Rating Methodology for Fertilizer Industry

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Background

The Indian fertilizer industry can be broadly divided into three categories depending on the nutrient composition viz. nitrogenous (N), phosphatic (P) and potassic (K). The industry has grown over the years aided by government policies and demand growth arising from rising agricultural output. The industry has been heavily regulated for decades by the Government of India (GoI) as the product is politically sensitive in nature. Such regulations have covered inter-alia the farm gate price (FGP), types of fertilizers eligible for subsidy, distribution pattern and the extent of profitability that can be earned by the manufacturers. Urea is the key fertilizer consumed within the nitrogenous fertilizers segment and accounts for almost 55% of all fertilizer consumed in India. Phosphatic fertilizers are consumed in the form of complex fertilizers with varying levels of NP [including Di Ammonium Phosphate or (DAP)] and NPK and single super phosphate (SSP). Pottassic fertilizers mainly comprise of Muriate of Potash (MOP), which is not manufactured in India and is fully imported.

Among the various fertilizers, urea plants are characterized by high capital intensity, while complex and SSP plants are relatively less capital intensive. Raw materials account for more than 85% of the cost of production of complex & SSP fertilizers because of low value addition and consequently operating and net margin tend to be low for the manufacturers. On the contrary, urea business is characterized by high value addition leading to higher operating margin, although net margin will be weighed down by the capital servicing charges.

In ICRA's opinion, the key determinants of business risk profile of fertilizer companies are their ability to overcome the regulatory risk and agro climatic conditions. Other factors include operating efficiency, product diversity and market position. These are elaborated below:

Business Risk Profile Assessment

Regulatory Risk

Profitability of the fertilizer companies is significantly influenced by the regulatory prescriptions governing various types of fertilizers. The gap between the reasonable cost of production of the fertilizers and FGP has risen steadily in the recent past because of the fact that the GoI has not revised FGP of fertilizers in a meaningful manner, even as the feedstock costs for producing the fertilizers have risen significantly. For administrative convenience, the GoI has been routing the subsidy, which is the difference between the normative costs of manufacturing the fertilizers and the FGP, through the fertilizer industry.

Urea:
Urea manufacturers were functioning under unit wise Retention Pricing Scheme (RPS) until 2002-03. Under RPS, Retention Price was arrived for each urea manufacturing plant taking into account normative costs of feedstock, packing costs, conversion costs, capital servicing charges (CRCs) including return of 12% post tax RoE, selling expenditure and freight. In order to control subsidy, GoI introduced a New Pricing Scheme (NPS) with effect from April 1, 2003 in three Stages, with Stage I and II operational during 2003-2006 and Stage III operational from April 1, 2006. Under NPS, six groups were formed depending on the feedstock and vintage of the plant and subsidy was linked to actual RP of the units or the group average RP, whichever was low. Normative parameters pertaining to capacity utilization and energy consumption were tightened and CRC and conversion costs were further rationalized. These had offset some of the positive features like higher reimbursement of energy savings, update of freight costs and reimbursement of actual taxes on inputs, leading to marginal decline in profitability for the industry.

ICRA analyses the cost structure of urea manufacturers vis-a-vis that of the group under which it is categorized under NPS. While higher RP than the group average would erode the assured margins, a lower RP than the group is no guarantee that the company will be able to achieve the assured margins because of the possible under recoveries on account of several reasons, which would typically be inability to meet the other normative parameters. Overall, ICRA tries to analyse the actual margins achieved by the unit vis a vis the margins supposed to be achieved under the policy, and reasons for variation in the same. Typically under performance could be on account of higher energy consumption than the pre-set norm, lower capacity utilization, disallowances on certain operational expenditure and taxes.

However, for all new projects, whether it is debottlenecking, brownfield or Greenfield, subsidy has been linked to import parity prices of urea, indicating the intention of the GoI to move towards deregulation of the sector.

While Stage III of NPS is valid only upto March 31, 2010, the GoI is yet to announce a long term policy. Based on public pronouncements, it is likely that GoI may introduce a nutrient based subsidy scheme as well as change the method of administration such that subsidy is paid directly to the farmers. While the details of these measures would have to be known to understand its impact on companies, it is likely that operationally efficient companies with competitive cost structure, should be able to operate profitably in the new regime.

Phosphatic and Complex Fertilizers

Phosphatic and Complex Fertilizers have been governed under ad-hoc concession scheme of GoI, ever since the decontrol in 1992. Under this policy regime, the norms of the policy are revised every three to four years. Under the extant policy, which is applicable from April 1, 2008, subsidy for the domestic DAP manufacturers is paid at the same rate as that for imported DAP. (normative cost of imported DAP including a fixed margin less farm gate price). Until March 2008, domestic DAP manufacturers enjoyed a differential subsidy, under which subsidy for the domestic players was higher than imported DAP to account for raw material disadvantages. Because of the revised policy, it is critical for the domestic manufacturers to control the cost of production of DAP such that it is lower than the normative cost of imported DAP, to achieve meaningful profitability. Based on the past trends, ICRA has observed that imported DAP can be cheaper compared to domestic manufacturing costs for few months, which increases the business risk profile of the domestic DAP manufacturers. Hence, control over the raw material prices viz. ammonia and phosphoric acid and efficient conversion norms, assume critical importance to achieve healthy profitability.

With regard to complex fertilizers (other than DAP), subsidy is computed as the difference between normative cost of selling these fertilizers, including an assured margin, and farm gate price. Four groups, comprising various manufacturing units, have been formed by GoI depending on how N and P are sourced by the individual units. For deriving the normative cost of sales, cost of 'P' component is derived from that of imported DAP using certain formula. Cost of N is derived based on group average cost. Cost of K is based on the imported MOP prices. In view of this method and also the fact that subsidy is computed with a monthly lag, controlling the cost of sales such that it is in line with or lower than that assumed for subsidy computation is important to achieve reasonable profitability. Despite the stringent norms for subsidy, some companies do enjoy comfortable business risk profile because of their superior cost structure and risk management practices.

Agro climatic risks

As the share of irrigated (by dams/canals/wells) area is low in India, most of the other regions are dependent on monsoons for irrigation. Even the irrigated areas are indirectly dependent on monsoon. Thus fertilizer sales do get negatively impacted in years when there is drought or deficient rainfall. Besides lower sales, the fertilizer manufacturers are also impacted by higher inventory levels, discounts, & larger credit period to push sales. However, the risk can be mitigated to some extent if the manufacturers have a diversified marketing regions spread across several states as the chances of monsoon failure simultaneously in all the States are low to medium only.

Cost competitiveness

Cost structure of urea manufacturers is determined by the feedstock used, process technology adopted, energy consumption level and location of the unit. With regard to the feedstock, under the prevailing subsidy policy regime, feedstock price changes will be a pass through (to the GoI for subsidy computation) , subject to the ceiling on energy consumption norms, and hence do not make a difference to the profitability whether when one uses

natural gas or liquid hydrocarbons [Naphtha, furnace oil, low sulphur heavy stock (LSHS)]. Thus, despite the Retention Price of some of the naphtha based urea manufacturers being double that of natural gas based players, their profitability is not impacted under the present policy. ICRA however believes that access to a low cost feedstock will be critical to the competitiveness of units in a deregulated scenario. The recent regulatory directive also makes it an imperative for the liquid hydrocarbon units to convert to natural gas by March 2010, although the deadline is likely to be extended marginally because of uncertainty on gas availability, gas connectivity and certain policy related issues. For units contemplating debottlenecking/brownfield/greenfield projects, access to cost competitive natural gas will be key to control the cost of production, as the subsidy is linked to the import parity price of urea, subject to certain floor and ceiling imported urea prices.

Energy consumption is a function of the vintage of the unit, process technology adopted and maintenance practices followed. With few process technology suppliers to choose from, the process technology adopted by the units has mainly been determined by the vintage of the plants, with recent plants adopting modern processes and older plants adopting the processes prevailing then. Efficient units achieve lower energy consumption than the normative parameters and gain from the policy as the energy savings are not mopped up during a particular block period of the policy. Location of the unit can influence both raw material costs and distribution costs of fertilizers. In general, location of the units near a large consumer market confers competitive advantage as the cost of transporting the feedstock is lower in relation to that of the finished fertilizers.

In the case of phosphatic and complex fertilizers, import dependence is high because of lack of sufficient availability of cost effective raw materials in India. Key raw materials/intermediates imported include ammonia, phosphoric acid, rock phosphate and sulphur, albeit some manufacturers have limited capacity for manufacturing intermediates such as phosphoric acid and ammonia. Of the raw materials/intermediates, phosphoric acid and rock phosphate are in short supply in the global market and hence durable tie-ups with producers in overseas countries could be a source of competitive advantage for the units, although it may not confer any pricing advantage over the other importers. Ability to control the overall cost of production, within the normative cost of production will be a key source of strength for the players, which is influenced by import prices, exchange rate fluctuations and conversion efficiency. Adequate handling systems and storage facilities, given the high import dependence, also can impart competitive advantage.

Market Position

Of late, the domestic production of fertilizers has stagnated, whereas the demand has steadily risen, leading to steady rise in import dependence for Urea and DAP. In this context, marketing of fertilizers per se is not an issue for the domestic manufacturers who have over the years developed a well established dealer network, brands and also implemented several farmer relationship initiatives. The distribution and marketing territories are also by and large decided by the GoI and freight costs are reimbursed at near actuals. However, in a deregulated scenario, units located near major fertilizer consuming regions will be better placed than units located far off, through lower logistics costs. Deregulation could also usher in application of customized fertilizers, depending on the specific nature of soil and crop; hence players with ability to offer customized solutions can have competitive advantage

over others. Ability to offer a broad array of fertilizers, including micro nutrients, and allied products such as seeds and pesticides could also be another differentiating factor.

Management Quality

All debt ratings necessarily incorporate an assessment of the quality of the issuer's management, as well as the strengths/weaknesses arising from the issuer's being a part of a "group". Also of importance are the issuer's likely cash outflows arising from the possible need to support other group entities, in case the issuer is among the stronger entities within the group. Usually, a detailed discussion is held with the management of the issuer to understand its business objectives, plans and strategies, and views on past performance, besides the outlook on the issuer's industry. Some of the other points assessed are:

- Experience of the promoter/management in the line of business concerned
- Commitment of the promoter/management to the line of business concerned
- Attitude of the promoter/management to risk taking and containment
- The issuer's policies on leveraging , interest risks and currency risks
- The issuer's plans on new projects, acquisitions, expansion, etc.
- Strength of the other companies belonging to the same group as the issuer
- The ability and willingness of the group to support the issuer through measures such as capital infusion, if required.

Financial Risk Profile Assessment

The objective here is to determine the issuer's current financial position and its financial risk profile. Some of the aspects analysed in detail in this context are

Operating profitability: The analysis here focuses on determining the trend in the issuer's operating profitability and how the same appears by peer comparison. Ability of the companies to achieve the assured return for various types of fertilizers will be a key rating parameter. Efficient urea companies achieve higher returns by operating the units at more than the normative capacity utilization, which enable them to recover more than 100% of fixed costs assumed for computing RP. Units producing at more than 100% capacity utilization, also stand to gain by way of Import Parity linked urea prices, subject to sharing of some gains with GoI. Achieving lower energy consumption than the pre-set norms is also another source of gain for the units. With regard to the phosphatic and complex fertilizer units, efficient raw material sourcing, control over the exchange rate and efficient conversion can aid the profitability, because of high raw material intensity in the business.

Gearing: The objective here is to ascertain the level of debt in relation to the issuer's own funds and is viewed in conjunction with the business risks that the issuer is exposed to.

Debt service coverage ratios: Here, the trends in the issuer's key debt service coverage ratios like Interest Coverage and Net Cash Accruals/Total Debt are examined.

Working capital intensity: The analysis here evaluates the trends in the issuer's key working capital indicators like Receivables, Inventory and Creditors, again with respect to industry peers. Timely availability of subsidy can influence the liquidity position of the fertilizer manufacturers. As the subsidy as a percentage of the normative cost of sales has been rising in the recent past because of rise in feedstock prices and lack of commensurate rise in the FGP, any delays in the receipt of subsidy can squeeze the liquidity position of the companies in this sector. In the recent past there have been delays by GOI with regard to payment of subsidy, on account of inadequate provision in the Union Budget for subsidy, which has had to be subsequently revised upwards with a time lag. GoI has also resorted to part payment of subsidy through fertilizer bonds, and fertilizer manufacturers have had difficulties in liquidating the same in the market in the absence of SLR status. Changes in the interest rates in the market have also influenced the current value of these bonds, requiring provisioning in an era of rising interest rate. In such a scenario, high financial flexibility in the form of ability to raise resources to the extent warranted by the delays in release of subsidy can help the liquidity position of the companies.

Other areas which are analysed include the following:

- **Cash flow analysis*:*** Cash is required to service obligations. Cash flows reflect the sources from which cash is generated and its deployment. Analysed here are the trends in the issuer's Funds Flow from Operations (FFO) after adjusting for working capital changes, the Retained Cash Flows, and the Free Cash Flows after meeting debt repayment obligations and capital expenditure needs. The cash flow analysis also helps in understanding the external funding requirement that an issuer has, to meet its maturing obligations.

- **Foreign currency related risks*:*** Such risks arise if an issuer's major costs and revenues are denominated in different currencies. Examples in this regard would include companies selling in the domestic market but making large imports, and export oriented units operating largely on the domestic cost structure. The foreign currency risk can also arise from unhedged liabilities, especially for companies earning most of their revenues in local currency. The focus here is on assessing the hedging policy of the issuer concerned in the context of the tenure and nature of its contracts with clients (short term/long term, fixed price/variable price).

- **Tenure mismatches, and risks relating to interest rates and refinancing*:*** Large dependence on short-term borrowings to fund-long term investments can expose an issuer to significant re-financing risks, especially during periods of tight liquidity. The existence of adequate buffers of liquid assets/bank lines to meet short-term obligations is viewed positively. Similarly, the extent to which an issuer would be impacted by movements in interest rates is also evaluated.

- **Accounting quality**: Here, the Accounting Policies, Notes to Accounts, and Auditor's Comments are reviewed. Any deviation from the Generally Accepted Accounting Practices is noted and the financial statements of the issuer are adjusted to reflect the impact of such deviations.

- **Contingent liabilities/Off-balance sheet exposures**: In this case, the likelihood of devolvement of contingent liabilities/off-balance sheet exposures and the financial implications of the same are evaluated.

Summing up

In the current controlled environment, ability to control the costs in line with the normative parameters will be a key success factor for the fertilizer manufacturers' profitability and debt servicing ability. However, ICRA believes, in a partial or full deregulated scenario, operating efficiency will assume greater importance . Players with competitive cost structure and established market position, should be able to withstand deregulation and preserve their credit quality.

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