

India

Underweight (no change)

Highlighted Companies

Camlin Fine Sciences

ADD, TP Rs180, Rs148 close

Camlin Fine Sciences is engaged in the specialty chemicals business. Commissioning of vanillin capacity may add ~Rs1bn to FY23F gross profit. In our view, the nimble decision to change product portfolio as per market conditions will help generate more profit by selling HQ rather than making MEHQ.

Deepak Nitrite Ltd

REDUCE, TP Rs1514, Rs2192 close

Deepak Nitrite's product margins (including phenol) will fall as the prices of key base chemicals (benzene, natural gas, ethylene, and caustic soda) rise. We have already highlighted the cyclical nature of its Rs15bn expansion project in our earlier report. Retain our high- conviction REDUCE rating on the stock. Consensus earnings estimates, in our view, are in for a big negative surprise.

Jubilant Ingrevia Ltd

REDUCE, TP Rs495, Rs531 close

Almost 90% of the product profile of Jubilant Ingrevia is commodity in nature. Pyridine is not a specialty chemical when its fate is driven by agrochemicals. Further, the company is one among several suppliers without any USP. Stock correction till now has been driven by earnings disappointment and the P/E is yet to fall.

Summary Valuation Metrics

| P/E (x) | Mar22-A | Mar23-F | Mar24-F |
|-----------------------|---------|---------|---------|
| Camlin Fine Sciences | 34.78 | 26.1 | 19.35 |
| Deepak Nitrite Ltd | 28.02 | 29.99 | 28.95 |
| Jubilant Ingrevia Ltd | 17.74 | 23.06 | 21.45 |

| P/BV (x) | Mar22-A | Mar23-F | Mar24-F |
|-----------------------|---------|---------|---------|
| Camlin Fine Sciences | 3.1 | 2.47 | 1.99 |
| Deepak Nitrite Ltd | 8.95 | 7.02 | 5.74 |
| Jubilant Ingrevia Ltd | 3.48 | 2.98 | 2.34 |

| Dividend Yield | Mar22-A | Mar23-F | Mar24-F |
|-----------------------|---------|---------|---------|
| Camlin Fine Sciences | 0.26% | 0.44% | 0.58% |
| Deepak Nitrite Ltd | 0.38% | 0.27% | 0.27% |
| Jubilant Ingrevia Ltd | 0.23% | 0.27% | 0.29% |

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Chemicals - Overall

Natural gas and naphtha headwinds

- Recessionary trend in demand as well as rising natural gas and naphtha prices are headwinds for the chemicals sector's earnings for the coming few quarters.
- Ammonia, ethylene, methanol and propylene prices are on an upswing, which is bad news for margins of multiple chemicals like IPA, phenol, ethanol, amines, BOPP films, pyridines, esters, acetic acid and its salts, etc.
- The chemicals sector reminds us of the capital goods sector in FY08. Derating has already started and at the same time, companies are incurring huge capex which will deliver sub-par ROIC, thereby accentuating the derating. Buy companies that have significant earnings growth (as derating to cap returns).

Natural gas is the main problem of Indian chemical companies

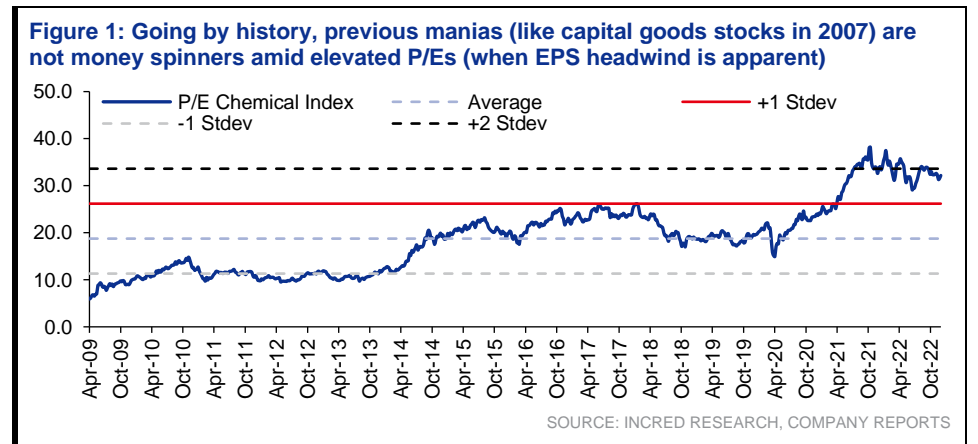
Natural gas is the main problem of India's chemical industry. Natural gas and naphtha can be used interchangeably for power production, which is leading to higher naphtha prices as well. Please note that natural gas is used to make ammonia while naphtha is used for making ethylene. Both (ethylene and ammonia) are mother chemicals for the chemical industry which are becoming costly. Hence, while raw material prices are going up, product prices are subdued as the world is witnessing a slowdown. Rising ammonia prices are leading to higher urea prices, and margin compression for ammonium nitrate, amines, and allied chemicals. Rising naphtha prices are leading to higher ethylene and propylene prices as well as margin compression for multiple chemicals. There are headwinds for the following companies based on this theme – SRF (HOLD), Deepak Fertilisers (UNRATED), Deepak Nitrite (REDUCE), Balaji Amines (UNRATED), Alkyl Amines (UNRATED), Clean Science and Technology (REDUCE), Laxmi Organics (REDUCE), Jubilant Ingrevia (REDUCE), and Aarti Industries (REDUCE).

Chemical stocks have started getting derated, but more fall is likely

The chemicals sector in 2022 has remarkable resemblance to what was witnessed by the capital goods sector in 2007-08. We like to draw attention to BHEL as a fine example of what to avoid at the peak of craziness. Please see the corporate plan of BHEL published in Apr 2007 which showed US\$10bn revenue in FY12 ([Final-2-04 - 7th draft \(bhel.com\)](#)). Please see the Comptroller and Auditor General of India or CAG's report on BHEL's strategic plan ([Microsoft Word - 05 PA Report BHEL \(cag.gov.in\)](#)). Our recap of the history of BHEL is just to point out the cycle. When the cycle is at its peak, stocks go in the distribution mode for multiple years. Indian chemical stocks are going through such a phase. It's needless to point out to the readers of this report that like the capital goods sector, the chemicals sector is also cyclical. All the chemicals named in the first paragraph are way past their cyclical peak.

What to Buy? Buy names where EPS growth can withstand derating

We urge the investors to buy the stocks of companies whose earnings growth is significant enough to withstand a derating. In this respect, we like Camlin Fine Sciences (ADD), and Meghmani Finechem (ADD).



Buy stocks whose earnings growth is visible

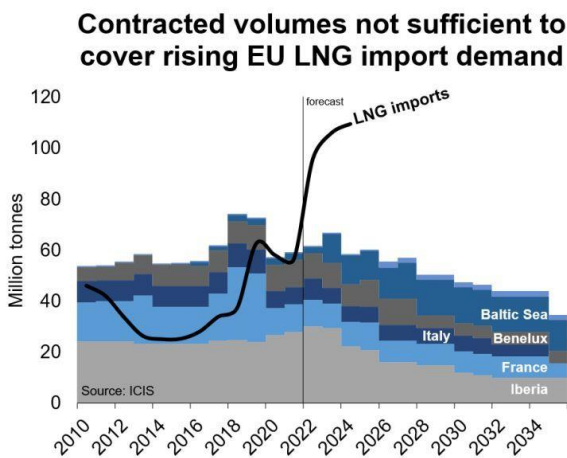
The chemicals sector is witnessing a stagnation of sorts as the earnings growth is not coming through. We feel clean balance sheet holds the stock price, but not for long. Earnings collapse is round the corner, which will lead to a fall in stock price. We advise the investors to exercise caution. Most expansion projects of chemical companies will give sub-par returns in the coming three-to-four years. Tread with caution and buy only niche names. We like companies where there is earnings growth in the near term and hence, Camlin Fine Sciences remains our top pick.

Natural gas is the main problem of chemical Industry

Natural gas is the key problem of India's chemical industry. Natural gas is used to make ammonia and ethylene - mother chemicals for the chemical industry - to become costly. Hence, while raw material prices will go up, product prices will remain subdued as globally there is a slowdown. Please note that naphtha can theoretically replace natural gas at all places but there are many chemical production facilities that are based on natural gas and hence, replacing them with naphtha is not possible.

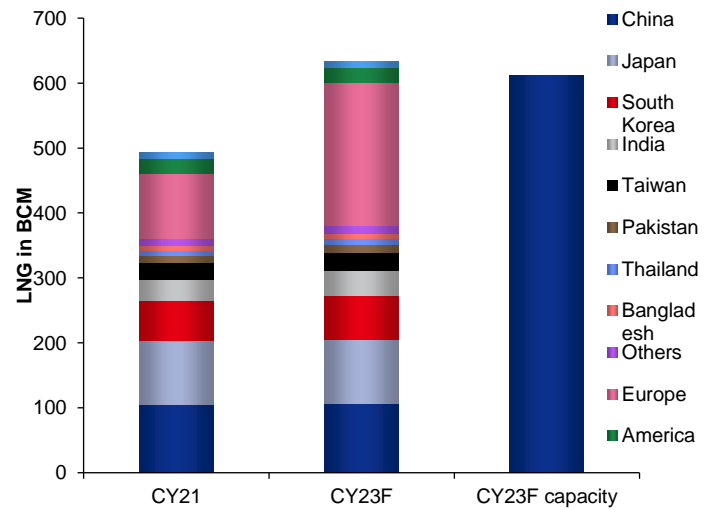
Europe will cause big natural gas scarcity in CY23F ➔

Figure 2: Europe is highly dependent on spot LNG



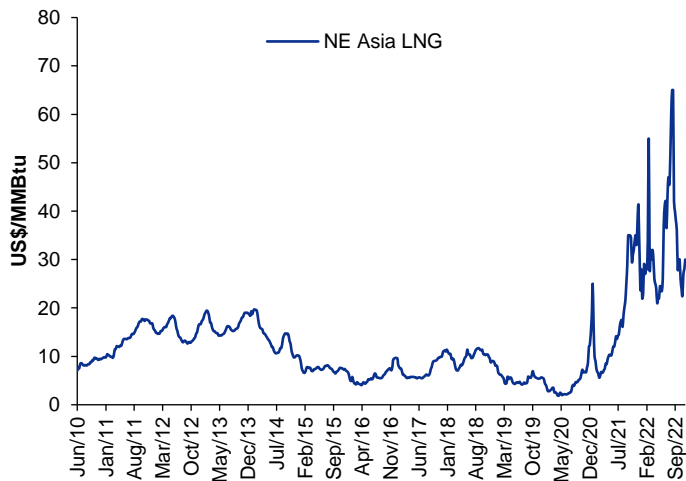
SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 3: However, demand-supply dynamics are highly unfavourable



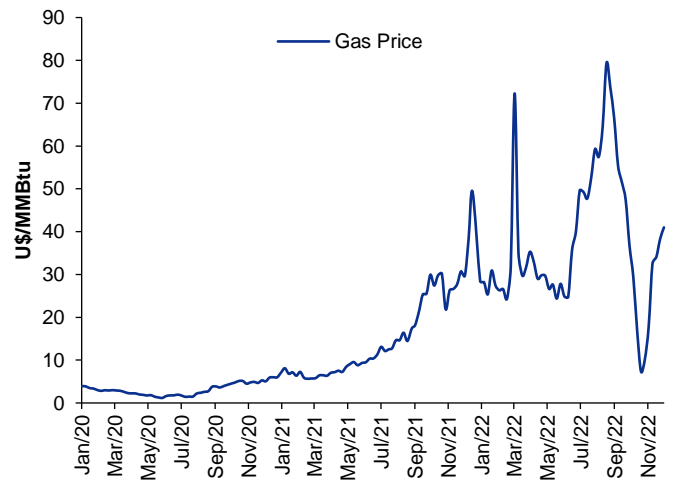
SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 4: Northeast Asia natural gas price is already back to US\$30/mmBtu level...



SOURCE: INCRED RESEARCH, COMPANY REPORTS

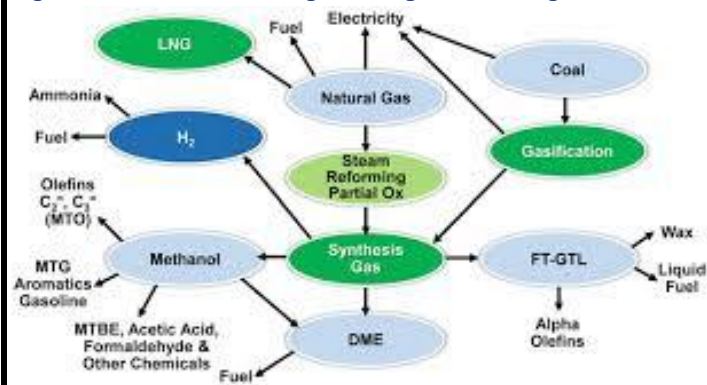
Figure 5: ...and European TTF gas price is also back to US\$41/mmBtu level



SOURCE: INCRED RESEARCH, COMPANY REPORTS

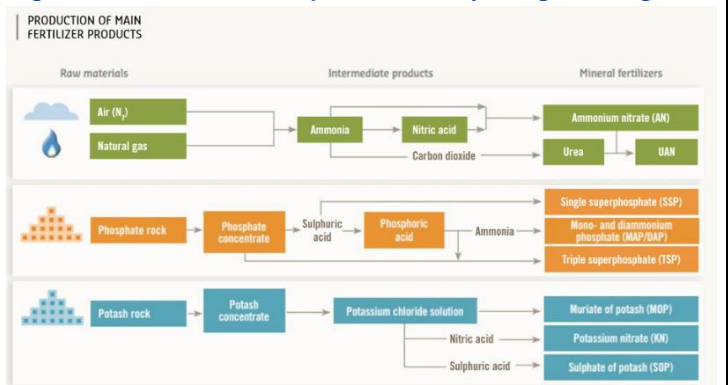
Natural gas is used for manufacturing multiple chemicals➤

Figure 6: Chart summarizing the usage of natural gas



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 7: Urea is another important industry using natural gas



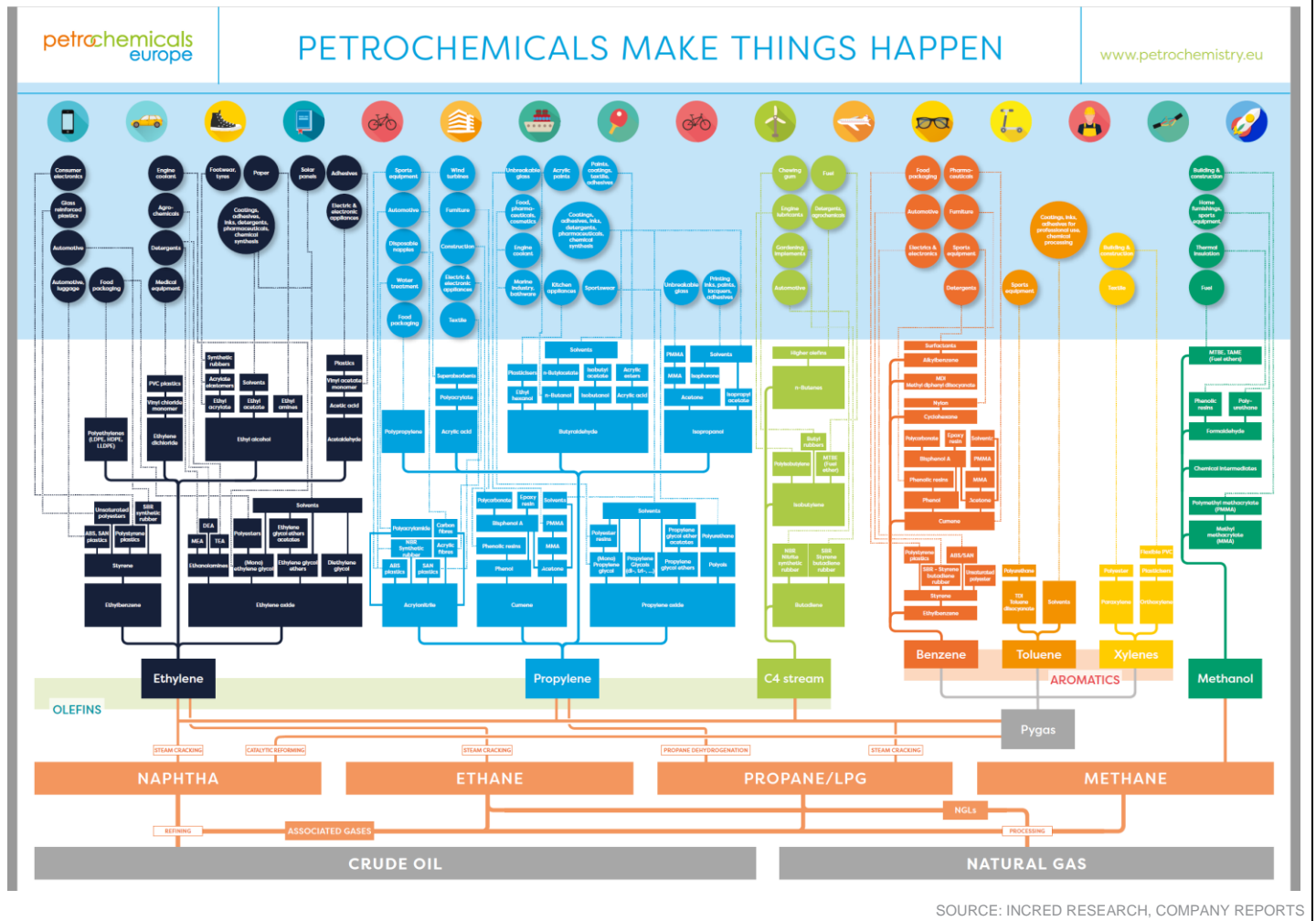
SOURCE: INCRED RESEARCH, COMPANY REPORTS

It must be noted that in all the processes, natural gas is cracked to produce H₂ or other unsaturated carbons which is then used to produce a variety of chemicals.

For our analysis, the usage of natural gas to produce ethylene, ammonia and methanol takes precedence ➤

Ethylene, ammonia and methanol are used in most organic chemicals in some form or the other. In fact, almost all non-aromatic chemicals start with the basic chemical – ethylene.

Figure 8: The chart gives a snapshot of the importance of natural gas in making day-to-day chemicals; the products and its flows can be best studied on (APPE - Flowchart (petrochemistry.eu))



Rising natural gas prices have led to a rise in naphtha prices ➤

There are multiple products where naphtha or natural gas can be used as an input and hence, rising natural gas prices will lead to a rise in naphtha prices. There is already a decline in naphtha discount vis-à-vis and crude oil.

Figure 9: Naphtha's spread over Brent crude oil is coming down as naphtha prices are driven more by natural gas substitution

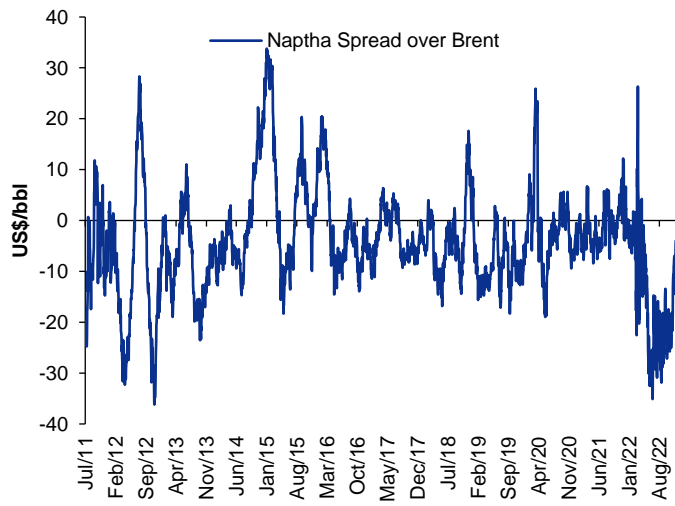
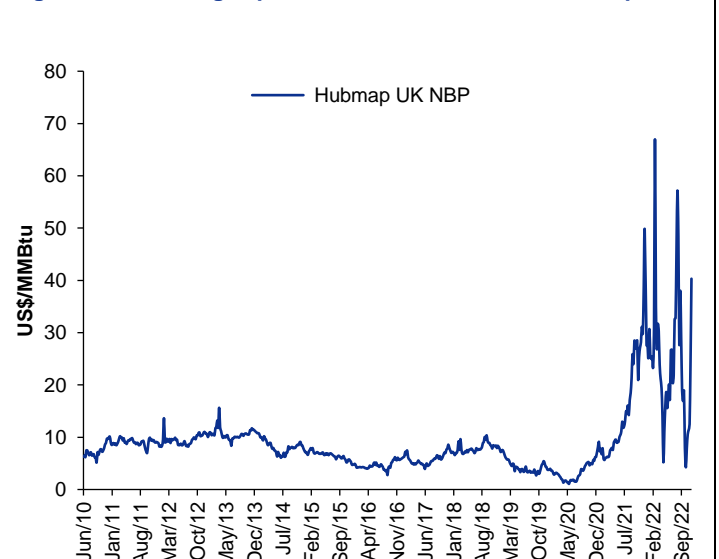


Figure 10: Natural gas prices have bounced back in Europe

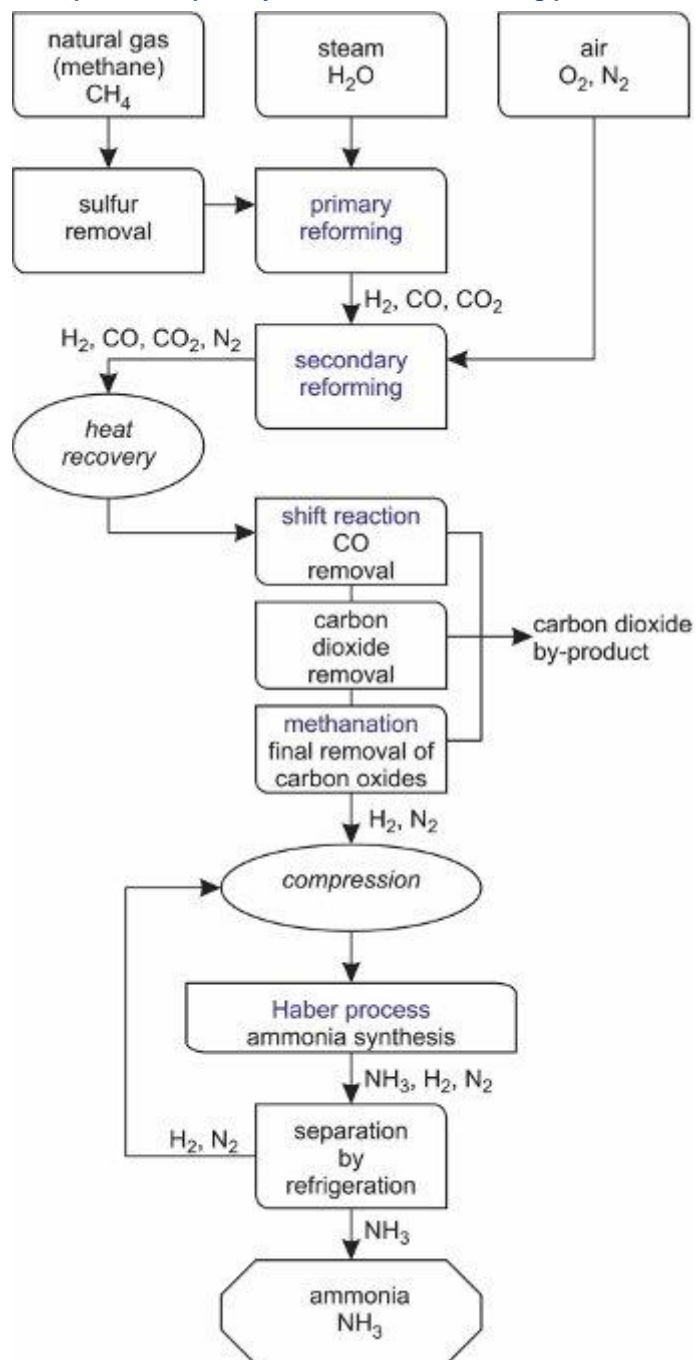


Ammonia and naphtha are key inputs for multiple bulk chemicals

Ammonia is the key input for multiple bulk chemicals. Some of these chemicals are nitric acid, ammonium nitrate, urea, polyamide, etc. Rising ammonia and ethylene prices are a headwind for Deepak Fertilisers (UNRATED), Deepak Nitrite (REDUCE), Laxmi Organics (REDUCE), Jubilant Ingrevia (REDUCE), Balaji Amines (UNRATED), Alkyl Amines (UNRATED), Clean Science and Technology (REDUCE), and SRF (HOLD).

Ammonia is manufactured by the Haber process using natural gas as primary input material >

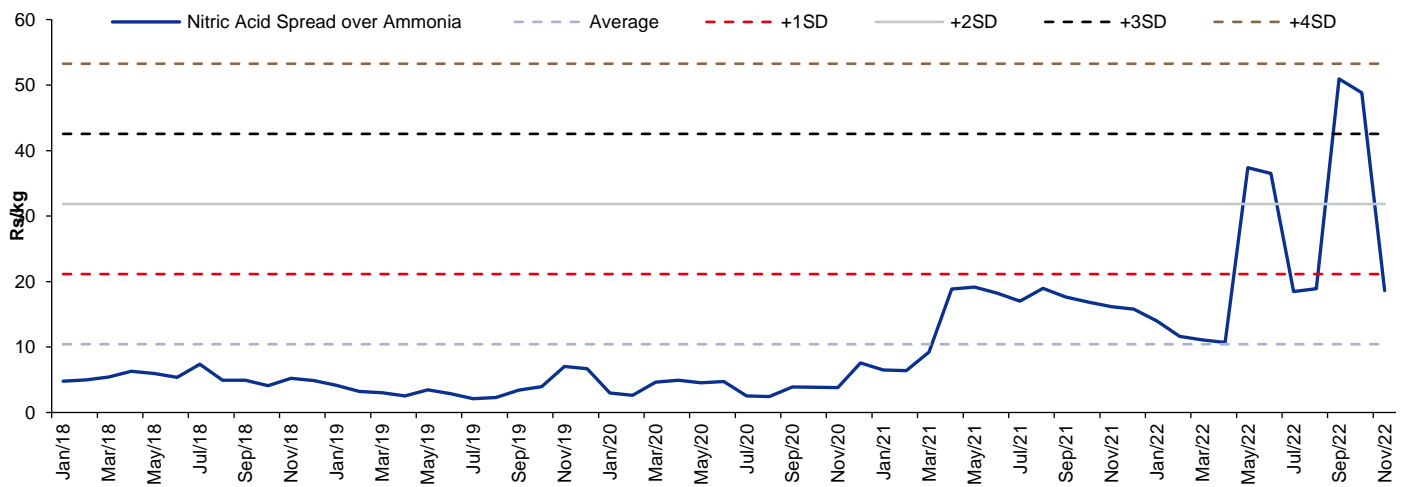
Figure 11: Haber process is primary ammonia-manufacturing process



SOURCE: INCRED RESEARCH, AMMONIA (ESSENTIALCHEMICALINDUSTRY.ORG)

Rising ammonia prices have negated the temporary jump in nitric acid spreads

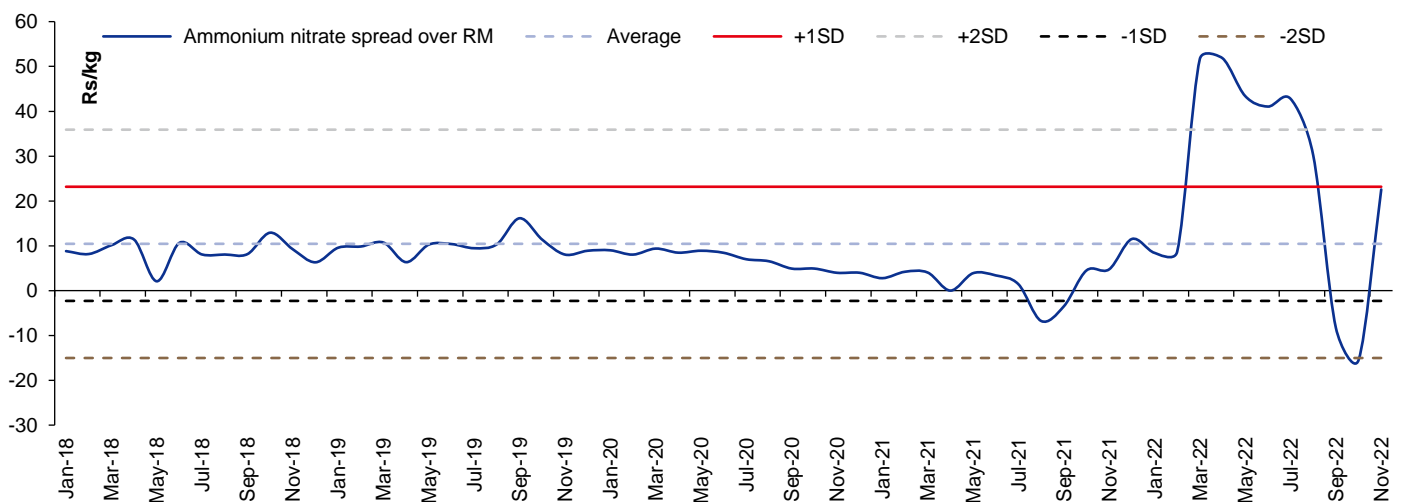
Figure 12: Nitric acid manufacturers had a good time for a few quarters, but the party is over for them as rising ammonia prices and falling demand will erode their profitability



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Ammonium nitrate's spread over ammonia has also collapsed

Figure 13: While there was some bounce in ammonium nitrate's spread over raw material, we feel this may be temporary



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Urea prices are rising in consonance with the rise in ammonia prices, which is negative for India's fiscal situation

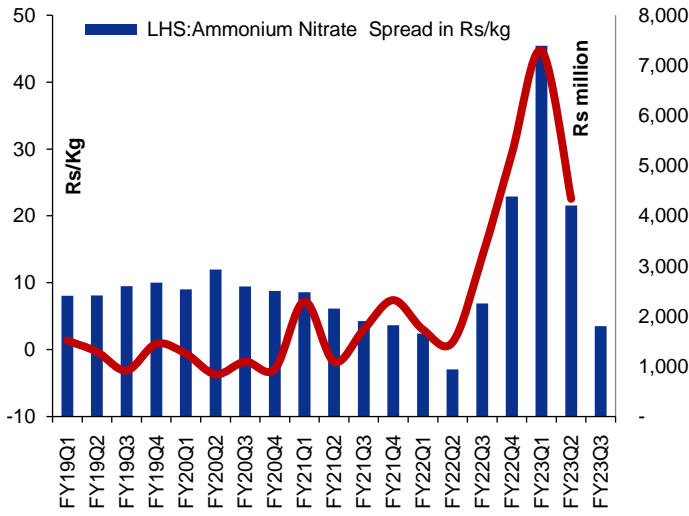
Figure 14: India's urea subsidy bill can rise to US\$30bn next year

| International urea prices in US\$/tonne | Import prices of LNG in US\$/mmBtu | | | | | |
|---|------------------------------------|----|----|----|----|----|
| | 30 | 35 | 40 | 45 | 50 | 55 |
| 900 | 23 | 26 | 28 | 31 | 33 | 36 |
| 950 | 24 | 26 | 29 | 31 | 34 | 36 |
| 1,000 | 24 | 27 | 29 | 32 | 34 | 37 |
| 1,050 | 25 | 27 | 30 | 32 | 35 | 37 |
| 1,100 | 25 | 28 | 30 | 33 | 35 | 37 |
| 1,150 | 26 | 28 | 31 | 33 | 35 | 38 |
| 1,200 | 26 | 29 | 31 | 33 | 36 | 38 |
| 1,250 | 26 | 29 | 31 | 34 | 36 | 39 |

SOURCE: INCRED RESEARCH, COMPANY REPORTS

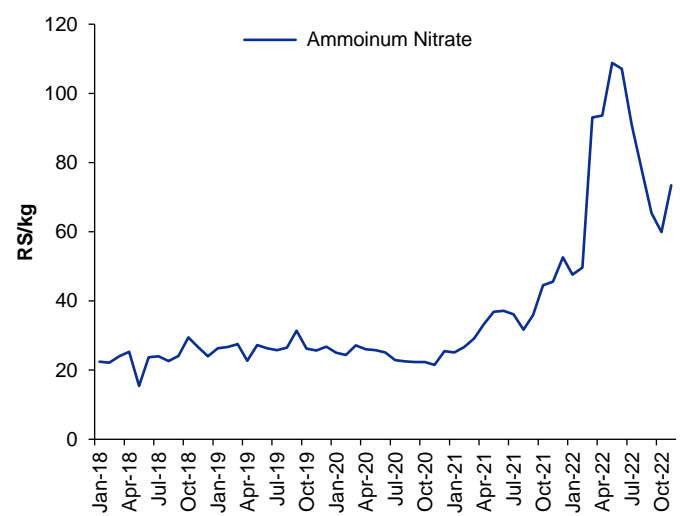
Deepak Fertilisers' (UNRATED) chemical business is highly dependent on the profitability in ammonium nitrate

Figure 15: Chemical segment EBIT of Deepak Fertilisers is highly dependent on ammonium nitrate's spread over raw material



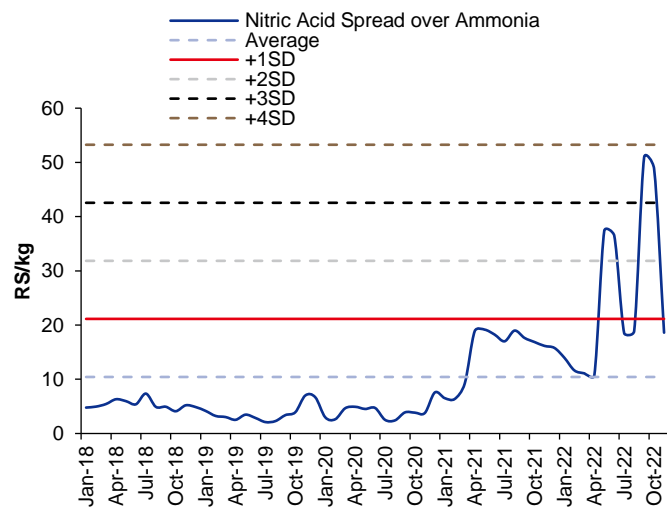
SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 16: Ammonium nitrate prices bounced back slightly in Nov 2022, but are still way below peak levels



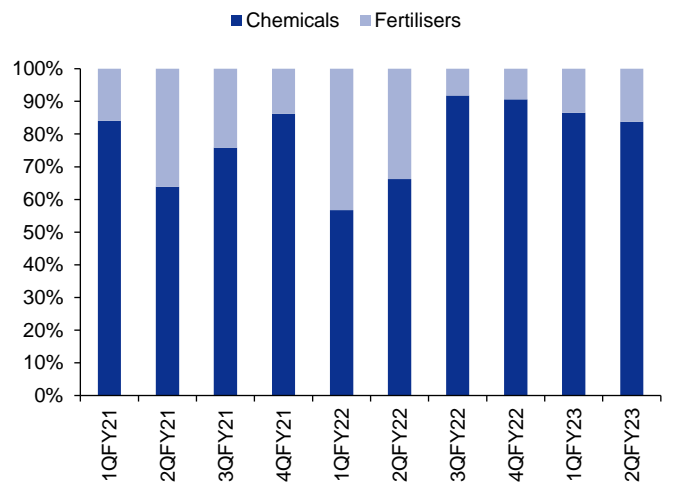
SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 17: Even nitric acid's spread over ammonia is falling



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 18: Chemical business is the major driver of Deepak Fertilisers' EBIT

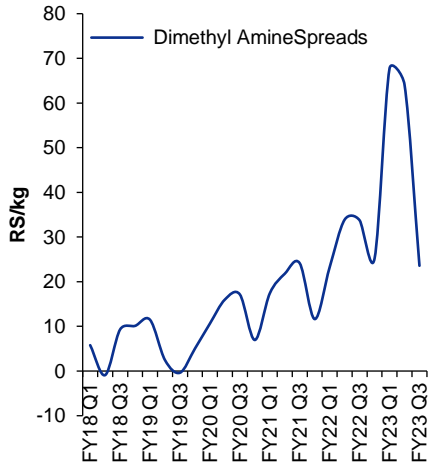


SOURCE: INCRED RESEARCH, COMPANY REPORTS

Manufacturers of amines and its compounds are also dependent on ammonia prices ➤

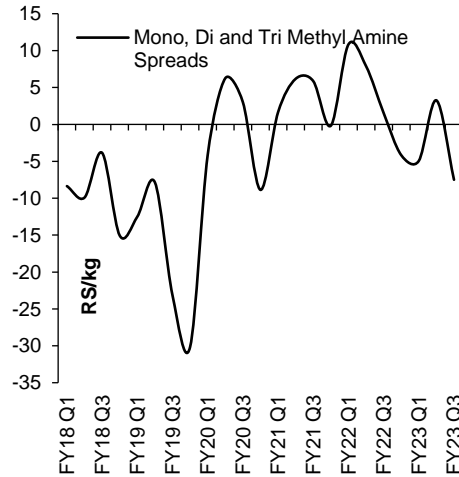
The spreads of amine products, where methanol, ethanol and ammonia are inputs, are coming down. This is negative for Balaji Amines (UNRATED).

Figure 19: Dimethyl amine's spread over raw material has peaked



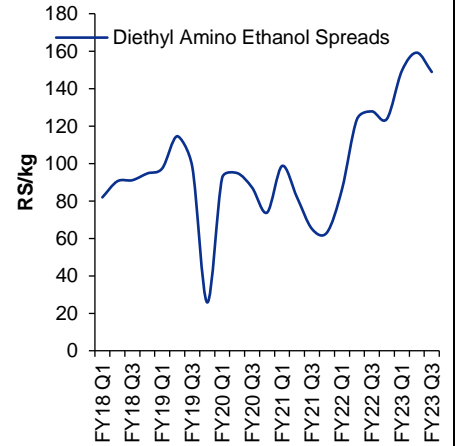
SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 20: Simple alkyl amine's spread has gone into the negative territory



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 21: Diethyl amino ethanol's spread over raw material has also peaked

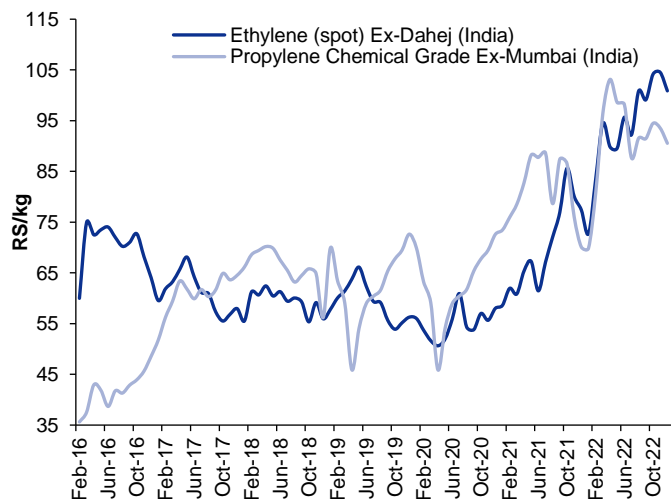


SOURCE: INCRED RESEARCH, COMPANY REPORTS

Ethylene and propylene prices are also on an upswing, which is negative for SRF ➤

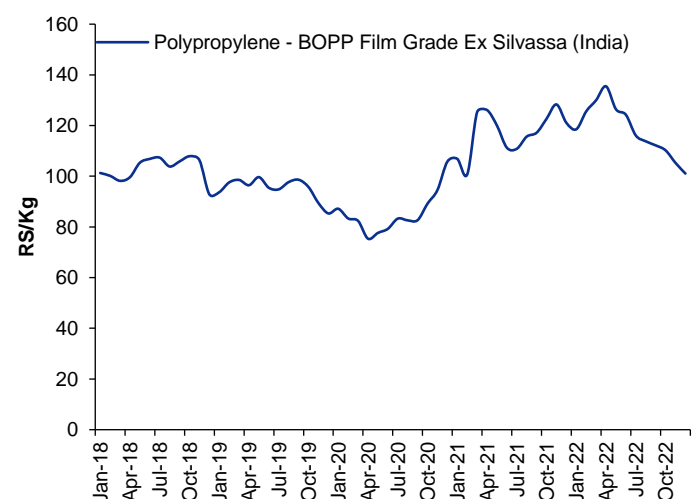
While ethylene can be manufactured from natural gas or naphtha, propylene is mostly manufactured from naphtha. With the rise in crude oil and natural gas prices, ethylene as well as propylene prices are rising.

Figure 22: Ethylene as well as propylene prices are still on an upswing



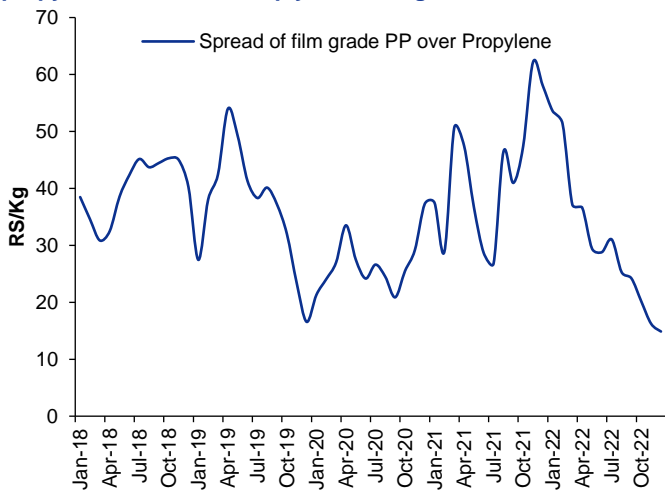
SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 23: Film grade polypropylene prices have corrected a bit, reducing its margins over propylene as demand for BOPP films has been hit



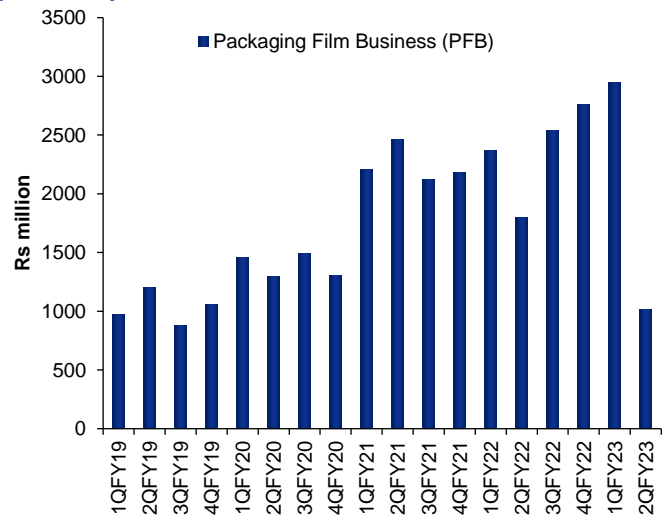
SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 24: Film grade PP's (polypropylene) margin over propylene has fallen sharply, indicating demand stress



SOURCE: COMPANY REPORTS, INCRED RESEARCH

Figure 25: SFR (REDUCE) has high dependence on BOPP films' profitability

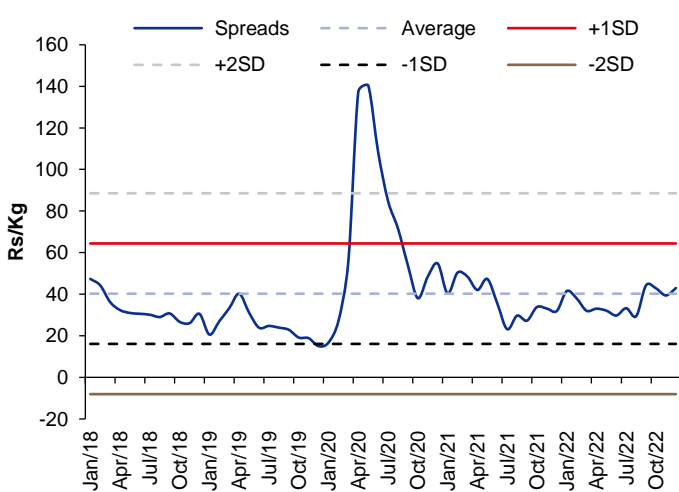


SOURCE: COMPANY REPORTS, INCRED RESEARCH

Rising propylene prices are negative for the profitability of iso propyl alcohol and phenol ➤

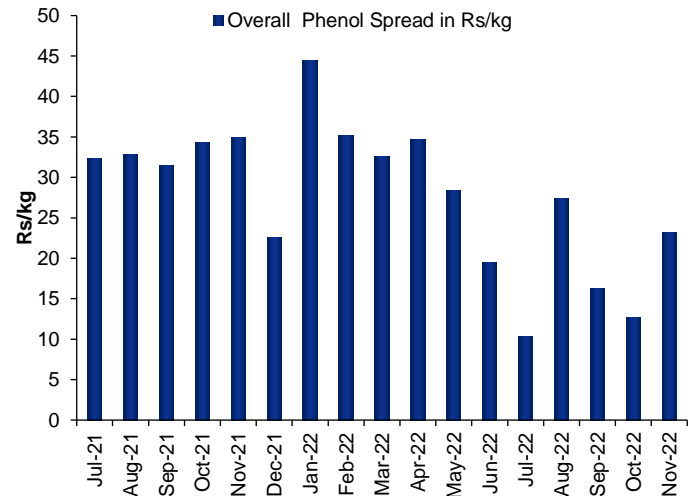
Propylene is a key input material for phenol and iso propyl alcohol (IPA). The spreads of IPA and phenol are falling vis-à-vis propylene.

Figure 26: IPA's spread is likely to fall in the coming quarters



SOURCE: COMPANY REPORTS, INCRED RESEARCH

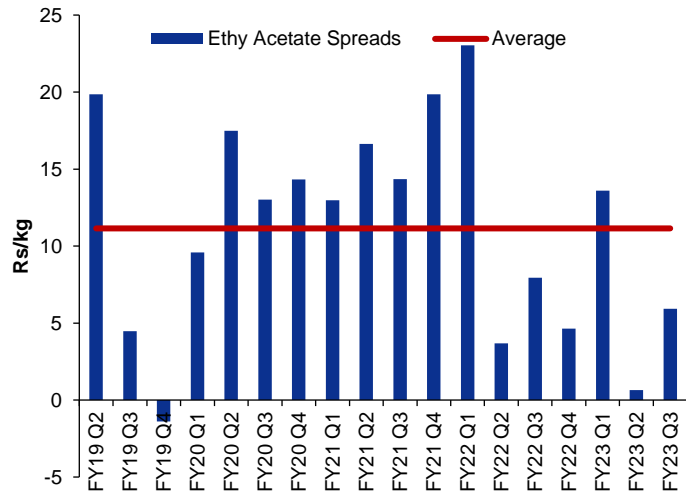
Figure 27: Phenol will have a similar fate as demand falls



SOURCE: COMPANY REPORTS, INCRED RESEARCH

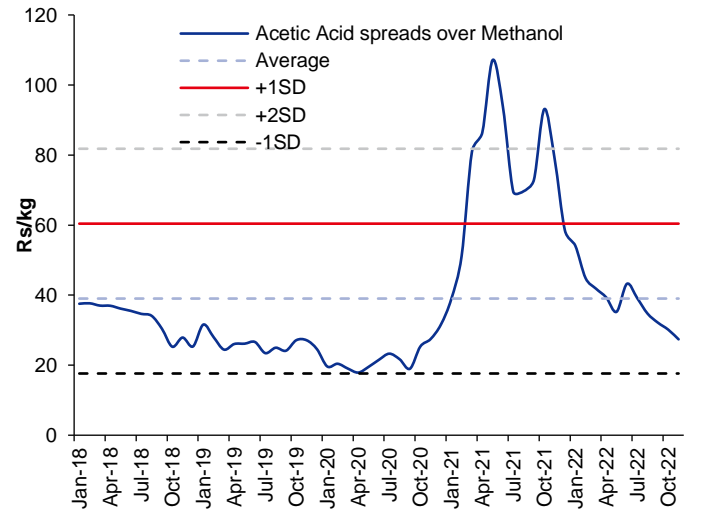
Rising ethyl alcohol prices are leading to a decline in ethyl acetate's margin; while acetic acid prices can recover slightly, we feel peak prices are unlikely for a long time ➤

Figure 28: Ethyl acetate's spread is well below its long-term mean



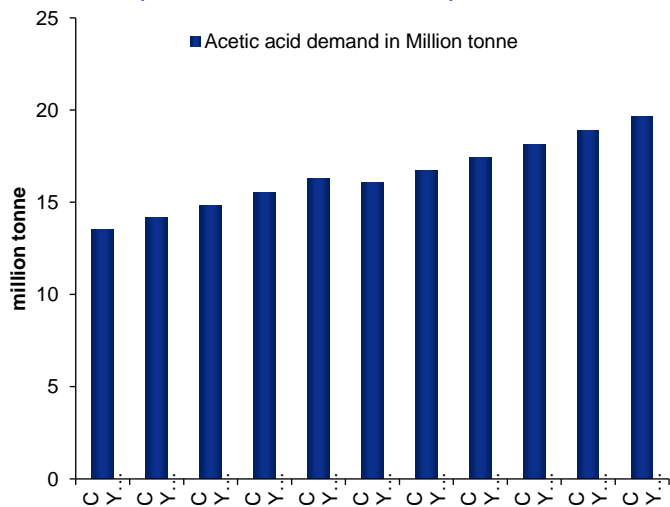
SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 29: Acetic acid's spread is falling, and we don't see any fundamental reason for an upswing



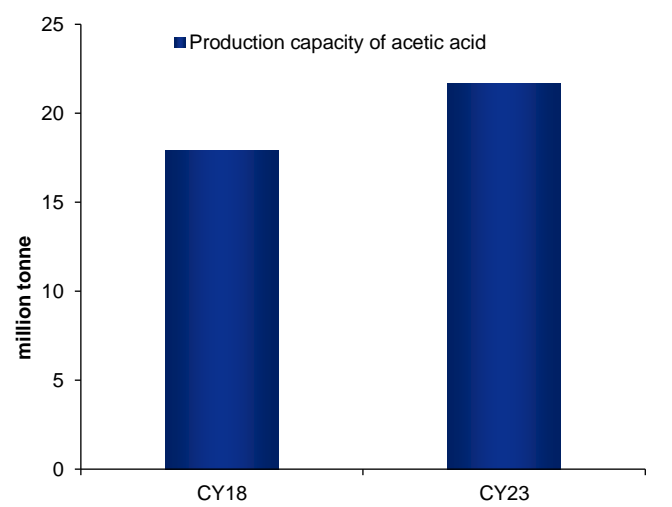
SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 30: Global demand for acetic acid has been growing at a 3.6% CAGR (CY21 demand was at 16.7mt)



SOURCES: INCRED RESEARCH, COMPANY REPORTS

Figure 31: However, capacity is much higher vis-à-vis demand



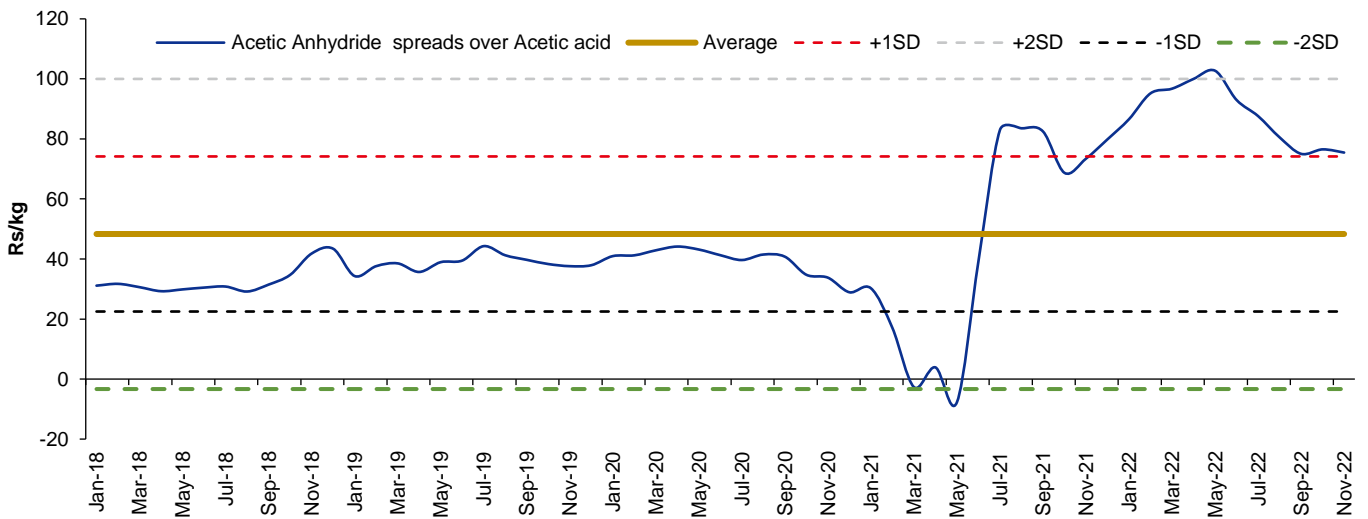
SOURCES: INCRED RESEARCH, COMPANY REPORTS

Acetic acid is oversupplied, and we don't see any fundamental reason for its prices to bounce back in the coming future. Higher prices were because of supply-led channel filling, which is over.

Acetic anhydride's spread over acetic acid is still quite high vis-à-vis historical levels and it is likely to fall ➤

Jubilant Ingrevia makes food grade bio acetic acid which commands a premium versus industrial acetic acid, but as base prices fall, the prices of food grade acetic acid will also decline. The fall in acetic acid prices will lower acetic anhydride prices as well. As of now, acetic anhydride still enjoys super-normal margin, which is unwarranted for such a simple commodity.

Figure 32: We expect acetic anhydride's spread to fall, thereby exerting further pressure on gross profit of Jubilant Ingrevia in the coming quarters

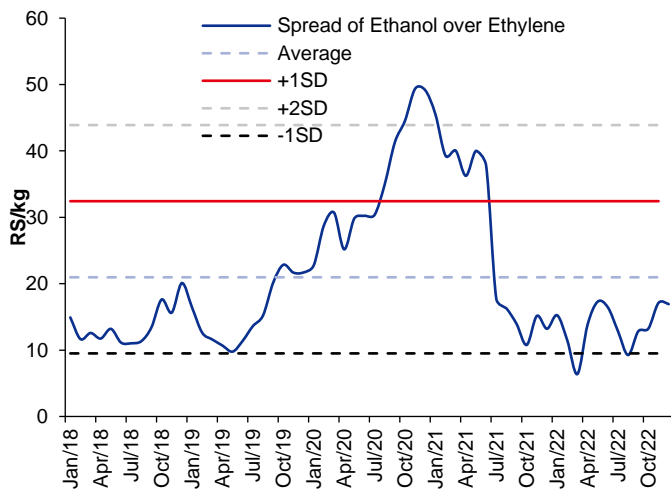


SOURCE: INCRED RESEARCH, COMPANY REPORTS

Ethanol has major demand tailwind, thereby keeping its price high ➤

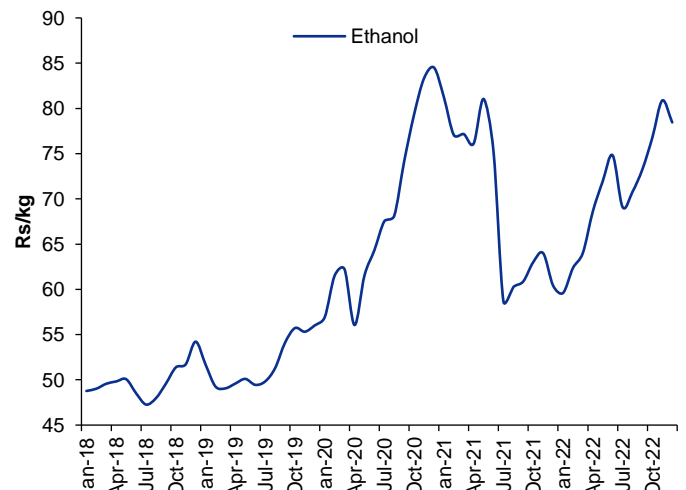
Ethanol is produced by two methods: 1) hydration of ethylene, and 2) the fermentation method which is used to produce bio ethanol. As the demand for bio ethanol is rising for fuel application, overall ethanol has major demand tailwind which should keep its prices elevated. Rising ethylene prices will also keep ethanol prices high.

Figure 33: Ethanol prices may be high but its spread over ethylene has touched a multi-year low



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 34: Ethanol prices have recovered smartly and given the demand tailwind, they will go up further



SOURCE: INCRED RESEARCH, COMPANY REPORTS

We expect margins of Jubilant Ingrevia (REDUCE) and Laxmi Organics (REDUCE) to remain under pressure ➤

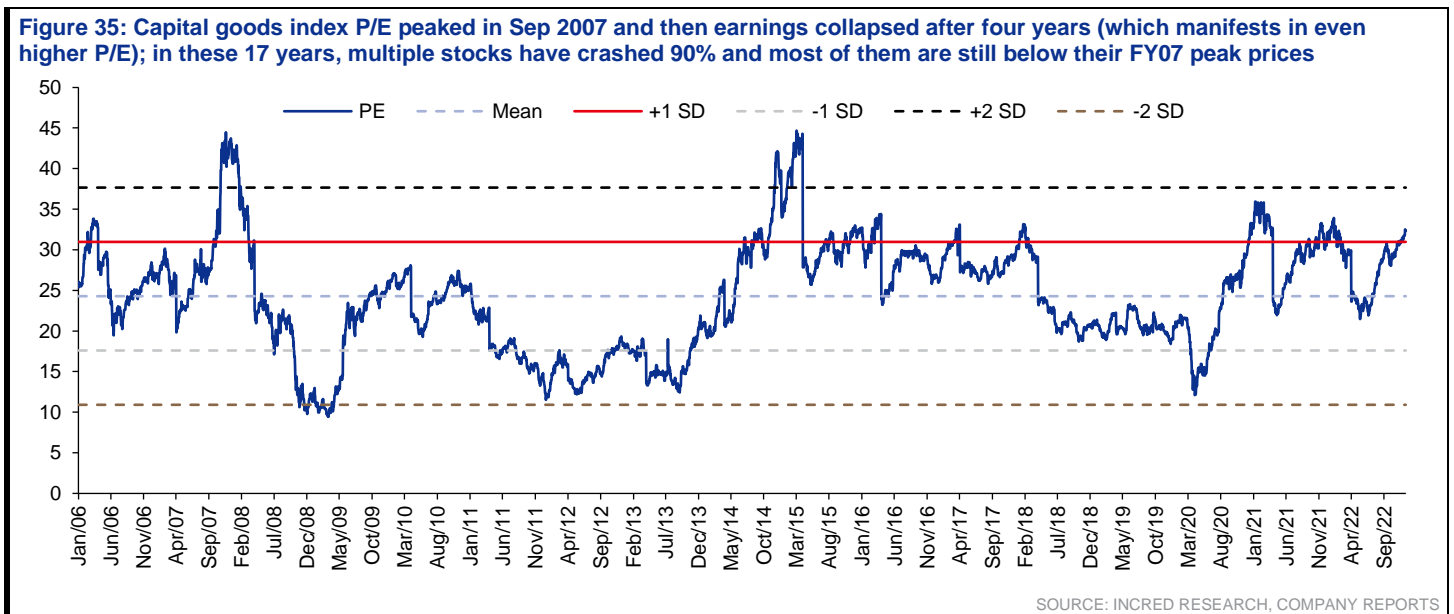
The fall in margins of ethyl acetate and acetic anhydride will have a negative impact on the earnings of Jubilant Ingrevia and Laxmi Organics. Jubilant Ingrevia remains a high-conviction REDUCE stock for us. Please see our earlier reports: [IN: Jubilant Ingrevia Ltd - Estimating the best-case earnings \(REDUCE - Maintained\)](#) and [IN: Jubilant Ingrevia Ltd - Pyridine getting specialty chemical multiple \(REDUCE - Downgrade\)](#)

Enough of Sell recommendations - What to Buy? Buy stocks of companies whose earnings growth is visible

In every bull market, a new theme emerges. While the main writer of this report was a rookie in equity markets, there used to be a raging bull market in capital goods stocks. Bharat Heavy Electricals or BHEL used to give guidance of Rs0.9 tr revenue by FY17 (in FY10) and market believed it. Similarly, in this bull market, chemical is a theme and excel sheet extrapolation is at its best. Don't buy stocks of companies whose sustenance of the current multiple is needed to make money. Assume a derating and look for earnings growth. There are a few stocks in our coverage universe which fit the bill like Camlin Fine Sciences (ADD), and Meghmani Finechem (ADD).

The history of Indian capital good stocks will present a case in point ➤

The chemicals' sector in 2022 has remarkable resemblance to what was witnessed by the capital goods sector in 2007-08. We like to draw attention to BHEL as a fine example of what to avoid at the peak of craziness. Please see the corporate plan of BHEL published in Apr 2007 which showed US\$10bn revenue in FY12 ([Final-2-04 - 7th draft \(bhel.com\)](#)). Please see the Comptroller and Auditor General of India or CAG's report on BHEL's strategic plan ([Microsoft Word - 05 PA Report BHEL \(cag.gov.in\)](#)). Our recap of history BHEL is just to point out the cycle. When the cycle is at its peak, the outlook turns rosy and then stocks go in the distribution mode for multiple years. Indian chemical stocks are going through such a phase. Needless to point out to the readers of this report that like the capital goods sector, the chemicals sector is also cyclical. All the chemicals named above are way past their cyclical peak.



An important point to be noted here is the fact that earnings started declining three-to-four years after the stock price peaked. These stocks go through a painful distribution process when every new buyer thinks he has got them cheap vis-à-vis recent historical levels. The price/book value of the capital goods index tells a much better story.

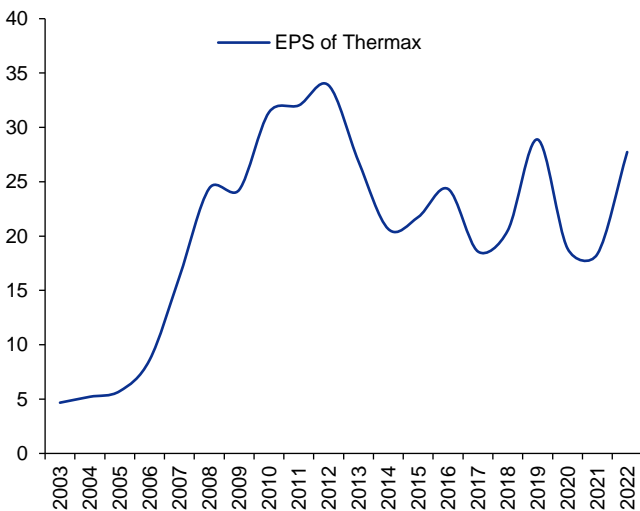
Figure 36: Price/book value chart of the capital goods index tells a much better story of derating as earnings collapse makes P/E ostensibly high (most cyclical stocks start trading on book value at the advent of EPS collapse)



SOURCES: INCRED RESEARCH, COMPANY REPORTS

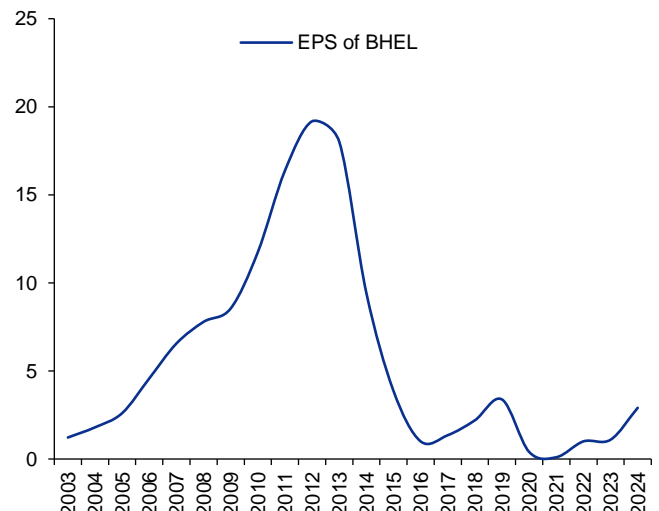
The story of BHEL and Thermax earnings is an eye opener for all of us. Thermax's EPS is still way below its FY12 peak and BHEL may never be able attain its FY12 EPS.

Figure 37: Thermax has still not beaten its peak EPS attained in FY12



SOURCE: INCRED RESEARCH, COMPANY REPORTS

Figure 38: BHEL may never be able to beat its peak EPS attained in FY12



SOURCE: INCRED RESEARCH, COMPANY REPORTS

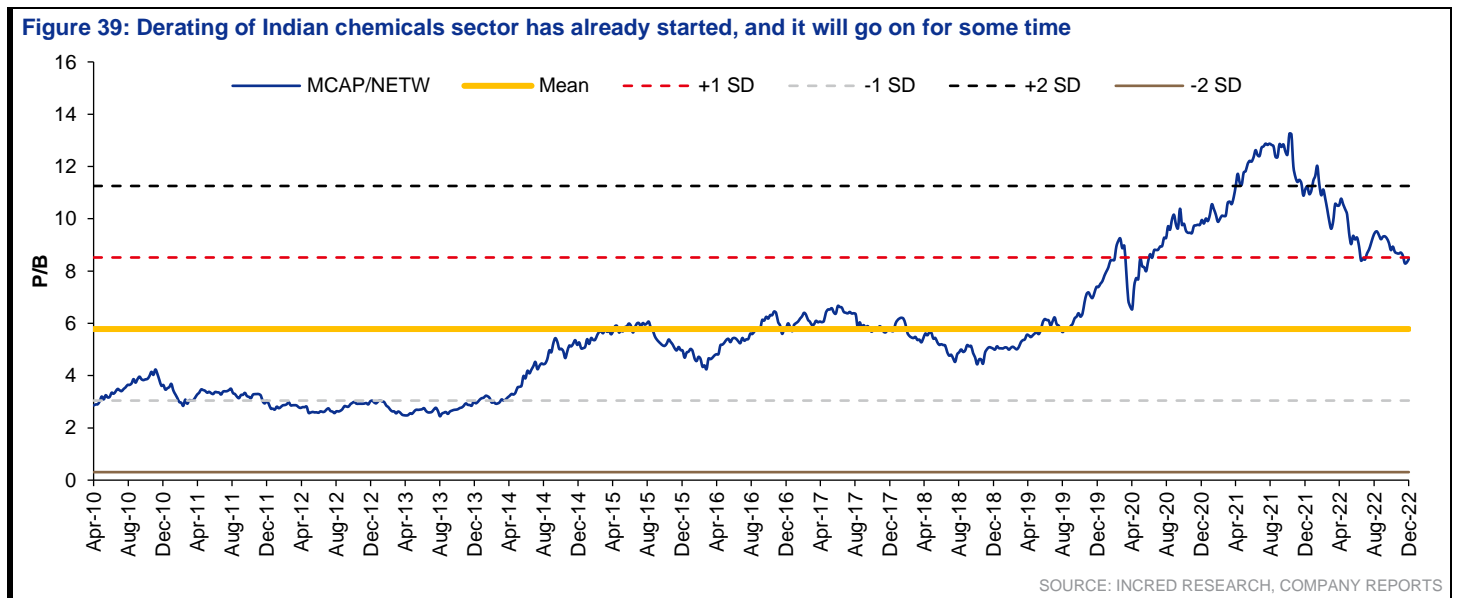
Given earnings headwinds, it's futile to believe that current P/BV or P/E will sustain for the chemicals sector ➤

History repeats itself and repeats with a remarkable frequency. Please see below the recent announcements made by Indian chemical companies:

- Aarti Industries has given FY27F revenue and profit guidance - a brave prediction for a cyclical company.
- Jubilant Ingrevia predicts how much revenue it will garner based on capex incurred.
- Astec Lifesciences (REDUCE), Anupam Rasayan (REDUCE) also talk of revenue of the basis of capex incurred.
- Laxmi Organics (REDUCE) is getting a dismantled fluorine plant from Italy and street is going gung-ho on its prospects.
- SRF (HOLD) is incurring capex in a fluorine-based agrochemical intermediary and commodities like BOPP/ PET films (which are in a downcycle) and street is getting super bullish on it.

- Ami Organics (UNRATED) hasn't even supplied a kilo of vanillin carbonate and street is assigning multiple to those earnings.
- Gujarat Fluoro (REDUCE) is making money from HFC-125 shortage by an extremely shortsighted US policy and market goes ga-ga over it. HFC-125 prices are already down 20% from their peak level.
- LiPF6 prices are collapsing, but a multiple has been assigned to companies that even talk of manufacturing it (Gujarat Fluoro and Neogene Chemicals- both UNRATED).

The examples are multiple and the best way to capture this mania is to look at the current P/BV multiple of the chemicals sector.



So, buy stocks where earnings growth can withstand multiple derating ➤

Rather than buying stocks on a theme like China+1, it's better to do a bottom-up analysis and look for earnings growth more than a 35-30% CAGR over the next couple of years. On this theme, we like two companies:

Camlin Fine Sciences - Profitability in hydroquinone (HQ) is good for Camlin Fine Sciences or CFS as traditional suppliers in Europe are struggling because of scarce power supply. Making MEHQ from HQ doesn't make sense for CFS as selling MEHQ will not even recover the market price of HQ. Hence, CFS has taken the correct decision of manufacturing minimum quantity of MEHQ. CFS has also commissioned its 6ktpa vanillin plant at Dahej in Gujarat by investing Rs1.85bn to produce guaiacol (key raw material for vanillin), ethyl vanillin, & methyl vanillin and its derivatives. Vanillin is a high-gross profit product and can add around Rs1bn in gross profit to CFS in coming 5.5 months. HQ prices are also on the rise in Europe, which should benefit its Italian subsidiary. TBHQ prices and spreads are steady, which also bode well for profitability.

Meghmani Finechem - It is a chlor-alkali producer with a current caustic soda capacity of 294kt (kilo tonne). It also manufactures chloromethanes (capacity 50kt), caustic potash (capacity 21kt) and hydrogen peroxide (H₂O₂ capacity 60kt). The company is also expanding caustic soda capacity by 106kt (to be commissioned in 1HFY23F), installing epichlorohydrin (ECH) plant of 50kt capacity and CPVC (chlorinated poly vinyl chloride) plant of 30kt capacity. ECH and CPVC capacities will be commissioned by 1HFY23F. The company has also announced expansion into chloro toluene and downstream products of chloro toluene. Chloro toluene is a steady gross profit product with the spread over raw material at around Rs60-65/kg, and similarly, on an average, ECH makes around Rs40-45/kg over raw material. ECH and chloro toluene as well as its downstream products are mostly imported and hence, in both cases the company has import-substitution opportunities.

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