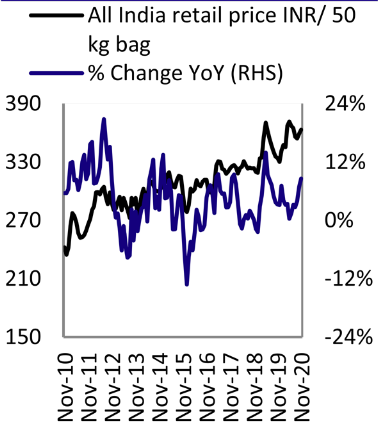
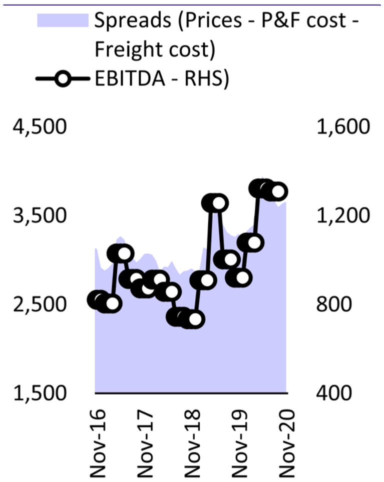
Cement

All-India prices up 7% YoY



Cement spreads remain strong in 3QFY21



Busy season demand kicking in

Expect price hikes to follow

Our channel checks indicate the seasonal uptick in demand is playing out as expected, with volumes bouncing back in the last few weeks from the weakness seen in November (due to festive holidays). While prices weakened in December (falling 3% MoM), we expect recovery in the next few weeks as peak season demand sets in. Cost inflation from higher fossil fuel prices (petcoke, coal, and diesel) should be offset, in our view, by price hikes, keeping margins in 4QFY21 at elevated levels. We remain constructive on the sector and expect our Coverage Universe EBITDA to grow 37% YoY in 2HFY21 – as demand and margins remain above consensus estimates. UltraTech is our top large-cap pick and Dalmia Bharat our top mid-cap pick.

- **In 3QFY21, we estimate volumes for our Coverage Universe to grow 7% YoY, with higher growth for North and East based companies (JK Cement, Shree). We expect unitary EBITDA to rise 33% YoY to INR1,225/t (-6% QoQ) on higher cement price (+7% YoY).**
- **As per our channel checks, volumes are growing >10% YoY in the North, East, and Central regions of India. While demand has remained weak in South and Maharashtra, it has recovered strongly from the 15–20% YoY decline seen in 2QFY21.**
- **In 3QFY21, all-India average price rose 7% YoY to INR350/bag, led by a 17% increase in South and 6–7% in North, Central, and West, even as East was flat.**
- **All-India price, however, has been flat QoQ on 3% MoM decline in December across regions. On a QoQ basis, price was +3%/+2%/0%/-1%/-5% in North/Central/West/South/East in 3QFY21. East posted sharp decline – 6%/7%/8%/5% QoQ decline was seen in Bihar/Jharkhand/Odisha/West Bengal due to new capacities and higher inter-regional flow of material from South.**
- **Variable cost has risen in 3QFY21 on account of higher costs of petcoke (+16% YoY), diesel (+14% YoY), and raw material (slag). Despite this, we estimate total costs/t to have declined ~2% YoY due to lower fixed costs as well as operating leverage benefits.**

Volumes expected to be up 7% YoY in 3QFY21

- Cement industry volumes have remained strong on the back of rural housing and a pickup in government spending (particularly in East and North). November demand growth, however, tapered due to festive holidays (Diwali, Chhath) and workers returning to their villages for the same. Our channel checks indicate demand has picked up once again from the second half of December as seasonal improvement in construction activity kicks in.
- Demand in East has been particularly strong, supported by pre-election spending by the state governments in West Bengal and Assam. Odisha, on the other hand, has seen an uptick in industrial infra demand.
- In 3QFY21, we estimate volumes for our Coverage Universe to have grown 7% YoY, with higher growth for North and East based companies – 23% for JK Cement and 14% for Shree. South-based companies India Cement and Ramco are expected to continue to see volume decline of 10% and 5%, respectively.

Amit Murarka - Research analyst (Amit.Murarka@motilaloswal.com)
Basant Joshi - Research analyst (Basant.Joshi@motilaloswal.com)

South – production discipline going strong

- The Cement industry in South has exhibited a strong production discipline in the past year in the face of weak volumes.
- Prices in South were up ~INR58/bag, or 17% YoY, to INR383/bag in 3QFY21. Prices were up 39%/11%/14%/11% YoY in Andhra Pradesh / Tamil Nadu / Karnataka / Kerala.
- On a QoQ basis, prices were down 1% QoQ as hikes in Nov were offset by decline of 6% MoM in Dec in Kerala and 1–2% in other states.

North and Central – only regions with QoQ price hikes in 3QFY21

- Demand is North and Central was strong, particularly in October, when some states saw >20% YoY volume growth. While the ongoing farmer agitation in North caused some logistical issues in November, this has now been resolved.
- Prices in North have risen by 3%/7% QoQ/YoY to INR383/bag, led by sharp hikes seen in October (as demand was strong).
- Prices in Central have also risen by 2%/6% QoQ/YoY to INR351/bag, led by hikes in both Uttar Pradesh and Madhya Pradesh.

West – mixed demand trends; prices remain flat QoQ

- Cement demand in Maharashtra has been among the most impacted in the country due to the COVID-19 pandemic. The state has continued to see some decline in demand, although lower than the ~20% YoY decline in 2QFY21. Demand in Gujarat has been good, with volume growth of 5–10% YoY.
- Price was up 1%/11% QoQ/YoY to INR351/bag in Maharashtra in 3QFY21, but declined 1% QoQ (+3% YoY) to INR348/bag in Gujarat. As a result, prices in West were flat QoQ at INR350/bag (+7% YoY).

East – weakest pricing among the regions

- Demand in East has been the strongest among the regions at >10% YoY, supported by government spending (particularly in West Bengal, Assam, and Odisha) as well as improved labor availability.
- However, due to aggressive expansions undertaken by various players, East has seen the weakest pricing among the regions in the past three years – current prices are the lowest in the last three years. The rest of the country, meanwhile, has seen an over 10% increase in prices in the past three years.
- Price in East has declined ~INR45/bag since May'20. It declined ~5% QoQ in 3QFY21 due to a sharp INR20–25/bag MoM decline across states in Dec.
- In 3QFY21, price in Bihar / Jharkhand / Odisha / West Bengal declined 6%/7%/8%/5% QoQ.

Costs – increase in power and fuel to be offset by lower fixed cost

- Lower petcoke price has been a tailwind for the Cement sector. It aided decline in power and fuel cost for the fifth successive quarter in 2QFY21 (by 18% YoY). However, this is now set to reverse as petcoke price has risen substantially.
- Petcoke price was up 46% YoY to USD98/t in December (up 63% v/s Apr'20). To mitigate the impact of higher petcoke price, cement producers increased the use of imported coal, but even this firmed up by 31% MoM (13% YoY) in December. We estimate an INR60–70/t, or ~7% QoQ, increase in power and fuel

cost in 3QFY21. It would rise further in 4QFY21 as low-cost inventory gets diluted in 3QFY21.

- Diesel price was up 14% YoY in 3QFY21 due to an increase in duties levied by the government. Lower rail freight and steps undertaken by the industry to optimize logistic cost have, however, neutralized the impact of higher diesel price.
- 1HFY21 saw ~10% decline in other expenses due to savings on fixed costs (such as travel, administration, repairs, and advertising and promotions). While these spends should gradually normalize, we expect them to remain low even in 2HFY21. Lower fixed costs and higher operating leverage (from strong volumes) should largely neutralize the increase in power and fuel cost and lead to marginally lower total costs YoY even in 3QFY21.

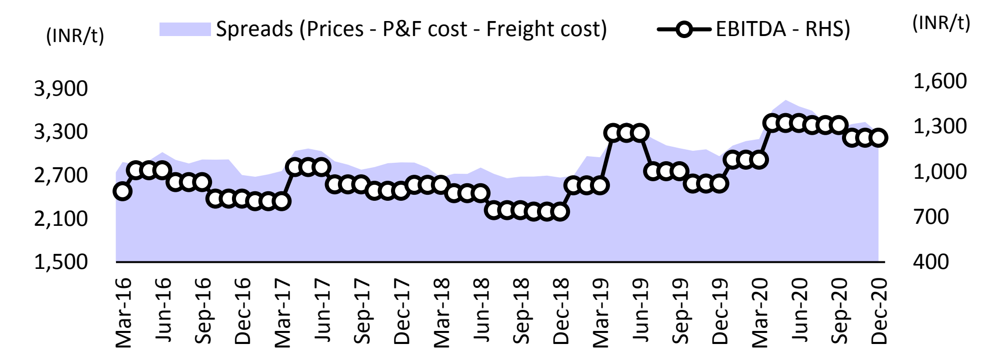
Top picks – UltraTech and Dalmia Bharat

- While we are structurally positive on the industry outlook, we prefer North and Central as these markets have a higher clinker utilization of over 80%.
- We adopt a bottom-up stock-picking approach and prefer companies that: a) are moving down the cost curve, b) have the potential to gain market share, and c) provide valuation comfort.
- UltraTech is our top large-cap pick, while Dalmia Bharat is the top mid-cap pick. We also like ACC as a value pick, but do not see much upside in Shree, Ramco, and Ambuja, whose potential market share gains are already priced in.

Cement: Valuation summary

	Mcap (USD b)	CMP (INR)	TP (INR)	Rating	P/E (x)		EV/EBITDA (x)		EV/t (x)		P/BV	
					FY21E	FY22E	FY21E	FY22E	FY21E	FY22E	FY21E	FY22E
UTCEM	21.0	5,343	6,240	Buy	29.6	24.7	14.9	13.1	201	187	3.3	3.0
SRCM	11.8	23,894	24,900	Neutral	34.5	34.8	19.5	16.5	234	218	5.7	4.9
ACEM	6.9	254	250	Neutral	19.3	20.1	11.3	11.4	141	138	1.7	1.6
ACC	4.2	1,645	1,980	Buy	22.0	19.5	9.5	8.2	102	93	2.5	2.2
TRCL	2.6	793	805	Neutral	21.4	22.7	12.5	12.6	133	131	3.3	2.9
DALBHARA	2.9	1,116	1,310	Buy	25.9	25.6	9.0	8.3	107	88	1.9	1.8
JKCE	2.2	2,093	2,250	Buy	25.8	20.3	11.4	9.8	139	135	4.6	3.9
BCORP	0.8	732	935	Buy	9.1	8.9	5.1	6.0	65	67	1.1	1.0
ICEM	0.7	175	168	Neutral	24.9	31.8	10.1	10.9	72	71	1.0	0.9
JKLC	0.5	342	445	Buy	13.1	13.0	6.2	5.8	47	45	2.0	1.7

Exhibit 1: Cement spreads remain strong in 3QFY21



Source: MOFSL; EBITDA/t is actual reported for our coverage

Estimate 13% EBITDA CAGR for our Coverage Universe over FY20–22E

We expect EBITDA to rise by 18%/8% YoY in FY21E/FY22E, implying a 13% CAGR in EBITDA over FY20–22E. We expect a 19%/22% CAGR in JKCE/TRCL on capacity-led volume growth and higher prices in South. PAT for our Coverage Universe should also grow at 22% CAGR over FY20–22E. While EBITDA growth in FY21 is led by higher margins, growth in FY22E is expected to be driven largely by volumes. After edging down 1% YoY in FY21E, we expect volumes to grow 13% (on a low base) in FY22E, implying a 6% volume CAGR.

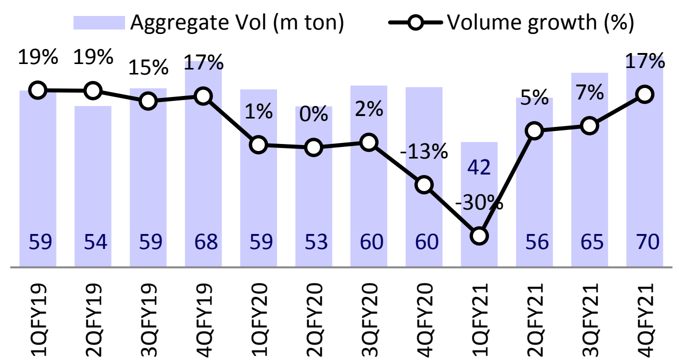
Focus on cost reduction after the easing of COVID-led restrictions as well as price hikes have resulted in margin expansion in the sector. 1HFY21 saw ~10% decline in other expenses owing to savings on fixed costs (such as travel, administration, repairs, and advertising and promotions). While these spends should gradually normalize, we expect them to remain low even in 2HFY21. Lower fixed costs and higher operating leverage (from strong volumes) should largely neutralize the increase in power and fuel cost from higher petcoke cost, leading to marginally lower total costs YoY even in 2HFY21. We expect EBITDA for our Coverage Universe to be 37% higher YoY in 2HFY21 on better realizations (+4% YoY) and higher volumes (+12% YoY).

Exhibit 2: Expect 13% EBITDA CAGR over FY20–22E, driven by 6% volume CAGR

	EBITDA (INR b)			FY20–22E	Volume (mt)			FY20–22E	EBITDA/t (INR)		
	FY20	FY21E	FY22E	CAGR (%)	FY20	FY21E	FY22E	CAGR (%)	FY20	FY21E	FY22E
UTCEM	94.1	109.6	121.5	14	82.3	82.7	91.8	6	1,143	1,325	1,323
SRCM	36.7	40.8	45.1	11	24.9	26.9	29.8	9	1,448	1,519	1,503
ACEM	21.5	27.0	27.8	14	24.1	22.5	25.4	3	891	1,199	1,094
ACC	24.1	26.0	28.4	8	28.9	25.6	29.5	1	834	1,016	962
TRCL	11.1	16.3	16.6	22	11.2	10.2	12.2	5	992	1,598	1,356
DALBHARA	21.1	26.4	27.6	14	19.3	20.3	23.6	11	1,092	1,304	1,166
JKCE	12.1	15.2	17.2	19	10.1	11.5	13.1	14	1,199	1,318	1,309
BCORP	13.4	14.3	15.6	8	13.4	13.0	15.0	6	997	1,104	1,042
ICEM	5.9	8.4	7.6	14	11	8.8	10.6	(2)	531	948	719
JKLC	6.7	7.4	7.5	6	9.2	9.7	10.4	6	732	757	723
Sum/average	**246.7**	**291.5**	**314.8**	**13**	**234.4**	**231.3**	**261.5**	**6**	**1,052**	**1,260**	**1,203**
YoY growth (%)	24	18	8		-2	(1)	13		27	20	(5)

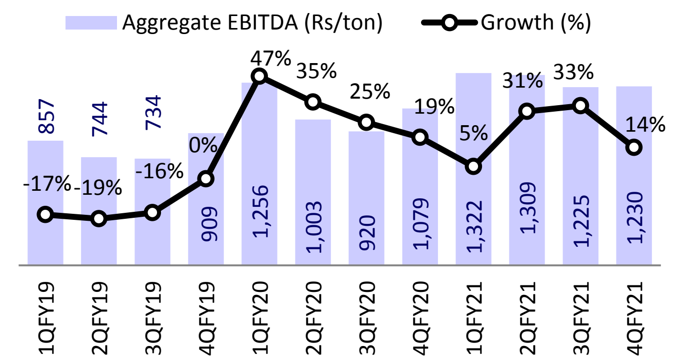
Source: MOFSL, Company

Exhibit 3: Volumes to be 12% YoY higher in 2HFY21E



Source: Company, MOFSL

Exhibit 4: EBITDA/t to be 22% higher YoY in 2HFY21E



Source: Company, MOFSL

Top picks – UltraTech, Dalmia Bharat, ACC, JK Cement

UltraTech (Buy, TP: INR6,240)

UTCEM has a strong pan-India distribution network and preferred supplier status for key infrastructure projects. As a result, it is well-positioned to tap into expected growth in both retail and institutional (non-trade) cement demand in India. The company is ramping up its under-utilized acquired capacities (Binani, Century Cement). It also has a strong pipeline of projects and brownfield expansion potential, which offer visibility on long-term growth. We estimate a 14%/28% CAGR in consolidated EBITDA/PAT over FY20–22E, driven by a 6% CAGR in volumes and lower operating/interest costs. Its valuation is reasonable at 13.1x FY22E EV/EBITDA and USD187/t capacity – a ~17% discount to its past five-year average. The stock is also trading 20% cheaper v/s peer SRCM and against its historical average of 10%. We value UTCEM at 14x Sep'22 EV/EBITDA to arrive at our TP of INR6,240.

Dalmia Bharat (Buy, TP: INR1,310)

With its recent clinker expansion in East, DALBHARA is well-placed to gain market share in this region. We estimate a 10% volume CAGR over FY20–22E, far higher than the industry growth rate. We forecast a ~15% EBITDA CAGR over FY20–22E, aided by lower cost. The company should continue to generate strong FCF and reduce its net debt further from ~INR20b currently. It trades at a reasonable valuation of 8.3x FY22E EV/EBITDA and USD88/t EV/capacity. We value the stock at 8.5x Sep'22 EV/EBITDA to arrive at our TP of INR1,310.

ACC (Buy, TP: INR1,980)

ACC trades at a 30–50% discount to peers SRCM, UTCEM, and TRCL. Such a large valuation discount is excessive as: a) ACC has arrested its market share losses since CY17, b) the proportion of inefficient assets would decline and profitability would improve with planned capacity expansions in CY22/CY23, and c) the company has a strong net-cash balance sheet (16% of mcap), allowing room for a special dividend (similar to parent ACEM). We value ACC at 9x CY22E EV/EBITDA (~20% discount to its past five-year average of 11x) to arrive at our TP of INR1,980. This implies target EV/t of USD115 and target P/E of 21x on CY22E earnings. Reiterate **Buy**.

JKCE (Buy, TP: INR2,250)

We expect JKCE to deliver a higher-than-industry EBITDA CAGR of 20% over FY20–22E, driven by a 16% volume CAGR, on account of its new capacity in North. The expansion further improves its regional mix in favor of North and Central. Furthermore, the company moves down the cost curve by increasing its share of newer cost-efficient capacities. We arrive at our TP of INR2,250, valuing the White Cement business at 12x Sep'22 EV/EBITDA and Grey Cement business at 9x Sep'22 EV/EBITDA. Maintain **Buy**.

Story in charts

Exhibit 5: All-India prices flat QoQ / up 7% YoY

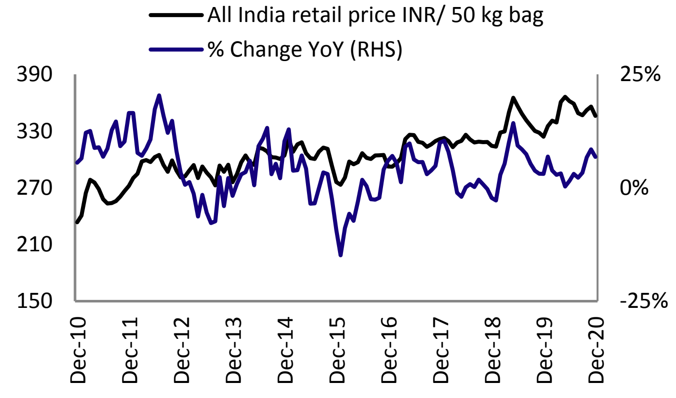


Exhibit 6: Prices in North up 3% QoQ / 7% YoY

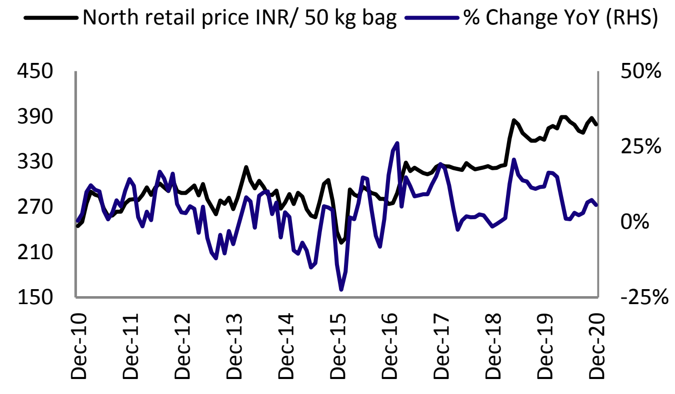
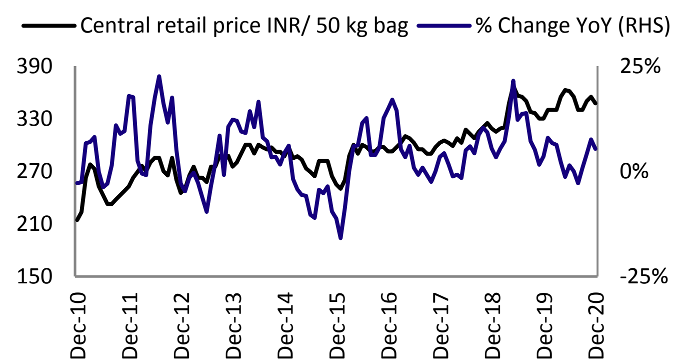
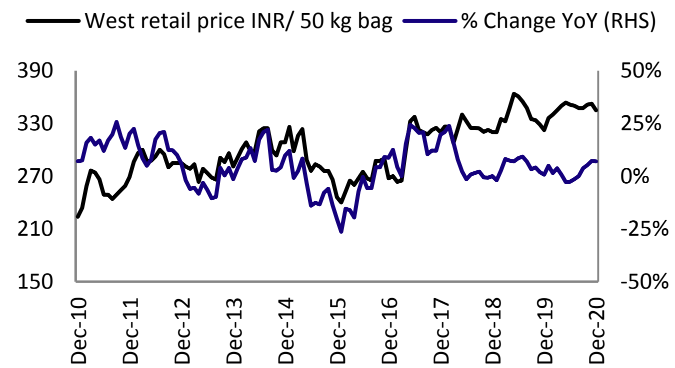


Exhibit 7: Prices in Central up 2% QoQ / 6% YoY



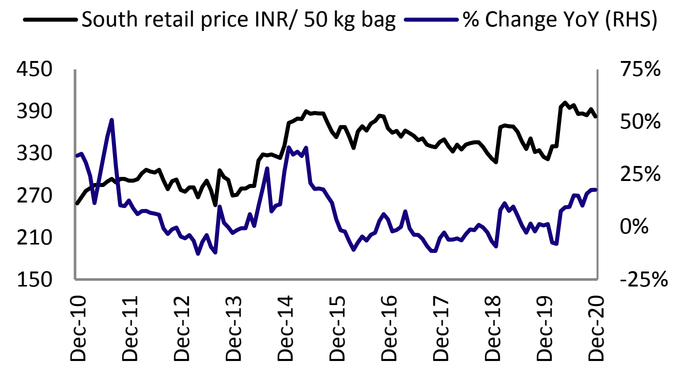
Source: MOFSL

Exhibit 8: Prices in West flat QoQ / up 7% YoY



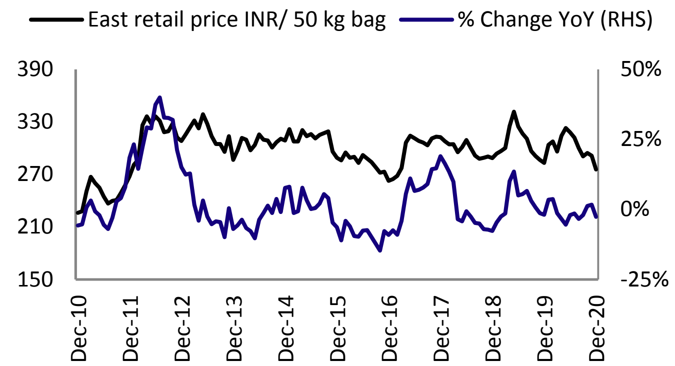
Source: MOFSL

Exhibit 9: Prices in South down 1% QoQ / up 17% YoY



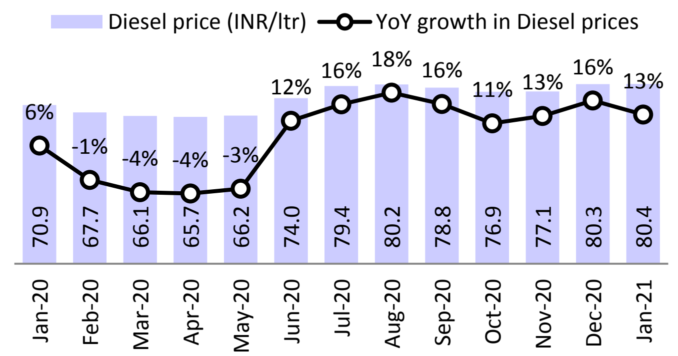
Source: MOFSL

Exhibit 10: Prices in East down 5% QoQ / flat YoY



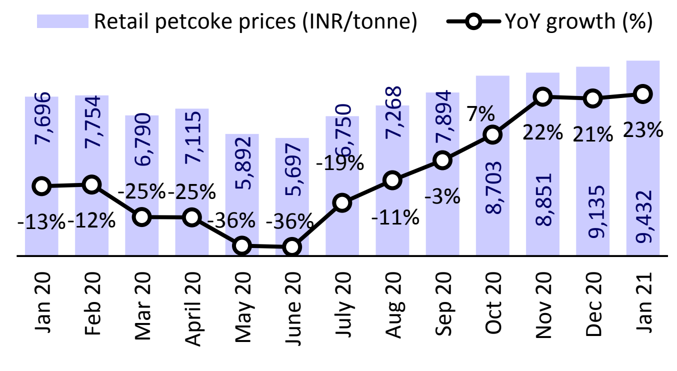
Source: MOFSL

Exhibit 11: Diesel prices up 13% YoY in Jan'21



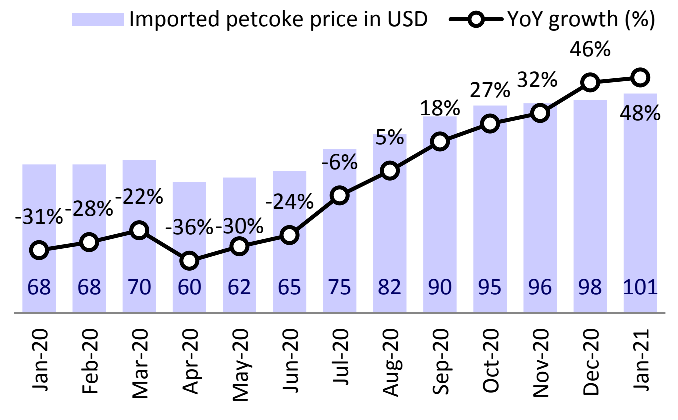
Source: Industry

Exhibit 12: Domestic petcoke prices up 23% YoY in Jan'21



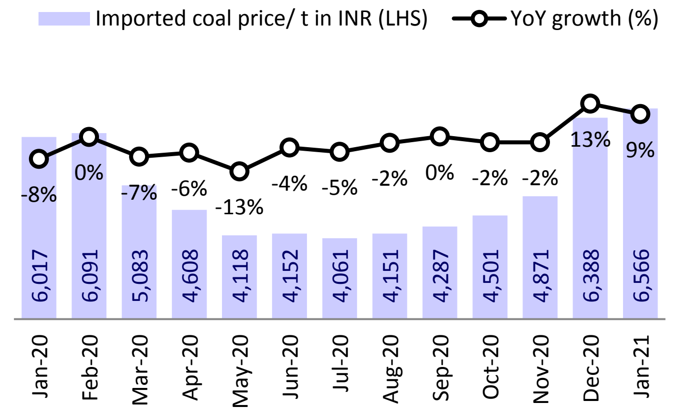
Source: Industry

Exhibit 13: Imported petcoke prices up 48% YoY in Jan'21



Source: Industry

Exhibit 14: Imported coal prices up 9% YoY in Jan'21



Source: Industry

NOTES

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

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

Disclosures

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

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

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

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

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

Regional Disclosures (outside India)

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

For Hong Kong:

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

For U.S.

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

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

For Singapore

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

Specific Disclosures

1 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.

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