16,728	21,116	21,116	21,116	21,116
Less: Accum. Deprn.	2,371	2,614	2,957	3,463	4,150	4,931	5,775	6,831
Net Fixed Assets	**4,580**	**7,464**	**12,799**	**13,265**	**16,966**	**16,185**	**15,340**	**14,284**
Goodwill on Consolidation	137	19	25	22	21	21	21	21
Capital WIP	734	3,127	1,256	1,207	2,201	2,884	3,271	3,598
Curr. Assets, Loans&Adv.	**3,537**	**9,743**	**8,059**	**9,688**	**9,946**	**8,674**	**16,651**	**22,741**
Inventory	115	218	260	338	421	257	438	497
Account Receivables	972	7,059	3,469	2,285	4,540	2,935	4,957	5,638
Cash and Bank Balance	967	623	1,620	4,129	2,634	3,963	8,690	13,688
Loans and Advances	1,482	1,844	2,710	2,936	2,350	1,519	2,566	2,918
Curr. Liability & Prov.	**1,442**	**8,264**	**5,841**	**6,926**	**9,290**	**5,862**	**9,939**	**11,290**
Account Payables	894	6,778	3,788	4,853	4,016	2,452	4,181	4,740
Other Current Liabilities	402	1,374	1,918	1,927	5,096	3,294	5,563	6,327
Provisions	145	112	135	146	179	116	196	223
Net Current Assets	**2,095**	**1,480**	**2,218**	**2,762**	**655**	**2,812**	**6,712**	**11,452**
Appl. of Funds	**7,550**	**12,092**	**16,299**	**17,360**	**19,917**	**21,975**	**25,417**	**29,428**

E: MOFSL Estimates

Financials and Valuations

Ratios

Y/E March	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
EPS	**3.4**	**3.6**	**5.9**	**6.6**	**3.0**	**6.8**	**12.1**	**14.3**
Cash EPS	4.1	4.3	6.9	8.1	5.0	9.2	14.7	17.5
BV/Share	15.1	25.1	36.1	41.7	49.5	54.8	64.3	75.4
DPS	0.9	0.7	1.5	1.4	1.7	1.3	2.4	2.8
Payout (%)	31.9	22.4	28.8	24.3	65.6	22.3	22.3	22.3
Valuation (x)								
P/E	61.3	57.8	35.1	31.4	69.8	30.5	17.1	14.5
Cash P/E	50.8	48.1	29.9	25.5	41.3	22.7	14.2	11.9
P/BV	13.8	8.3	5.8	5.0	4.2	3.8	3.2	2.8
EV/Sales	3.2	1.8	1.5	1.2	1.0	1.5	0.8	0.7
EV/EBITDA	38.0	34.5	26.6	18.1	24.9	16.0	9.8	7.7
Dividend Yield (%)	0.4	0.3	0.7	0.7	0.8	0.6	1.1	1.3
FCF per share	1.4	-2.6	-3.0	12.7	-8.2	5.5	16.4	17.6
Return Ratios (%)								
RoE	24.3	17.9	19.4	17.0	6.5	13.1	20.4	20.5
RoCE	21.0	16.4	17.7	17.9	9.0	14.1	20.4	20.4
RoIC	24.0	20.1	20.3	21.1	10.0	17.2	29.8	38.9
Working Capital Ratios								
Fixed Asset Turnover (x)	3.2	3.9	3.0	3.4	3.4	2.2	3.7	4.2
Asset Turnover (x)	2.9	3.3	2.9	3.2	3.6	2.1	3.1	3.0
Inventory (Days)	2	2	2	2	2	2	2	2
Debtor (Days)	16	66	26	15	23	23	23	23
Creditor (Days)	15	63	29	32	20	19	19	19
Leverage Ratio (x)								
Current Ratio	2.5	1.2	1.4	1.4	1.1	1.5	1.7	2.0
Interest Cover Ratio	9.2	11.3	15.2	12.2	6.3	15.1	21.9	23.0
Net Debt/Equity	0.2	0.2	0.1	-0.2	0.0	-0.1	-0.3	-0.4

Consolidated - Cash Flow Statement **(INR Million)**

Y/E March	FY16	FY17	FY18	FY19	FY20	FY21E	FY22E	FY23E
OP/(Loss) before Tax	1,527	1,717	2,248	3,023	2,076	3,521	5,880	6,861
Depreciation	234	243	343	505	687	781	845	1,056
Interest & Finance Charges	122	135	69	180	3	-49	-211	-247
Direct Taxes Paid	-405	-287	-110	-502	-736	-901	-1,482	-1,729
(Inc)/Dec in WC	-76	-250	258	1,966	612	-828	828	258
CF from Operations	**1,402**	**1,558**	**2,808**	**5,172**	**2,641**	**2,524**	**5,860**	**6,199**
CF from Operating incl EO	**1,384**	**1,544**	**2,808**	**5,172**	**2,641**	**2,524**	**5,860**	**6,199**
(Inc)/Dec in FA	-916	-2,401	-3,813	-919	-5,381	-683	-387	-327
Free Cash Flow	**468**	**-858**	**-1,005**	**4,253**	**-2,740**	**1,841**	**5,473**	**5,871**
CF from Investments	**-641**	**-2,354**	**-1,206**	**-597**	**-4,292**	**-405**	**84**	**208**
Inc/(Dec) in Debt	-298	982	276	-959	290	290	290	290
Interest Paid	-177	-205	-152	-262	-331	-230	-259	-288
Dividend Paid	-356	-311	-569	-538	-654	-507	-904	-1,067
CF from Fin. Activity	**-831**	**467**	**-605**	**-2,066**	**155**	**-791**	**-1,216**	**-1,409**
Inc/Dec of Cash	**-87**	**-344**	**997**	**2,509**	**-1,495**	**1,329**	**4,727**	**4,998**
Opening Balance	1,054	967	623	1,620	4,129	2,634	3,963	8,690
Closing Balance	**967**	**623**	**1,620**	**4,129**	**2,634**	**3,963**	**8,690**	**13,688**

E: MOFSL Estimates

NOTES

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

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

Disclosures

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

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

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

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

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

Regional Disclosures (outside India)

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

For Hong Kong:

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

For U.S.

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

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

For Singapore

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

Specific Disclosures

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

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

The associates of MOFSL has not received any compensation or other benefits from third party in connection with the research report
Above disclosures include beneficial holdings lying in demat account of MOFSL which are opened for proprietary investments only. While calculating beneficial holdings, It does not consider demat accounts which are opened in name of MOFSL for other purposes (i.e holding client securities, collaterals, error trades etc.). MOFSL also earns DP income from clients which are not considered in above disclosures.

Analyst Certification

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

Terms & Conditions:

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

Disclaimer:

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

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

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

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