

Rating Methodology by Sector

Paper and Pulp

1. Business base

Paper and pulp products can be broadly divided into paper and paperboard, both of which are highly dependent on domestic demand. Printing paper, a key paper product, is in a state of oversupply due to the successive addition of large paper machines by major paper manufacturers seeking to increase their cost competitiveness, which has combined with a serious decline in domestic demand following the recent global recession. Further appreciation of the yen resulted in intensified competition with imported paper products, centered on printing and information paper, while export profitability suffered, adding to the worsening business environment.

In these circumstances, paper and pulp businesses in the domestic market, where increases in demand cannot be anticipated, have been streamlined through business integration and the modification of production systems, while seeking opportunities in overseas markets with high growth potential and focusing on businesses other than paper and pulp. Because the success of these efforts is likely to cause disparities in future competitiveness, JCR focuses on the progress and results of each company's activities.

(1) Characteristics of the industry

(i) Market overview

Paper and pulp products are broadly divided into paper and paperboard, both of which are highly dependent on domestic demand. Domestic demand for mainstay paper products—namely printing and information paper—has been declining due to factors such as an increase in thinner products, a reduction in advertising spending, a slowdown of the publishing industry, and a shift to electronic media. Additionally, the stronger yen has encouraged imports, particularly of printing and information paper, which has forced paper manufacturers to reduce their domestic shipments. Some companies reduce the exports of printing paper in response to the lower export profitability attributable to the stronger yen. Meanwhile, domestic demand for linerboard and corrugated medium, a key paperboard product that is used primarily as a packaging material in the distribution of processed foods, fruit, vegetables, and other products, is less susceptible to cost cutting. Despite an increase also in thinner linerboard and corrugated medium products, domestic demand has been comparatively strong based on a relatively low ratio of imports and the absence of practical substitutes.

The domestic market for paper distribution has a hierarchical structure consisting of paper manufacturers, agencies (primary wholesalers), and wholesalers (secondary wholesaler). Although direct sales from paper manufacturers to large-scale consumers is the most common approach for

some products such as newspaper, the overall mainstream channel is distribution from agencies to consumers through wholesalers or from agencies to consumers.

(ii) Competitive situation

The three largest manufacturers enjoy relatively high oligopolistic production that exceeds 50% of the total volume in both paper and paperboard. Among paper products, however, printing paper has entered a state of oversupply following a significant decline in domestic demand after the recent global recession, in addition to the continuous installation of large paper machines by major paper manufacturers seeking to increase their cost competitiveness. In addition, competition has been intensifying with imported paper products consisting primarily of printing and information paper with higher competitiveness thanks to the increasingly strong yen. In this situation, a reduction in production capacity, including the shutdown of paper machines has been spreading, suggesting that competition will remain intense for some time.

Meanwhile, the value added component of linerboard and corrugated medium among the key paperboard products is lower than that of paper, and sales areas are limited by distribution costs to the extent that can be covered by the producing centers. The domestic market, therefore, can be divided to a degree based on factory locations, and competition with imports is also limited. The reorganization of linerboard and corrugated medium manufacturers as well as progress in the vertical integration of major linerboard and corrugated medium manufacturers through the inclusion of downstream paperboard businesses have also helped companies escape the conventional trend of excessive competition.

Companies in the paper distribution market have also merged in response to the intensified competition, into three large agencies selling the products of multiple large paper manufacturers and having strength in broad product lines. In addition, some large paper manufacturers have been strengthening their direct agencies, and agencies affiliated with general trading companies are maintaining a certain degree of influence.

(iii) Cost structure (profit structure)

Paper and pulp is an industry which is highly influenced by market conditions and the ratio of the cost of raw materials and fuel to total manufacturing cost is relatively high. The profit structure is hence susceptible to the effect of market conditions and fluctuations in the prices of raw materials and fuel. While promoting a short-term increase in profit from raw materials and fuel, which are mostly imported, the stronger yen facilitates the inflow of foreign printing and information paper, which may place downward pressure on the market conditions. This also reduces the profitability of exports of printing paper and other paper products. Under the circumstances, the critical issue is whether the industry, led by large paper manufacturers, is capable of establishing a system of price pass-through of paper when raw material and fuel prices rise.

Much of the raw materials of paperboard are wastepaper, the price of which has been experiencing upward pressure due to increased inquiries from China. The structure nevertheless facilitates price pass-through, led by leading linerboard and corrugated medium manufacturers facing limited competition from imports of linerboard and corrugated medium and progress in vertical integration.

The primary income source of agencies is their wholesale margins, where the risk of losses is low and profit stability is relatively high. Large agencies with a long history of business that, in some cases, started as Japanese paper wholesalers are also in the business of real estate rental using their own well-located properties.

(2) Important factors in market position and competitiveness

(i) Market position

In the business of paper and pulp, economies of scale can be achieved at each factory and a market share affects the company's influence on the market, suggesting a relatively strong effect of a market position on the company's competitiveness.

Market positions are important also for large paper agencies for the adequacy of their sales and distribution networks and price bargaining power against large paper manufacturers.

(ii) Industrial reorganization

The reorganization of large paper manufacturers has been mostly completed, and some progress has been made with medium-sized paper manufacturers. Business integration may create synergies, including cost savings and streamlining and benefits such as scope for reducing production capacity, which might be difficult to achieve by a single company. Amid the intensifying competition, particularly in paper, JCR observes how large paper manufacturers carry out their medium-term business restructuring. As for paperboard, there is an issue of how specialized manufacturers of linerboard and corrugated medium can survive amid the progress in vertical integration.

While the restructuring among large agencies is also complete for now, wholesalers are likely to be further reorganized to deal with the even harsher domestic business environment. JCR is paying attention to the extent of the effect of this trend on large agencies.

(iii) Competitiveness of factories

As competition in the paper market with imported paper intensifies, increasing cost competitiveness becomes important, especially for major factories. The competitiveness of paper manufacturing factories is assessed based on factory locations, capacity utilization ratio, energy composition, and other factors. Those factories in which large paper machines have recently been installed need to pay special attention to their capacity utilization ratio. Improving and maintaining the medium-term competitiveness of factories while facing a decrease in domestic demand, especially

for printing paper, requires that the capacity utilization ratio be kept at or above a certain level by cutting production capacity or increasing exports. The differences in these efforts are likely to result in varying levels of future cost competitiveness.

Since medium-term growth in domestic demand for paperboard is unlikely, integration or disposal of facilities and other activities to increase cost competitiveness become important here as well. The installation of new machines is an optional measure to resolve the obsolescence of facilities, but this often leads to increased production capacity. When installing new machines, therefore, attention must be paid to the effect on domestic demand and market conditions.

(iv) Growth strategy

Large paper manufacturers have been streamlining their paper and pulp businesses in the domestic market, where demand forecasts are bleak, through the integration and modification of production systems. At the same time, they are seeking opportunities in overseas markets with high growth potential and focusing on businesses other than paper and pulp to achieve growth.

For the rating decision, the key criterion is the ability of the companies to increase their earnings from overseas expansion and new businesses while maintaining a certain income and cash flow from their domestic paper and pulp business. Companies expanding their business overseas are also assessed based on the sector of their overseas business, the amount of invested capital, whether the expansion is primarily through local production, M&A, or other means, and other factors that change their business risk.

2. Financial base

(1) Business size

As indicators of business size, JCR focuses on net sales, production, and sales volumes, market share, and the size of factories that may create economies of scale.

Key financial indicators:

- Net sales
- Production and sales volumes
- Market share

(2) Earnings strength

Since the profit structure is susceptible to the effects of market conditions and price fluctuations of raw materials and fuel, trends in raw material and fuel prices, the progress of price pass-through, and differences in business portfolios are taken into consideration in the assessment of earnings strength. For large agencies, JCR observes the trends in their margin levels, taking into account their power relationships with paper manufacturers and the progress of price pass-through.

Key financial indicators:

- Operating income
- Ordinary income
- Operating margin
- The ratio of ordinary profit to sales

(3) Cash flow

Being a process industry, the paper and pulp sector incurs relatively heavy depreciation expenses, which adds to the importance of the assessment of cash flow capacity based on total cash flow, EBITDA, and other criteria. JCR also evaluates the solvency of the companies through, for instance, a comparison of total cash flow and EBITDA against net interest-bearing debt.

Key financial indicators:

- Total cash flow
- EBITDA
- Ratio of net interest-bearing debt to total cash flow
- Ratio of net interest-bearing debt to EBITDA

(4) Safety

Earnings are very vulnerable to fluctuations in raw material and fuel prices and market conditions, and there is a risk of impairing equity capital due to a loss on disposal of equipment. To improve the ability to deal with this risk, a certain level of equity capital must be maintained.

In addition, an increase in overseas investment for future growth tends to create more business risks, which necessitates the establishment of a sound financial system.

Key financial indicators:

- Shareholders' equity
- Equity ratio
- Debt equity ratio

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