Last Updated: February 8, 2024

Rating Methodology by Sector

# Tires

(Note) Abbreviations: EV (Electric Vehicle), HV (Hybrid Vehicle), PHV (Plug-in Hybrid Vehicle)

## 1. Business base

While demand for tires for new vehicles is easily affected by economic fluctuations, demand for replacement tires, which account for a large portion of total demand, is less volatile than demand for tires for new vehicles, reducing volatility in tire manufacturers' production volume and business performance. On the other hand, in addition to high technological capabilities, tire manufacturers must also have a strong customer base and global supply capacity for new tires, and an extensive distribution network for replacement tires. Since business performance is easily affected by rising raw material prices, and its global expansion requires a heavy capital investment burden, JCR incorporates these business risks.

### (1) Characteristics of the industry

#### (i) Market overview

While demand for tires for new vehicles in developed countries such as Japan, the U.S., and Europe has matured, demand is rising in emerging markets on the back of progress in motorization, and demand in emerging countries is expected to drive global demand growth over the medium term. On the other hand, replacement tires, for which demand is relatively stable, account for 70-80% of the sales, including exports. Therefore, moderate market growth is expected over the medium to long term, with replacement tires supporting fluctuations in demand for tires for new vehicles.

In terms of structural changes in the industry, tires will remain necessary even if the power source changes from internal combustion engine-powered vehicles to EVs and other vehicles. On the other hand, over the long term, demand for tires for new vehicles will be affected by a possible decline in new car sales due to the spread of automated driving and car sharing in some areas.

#### (ii) Competitive situation

Large-scale factories are needed to manufacture tires at low cost, and barriers to entry are high, including the investment burden of global expansion. As a result, the global tire market is an oligopoly market led by Bridgestone, Michelin, and Goodyear, but in recent years the three companies' market shares have been shrinking somewhat due to the expansion of markets in emerging countries and the rise of new manufacturers.

In recent years, there has been a shift in demand from sedans to large vehicles such as SUVs (multi-purpose sport utility vehicles), mainly in North America. As a result, demand for large-diameter tires, which are high value-added products, is increasing. Large-diameter tires require high technology to ensure circularity, and Japanese tire manufacturers have a competitive advantage in this area.

On the other hand, low-inch tires are becoming increasingly commoditized, and price competition is becoming tougher due in part to the rise of new tire makers.

(iii) Cost structure

Raw material costs account for a large proportion of the cost structure of tires, and market fluctuations can easily affect earnings. Automobile tires are manufactured by combining various raw materials, including raw rubber (natural rubber and synthetic rubber), compounding agents (vulcanizing agents and other agents), reinforcing agents (carbon black and other agents), and tire cords (steel, polyester and other materials). In particular, it is easily affected by changes in the market prices of natural rubber and crude oil, and each company revises its prices in response to changes in market conditions, but profit margins are often squeezed when raw material prices are on the rise.

(2) Important factors in market position and competitiveness

(i) Market position

As the tire industry is a typical apparatus industry, economies of scale tend to work. Since 70-80% of sales by Japanese manufacturers, including exports, are considered to be for replacement use, the establishment of an extensive distribution network for replacement tires is also important.

Competition is intensifying for both general-purpose products, especially in emerging markets, and high value-added products in developed markets, and it is necessary to establish a business structure to ensure earnings in each market.

The tire market can be also divided into consumer goods tires (for passenger cars, etc.) and producer goods tires (for trucks and buses, agricultural machinery, industrial vehicles, etc.). Diversification of tire applications will likely lead to stabilization of earnings power.

The key to competitiveness for Japanese tire manufacturers for the time being will be to expand their lineup of high value-added products, strengthen sales, and enhance environmentally friendly technologies.

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

For the selling price of new car tires, Japanese tire manufacturers have introduced a raw material cost-linked pricing formula with most of the customers, which allows them to revise prices even if there is a time lag.

For replacement tires, ease of raising prices varies depending on the country, area and competitive situation, so prices are set while keeping an eye on the competitive situation.

(iii) Measures to deal with global market and product lineup

The ratio of overseas sales is high for all companies. The basic principle of tire production is to manufacture in the place of consumption due to the high transportation costs. In addition, low-inch tires are subject to global cost competition, which sometimes necessitates concentrated production in low-cost regions.

Some manufacturers are supplementing their global structure through alliances with other companies or M&A. Alliances and M&A may continue in order to expand overseas sales networks, enhance product lineups, and respond to next-generation technologies, and in such cases, the status of realization of synergy effects will be important.

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

Amid stricter regulations on fuel efficiency and CO2 emissions, mainly in Japan, the U.S., and Europe, development of environmentally friendly vehicles is accelerating. As consumer awareness and automakers' development focus on fuel efficiency, differentiating products by improving fuel efficiency as well as safety performance will be a priority item in future product strategies.

Reducing rolling resistance will lead to reduced CO2 emissions while driving. As the development of EVs is in full swing to comply with environmental regulations, tires are required to have high performance in terms of rolling resistance reduction, weight reduction, wear resistance, and quietness. Japanese tire manufacturers have been working to improve their technologies for HVs and PHVs in these areas, and although they are not required to make drastic changes, the difference in performance is expected to affect their competitiveness.

In addition to electrification, there may also be differences in the added value of tires depending on how they respond to automated driving and connected systems.

(v) Non-tire business

In the business composition of Japanese tire manufacturers, non-tire business (sports business, industrial materials, etc.) accounts for 10-20% of consolidated sales. While many of the products in this business have relatively high market shares, there have been some unprofitable products in the past. The companies are restructuring their businesses to build a more stable portfolio, taking into account profitability, growth potential, and synergies with tire business.

## 2. Financial base

(1) Earnings strength

JCR is focusing on what factors are responsible for the high and low ratio of operating margin and how it will improve in the future. Various factors can be considered, including brand strength, cost competitiveness, ability to cope with rising raw material costs, ability to respond to exchange rate fluctuations, and sales network.

JCR also checks the earnings conditions of each of tires for new vehicle, replacement, and exports. Profitability of tires for new vehicles has been improving due to the introduction of the raw material cost-linked pricing formula, but in some cases profitability has been lower than that of tires for replacement and exports. In addition, in forecasting profit and cash flow, JCR is checking the degree of penetration of tire price revisions.

Key financial factors:

- Operating margin
- Operating income
- Ordinary income

(2) Cash flow generation capability

Amid intense global competition and continuing investment burden, tire manufacturers must be able to generate sufficient cash flow for investments to maintain and improve their competitiveness. JCR places emphasis on the contribution of new investments and overseas production expansion to profit and cash flow.

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

(3) Safety

Since global business expansion requires a large amount of capital investment and R&D expenses, tire manufacturers must have reasonable financial strength. In addition to production capacity expansion, investments are expected to increase in response to electrification and other needs. Progress in maintaining and strengthening financial strength in such an environment is important.

Key financial factors:

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

Japan Credit Rating Agency, Ltd.
Jiji Press Building, 5-15-8 Ginza,
Chuo-ku, Tokyo 104-0061, Japan
Tel. +81 3 3544 7013, Fax. +81 3 3544 7026