Rating Methodology – Paper Industry

Industry Overview

Based on the end-products, the paper industry in India is classified into - Writing and Printing Paper, Paperboard/Packaging, Newsprint and Speciality Paper. Indian paper mills are also categorized based on the raw materials used by them in the manufacture of paper as wood/forest-based mills, agro-based mills and wastepaper (recovered paper)-based mills. In terms of share in total production, approximately 25% are based on wood, 58% on recycled / recovered (commonly known as wastepaper in India) fibre and 17% on agro-residues. The geographical location of the mill often determines the type of raw material used. Most mills in the northern and western regions of India utilise agricultural residues and recovered paper, while southern and eastern regions mills use wood and bamboo as raw materials.

The growth in the paper industry has generally mirrored the growth in GDP. With the per capita paper consumption in India being low at around 13 kg when compared with the global average of 57 kg, the growth is expected to be higher in the domestic market when compared with the world growth rate. Around 80% of the nation's paper capacity of 25 million tonnes (mt) (750-800 mills) is clustered around six states that account for half of India's gross domestic product. They are also major consumption hubs.

Rating Methodology

CARE Ratings (CARE) has a detailed methodology for the rating of companies belonging to the manufacturing sector. CARE's rating process begins with the evaluation of the economy/industry in which the company operates, followed by the assessment of the business risk factors specific to the company. This is followed by an assessment of the financial and project-related risk factors as well as the quality of the management. This methodology is followed while analysing all the industries that come under the purview of the manufacturing sector. However, considering the size and diversity of the manufacturing sector, CARE has developed methodologies specific to various industries within the sector. These methodologies attempt to bring out factors, over and above those mentioned in the broad methodology, which are considered while analysing companies belonging to an industry.

CARE considers the following factors as critical determinants of credit risk associated with paper manufacturing companies.

1. Industry risk analysis

Paper and paper products have very limited scope for product differentiation which limits the pricing strategy. This in turn results in intense price competition with low barriers to entry. However, substantial capital investments are required to set up integrated paper mills, which may act as a deterrent to the new players. Moreover, with presence of several mid and small scale players, the industry is highly fragmented.

Another important feature of the paper industry is cyclicality. The paper industry is highly cyclical and depends on general economic conditions as well as the industry demand and supply. There is a bunching up of new capacity additions which in turn results in higher supply when compared to the demand growth. Companies with strong market position and low leverage are generally able to withstand the impact of high cyclicality. Also, presence in different product segments helps companies to maintain the revenue despite decline in demand for a particular product. The Indian paper industry also faces import threats which results in volatile profitability for the companies.

2. Business risk analysis

Market Position

The paper industry is highly fragmented with presence of several mid and small-scale players. CARE Ratings conducts detailed assessment of a company based on its size of operations, evaluation of installed capacity and level of utilisation, total number of products offered by the company and proportion of revenue from value-added products to gauge the market position of an entity. Different products in the paper industry often face varying supply and demand trends. Therefore, a company with more segments typically benefits from greater diversification against fluctuation in pricing and end-market demand. The paper industry being capital intensive, the ability of the company to consistently achieve high capacity utilization levels is critical to recover the costs and generate healthy profitability.

Strong market position of a company enables it to better withstand the fluctuations in prices and demand. Market position assessment is especially important in case of a cyclical industry with low entry barriers.

Level of integration in operations

Under this, the extent of both backward and forward integration in operations are analysed. Backward integration, including pulping and power generation capacities, is more critical in case of a wood-based mill to ensure a steady supply of raw materials at a relatively lower cost. The degree of backward integration, whether the captive pulp and power generated are adequate for the entire capacity available with a company, is seen. The waste and chemicals generated during the conversion process can also be used as fuel for power generation, thereby reducing the cost. However, waste paper and agri-residues-based mills do not require captive pulp and power generation capacities. Although this kind of integration is capital intensive resulting in high fixed costs for a company, it results in stable profitability for a company.

Similarly, a high degree of forward integration is seen positively as it results in higher profit margins. For example, a paper board manufacturer manufacturing cardboard boxes will enjoy high and stable profits.

Sourcing arrangement of various raw materials

Paper and paper products can be manufactured using the three key raw materials, viz, wood, waste paper and agri-residues. There is a shortage of these raw materials in the country in case of all three kinds of mills. In case of wood-based mills, the land that can be held is restricted resulting in limited forest resources. Also, the farmers' willingness to cultivate a particular crop depends on the kind of profits they can generate and the time taken to generate those profits. Therefore, the mills may have to depend on import of wood, which again depends on their availability in the global markets as well as their price movements. Even the waste paper mills depend on imports as the collection rate is quite low and, in this case, network which an entity has for collection of waste paper is critical. The challenges faced by agri-residues-based mills are alternate use and seasonal availability of raw materials. The companies who have the ability to use different raw materials and whose mills are located closer to raw material sources are viewed favourably. Overall efficiency in raw material procurement is assessed which is reflected from cost of raw material per tonne. In case a company relies more on imports, it is exposed to foreign exchange fluctuation risk and also the inventory holding period is expected to be longer.

Cost structure and operational efficiency

On account of cyclicality, lack of product differentiation associated with the paper industry as well as presence of import threats, the cost competitiveness is very critical to maintain the profits. Cost structure of paper manufacturing company is largely dominated by raw material costs followed by power and fuel cost, chemical cost, employee and labour costs as well as selling expenses. Analysis of each component vis-à-vis total operating income is very crucial to understand operational efficiency of the company. Both the raw material and power costs differ depending on the raw material used by a mill. In case of wood-based mill, raw material cost per ton is higher when compared to that of a waste paper mill. Also, the power consumption in case of a wood pulp mill is much higher than that of a waste paper mill. The past trends in the cost structure as well as comparison with the other industry players is also undertaken. Ratios such as Raw Material Cost per Tonne and Power Cost per Tonne are analysed and compared with other industry players. The ability of the company to consistently operate at high capacity utilization levels is also important in order to ensure that the cost per tonne is reduced and the company remains competitive.

Adherence to environmental norms

A large amount of water as well as various chemicals are used for manufacturing paper and paper products. Therefore, any player in paper manufacturing industry irrespective of size of operations is exposed to varying degrees of regulatory oversight, including environmental standards in terms of scrutiny of disposal of raw material wastes and level of carbon emissions. It may be noted that when compared to waste paper mills, the effluents and environmental concerns are higher in case of wood-based mills as the water, power and chemical required are significantly higher in case of the former. Also, approval of pollution control board is required for effluent discharge norms as well as for operation of the power plant. The kind of measures adopted by the companies for water treatment and effluent treatment, before they are discharged are critical for the long-term viability of the operations.

Marketing network and geographical diversification

Majority of the sales of paper companies are undertaken through dealers and a small portion is through corporate tie-ups and Government orders. Strong and wide spread dealer network helps the company to serve different geographies, thereby increasing scale of operations and strengthening the business risk profile. Also, long association with the dealers ensures sales of a company's products even during times of low demand. The dealers generally favour companies who supply a wide range of quality products in a timely manner and provide extended credit period, when needed.

Capital expenditure for capacity expansion as well as modernization of facilities

In order to cater to the increasing market and increase/maintain their market position, the companies in the paper industry continuously incur capital expenditure for de-bottlenecking the existing facilities and setting up new capacities. They also expend on various cost-efficiency measures for remaining competitive as well as for adherence to environmental norms. The cost of capex projects and funding pattern are taken into consideration while evaluating capex-related aspects. The extent of capital outlay will depend on nature of capex - greenfield, brownfield, maintenance, debottlenecking, etc.

The completion of capacity enhancement project during low demand and oversupply scenario is likely to impact the profitability of the company and take longer than expected to derive the benefits of expansion. The companies who have adequate cash flows and liquidity buffer to withstand any uncertainty with regard to the capex are seen favourably.

3. Financial risk analysis

The financial analysis considers both historical and projected financial performance of the rated entity. Trend of the financial analysis over the last 3-5-year period is analysed and compared with the average industry trend. CARE's analysis is largely focused on the stability and sustainability of the earnings so that the cash flows generated from the operating activities are adequate for debt servicing as well as for meeting the equity requirement of capex. Apart from the internal accruals, the companies in this sector need to borrow debt for funding the capex. In light of the above, leverage ratio and the level of financial flexibility are key factors influencing the credit quality of the company in this industry. Apart from these, PBILDTA per Tonne, Total Debt to PBILDTA and Return on Capital Employed (ROCE) are the other ratios that are analysed in greater detail in case of paper mills. ROCE is an important ratio as the companies in this sector have different capital intensities depending on the type of mill operated.

For more details on Financial ratios please refer to the methodology on ***'Financial Ratios-Non financial sector entities'*** *which is available on* www.careratings.com *.*

Conclusion

Overall credit risk profile of companies in the paper sector is driven by their product portfolio, relative position in the key markets, geographical diversification and the ability to improve the scale of operations while maintaining operational viability as utility costs are higher. Nevertheless, the rating outcome is ultimately an assessment of the fundamentals and the probabilities of change in the fundamentals. CARE analyses each of the above factors and their linkages to arrive at the overall assessment of credit quality, by taking into account the industry's cyclicality. While the methodology encompasses comprehensive financial, commercial, economic and management analysis, credit rating is an overall assessment of all aspects of the issuer.

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