Operational Risks

The status of the Companies as documented in this report is subject to diverse risks from both operational and accounting perspectives. This section provides an overview of the major categories of risk that may have a bearing on investors' decisions.

Management is aware of these risks, and systematic efforts are made to prevent or minimize the impact of related adverse events on operations. Nonetheless, the potential exists for unforeseen or unpredictable events related to the risk factors described below to affect the operations, business results, and financial position of the Companies. All references to possible future developments in the following text are as of March 26, 2021.

Major Categories of Operational Risk

Demand and macroeconomic conditions

The Companies conduct research and development (R&D), purchasing, manufacturing, logistics, marketing, sales, procurement, and other functional activities on a global basis. Operating results and financial position are thus subject to trends in demand, interest rates, exchange rates, share prices, and other economic variables in different countries and regions. In fiscal 2020, the consolidated revenue split by market (for external customers only) was 46% from operations in the Americas; 21% from Europe, Russia, the Middle East, India and Africa; 19% from Japan; and 14% from China, Asia-Pacific. An economic downturn in any of these regions could exert a major adverse effect on the operating results and financial position of the Companies.

The Companies' business is closely tied to the automobile industry, therefore, the operating results and financial position of the Companies are strongly affected by business conditions in the global automobile industry. Demand for replacement tires in each country where the Companies operate depends on national trends in consumer spending, automotive fuel prices, and a range of other local market variables. Any combination of trends that might cause demand for replacement tires to decline, or to grow at a slower rate, could adversely affect the operating results and financial position of the Companies.

Demand for large and ultra-large off-the-road radial tires for construction and mining vehicles—which are the core of the Companies' mining, manufacturing, and construction solutions businesses—and for certain products, such as conveyor belts, is affected by businesses in the resource industries and in the civil engineering and construction industries. Trends in those business conditions that might cause demand to decline, or to grow at a slower rate, could adversely affect the operating results and financial position of the Companies.

Moreover, demand for winter tires (which make a sizable contribution to sales in regions such as Japan, Europe, and North America) is closely related to seasonal weather trends. A mild winter and a decline in demand in these regions could adversely affect to some extent the operating results and financial position of the Companies.

Legal, regulatory, and litigation risk

The Companies' operations around the world are subject to diverse national (and, in Europe, supranational) laws and regulations, including trade, investment, foreign exchange transactions, taxation systems (including transfer pricing), anticompetitive practices, environmental protection, and protection of personal information.

Laws and regulations that affect the Companies' business activities have been established and introduced. These include labeling systems and regulations regarding tire performance and regulations regarding chemicals in Japan and overseas. Accordingly, new or revised laws and regulations could limit the scope of business activities, raise operating costs, or otherwise adversely affect the operating results and financial position of the Companies.

The Companies could be subject to lawsuits or to investigations by governmental authorities in regard to their business activities in Japan or in overseas markets. In the event that an important lawsuit is filed or investigation by governmental authorities has commenced, the Companies' operating results and financial position could be affected.

Operational Disruptions

Natural disasters, wars, terrorist actions, civil strife, and social and political unrest

Globally dispersed operations expose the Companies to a broad range of natural and man-made risks that could constitute force majeure, including natural disasters, such as earthquakes and floods, wars, terrorist actions, civil strife, boycotts, epidemics, energy supply problems, and general social or political unrest. Such events have the potential to adversely affect the operating results and financial position of the Companies.

Also, factors such as abrupt, substantial fluctuations in political or economic matters in Japan or overseas could hinder the continuation of the Companies' business activities. Such events have the potential to affect the Companies' operating results and financial position.

The risk of earthquakes is particularly high in Japan where the Companies have numerous key facilities. Management systematically promotes the seismic reinforcement of the Companies' facilities in Japan based on an order of priority determined from the results of site analyses using seismic diagnostics. In addition, a business continuity plan (BCP) has been created in order to facilitate a swift response to an earthquake and the early restoration of operations. Operation of this BCP is subject to regular review and improvement. The Companies have also formulated a BCP designed to prioritize the wellbeing and safety of employees, families, and all related people while minimizing Company losses stemming from the spread of H1N1 influenza, COVID-19, and other diseases caused by unknown pathogens. The content of this BCP is continuously expanded based on feedback from its implementation.

Despite the preventive measures, such serious risks could disrupt or reduce the scale of operations or cause damage to facilities, necessitating expensive repairs or restoration work. The costs involved could adversely affect the Companies' operating results and financial position.

Operational disruptions at those plants where the production of certain products or materials is concentrated have the potential to cause greater problems due to the increased possibility of a supply interruption, which could result in claims for compensation based on breach of supply contracts, or in an erosion of customer confidence in the Companies as a reliable source of supply. Any such developments could have a significantly adverse impact on the operating results and financial position of the Companies.

Information Technology (IT) Systems Failures

The complex operations of the Companies are increasingly dependent on the smooth, round-the-clock functioning of various computing and IT systems. Failure of such technical systems due to external causes, such as natural disasters, cyberattcks, or through human error, could result in the halt of major operations and services and theft or leakage of confidential or personal information and data, with the possibility of hindering further business activities. Such incidents bear the potential to damage the Companies' brand image and lower social trust, with adverse effects on performance and financial standing. The Companies have instituted comprehensive measures to safeguard IT and computing systems and related data, and to upgrade network security on an ongoing basis in order to prevent systemic failures.

Industrial Action

Prolonged strikes or other industrial action could cause operational disruptions, and thereby adversely affect the operating results and financial position of the Companies. Management strives to minimize the risk of labor unrest by fostering good labor management relations throughout global operations.

Risks related to climate change

Amid growing global interest in climate change and an accelerated move toward a low-carbon society as represented by the Paris Agreement, the Companies recognize the risks and opportunities related to climate change and reflect them in their business strategy. These risks include stronger typhoons and increased frequency of flooding and drought, which pose the risk of interrupting business activities. There are also risks related to the procurement of raw materials as a result of changing rainfall patterns leading to poor harvesting of natural rubber. Furthermore, reduced snowfall bears the risk of lowering demand for winter tires. Moreover, climate change has led to the ongoing introduction of systems and regulations related to carbon taxes, reduction obligations for CO_2 emissions, emissions trading schemes, and fuel-efficient tires in Japan and overseas.

If the R&D expenses required to meet the changing needs of clients and customers do not produce sufficient results, the Companies' operating results and financial position may be adversely affected in ways that include limitations on business activities and increased costs.

Based on the Companies' awareness of the risks and opportunities surrounding climate change, the Companies have set a long-term goal for 2050 of becoming carbon neutral, with targets set for 2030 to 1) reduce absolute CO_2 emissions (Scope 1*[1] and 2*[2]) by 50% compared with 2011 levels and 2) contribute to a global CO_2 emissions reduction across the lifecycles and value chains (Scope 3*[3]) of the Companies' products and services that exceeds five times the amount of CO_2 emissions generated by the Companies' operations by 2030. The Companies are working to meet these targets with efforts that include developing new technology that helps reduce CO_2 emissions, reducing emissions at production bases, and promoting the development and sales of fuel-efficient tires.

*1 CO_2 emissions produced directly by a company (boilers at company factories, etc.)
*2 Indirect CO_2 emissions generated from the production of energy by an external provider and then utilized by a company
*3 CO_2 emissions produced throughout a product's lifecycle, including procurement of raw materials, logistics, customer use, and disposal/recycling

Corporate and brand image

The Companies strive to enhance their corporate and brand image consistently through global business activities. Systematic efforts are made to ensure compliance with all applicable laws and regulations and to promote the highest ethical standards. Programs are in place across the Companies to prevent industrial incidents, particularly fires and any accidents that could cause occupational injuries, and to respond immediately to any accidents that occur.

Despite such preventive measures, serious ethical lapses or industrial accidents, which are by their nature unpredictable, have the potential to adversely affect the operating results and financial position of the Companies by damaging the image and reputation of the Companies, diminishing the general public's confidence in the Companies, or leading to a drop in share price.

Currency risk

The global distribution of the Companies' R&D, manufacturing, logistics, marketing, and sales facilities requires business transactions in numerous currencies. The Companies employ foreign currency forward contracts to hedge foreign currency-denominated trade receivables and payables, and currency swaps to hedge foreign currency-denominated loans and borrowings in an effort to minimize the effects of short-term exposure to exchange rate fluctuations. However, hedging cannot insulate the Companies' operations completely from foreign exchange market trends since these operations include extensive import and export activities worldwide. Fluctuations in exchange rates can thus have an adverse effect on the operating results and financial position of the Companies.

Exchange rate fluctuations also affect the consolidated performance of the Companies because results are reported in yen. Changes in exchange rates affect the values recorded for revenue, expenses, assets, and liabilities in all countries outside Japan when translated into yen. In general terms, yen appreciation against other leading currencies tends to depress the financial results, while yen depreciation tends to have a favorable impact.

Competition

The Companies encounter numerous competitors across their entire product lineup. Competitive price pressures have the potential to adversely affect the operating results and financial position of the Companies. In addition, the Companies face a constant risk of demands for price reductions from large corporate clients.

The Companies strive to maintain profitability in the face of downward price pressures by continually seeking to raise productivity, enhance brand image, develop new markets, and launch new products that provide greater value to customers. However, management cannot guarantee that such efforts will always be sufficient to offset the effects of competition.

The Companies' strategy is based on maintaining a highly competitive technological edge. The Companies target the development and introduction of products equipped with new and advanced technologies, and then aim to persuade customers of the value inherent in such technical advances to secure prices sufficient to ensure that profits fully offset the costs of development. Fierce competition in various fields can sometimes prevent the Companies from recovering development costs through pricing, which can also have an adverse effect on operating results and financial position.

Product defects

The Companies hold customer safety as their highest priority. The Companies invest considerable resources in establishing and maintaining high quality standards for all products manufactured and sold. Management is particularly sensitive to the importance of quality assurance in tires and other products closely associated with human safety. The Companies have honed their collective quality assurance capabilities by upgrading information systems related to product performance, collecting pertinent market information, and establishing systems to provide early warning of any potential safety issues that may arise before they become problems.

Nonetheless, such efforts cannot guarantee a zero level of product defects or eliminate the chance of an extensive product recall because product defects could occur due to unpredictable factors. Any such defects or recalls could result in customer claims for damages, as well as associated litigation costs, replacement costs, and damage to the Companies' reputation. Product liability claims, class-action lawsuits, and other litigation pose a particular risk in the U.S.

Raw materials procurement

Disruption of supplies of raw materials has the potential to affect performance adversely. The Companies use large quantities of natural rubber in tires and other rubber products, most of which are supplied from Southeast Asia.

The availability of natural rubber supplies in quantities sufficient for manufacturing purposes is subject to disruption due to natural disasters, wars, terrorist actions, civil strife, and other social or political unrest, in addition to the threat of poor harvests. Supply shortages or capacity constraints are also potential problems with other basic raw materials.

The Companies rely on in-house upstream raw materials operations and on third-party suppliers for important raw materials. Any disruption of activity to those operations or suppliers and any other events that impede the Companies' plants that use those raw materials could adversely affect the Companies' operating results and financial position. Increases in the costs of raw materials due to tight supply, trade for speculative purposes, and other reasons are also potentially detrimental to the operating results and financial position of the Companies. Management cannot guarantee that price rises can always be passed on to customers or that ongoing efforts to raise productivity will be sufficient to compensate for any sharp increases in raw materials costs.

Pension costs and obligations

Pension-related costs and obligations are reliant on actuarial assumptions concerning discount rates and a number of other variables. If these assumptions were to change significantly as a result of changes in interest rates or the fair value of plan assets (including pension assets), or other factors were to necessitate a change in the underlying assumptions, there could be an increase in pension-related costs and obligations, as well as a material impact on the operating results and financial position of the Companies.

Intellectual property

The Companies treat intellectual property as an important business resource. Systematic efforts are made to employ intellectual property effectively in improving the competitive position of the Companies, to protect intellectual property rights from infringement, and to avoid infringing the intellectual property rights of other parties.

Despite such safeguards, any actual or alleged infringement of third-party intellectual property rights by the Companies could have a negative impact on the use of certain materials or technologies by the Companies, and could potentially also trigger the payment of compensatory damages. Any such outcome could have a negative effect on the operating results and financial position of the Companies.

Conversely, if claims by the Companies of intellectual property rights infringement against third parties are not upheld, the Companies could also suffer direct or indirect losses through the diminished differentiation or competitiveness of their products in global markets.