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Rating Methodology by Sector

Tires

1. Business base

While demand for tires for new vehicles tends to be exposed to economic fluctuations, replacement demand for tires used for replacement serves as a buffer. The industry, meanwhile, has an earnings structure that is highly susceptible to rises in the prices of raw materials, and has a burden of capital investment for developing global operations. These business risks are taken into account in the ratings.

(1) Characteristics of the industry

(i) Market overview

Demand for new vehicles in Japan, the United States, Europe, and other developed countries is static in a mature market. In contrast, demand in China, India, and other emerging countries for vehicles has been growing, reflecting the progress of motorization. In the medium-term, demand from emerging countries will lead global demand. Emerging countries will also act as a driving force in demand for tires in the medium-term, and global demand is likely to grow between 3% and 4% annually. In tandem with this development, demand for tires used for replacement is also expected to rise.

(ii) Competitive situation

Manufacturing tires at low costs requires large-scale plants. The burden of investments for developing overseas operations is great. With these considerations, the barrier to entry in the tire business for new manufacturers is high. As a result, the global tire market has become an oligopolistic market mainly with Bridgestone, Michelin, and Goodyear. In recent years, however, the share of these three companies in the market has been slipping, reflecting growth in emerging markets and the rise of new manufacturers. While price competition in general-purpose products has been escalating, given the participation of emerging manufacturers in the market, competition in high value-added products among major manufacturers, especially in developed countries, has become increasingly severe.

As the emerging market is expanding rapidly, China has surpassed the United States to become the world's largest tire market. However, because Japanese manufacturers often specialize in high-end products, their market share in China is limited. The future direction of competition among all tire manufacturers, including those specializing in mid-range or lower-end products, will need to be watched as the market grows rapidly.

(iii) Cost structure

Raw materials costs takes up high percentage in costs of tires. As a result, market fluctuations tend to affect earnings.

Tires for vehicles are produced by combining a number of raw materials, including raw rubber (natural rubber and synthetic rubber), compounding agents (vulcanized agent and other agents), reinforcing agents (carbon black and other agents), and tire cords (steel, polyester and other materials). By weight, natural rubber accounts for approximately 30% of a tire, and petrochemical products made of naphtha, including synthetic rubber and carbon black, for approximately 60%. Consequently, the cost of tires is affected by changes in the market for natural rubber and crude oil.

Although all manufacturers strive to transfer higher costs of raw materials by raising prices of their products, their profitability frequently suffers when raw materials prices rise.

(2) Important factors in market position and competitiveness

(i) Market position

Because the tire industry is a typical apparatus industry, it can benefit from economies of scale. As it is believed that sales of replacement tires accounts for between 70% and 80% in total sales of Japanese manufacturers, including exports, building a distribution network is another key issue for the tire manufacturers.

Competition both in general-purpose products mainly in the emerging market and high value added products in the market of developed countries has been intensifying. Consequently, tire manufacturers need to develop business structures that generate earnings in each market.

Key points in competition in the near-term are considered to be bolstering sales in emerging markets, where demand is growing, and developing environmentally responsive technologies.

(ii) Measures to counter a rise in raw materials costs

An important issue for the tire manufacturers is the extent to which they can effectively contain the pressure from a rise in raw materials costs by raising sales prices in overseas markets, introducing a price system in which prices of new vehicles in Japan are linked with raw materials costs, expanding sales in growth markets, such as emerging markets, and adopting other sales policies.

Internal manufacturing of natural rubber has not progressed greatly, principally because of problems in managing large-scale farms and dealing with labor issues. However, given a surge in prices of natural rubber, internal manufacturing has recently started to grow gradually.

(iii) Measures to deal with the global market

The ratio of the overseas sales of tire manufacturers to their total sales is high. Because the cost of transportation of tires is high, tires are in principle manufactured in consumption areas. It is also necessary to carry out intensive production of general-purpose models and other products in areas where costs can be sustained at a low level, given the severe global cost competition.

Among Japanese tire manufacturers, Bridgestone is the only company that produces products in the four major global markets. Other Japanese tire manufacturers supplement their global structures through alliances with, mergers with or acquisitions of foreign companies. When alliances are established, we focus on the actual progress and effectiveness of business cooperation.

(iv) Strengthening of high value added products and environmental technologies

As the restrictions on fuel consumption and emissions of CO_2 become more severe, especially in Japan, the United States, and Europe, the development of eco-friendly vehicles has been accelerating. Both consumer awareness and trends in product development by auto manufacturers have been increasingly focusing on efficient fuel consumption. We believe that this will be a critical issue from the perspective of product strategies for the tire manufactures in the future to achieve product differentiation by improving the fuel consumption capability of tires, as well as bolstering their safety and reliability.

A labeling system (a system in which the performance of low fuel-consumption tires was presented using grades so that users can easily judge the performance) was also introduced to tires in Japan in January 2010. The market for low fuel-consumption tires is expected to grow going forward.

As a proposal to assist users of tires for trucks and buses to reduce costs, Bridgestone manages the retread tire business in Japan. The business is designed to secure earnings by offering comprehensive services, from putting on new tires to retread services. The business has been attracting attention in terms of whether or not it will strengthen relationships with users and bolster earnings stability.

(v) Non-tire business

The non-tire business of Japanese tire manufacturers (vibration absorbing rubber, sporting equipment, and industrial materials) accounts for between 10% and 30% of their total consolidated sales. In this business, although the tire manufacturers tend to have a broad lineup of products that enjoy relatively high market shares, they did have some unprofitable products in the past. All of the manufacturers have taken steps to streamline their operations by adopting a policy of narrowing their focus, and we will continue to monitor the outcome of these initiatives.

2. Financial base

(1) Earnings strength

We focus on what kind of factors cause differences in operating margins and how they can be improved in the future. These factors include the power of brands, cost competitiveness, the ability to respond to a rise in raw materials costs, and fluctuations in foreign exchange rates, sales networks, and a host of other matters.

We also focus on the earnings of each segment of tires for new vehicles, replacement, and exports. Although the profitability of the segment for new vehicles has been improving, mainly reflecting the introduction of a system that links raw materials costs with product prices, there have been cases when the profitability of the segment for new vehicles was less favorable compared with that of the segments of replacement and exports. We also inevitably confirm the progress of raising prices of tires when estimating income and cash flows.

Key financial factors:

- Operating margin
- Operating income
- Ordinary income

(2) Cash flow

To continue to deal with the severe global competition and finance the burden of investment, tire manufacturers need to be able to generate cash flows that are sufficient to make investments to maintain competitiveness. Amid the expansion of overseas production, mainly in emerging countries, we focus on the contribution made by overseas production to overall income and cash flows.

Key financial factors:

- Operating cash flows and EBITDA
- Free cash flows
- Ratio of interest-bearing debt to EBITDA

(3) Safety

Tire manufacturers are required to have reasonable financial strength, because they need to finance a large amount of capital investment and R&D expenses to preserve their global operations. As they also need to invest in production capacity to accommodate demand from emerging countries, we focus on the maintenance and the strengthening of tire manufacturer finances.

Key financial factors:

- Interest-bearing debt
- Debt equity ratio
- Equity ratio

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