

Our latest O&G updates

Beyond barrels: Seismic shifts in the O&G landscape!

In our [previous note](#), we highlighted that valuations across the O&G sector were no longer inexpensive, with the sector trading at a one-year fwd. P/E of 16.8x (LT avg. of 13x). Since then, OMCs/CGDs/upstream stocks have corrected 5%-8%/2%-12%/5%-13%, and the sector now trades at 15.7x one-year fwd. P/E. In this brief update, we highlight that 1) China's oil demand is weakening, signaling a structural shift and pushing global oil demand growth below 1mb/d for the first time in the last decade outside of crisis years; 2) the International Energy Agency (IEA) projects strong supply growth of 2.7/2.1 mb/d in CY25/26, raising the risk of oversupply; 3) petchem, rather than gasoline or gasoil, is emerging as the main driver of oil demand; and 4) auto-fuel marketing margins are likely to remain strong, while CGDs could see an expansion in their EBITDA margins. A substantial weakening of the oil price outlook could extend the super-normal marketing margin cycle and simultaneously reduce input gas costs for CGD players. HPCL, MAHGL, and PLNG remain our preferred plays in the sector.

Structural shifts could keep oil demand lower for longer

- **Oil demand growth might fall ~30% short of the past decade's average in CY26-27:** Global oil markets are undergoing a structural shift as Chinese demand is losing momentum, a sharp contrast to the previous decade, when the country contributed 60% of the global increase in oil demand. With Chinese oil demand set to peak this decade amid EV adoption, LNG trucking, rail expansion, and economic rebalancing, IEA projects annual global demand growth of ~0.6-0.7 mb/d over CY25-CY27, below the ~1 mb/d average of the past decade.
- **Emerging economies to drive oil demand growth entirely:** IEA projects that incremental gains in oil demand will be entirely non-OECD-led, dominated by Asia Pacific contributing ~1mb/d over CY25-27, but still far behind China's earlier surge. Consumption in North America and Europe is set to decline ~0.5mb/d during CY25-27, led by structural weakness in gasoline and gasoil. This marks a decisive shift toward slower, emerging market-driven demand growth.

Amid slower demand, oil production set to reach record highs in CY25/26

- **IEA now estimates global oil supply to exceed demand by ~2/1.4 mb/d in CY25/26:** Global oil supply is set to increase by 2.7/2.1 mb/d in CY25/26, as non-OPEC+ supply growth remains strong, with the US, Brazil, Canada, Guyana, and Argentina producing at or near record highs. Non-OPEC+ output is projected to rise by 1.4/1 mb/d in CY25/26, broadly matched by OPEC+, which is expected to add 1.3/1 mb/d, respectively.
- **Upstream has remained our least preferred sector since Jun'24:** We recently downgraded [ONGC](#) and [Oil India](#) to Neutral as 1) possibilities of earnings cuts exist amid a weak crude price outlook, 2) benefits of increased new well gas proportion will be mostly offset by subdued gas realization amid a weaker crude oil price outlook, 3) the companies have struggled to increase production, and 4) rising exploration expenses resulting in higher well write-offs could dent earnings.

- We reiterate that the risks of crude oil prices falling below the USD65/bbl mark are mounting as OPEC+ strategy shifts from “managing” oil prices to “protecting market share”. We note that while OPEC+’s surplus crude oil production capacity has declined over the past year from a 30-month high of 6.3mb/d in Sep’24, it still remains high at ~4 mb/d. While we assume a crude oil price of USD65/bbl for FY26/FY27, the risk to this assumption remains elevated on the downside. Every USD1/bbl decline in crude oil price results in a 2%-4% cut in our FY27 SA PAT estimates for ONGC and OINL.

Structural shifts in the global oil market

- **Oil demand is increasingly decoupling from GDP** as substitution in transport and power offsets economic growth. Per capita fuel use has been trending lower across the OECD and several non-OECD economies despite rising incomes, reflecting efficiency gains and a shift toward less oil-intensive sectors. According to the IEA, vehicle miles traveled per capita in the US in CY24 remained nearly 5% lower than pre-GFC levels, even though GDP per capita rose by about 25% in real terms.
- **Chinese oil demand wanes as EV penetration increases:** As per IEA, Chinese fuel demand growth is slowing sharply as EV penetration, LNG trucking, and rapid rail expansion displace oil, avoiding ~1.2 mb/d since 2019 with a further ~2.5 mb/d expected by CY30.
- **Remote work alters gasoline demand trajectory:** Behavioral changes post-pandemic, notably work-from-home in the US, have permanently displaced ~1.2 mb/d of road fuel demand. After peaking at 60% during the 2020 lockdowns (vs. <10% pre-Covid), WFH has stabilized in the US at ~25–30% of paid workdays since 2022. Record-high office vacancy rates of 13.9% (up from 9.3% in 2019) further underscore this structural shift. Further, Japan and Korea face structural declines from aging demographics and efficient transport systems.
- **Petchem emerging as a key oil demand driver:** The increasing use of oil products as feedstock for plastics and synthetic fibers has reinforced petrochemicals’ position as the primary driver of oil demand growth in CY24, contributing nearly three-quarters of net growth. The IEA expects this trend to persist throughout the rest of the decade and beyond, with the share of petrochemical feedstocks in total oil consumption projected to rise to 17.4% by CY30 from 15.8% in CY23.
- Feedstock demand is set to reach 18.4 mb/d in CY30, up 2.1 mb/d from CY24 levels – comprising 10.2 mb/d of naphtha (+1.1 mb/d) and 8.2 mb/d of LPG/ethane (+990 kb/d). The surge in LPG and ethane processing, particularly in the United States, has been supported by abundant NGL supply.

Era of margin expansion for OMCs and CGDs

- **OMCs:** A USD5/bbl decline in crude oil prices translates into a change of ~INR4/lit in marketing margins. While part of this benefit may be shared with the government (through excise duty hikes) or with consumers (via retail price cuts), MS/HSD marketing margins are likely to remain strong and well above the INR3.3/lit assumption, which we are building in.
- **CGDs:** As highlighted in our recent note ([Twin emerging tailwinds for CGDs](#)), we expect that a soft crude price outlook, coupled with a lower pricing slope for natural gas amid the upcoming LNG oversupply, will reduce gas costs. This should also ease concerns around the APM deallocation affecting margins.

Valuation and view

- **PLNG's valuations imply the stock is at a point of maximum pessimism:** PLNG trades at ~9x FY27E EPS compared to its historical one-year forward P/E of 10.4x. Our DCF-based TP (WACC: 10.5%, TG = 2%) assumes a 10% tariff cut in FY28, followed by a 4% increase for both the terminals. While we have incorporated the full capex for the petchem plant, we value it conservatively at 0.5x FY29E P/B and discount this back to FY27E. In an extreme bear-case DCF scenario, we assume 0% terminal growth and no tariff hike after a 20% cut in FY28, implying a valuation of INR274/sh. At ~9x FY27E P/E and a ~4.3% dividend yield, we believe valuations are at the rock bottom. Reiterate BUY with a DCF-based TP of INR410.
- **MAHGL & HPCL:** We view HPCL and MAHGL as momentum plays and PLNG as a value play while we await better buying opportunities in the sector. **HPCL** remains our preferred pick among the three OMCs given its leverage towards marketing. We model a marketing margin of INR3.3/lit for both MS and HSD in FY26/27, while the current MS and HSD marketing margins are ~INR9.7/lit per lit. We view the following as key catalysts for the stock: 1) the de-merger and potential listing of the lubricant business, 2) the commissioning of its bottom upgrade unit in 2QFY26'end, and 3) the start of its Rajasthan refinery in FY26. **MAHGL:** We expect a 9% CAGR in volume over FY25-27, driven by multiple initiatives implemented by the company, such as collaborating with OEMs to drive conversions of commercial CNG vehicles and providing guaranteed price discounts to new I/C-PNG customers.

Exhibit 1: O&G sector's 1-year fwd. P/E valuation

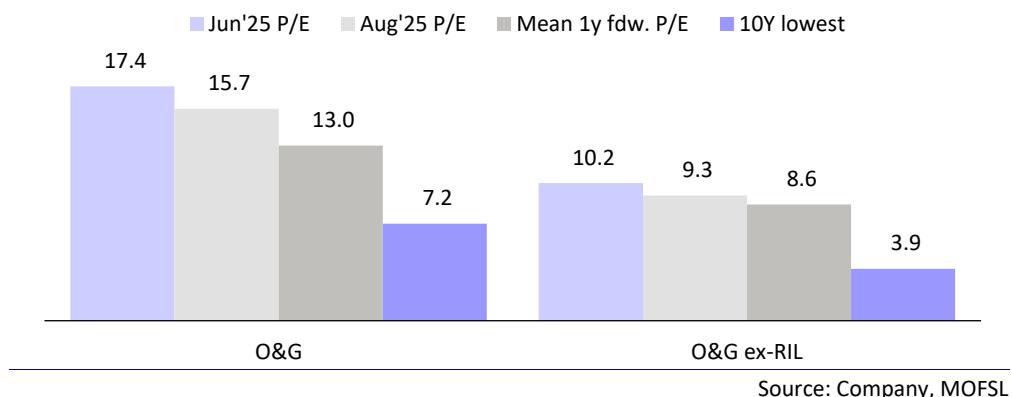


Exhibit 2: Oil demand growth might fall ~30% short of the past decade average in CY26-27

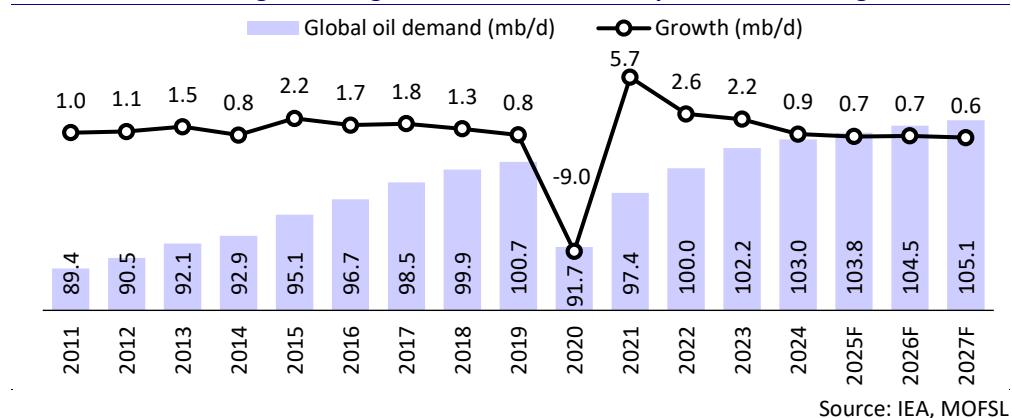
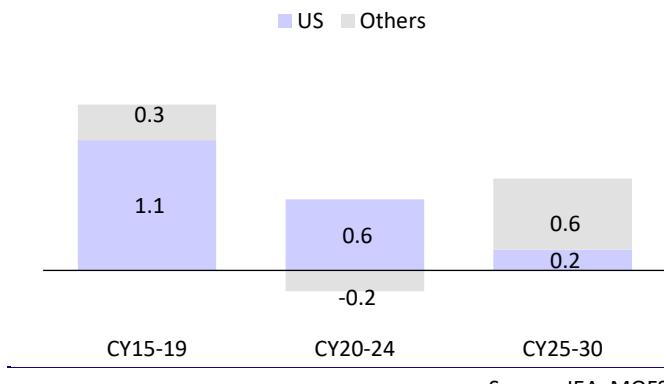
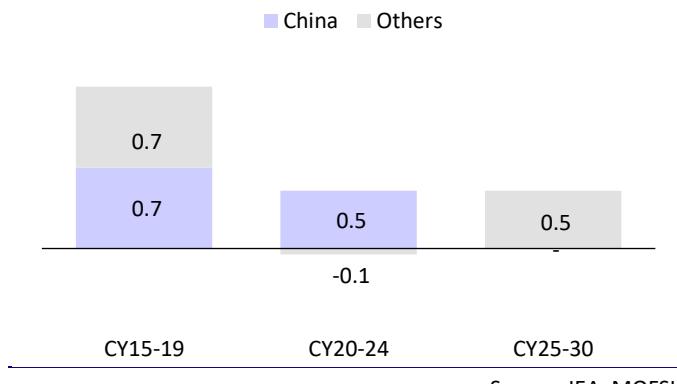
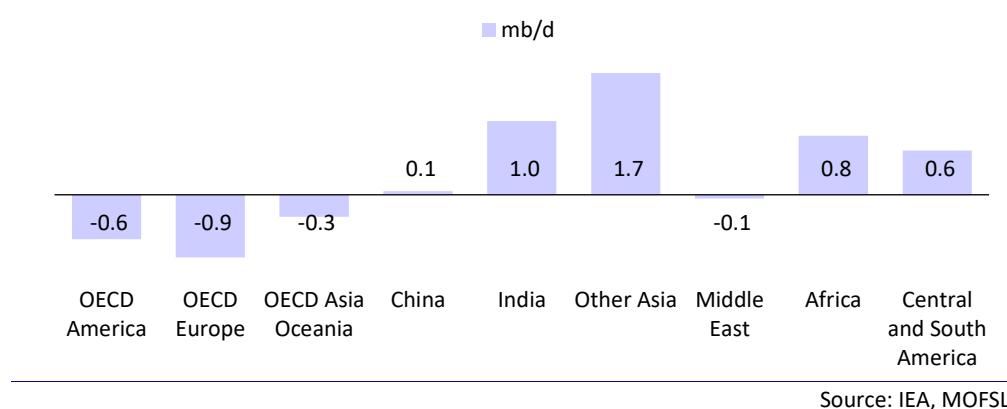


Exhibit 3: US share in global oil supply growth falls (mb/d)


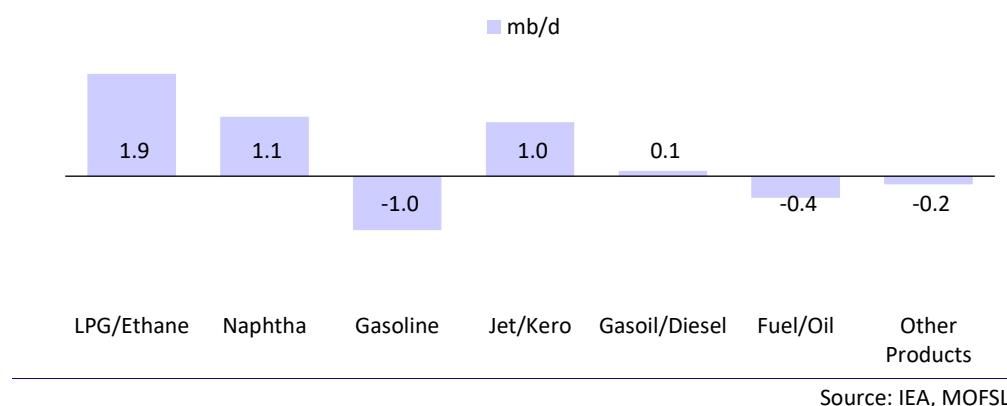
Source: IEA, MOFSL

Exhibit 4: Chinese oil demand growth wanes (mb/d)


Source: IEA, MOFSL

Exhibit 5: Growth in world oil demand by selected countries and regions (CY24-30)


Source: IEA, MOFSL

Exhibit 6: Growth in world oil demand by product (CY24-30)


Source: IEA, MOFSL

Exhibit 7: Oil demand displaced by EVs

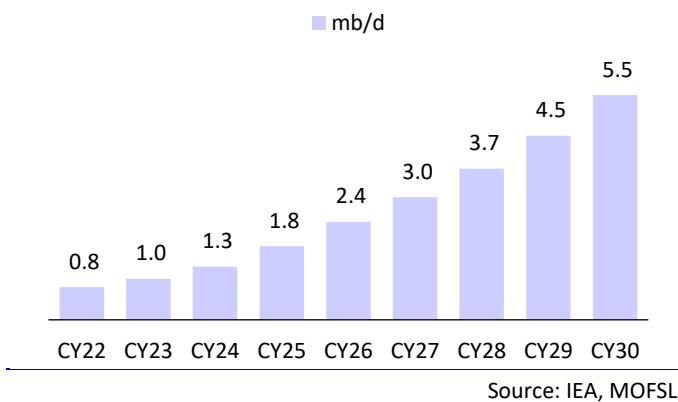


Exhibit 8: Oil demand displaced by teleworking

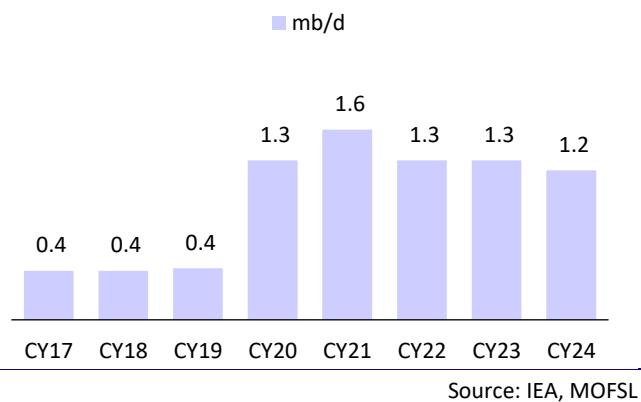


Exhibit 9: MS/HS marketing margins remain strong

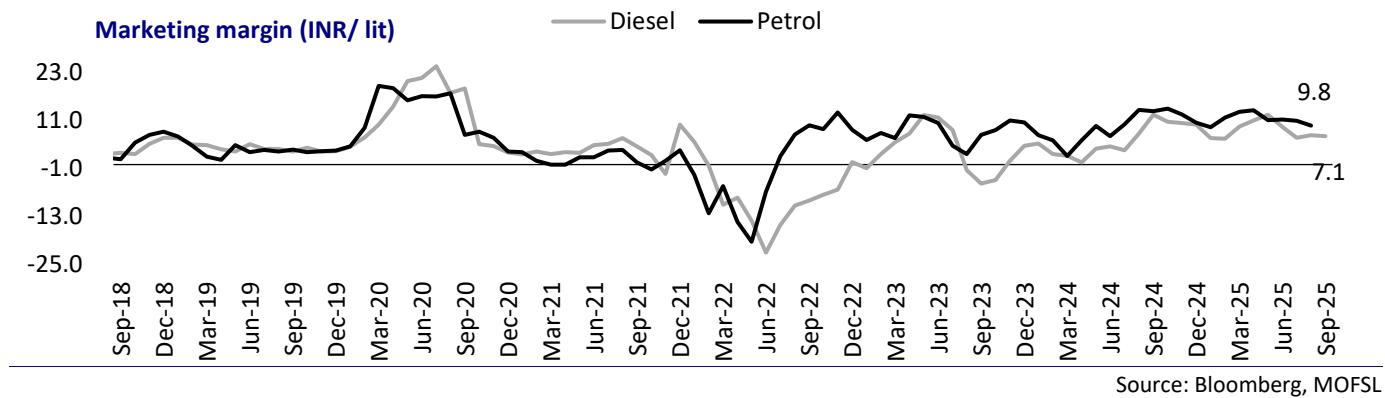


Exhibit 10: Spot LNG prices remain elevated

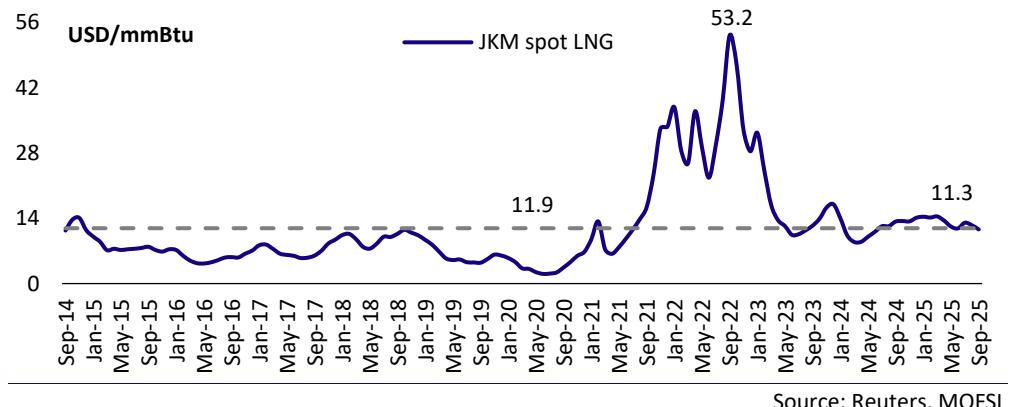


Exhibit 11: Brent crude price (USD/bbl)

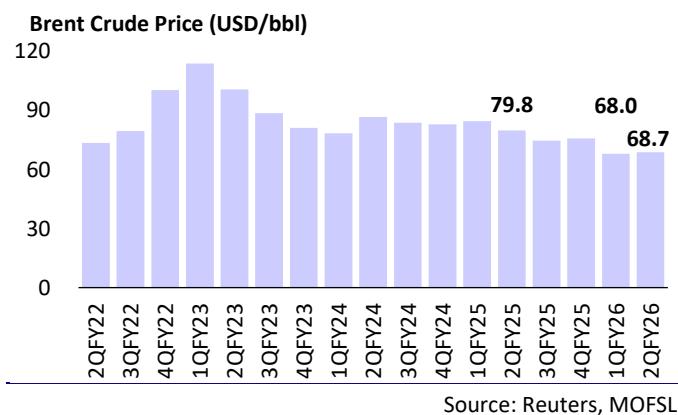


Exhibit 12: Brent less WTI (USD/bbl)

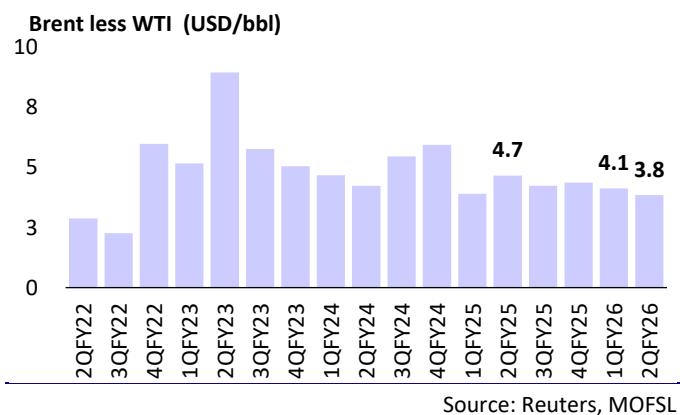
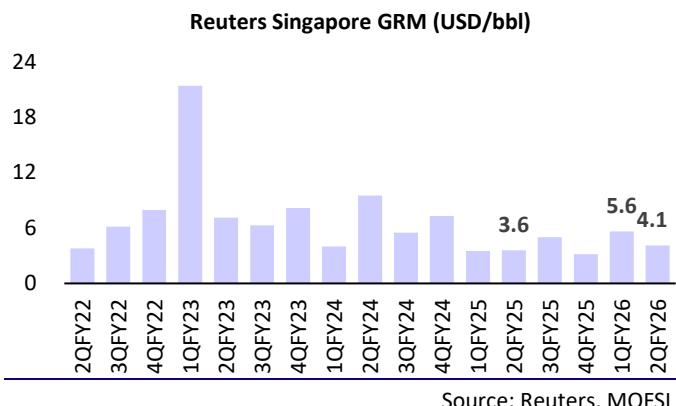
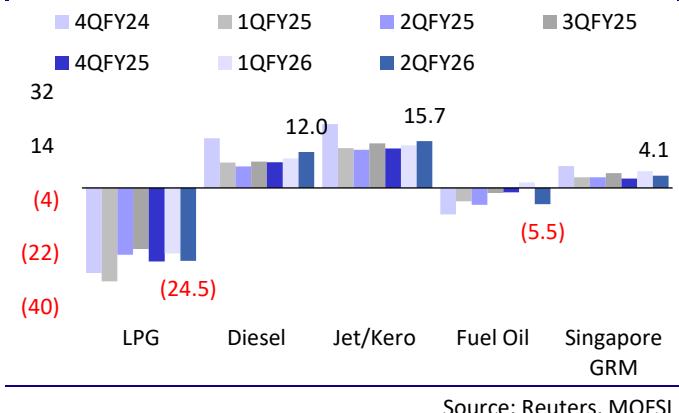
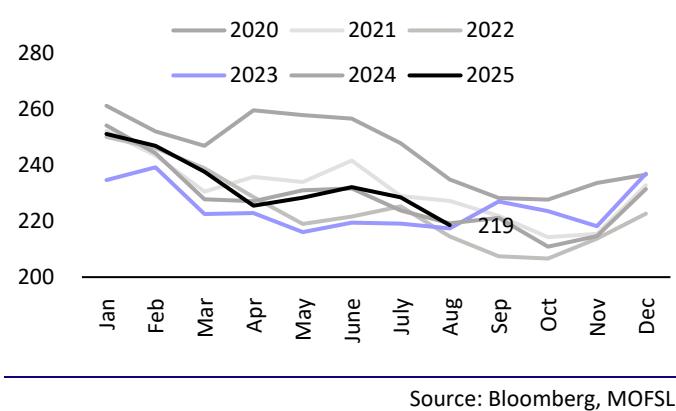
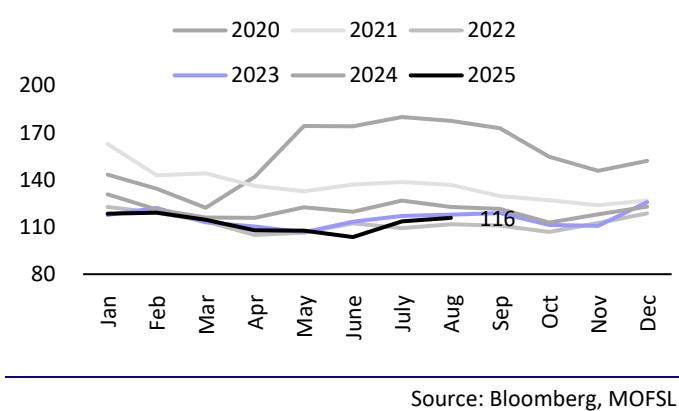
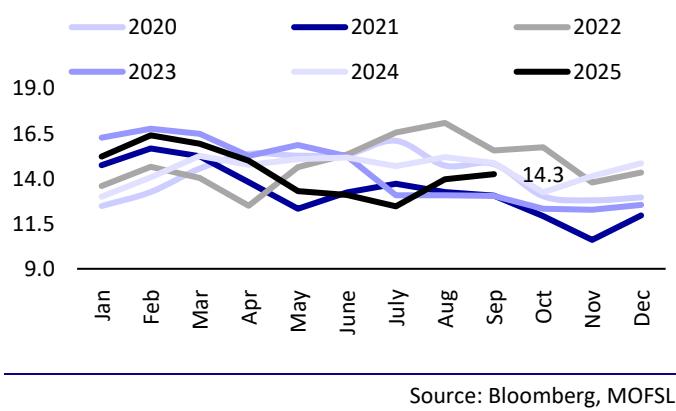
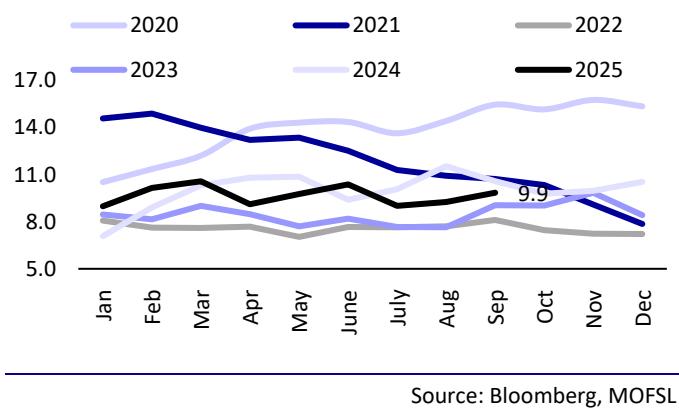


Exhibit 13: Singapore GRM (USD/bbl)

Exhibit 14: Various product cracks over Dubai crude (USD/bbl)

Exhibit 15: US gasoline inventory (mb)

Exhibit 16: US gasoil inventory (mb)

Exhibit 17: Singapore light distillate inventory (mb)

Exhibit 18: Singapore middle distillate inventory (mb)


Financials and valuations: PLNG (BUY | TP: INR410)

Key assumptions	FY25	FY26E	FY27E	FY28E	FY29E	FY30E	FY31E	FY32E
Volume sold (mmtpa)								
Dahej terminal	17.3	17.3	18.3	18.9	19.5	20.1	20.6	21.2
Terminal utilization	99%	92%	81%	84%	87%	89%	92%	94%
Kochi terminal	1.2	1.3	1.3	1.4	1.7	1.9	2.1	2.4
Terminal utilization	23%	25%	25%	29%	34%	38%	43%	47%
Total	19.5	19.5	20.3	21.2	22.0	22.9	23.7	24.5
Regas tariff (INR/mmbtu)								
Dahej terminal	63.7	66.9	70.2	63.2	65.7	68.3	71.1	73.9
YoY increase/(decrease)	5%	5%	5%	-10%	4%	4%	4%	4%
Kochi terminal	89.3	93.8	98.5	88.6	92.2	95.8	99.7	103.7
YoY increase/(decrease)	5%	5%	5%	-10%	4%	4%	4%	4%
Financial Snapshot (INR b)								
Y/E March	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26E
Sales	384.0	354.5	260.2	431.7	599.0	527.3	509.8	495.2
EBITDA	32.9	39.9	47.0	52.5	48.6	52.1	55.2	56.7
Adj. PAT	21.6	27.6	29.5	33.5	32.4	35.4	39.3	39.1
Adj. EPS (INR)	14.4	18.4	19.7	22.3	21.6	23.6	26.2	26.1
EPS Gr. (%)	3.7	28.1	6.9	13.7	-3.4	9.1	11.0	-0.4
BV/Sh.(INR)	67.1	73.0	77.7	89.5	99.6	113.1	129.2	145.3
Ratios								
Net D:E	-0.3	-0.4	-0.4	-0.3	-0.4	-0.4	-0.5	-0.4
RoE (%)	21.8	26.3	26.1	26.7	22.8	22.2	21.6	19.0
RoCE (%)	21.5	29.4	28.1	28.5	24.6	23.5	22.7	19.4
Payout (%)	74.9	73.8	58.5	51.5	46.3	42.4	38.2	38.2
Valuation								
P/E (x)	21.3	16.6	15.6	13.7	14.2	13.0	11.7	10.7
P/BV (x)	4.6	4.2	3.9	3.4	3.1	2.7	2.4	1.9
EV/EBITDA (x)	13.1	10.4	8.9	7.9	8.3	7.4	6.7	5.8
Div. Yield (%)	3.3	4.1	3.8	3.8	3.3	3.3	3.3	4.3

Financials and valuations: HPCL (BUY | TP: INR520)

Financial Snapshot (INR b)									
Y/E March	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E
Sales	2,755	2,691	2,332	3,499	4,407	4,339	4,341	3,634	3,423
EBITDA	115	57	160	102	-72	249	166	222	203
Adj. PAT	67	36	107	73	-70	160	67	116	95
Adj. EPS (INR)	31	17	50	34	-33	75	32	55	45
EPS Gr. (%)	-7	-46	193	-32	PL	LP	-58	73	-18
BV/Sh.(INR)	143	146	179	195	152	220	240	288	331
Ratios									
Net D:E	0.8	1.3	1.1	1.1	2.1	1.3	1.3	1.0	0.8
RoE (%)	23.9	11.9	30.9	18.4	-19.0	40.4	13.7	20.7	14.5
RoCE (%)	12.9	12.0	14.9	8.3	-7.8	15.9	8.2	10.8	8.8
Payout (%)	43.0	76.0	30.3	27.2	0.0	27.9	33.2	30.6	28.2
Valuations									
P/E (x)	12.7	23.4	8.0	11.7	-12.2	5.3	12.6	7.3	8.9
P/BV (x)	2.8	2.7	2.2	2.1	2.6	1.8	1.7	1.4	1.2
EV/EBITDA (x)	9.6	22.0	8.0	12.7	-21.0	5.9	9.1	6.5	6.9
Div. Yield (%)	2.7	1.6	3.8	2.3	0.0	5.3	2.6	5.3	4.2
FCF Yield (%)	-3.2	-9.8	7.3	4.4	-15.0	16.3	5.6	17.3	12.8

Key Assumptions- HPCL

Particulars	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E
Exchange Rate (INR/USD)	70.0	70.9	74.3	74.5	80.4	82.8	84.6	86.0	86.2
Brent Crude (USD/bbl)	70.1	61.2	44.4	80.5	96.1	83.0	78.6	65.4	65.0
Market Sales (MMT)	38.7	39.6	36.6	39.1	43.5	46.8	49.8	51.8	53.9
YoY (%)	5	2	(8)	7	11	8	6	4	4
GRM (USD/bbl)	5.0	1.0	3.9	7.2	12.1	9.1	5.7	5.5	6.5
Singapore GRM (USD/bbl)	4.9	3.2	0.5	5.0	10.7	6.6	3.8	5.2	5.0
Prem/(disc) (USD/bbl)	0	(2)	3	2	1	2	2	0.4	1.5
Total Refinery throughput (MMT)	18.4	17.2	16.4	14.0	19.1	22.3	25.3	26.6	26.6
YoY (%)	1%	-7%	-4%	-15%	37%	17%	13%	5%	0%
Refining capacity utilization (%)	117%	109%	104%	88%	85%	91%	103%	109%	109%
Blended marketing margin incld inventory (INR/lit)	4.3	4.0	6.3	4.3	(0.8)	5.5	4.4	5.1	4.5
Consolidated EPS	31.4	17.1	50.1	34.3	-32.8	75.2	31.6	54.7	44.8

Financials and valuations: MAHGL (BUY | TP: INR1700)

Financial & Valuation Summary									(INR b)
Y/E March	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26E	FY27E
Sales	27.9	29.7	21.5	35.6	63.0	62.4	69.2	78.3	84.3
EBITDA	8.9	10.5	9.3	9.2	11.8	18.4	15.1	15.9	16.6
Adj. PAT	5.5	7.9	6.2	6.0	7.9	12.9	10.4	10.8	11.1
Adj. EPS (INR)	55.3	80.3	62.7	60.4	80.0	130.5	105.8	108.9	111.9
EPS Gr. (%)	14.3	45.2	-21.9	-3.6	32.3	63.2	-18.9	3.0	2.8
BV/Sh.(INR)	242.8	298.9	327.2	364.2	418.5	520.6	596.2	661.6	728.7
Ratios									
Net D:E	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1	0.0	0.0	0.0
RoE (%)	24.3	29.7	20.0	17.5	20.4	27.8	18.9	17.3	16.1
RoCE (%)	24.3	29.8	20.1	17.5	20.5	27.8	19.0	17.4	16.2
Payout (%)	43.5	52.4	36.7	38.1	32.5	40.0	28.4	40.0	40.0
Valuation									
P/E (x)	26.8	18.4	23.6	24.5	18.5	11.4	14.0	13.6	13.2
P/BV (x)	6.1	5.0	4.5	4.1	3.5	2.8	2.5	2.2	2.0
EV/EBITDA (x)	16.2	13.7	15.1	15.4	12.2	7.7	9.5	9.0	8.6
Div. Yield (%)	1.3	2.4	1.6	1.6	1.8	3.5	2.0	2.9	3.0
FCF Yield (%)	2.5	4.4	3.6	2.0	2.0	6.2	2.3	2.1	1.8

Investment in securities market are subject to market risks. Read all the related documents carefully before investing

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 be 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, Depository participant services & distribution of various financial products. MOFSL is a listed public company, the details in respect of which are available on www.motilaloswal.com. MOFSL (erstwhile Motilal Oswal Securities Limited - MOSL) is registered with the Securities & Exchange Board of India (SEBI) and is a registered Trading Member with National Stock Exchange of India Ltd. (NSE) and Bombay Stock Exchange Limited (BSE), Multi Commodity Exchange of India Limited (MCX) and National Commodity & Derivatives Exchange Limited (NCDEX) for its stock broking activities & is Depository participant with Central Depository Services Limited (CDSL) National Securities Depository Limited (NSDL), NERL, COMRIS and CCRL and is member of Association of Mutual Funds of India (AMFI) for distribution of financial products and Insurance Regulatory & Development Authority of India (IRDA) as Corporate Agent for insurance products. Details of associate entities of Motilal Oswal Financial Services Limited are available on the website at <http://onlinereports.motilaloswal.com/Dormant/documents/List%20of%20Associate%20companies.pdf> MOFSL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein; (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of MOFSL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report. MOFSL and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, the recipients of this report should be aware that MOFSL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions. Details of pending Enquiry Proceedings of Motilal Oswal Financial Services Limited are available on the website at <https://galaxy.motilaloswal.com/ResearchAnalyst/PublishViewLitigation.aspx>

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

Regional Disclosures (outside India)

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

For Hong Kong:

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

For U.S.

Motilal Oswal Financial Services Limited (MOFSL) is not a registered broker - dealer under the U.S. Securities Exchange Act of 1934, as amended (the "1934 act") and under applicable state laws in the United States. In addition MOFSL is not a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended (the "Advisers Act" and together with the 1934 Act, the "Acts"), and under applicable state laws in the United States. Accordingly, in the absence of specific exemption under the Acts, any brokerage and investment services provided by MOFSL, including the products and services described herein are not available to or intended for U.S. persons. This report is intended for distribution only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the Exchange Act and interpretations thereof by SEC (henceforth referred to as "major institutional investors"). This document must not be acted on or relied on by persons who are not major institutional investors. Any investment or investment activity to which this document relates is only available to major institutional investors and will be engaged in only with major institutional investors. In reliance on the exemption from registration provided by Rule 15a-6 of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act") and interpretations thereof by the U.S. Securities and Exchange Commission ("SEC") in order to conduct business with Institutional Investors based in the U.S., MOFSL has entered into a chaperoning agreement with a U.S. registered broker-dealer, Motilal Oswal Securities International Private Limited. ("MOSIPL"). Any business interaction pursuant to this report will have to be executed within the provisions of this chaperoning agreement. The Research Analysts contributing to the report may not be registered /qualified as research analyst with FINRA. Such research analyst may not be associated persons of the U.S. registered broker-dealer, MOSIPL, and therefore, may not be subject to NASD rule 2711 and NYSE Rule 472 restrictions on communication with a subject company, public appearances and trading securities held by a research analyst account.

For Singapore

In Singapore, this report is being distributed by Motilal Oswal Capital Markets (Singapore) Pte. Ltd. ("MOCMSPL") (UEN 2011129401Z), which is a holder of a capital markets services license and an exempt financial adviser in Singapore. This report is distributed solely to persons who (a) qualify as "institutional investors" as defined in section 4A(1)(c) of the Securities and Futures Act of Singapore ("SFA") or (b) are considered "accredited investors" as defined in section 2(1) of the Financial Advisers Regulations of Singapore read with section 4A(1)(a) of the SFA. Accordingly, if a recipient is neither an "institutional investor" nor an "accredited investor", they must immediately discontinue any use of this Report and inform MOCMSPL.

In respect of any matter arising from or in connection with the research you could contact the following representatives of MOCMSPL. In case of grievances for any of the services rendered by MOCMSPL write to grievances@motilaloswal.com.

Nainesh Rajani

Email: nainesh.rajani@motilaloswal.com

Contact: (+65) 8328 0276

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 at the end of the month immediately preceding the date of publication of the Research Report or date of the public appearance.
- received compensation/other benefits from the subject company in the past 12 months
- 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.
- 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.
- Served subject company as its clients during twelve months preceding the date of distribution of the research report.

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 warranty, 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 alterations 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, nor 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.

This report is meant for the clients of Motilal Oswal only.

Investment in securities market are subject to market risks. Read all the related documents carefully before investing.

Registration granted by SEBI and certification from NISM in no way guarantee performance of the intermediary or provide any assurance of returns to investors.

Registered Office Address: Motilal Oswal Tower, Rahimtullah Sayani Road, Opposite Parel ST Depot, Prabhadevi, Mumbai-400025; Tel No.: 022 - 71934200 / 71934263; www.motilaloswal.com.

Correspondence Address: Palm Spring Centre, 2nd Floor, Palm Court Complex, New Link Road, Malad (West), Mumbai- 400 064. Tel No: 022 71881000. Details of Compliance Officer: Neeraj Agarwal, Email Id: na@motilaloswal.com, Contact No.:022-40548085.

Grievance Redressal Cell:

Contact Person	Contact No.	Email ID
Ms. Hemangi Date	022 40548000 / 022 67490600	query@motilaloswal.com
Ms. Kumud Upadhyay	022 40548082	servicehead@motilaloswal.com
Mr. Ajay Menon	022 40548083	am@motilaloswal.com

Registration details of group entities.: Motilal Oswal Financial Services Ltd. (MOFSL): INZ000158836 (BSE/NSE/MCX/NCDEX); CDSL and NSDL: IN-DP-16-2015; Research Analyst: INH000000412 . AMFI: ARN : 146822. IRDA Corporate Agent – CA0579. Motilal Oswal Financial Services Ltd. is a distributor of Mutual Funds, PMS, Fixed Deposit, Insurance, Bond, NCDs and IPO products.

Customer having any query/feedback/ clarification may write to query@motilaloswal.com. In case of grievances for any of the services rendered by Motilal Oswal Financial Services Limited (MOFSL) write to grievances@motilaloswal.com, for DP to dpgrievances@motilaloswal.com.