

India

Overweight (no change)**Highlighted Companies****Havells India****ADD, TP Rs1493, Rs1182 close**

It will post a relatively better performance versus ECD listed peers. Margins in fan business could surprise negatively. Overall margins to sharply recover qoq. Lloyd will continue to report EBIT loss. Commentary on new fan launches and Lloyd product demand trend will be key monitorables.

Century Plyboards**ADD, TP Rs754, Rs519 close**

Stock price has corrected in line with listed peers, given weak demand. There is raw material-led margin pressure, likely supply glut in MDF from imports, new domestic capacity and a large capex that is underway being exposed to cost/time overruns. We expect an EPS CAGR of 23% over FY23F-25F and recommend ADD rating to the stock for a +40% upside.

KEI Industries**ADD, TP Rs1707, Rs1462 close**

We expect a good recovery in C&W sales volume led by channel restocking and better margins yoy. The company may report its highest-ever quarterly PAT in 3QFY23F.

Summary Valuation Metrics

P/E (x)	Mar22-A	Mar23-F	Mar24-F
Havells India	61.82	61.03	46.7
Century Plyboards	35.43	29.89	24.76
KEI Industries	35.02	26.99	21.42

P/BV (x)	Mar22-A	Mar23-F	Mar24-F
Havells India	12.32	11.07	9.68
Century Plyboards	7.36	6.01	4.91
KEI Industries	6.17	5.07	4.15

Dividend Yield	Mar22-A	Mar23-F	Mar24-F
Havells India	0.63%	0.72%	0.85%
Century Plyboards	0.29%	0.29%	0.29%
KEI Industries	0.17%	0.21%	0.27%

Analyst(s)**Rahul AGARWAL**

T (91) 22 4161 1553

E rahul.agarwal@incredcapital.com

Harshit SARAWAGI

T (91) 22 4161 0000

E harshit.sarawagi@incredcapital.com

Industrial - Overall**3QFY23F results preview - tough to predict**

- We expect steady revenue growth yoy while lower EBITDA/PAT growth yoy for our coverage universe in consumer durable and building material sectors.
- Channel check reveals huge demand volatility over Oct-Dec 2022. C&W and PVC pipe makers may do better. Fan, tile & wood panel businesses may weaken.
- We expect a relatively better 3Q for Havells, V-Guard, Polycab, Finolex Cables, KEI, APL Apollo, & Cera. CG Consumer & Orient Electric can surprise negatively.

We expect steady topline growth but EBITDA/PAT to decline yoy

The winter season was delayed with West/South India witnessing a mild winter chill in 3QFY23. 3Q is typically strong for geysers and washing machine sales while fans, coolers, and RACs register weak sales. Alternate sales channels - rural, modern trade and e-commerce - continue to gain revenue share. Please note that 3QFY23F revenue growth will be lower yoy due to a high base quarter (3QFY22) that had pent-up demand due to the Covid-19 impact in 1HFY22. Based on management interactions and channel check, in the consumer durables segment, ceiling fans have witnessed a volatile quarter with companies expected to post abnormally high revenue growth (liquidation of non-star rated ceiling fans led by BEE star rating norms), low gross/EBITDA margin (higher channel discounts/schemes) and weak operating cash flow due to higher receivables (primary sales>secondary sales). Small appliances saw huge competition with tactical price changes from brands to retain/gain market share. C&W firms saw better demand in Nov/Dec 2022 due to the rise in copper prices leading to channel restocking for wires. C&W brands hiked prices by 3-4% at end-Nov 2022. B2C LED sales were sub-par while B2B demand was relatively better. In the building materials segment, agri pipes were in short supply and saw robust demand recovery on the back of rising PVC prices from end-Nov 2022. Tiles, wood panels and bathware saw relatively weak demand due to high product prices & less spending on home improvement and festivals.

Expectations from consumer durables sector

We expect cumulative revenue/EBITDA/PAT growth of 10.5%/6%/-1% yoy, respectively. We expect C&W to fare better vs. ECD. CG Consumer & Orient Electric may post weakest performance owing to high revenue share from ceiling fans. Havells to be relatively better (EBITDA/PAT to fall yoy) and V-Guard to outperform. KEI to post highest-ever quarterly PAT.

Expectations from building materials sector

We expect cumulative revenue/EBITDA/PAT growth of 12.8%/-9%/-13% yoy. In terms of reported numbers, Supreme, Astral and Finolex Inds. will see a weak performance yoy. APL Apollo to post strong numbers while Cera may be steady yoy. Kajaria could surprise positively on margins while Century could disappoint. Top picks: Havells, Century, and KEI Industries.

Figure 1: 3QFY23F estimates summary

	Revenue	% yoy	EBITDA	% yoy	PAT	% yoy
Havells India	39,980	9.1	4,115	-6.5	2,713	-11.3
CG Consumer Electrical	17,266	22.4	1,944	-3.5	1,125	-24.1
V-Guard Industries	10,309	6.6	878	1.2	583	9.6
Orient Electric	6,278	-7.4	356	-46.4	146	-61.7
Polycab India	36,893	9.4	4,582	26.7	3,029	22.8
Finolex Cables	11,124	14.3	1,390	17.3	1,331	-7.0
KEI Industries	17,751	13.5	1,930	23.1	1,303	28.7
Astral	11,678	5.9	1,829	-7.5	1,047	-17.8
Supreme Industries	22,032	13.3	3,056	-3.9	2,089	-15.0
Finolex Industries.	9,066	-9.8	1,247	-48.5	823	-53.6
APL Apollo	39,883	23.5	2,492	23.2	1,566	35.4
Kajaria Ceramics	10,683	0.0	1,529	-16.8	914	-25.1
Cera Sanitaryware	4,446	9.9	707	6.2	489	13.0
Century Plyboards	8,883	4.7	1,449	-4.5	948	-2.5
Total	247,937	11.5	27,641	-1.1	18,299	-6.9

SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 2: Coverage Universe- valuation summary

Company Name	Bblg ticker	Rating	Market cap US\$m	Closing price Rs/share	Price Target Rs/share	Upside [%]	P/E (x)		EV/E (x)		CAGR % (FY23F-25F)		FY24F		
							FY24F	FY25F	FY24F	FY25F	Revenue	EPS	RoE (%)	RoCE (%)	OCF Yield
Building Materials															
Astral	ASTRA IN	ADD	5,791	2,087	2,298	10.1	68.1	54.9	42.2	35.1	14.3	30.2	20.7	24.9	1.8
Supreme Industries	SI IN	ADD	4,358	2,491	2,382	-4.4	34.5	31.7	23.6	21.3	5.5	12.8	20.0	21.8	4.0
APL Apollo Tubes	APAT IN	ADD	4,220	1,105	1,223	10.7	32.8	25.8	21.7	17.3	18.3	32.4	29.0	31.5	3.4
Kajaria Ceramics	KJC IN	ADD	2,546	1,161	1,227	5.6	36.0	30.0	22.4	18.6	14.7	28.3	21.0	25.5	3.3
Finolex Industries	FNXP IN	ADD	1,495	175	153	-12.8	20.6	17.7	13.5	11.2	-0.2	12.9	12.0	13.7	5.4
Century Plyboards	CPBI IN	ADD	1,587	519	754	45.4	24.8	19.7	16.5	12.5	20.4	23.2	21.8	24.6	4.3
Cera Sanitaryware	CRS IN	ADD	962	5,372	6,172	14.9	28.7	25.1	18.3	15.6	13.5	16.2	18.8	23.9	2.7
Simple Average							35.1	29.3	22.6	18.8	12.4	22.3	20.5	23.7	3.6
Electricals															
Havells India	HAVL IN	ADD	10,195	1,182	1,493	26.3	46.7	38.2	30.9	25.1	12.6	26.4	22.1	27.6	2.4
Polycab India	POLYCAB IN	REDUCE	5,527	2,681	2,582	-3.7	31.1	27.2	19.1	16.5	11.1	15.0	18.7	24.9	3.6
KEI Industries	KEII IN	ADD	1,816	1,462	1,707	16.7	21.4	18.1	14.3	11.8	16.8	22.2	21.3	27.6	3.6
Crompton Greaves	CROMPTON IN	REDUCE	2,953	337	366	8.5	32.4	27.1	20.6	17.7	12.8	20.5	21.7	20.5	3.7
Finolex Cables	FNXC IN	HOLD	1,117	530	526	-0.8	12.4	10.8	8.6	6.8	10.4	20.0	14.1	14.4	6.2
V-Guard Industries	VGRD IN	ADD	1,531	258	303	17.8	35.4	30.1	22.8	19.6	10.2	20.0	18.4	24.2	3.1
Orient Electric	ORIENTEL IN	ADD	776	265	312	17.7	37.4	32.0	18.7	16.0	14.6	35.5	22.8	33.6	3.3
Simple Average							31.0	26.2	19.3	16.2	12.6	22.8	19.9	24.7	3.7

SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 3: Electricals sector 3QFY23F earnings preview

	3QFY23F	3QFY22A	2QFY22A	Change (%)		Comments
				yoy	qoq	
FMEG						
Havells						
Net Sales	39,980	36,642	36,795	9.1	8.7	# We expect switchgear and LED lighting sales to grow 3-6% yoy.
EBITDA	4,115	4,402	2,868	-6.5	43.4	# Channel restocking due to the rise in copper prices (+3% qoq; -17% yoy) will drive C&W sales volume in 3QFY23F. # ECD segment sales (50% fans) will see an abnormal performance due to ~90% ceiling fan product portfolio change over to meet new BEE star rating compliance from 1 Jan 2023. # Washing machine sales will be key to track in case of Lloyd.
EBITDA margin (%)	10.3	12.0	7.8	-172bp	422bp	# High-cost raw materials got fully absorbed and margins will sharply improve qoq. # Margins could see an abnormal negative impact due to the possibility of higher discounts on ceiling fans in 3QFY23F to liquidate non-star inventory.
Consolidated PAT	2,713	3,058	1,870	-11.3	45.1	
CG Consumer						
Net Sales	17,266	14,106	16,995	22.4	1.6	# Butterfly was fully consolidated with the company from 1QFY23. 3QFY23F financials will, hence, not be comparable yoy.
EBITDA	1,944	2,015	1,931	-3.5	0.7	# Butterfly had an abnormally weak base quarter due to postponement of festivals to 2QFY22 and hence, YoY performance will be very strong on a low base for Butterfly in 3QFY23F. # We expect Butterfly to report revenue/EBITDA growth of +6%/+49% yoy. EBITDA margin is expected to be at 11.5%, +320bp yoy/+30bp qoq.
EBITDA margin (%)	11.3	14.3	11.4	-303bp	292bp	# ECD sales (50% fans) will see an abnormal quarter due to liquidation of non-star rated ceiling fans. We expect revenue growth of +6% yoy in a seasonally weak quarter. # LED sales will be weak and will decline 6% yoy.
Consolidated PAT	1,125	1,483	1,258	-24.1	-10.5	
V-Guard						
Net Sales	10,309	9,674	9,861	6.6	4.5	# We expect single-digit yoy revenue growth across segments in 3QFY23F.
EBITDA	878	868	727	1.2	20.8	# Wire sales volume may be strong qoq owing to channel restocking led by higher copper prices. However, copper prices are down 17% yoy and would lead to lower value growth yoy
EBITDA margin (%)	8.5	9.0	7.4	-45bp	160bp	# Ceiling fan revenue mix is low relatively for V-Guard versus fan market leaders and hence, ECD segment to see lesser volatility in revenue and margins.
Consolidated PAT	583	532	437	9.6	33.5	# Inventory cycle will reduce and may have normalized at the end of Dec 2022, in our view, leading to better operating cash flow. # Sunflame acquisition will be consolidated with the company from 4QFY23F.
Orient Electric						
Net Sales	6,278	6,784	5,106	-7.4	23.0	# The company will continue to report very weak consolidated performance owing to trade channel restructuring and BEE star rating transition for fans (ECD segment).
EBITDA	356	665	116	-46.4	206.8	# We expect the ECD segment's revenue to decline by 15% yoy, while lighting and switchgear segment's revenue to grow 12% yoy.
EBITDA margin (%)	5.7	9.8	2.3	-412bp	752bp	# Margins to recover qoq across segments. However, it will be much lower versus normalized level (EBITDA margin: 5.7%, down 410bp yoy).
Consolidated PAT	146	381	(3)	-61.7	NM	
C&W						
Polycab						
Net Sales	36,893	33,720	33,324	9.4	10.7	# We expect a good quarter for Polycab led by strong sales volume growth due to channel restocking in the C&W segment
EBITDA	4,582	3,617	4,276	26.7	7.1	# Owing to lower copper prices (down 17% yoy), C&W segment's revenue growth will be restricted to 10% yoy. Also, C&W export revenue to decline qoq, in our view.
EBITDA margin (%)	12.4	10.7	12.8	169bp	-211bp	# We expect the weakness to persist for the FMEG segment (fan mix: 35%). FMEG revenue will be largely flat yoy. # Base quarter had lower-than-normal margins due to very high copper prices and channel destocking. We expect EBITDA margin to improve by 170bp yoy.
Consolidated PAT	3,029	2,467	2,678	22.8	13.1	
Finolex Cables						
Net Sales	11,124	9,730	10,908	14.3	2.0	# We expect a good quarter for Finolex Cables with consolidated revenue growth boosted by recovery in the communication cable segment's sales (+50% yoy). In line with peers, the electrical cable segment will see sales volume recovery qoq but revenue growth to be restricted to 11% yoy due to lower copper prices vs. last year.
EBITDA	1,390	1,185	987	17.3	40.9	# FMEG revenue is expected to grow by 12% yoy.
EBITDA margin (%)	12.5	12.2	9.0	31bp	314bp	# Electrical cable segment's margins are expected to be stable yoy while communication cable and FMEG segments EBIT margin to improve yoy.
Consolidated PAT	1,331	1,430	554	-7.0	140.3	# Though we expect good revenue and EBITDA growth yoy, consolidated PAT growth will be weak owing to a lower share of profits from associate entities (Finolex Industries).
KEI Industries						
Net Sales	17,751	15,638	16,081	13.5	10.4	# We expect the cable segment's revenue growth at 14% yoy. Sales volume growth to recover qoq in line with the industry, because of channel restocking led by rising copper prices.
EBITDA	1,930	1,568	1,606	23.1	20.2	# EPC business intensity defocus will continue with revenue to decline by 50% yoy.
EBITDA margin (%)	10.9	10.0	10.0	85bp	4bp	# EBITDA margin to recover both yoy and qoq.
Consolidated PAT	1,303	1,012	1,069	28.7	21.9	
Cumulative Financials						
Net Sales	139,601	126,293	129,070	10.5	8.2	# Expect fan OEMs to report volatile performance. Operating cash flows will be weak in our view for 3QFY23F.
EBITDA	15,195	14,320	12,511	6.1	21.4	# Expect non-fan ECD sales to be relatively steadier
EBITDA margin (%)	10.9	11.3	9.7	-45bp	165bp	# Expect C&W companies to report good sale volume recovery and margins qoq
Consolidated PAT	10,229	10,363	7,862	-1.3	30.1	# Base quarter had pent-up demand and lower opex benefits. Hence expect margins to be lower yoy. # Expect EBITDA margins to be better vs. 1H as pressure from high cost RM considerably eases off. However, seasonal/regulatory implications will lead to volatility in 2HFY23F.

NM=NOT MEASURED

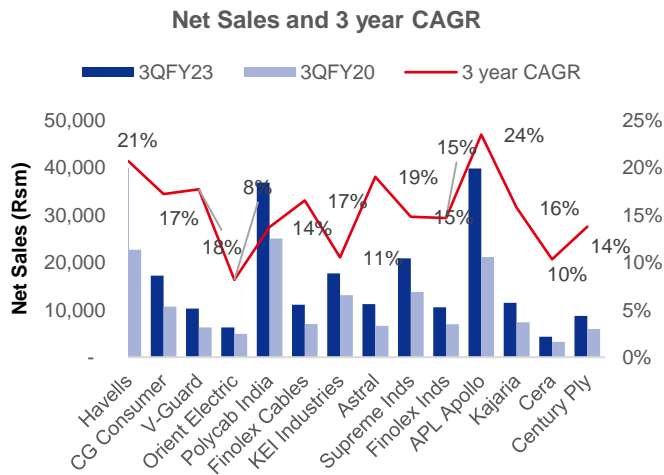
SOURCE: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

Figure 4: Building materials sector's 3QFY23F earnings preview

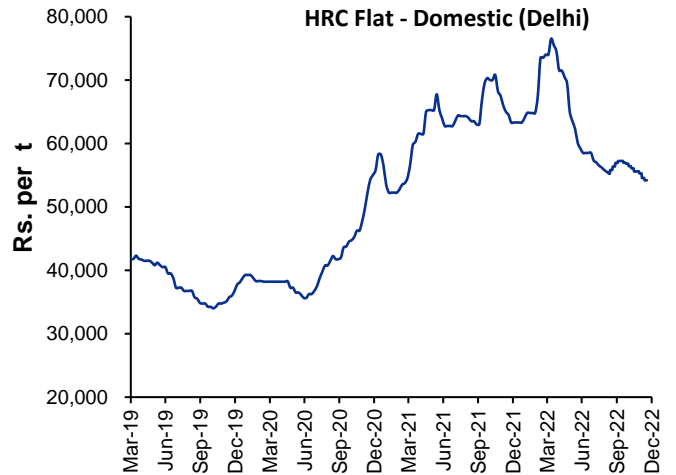
	3QFY23F	3QFY22A	2QFY22A	Change (%)		Comments
				yoy	qoq	
Plastic Pipes						
Astral						
Net Sales	11,678	11,027	11,716	5.9	-0.3	# We expect pipe sales volume at 42kt, +20% yoy, on the back rising PVC prices from end-Nov 2022. However, realization to be down 24% yoy, leading to the pipe segment's revenue decline of 9% yoy to Rs7.8bn. EBITDA margin too will be lower yoy by 190bp yoy, but recover sharply qoq due to lower inventory loss sequentially (approx. Rs100m vs. Rs450m qoq). EBITDA/t is expected at Rs33,750, down 32% yoy. # Adhesives revenue is expected at Rs2.8bn, +11% yoy. # Paints business was acquired in Jun 2022 and was not part of the base quarter. We expect revenue of Rs475m and EBITDA margin of 16% in 3QFY23F. # Plumbing business was not material in 2QFY23. 3QFY23F should be the first quarter where the company's management could potentially share segment-wise financial performance.
EBITDA	1,829	1,976	1,440	-7.5	27.0	
EBITDA margin (%)	15.7	17.9	12.3	-226bp	337bp	
Consolidated PAT	1,047	1,273	704	-17.8	48.7	
Supreme Industries						
Net Sales	22,032	19,451	20,866	13.3	5.6	# We expect a good recovery in revenue growth yoy across plastic pipes, packaging and industrial segments. Consumer product segment's revenue will see a flattish quarter yoy. # Plastic pipe sales volume is expected at 89kt, +56% yoy, on a very low base (significant destocking during 3QFY22). Pipe segment's revenue is expected at Rs13.2bn, +15% yoy. # Overall EBIT/t is expected at Rs18,900, down 35% yoy. # Overall EBITDA margins will be weak yoy owing to inventory losses due to the fall in PVC prices in Oct/Nov 2022. Base quarter had inventory gains.
EBITDA	3,056	3,179	1,471	-3.9	107.7	
EBITDA margin (%)	13.9	16.3	7.1	-247bp	682bp	
Consolidated PAT	2,089	2,457	820	-15.0	154.7	
Finolex Industries						
Net Sales	9,066	10,047	9,411	-9.8	-3.7	# We expect Finolex Industries to be back to profitability on the back of a significant recovery in agri pipe demand and PVC prices (from Nov-end 2022). # We build in PVC pipe and fittings sales volume of 72kt, +54% yoy. Realization will decline sharply too by 33% yoy, leading its overall revenue to be largely flattish yoy. # PVC resin sales volume is expected to grow by 75% yoy to 76kt on an abnormally low base of last year. # Inventory gains in 3QFY22 led to abnormally high margins and net profits. We expect foreign exchange (FX) to have suffered inventory losses in Oct/Nov 2022 and inventory gains in Dec 2022 based on extreme volatility in PVC resin prices.
EBITDA	1,247	2,419	(1,427)	-48.5	-187.4	
EBITDA margin (%)	13.8	24.1	-15.2	1032bp	2891bp	
Consolidated PAT	823	1,774	(954)	-53.6	-186.3	
Steel Pipes						
APL Apollo Tubes						
Net Sales	39,883	32,304	39,692	23.5	0.5	# In its 3QFY23 performance update, APL Apollo Tubes reported sales volume of 605kt, +50% yoy, on a weak base. We expect the realization to drop by 18% yoy to Rs63,850/t, in line with the fall in average HRC prices yoy. # VAP revenue mix largely stayed flat qoq at 56% and hence, we expect EBITDA/t at Rs4,100 vs. Rs3,850 qoq. # Update on Raipur plant production ramp-up is the key parameter to watch out for in the management commentary.
EBITDA	2,492	2,023	2,319	23.2	7.5	
EBITDA margin (%)	6.2	6.3	5.8	-1bp	41bp	
Consolidated PAT	1,566	1,156	1,502	35.4	4.3	
Sanitaryware & Tiles						
Kajaria Ceramics						
Net Sales	10,683	10,682	10,778	0.0	-0.9	# Demand for tiles has been a challenge during the quarter, as per our channel check. We expect flat sales volume growth for tiles at 25.9msm, +1% yoy. Realization to be up 5% yoy, leading to tile revenue of Rs10.2bn, +6% yoy. # Bathware and tile adhesive segments' sales should see significant growth qoq, in line with management guidance. # Based on our channel check, we expect EBITDA margin to positively surprise on the back of lower-than-expected gas cost.
EBITDA	1,529	1,838	1,294	-16.8	18.1	
EBITDA margin (%)	14.3	17.2	12.0	-290bp	230bp	
Consolidated PAT	914	1,220	735	-25.1	24.4	
Cera						
Net Sales	4,446	4,045	4,159	9.9	6.9	# We expect a steady quarter with the sanitaryware segment's revenue to grow by 10% yoy. # Faucet and tile businesses will see a relatively weaker revenue growth of 6-7% yoy.
EBITDA	707	666	679	6.2	4.1	
EBITDA margin (%)	15.9	16.5	16.3	-56bp	-43bp	
Consolidated PAT	489	432	507	13.0	-3.7	
Wood Panel						
Century Plyboards						
Net Sales	8,883	8,485	9,002	4.7	-1.3	# We expect a soft quarter for the company owing to a weak demand environment across segments, higher imports impacting the domestic demand-supply balance and higher raw material prices leading to lower-than-expected margins. # We expect consolidated revenue to be flattish yoy. Laminates business to do the best in 3QFY23F with a revenue growth of 9% yoy while the MDF segment's revenue to decline by 8% yoy. # EBITDA margin to decline or, at best, be flat yoy across segments excluding laminates, for which we expect margins to grow by 220bp yoy.
EBITDA	1,449	1,517	1,507	-4.5	-3.9	
EBITDA margin (%)	16.3	17.9	16.7	-157bp	-43bp	
Consolidated PAT	948	973	1,090	-2.5	-13.0	
Cumulative Financials						
Net Sales	108,336	96,041	105,624	12.8	2.6	# We expect plastic pipe companies to report strong recovery in sale volume growth qoq owing to recovery in PVC resin prices. Agri pipes to do better vs plumbing pipes. # Margins will be under pressure across companies given a very high base quarter and RM prices still very high vs. pre-covid. # Directionally, PVC pipes and tiles should improve profitability qoq over the next 12 months.
EBITDA	12,446	13,617	7,284	-8.6	70.9	
EBITDA margin (%)	11.5	14.2	6.9	-269bp	459bp	
Consolidated PAT	8,069	9,286	4,405	-13.1	83.2	

SOURCE: INCRED RESEARCH ESTIMATES, COMPANY REPORTS

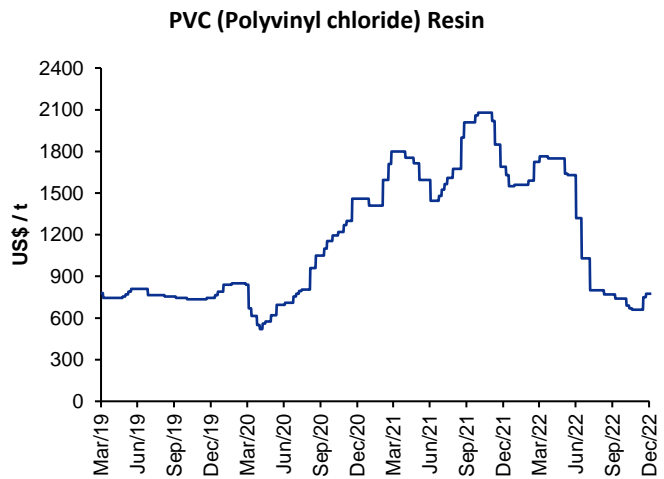
Figure 5: Sales growth and commodity price trend



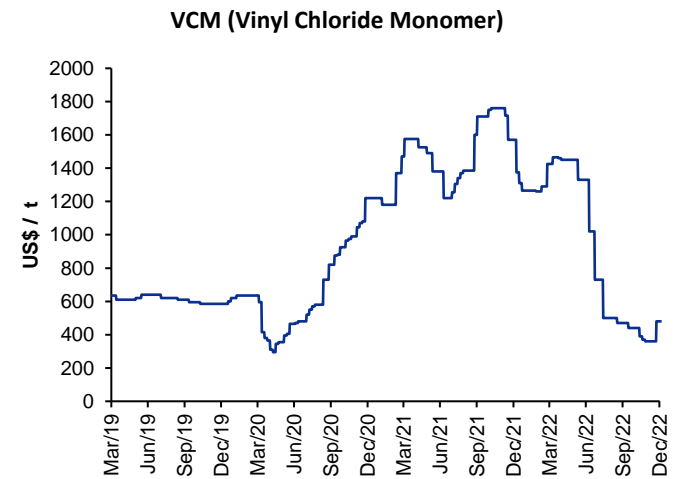
SOURCE: INCRED RESEARCH, BLOOMBERG



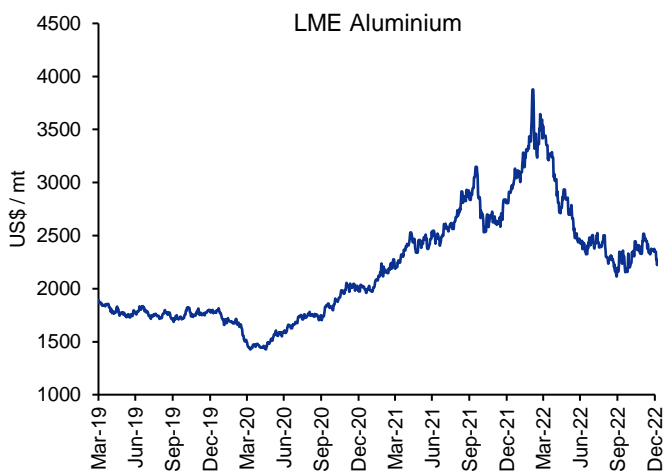
SOURCE: INCRED RESEARCH, BLOOMBERG



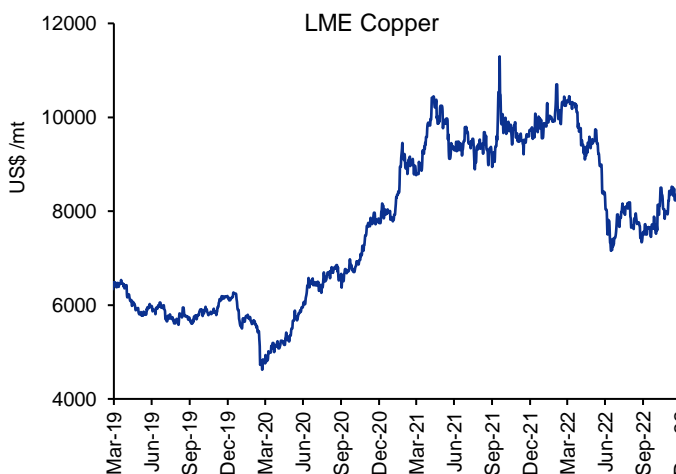
SOURCE: INCRED RESEARCH, BLOOMBERG



SOURCE: INCRED RESEARCH, BLOOMBERG



SOURCE: INCRED RESEARCH, BLOOMBERG



SOURCE: INCRED RESEARCH, BLOOMBERG

DISCLAIMER

This report (including the views and opinions expressed therein, and the information comprised therein) has been prepared by Incred Research Services Private Ltd. (formerly known as Earnest Innovation Partners Private Limited) (hereinafter referred to as "IRSPL"). IRSPL is registered with SEBI as a Research Analyst vide Registration No. INH000007793. Pursuant to a trademark agreement, IRSPL has adopted "Incred Equities" as its trademark for use in this report.

The term "IRSPL" shall, unless the context otherwise requires, mean IRSPL and its affiliates, subsidiaries and related companies. 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 IRSPL and its affiliates/group companies to registration or licensing requirements within such jurisdictions.

This report is being supplied to you strictly on the basis that it will remain confidential. No part of this report may be (i) copied, photocopied, duplicated, stored or reproduced in any form by any means; or (ii) redistributed or passed on, directly or indirectly, to any other person in whole or in part, for any purpose without the prior written consent of IRSPL.

The information contained in this report is prepared from data believed to be correct and reliable at the time of issue of this report.

IRSPL is not required to issue regular reports on the subject matter of this report at any frequency and it may cease to do so or change the periodicity of reports at any time. IRSPL is not under any obligation to update this report in the event of a material change to the information contained in this report. IRSPL has not any and will not accept any, obligation to (i) check or ensure that the contents of this report remain current, reliable or relevant; (ii) ensure that the content of this report constitutes all the information a prospective investor may require; (iii) ensure the adequacy, accuracy, completeness, reliability or fairness of any views, opinions and information, and accordingly, IRSPL and its affiliates/group companies (and their respective directors, associates, connected persons and/or employees) shall not be liable in any manner whatsoever for any consequences (including but not limited to any direct, indirect or consequential losses, loss of profits and damages) of any reliance thereon or usage thereof.

Unless otherwise specified, this report is based upon reasonable sources. Such sources will, unless otherwise specified, for market data, be market data and prices available from the main stock exchange or market where the relevant security is listed, or, where appropriate, any other market. Information on the accounts and business of company(ies) will generally be based on published statements of the company(ies), information disseminated by regulatory information services, other publicly available information and information resulting from our research. Whilst every effort is made to ensure that statements of facts made in this report are accurate, all estimates, projections, forecasts, expressions of opinion and other subjective judgments contained in this report are based on assumptions considered to be reasonable as of the date of the document in which they are contained and must not be construed as a representation that the matters referred to therein will occur. Past performance is not a reliable indicator of future performance. The value of investments may go down as well as up and those investing may, depending on the investments in question, lose more than the initial investment. No report shall constitute an offer or an invitation by or on behalf of IRSPL and its affiliates/group companies to any person to buy or sell any investments.

The opinions expressed are based on information which are believed to be accurate and complete and obtained through reliable public or other non-confidential sources at the time made. (Information barriers and other arrangements may be established where necessary to prevent conflicts of interests arising. However, the analyst(s) may receive compensation that is based on his/their coverage of company(ies) in the performance of his/their duties or the performance of his/their recommendations. In reviewing this report, an investor should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest. Additional information is, subject to the duties of confidentiality, available on request. The report is not a "prospectus" as defined under Indian Law, including the Companies Act, 2013, and is not, and shall not be, approved by, or filed or registered with, any Indian regulator, including any Registrar of Companies in India, SEBI, any Indian stock exchange, or the Reserve Bank of India. No offer, or invitation to offer, or solicitation of subscription with respect to any such securities listed or proposed to be listed in India is being made, or intended to be made, to the public, or to any member or section of the public in India, through or pursuant to this report.

The research analysts, strategists or economists principally responsible for the preparation of this research report are segregated from the other activities of IRSPL. Information barriers and other arrangements have been established, as required, to prevent any conflicts of interests.

The research analysts, strategists or economists principally responsible for the preparation of this research report are segregated from the other activities of IRSPL. Information barriers and other arrangements have been established, as required, to prevent any conflicts of interests.

IRSPL may have issued other reports (based on technical analysis, event specific, short term views etc.) that are inconsistent with and reach different conclusion from the information presented in this report.

Holding of Analysts/Relatives of Analysts, IRSPL and Associates of IRSPL in the covered securities, as on the date of publishing of this report

	Analyst/ Relative	Entity/ Associates
any financial interests in the company covered in this report (subject company) and nature of such financial interest	NO	NO
actual/beneficial ownership of 1% or more in securities of 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;	NO	NO
any other material conflict of interest at the time of publication of the research report or at the time of public appearance	NO	NO
received any compensation from the subject company in the past twelve months for investment banking or merchant banking or brokerage services or investment advisory or depository or distribution from the subject company in the last twelve months for products/services other than investment banking or merchant banking or broker- age services or investment advisory or depository or distribution from the subject company in the last twelve months	NO	NO
managed or co-managed public offering of securities for the subject company in the last twelve months	NO	NO
received any compensation or other benefits from the subject company or third party in connection with the research report	NO	NO
served as an officer, director or employee of the subject company	NO	NO
been engaged in market making activity for the subject company	NO	NO

Analyst declaration

- The analyst responsible for the production of this report hereby certifies that the views expressed herein accurately and exclusively reflect his or her personal views and opinions about any and all of the issuers or securities analysed in this report and were prepared independently and autonomously in an unbiased manner.
- No part of the compensation of the analyst(s) was, is, or will be directly or indirectly related to the inclusion of specific recommendations(s) or view(s) in this report or based any specific investment banking transaction.
- The analyst(s) has(have) not had any serious disciplinary action taken against him/her(them).
- The analyst, strategist, or economist does not have any material conflict of interest at the time of publication of this report.
- The analyst(s) has(have) received compensation based upon various factors, including quality, accuracy and value of research, overall firm performance, client feedback and competitive factors.

IRSPL and/or its affiliates and/or its Directors/employees may own or have positions in securities of the company(ies) covered in this report or any securities related thereto and may from time to time add to or dispose of, or may be materially interested in, any such securities.

IRSPL and/or its affiliates and/or its Directors/employees may do and seek to do business with the company(ies) covered in this research report and may from time to time (a) buy/sell the securities covered in this report, from time to time and/or (b) act as market maker or have assumed an underwriting commitment in securities of such company(ies), and/or (c) may sell them to or buy them from customers on a principal basis and/or (d) may also perform or seek to perform significant investment banking, advisory, underwriting or placement services for or relating to such company(ies) and/or (e) solicit such investment, advisory or other services from any entity mentioned in this report and/or (f) act as a lender/borrower to such company and may earn brokerage or other compensation. However, Analysts are forbidden to acquire, on their own account or hold securities (physical or uncertificated, including derivatives) of companies in respect of which they are compiling and producing financial recommendations or in the result of which they play a key part.