

ITEM 3. KEY INFORMATION

A. [Reserved]

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

Risks Relating to Our Business and Industry

Outbreaks, or fears of outbreaks, of any animal diseases may lead to cancellation of orders by our customers and create adverse publicity that may have a material adverse effect on consumer demand for our products. Moreover, outbreaks of animal diseases in Brazil may result in foreign governmental action to close export markets for some or all of our products, which may result in the loss of some or all of these animals.

Our operations involve raising poultry and hogs and processing their meat, which requires us to maintain certain standards of animal health and disease control. We could be required to dispose of animals or suspend the sale or export of some of our products to customers in Brazil and abroad in the event of an outbreak of disease affecting animals, such as the following: (i) in the case of hogs and certain other animals, foot-and-mouth disease, influenza (H5N1) and African swine fever and (ii) in the case of poultry, avian influenza and Newcastle disease. In addition, if the Porcine Reproductive and Respiratory Syndrome (PRRS), which has broken out in Europe and the United States in 1990 and 1985, respectively, the Porcine Epidemic Diarrhea (PEDV), which has broken out in Europe and the United States in 2014 and 2013, respectively, or the African swine fever which broke out in China in 2018, were to break out in Brazil, we could be required to dispose of hogs. There have been outbreaks of classical swine fever in Brazil, and an occurrence of such outbreaks in the free zones where we source our hogs for production could require us to dispose of the affected hogs. Disposal of poultry, hogs or other animals would preclude recovery of costs incurred in raising or purchasing these animals and result in additional expense for the disposal of such animals and loss of inventory. An outbreak of foot-and-mouth disease or other similar diseases could have an effect on livestock we own and the availability of livestock for purchase. In addition, the global effects of avian influenza or other similar diseases would impact consumer perception of certain protein products and our ability to access certain markets, which would adversely affect our results of operations and financial condition.

Chicken and other birds in some countries, particularly in Asia but also in Europe, the Americas and Africa, have on occasion become infected by highly pathogenic avian influenza in recent years. In a small number of highly publicized cases, avian influenza has been transmitted from birds to humans, resulting in illness and, at times, death. Accordingly, health authorities in many countries have taken steps to prevent outbreaks of this viral disease, including disposal of afflicted poultry flocks.

In recent years, some human cases of avian influenza and related deaths were reported, according to the World Health Organization. The cases reported were caused by the H5N1 virus. In early 2017, Chile, a neighboring country to Brazil, confirmed the occurrence of avian influenza. In 2019 and 2020, several countries within Europe, Asia and Africa reported cases of highly pathogenic avian influenza in poultry. Additionally, Mexico reported cases in 2019, the United States reported cases in 2020 and Japan, China and certain countries within Europe reported cases in 2021. Finally, in 2022, according to the World Organization for Animal Health, several highly pathogenic avian influenza subtypes were reported in many countries in Europe, Asia and the Americas, with cases involving poultry and non-poultry birds. In addition, in accordance with information published by MAPA, cases of highly pathogenic avian influenza involving poultry and non-poultry birds were reported in countries close to Brazil including Argentina, Chile, Colombia, Ecuador, Peru, Uruguay and Venezuela, with the reporting cases in Argentina, Ecuador, Chile and Peru involving industrial raised poultry.

There have been no reported cases of avian influenza in Brazil, however there are concerns that an outbreak of avian influenza may occur in the country in the future. Any outbreak of avian influenza in Brazil could lead to the required disposal of our poultry flocks, which would result in decreased sales in the poultry industry, prevent recovery of costs incurred in raising or purchasing poultry and result in additional expense for the disposal of poultry. In addition, any outbreak of avian influenza in Brazil would likely lead to immediate restrictions on the export of some of our products to key export markets. Preventive actions adopted by Brazilian authorities, if any, may not be effective in precluding the spread of avian influenza within Brazil.

Whether or not an outbreak of avian influenza occurs in Brazil, further outbreaks of avian influenza anywhere in the world could have a negative impact on the consumption of poultry in our key export markets or in Brazil, and a significant outbreak would negatively affect our results of operations and financial condition. Any outbreak could lead to the imposition of costly preventive controls on poultry imports in our export markets. Accordingly, any spread of avian influenza, or increasing concerns about this disease, may have a material and adverse effect on our company. Pandemics or human disease outbreaks, such as the coronavirus (COVID-19), may disrupt consumption and trade patterns, supply chains and production processes, which could materially affect our operations and results of operations.

Health and food safety risks related to our business and the food industry could adversely affect our production and shipping processes as well as our ability to sell our products.

We are subject to risks affecting the food industry generally, including risks posed by contamination or food spoilage, evolving nutritional and health-related concerns, consumer product liability claims, product tampering and sabotage, the possible unavailability and expense of liability insurance, public perception of product safety for both the industry as a whole and also our products specifically, but not exclusively, as a result of disease outbreaks or the fear of such outbreaks, the potential cost and disruption of a product recall and possible impacts on our image and brands. Among such risks are those related to raising animals, including disease and adverse weather conditions. For example, according to the World Organization for Animal Health, in 2022 there was an increase in contamination concerns related to avian influenza and African swine fever, with alert levels considered high. Biosafety concerns could cause certain markets to close and lead to production, shipping and sales disruptions in Brazil and our export markets.

Meat can be subject to contamination during processing and distribution. In particular, processed meat may become exposed to various disease-producing pathogens, including *Listeria monocytogenes*, *Salmonella enteritidis*, *Salmonella tiphimurium* and *E. coli* 0157:H7. These pathogens can also be introduced to our products during production or as a result of improper handling by third-party food processors, franchisees, distributors, foodservice providers or consumers. Spoilage, especially spoilage due to failure of temperature-controlled storage and transportation systems, is also a risk. The systems we maintain to monitor food safety risks throughout all stages of production and distribution could fail to function properly and product contamination could still occur. Failures in our systems to ensure food safety could result in harmful publicity that could cause damage to our brands, reputation and image and negatively impact sales, which could have a material adverse impact on our business, results of operations, financial condition and prospects.

In the first half of 2022, during routine laboratory analysis of poultry meat produced in our facility, in Dois Vizinhos, in the Brazilian state of Paraná, we identified a significant deviation in the level of dioxin in a sample of poultry meat due to an inadvertent deviation in feed ingredients. After conducting a corresponding risk analysis and laboratory review of the quality of our poultry meat, we started safety procedures to identify possible deviation in other lots of poultry meat and to remedy the source of such deviation. We incurred in substantial costs with laboratory analysis, special work force allocation, replacement of feed ingredients and discarding and transporting certain lots of poultry meat as a result of these safety procedures and commercial costs as a result of shipment delays. In the future, a product that has been actually or allegedly contaminated could result in product withdrawals or recalls, disposal of product inventory, negative publicity, temporary plant closings, substantial cost of compliance or remediation and potentially significant product liability judgments against us. Any of these events could result in a loss of demand for our products, which may have a material adverse effect on our business, brands' reputation, results of operations, financial condition and prospects.

Even if our own products are not affected by contamination, our industry may face negative publicity in certain of its markets if the products of other producers become contaminated, which could result in negative public perception about the safety of our products and reduced consumer demand for our products in the affected category. Significant lawsuits, widespread product recalls and other negative events faced by us or our competitors could result in a widespread loss of consumer confidence in the safety and quality of our products. Our sales are ultimately dependent on consumer preferences, and any actual or perceived health risks associated with our products could cause customers to lose confidence in the safety and quality of our products and have a material adverse impact on our business, results of operations, financial condition and prospects.

Geopolitical and other challenges and uncertainties due to the ongoing military conflict between Russia and Ukraine could have a material adverse effect on the global economy, certain material and commodity prices and our business.

Global markets are currently operating in a period of economic uncertainty, volatility and disruption following Russia's full-scale invasion of Ukraine on February 24, 2022. Although the length and impact of the ongoing military conflict is highly unpredictable, the conflict in Ukraine and any other geopolitical tensions could have an adverse effect on the economy and business activity globally and lead to:

- credit and capital market disruptions;
- significant volatility in commodity prices (such as grains, fertilizer inputs and oil and gas);
- increased expenses related to direct and indirect materials used in our production process (i.e., packaging, logistics and inputs, among others);
- increased costs of resources (such as energy, biomass, natural gas and coal) for our operations;
- slowdown or disruption of the global and local supply chain, which may lead to shortages and lack of critical materials, commodities and products in the market;
- potential appreciation of the U.S. dollar;
- increase in interest rates and inflation in the markets in which we operate, which may contribute to further increases in the prices of energy, oil and other commodities; and

- lower or negative global growth.

Any such event may increase our costs and adversely affect our business if we are not able to pass such increased costs onto our customers.

The conflict between Russia and Ukraine led to an increase in energy prices in Europe (especially natural gas, electricity and biomass inputs). In particular, the conflict stimulated demand for biomass inputs in the European market, reducing supply to meet international demand and leading to higher prices and, consequently, higher inflation. These conditions generally increased our costs and brought greater volatility to our margins. For example, there was an increase of 46% in the cost of biomass inputs in 2022 when compared to the previous year. Economic sanctions imposed on Russia in response to the war also caused an acute shortage in the supply of oil and natural gas in global markets, leading to an increase in energy prices from January 2022 and reaching the highest level in June 2022. In this context, the global economic slowdown also gained strength, reinforced by Chinese lockdown measures to contain COVID-19 outbreaks in various industrial regions during 2022. The global energy crisis and higher inflation, coupled with a slowdown in global economic production, may have a negative impact on our costs and the demand for our products. Our revenues were R\$53.8 billion in December 31, 2022, an increase of 11.3% when compared to the previous year. In addition, as a result of the higher inflation and energy prices, there was an increase in our production costs, which were R\$45.7 billion for December 31, 2022, an increase of 18.2% when compared to the previous year.

Additionally, Russia's prior annexation of Crimea, recent recognition of two separatist republics in the Donetsk and Luhansk regions of Ukraine and subsequent military interventions in Ukraine have led to sanctions and other penalties being levied by the United States, European Union and other countries against Russia, Belarus, the Crimea Region of Ukraine, the so-called Donetsk People's Republic, and the so-called Luhansk People's Republic, including the agreement to remove certain Russian financial institutions from the Society for Worldwide Interbank Financial Telecommunication, or SWIFT, payment system. Additional potential sanctions and penalties have also been proposed and/or threatened. Russian military actions, the resulting sanctions and Russian counter measures or retaliatory actions (including cyberattacks and espionage) could adversely affect the global economy and financial markets and lead to further instability and lack of liquidity in capital markets. See "A failure to comply with export control or economic sanctions laws and regulations could have a material adverse impact on our results of operations, financial condition and reputation." The impact of these measures, as well as potential responses to them by Russia, is currently unknown and, while our exposure to Russia and Ukraine is limited, current and future measures could significantly and adversely affect our business, financial condition and results of operations, including, for example, cancellation and difficulty in exporting goods to Russia, potential sanctions in the marketing of our products to Russia and threats to the safety of our employees in Russia and other locations close to the conflict.

Geopolitical and economic risks have also increased over the past few years as a result of trade tensions between the United States and China, Brexit, and the rise of populism. Growing tensions may lead, among others, to a deglobalization of the world economy, an increase in protectionism or barriers to immigration, a general reduction of international trade in goods and services and a reduction in the integration of financial markets, any of which could materially and adversely affect our business, financial condition and results of operations. For these reasons, we are in the process of revising our long-term strategy under the Vision 2030 Plan. See "Item 4. Information on the Company—B. Business Overview—Vision 2030 Plan."

We are continuing to monitor the situation in Russia, Ukraine and globally and assess its potential impact on our business. Any of the abovementioned factors could adversely affect our business, prospects, financial condition, and operating results. The extent and duration of the military action, sanctions and resulting market disruptions are impossible to predict, but could be substantial. Any such disruptions may also magnify the impact of other risks described elsewhere in this annual report.

Our results of operations are subject to cyclicalities and volatility affecting the prices of commodities, poultry and pork, which could adversely affect our entire business.

Our business is largely dependent on the cost and supply of corn, soy meal, soybeans, oil, hogs, packaging (resin, petrol), food ingredients, animal feed ingredients and other raw materials, as well as the selling prices of our poultry and pork. These prices are determined by supply and demand, which may fluctuate significantly, and other factors over which we have little or no control. For example, the war in Ukraine brought a significant increase in the prices of agricultural commodities such as corn, wheat and soybeans, in part caused by the increase in the use of these commodities for energy generation purposes, reducing the supply for international consumption. This directly affected our costs and increased volatility in our margin. Additionally, the price of poultry also increased as a result of the war, considering Ukraine is an important player in poultry production. The prices of grains and animal protein have more recently come down, but if the cost of commodities remains higher than expected and the price of poultry does not follow the same trend, then we may be adversely affected. Other factors that affect supply and demand include, among others, fluctuations in local and global poultry and hog production levels, environmental and conservation regulations, economic conditions, new variants of COVID-19 and/or a new virus of global magnitude, animal and crop diseases, cost of national and international freight and exchange rate and interest rate fluctuations. In addition, prices are also constantly affected by weather, climate events and seasonality, fertilizers prices, biofuel policies, export taxes, as well as political and trade disputes around the world, expectations and/or uncertainty about the future. Any changes in raw material prices may have major impact on our business.

Our industry, both in Brazil and abroad, is generally characterized by cyclical periods of higher prices and higher profitability, followed by overproduction, leading to periods of lower prices and lower profitability or losses. There can be no assurance that we will be able to adequately adapt to any such cyclicalities or volatility, which may have an adverse effect on our operations and financial results.

Natural disasters or extreme weather, including floods, earthquakes, excessive cold or heat, hurricanes or other storms, as well as any interruption at our plants that may require the temporary re-allocation of plant functions to other facilities could, among other things, impair the health or growth of livestock or interfere with our operations due to power outages, damage to our production and processing facilities or disruption in transportation channels or information systems. In February 2023, a 7.8 magnitude earthquake occurred in Turkey causing severe damage to infrastructure in various areas of the country. As a result, there have been supply chain and workforce disruptions, which have adversely affected our operations in the country. At this time, we cannot predict the extent of the impact of this natural disaster and the effect on our business, results of operations, financial condition and prospects.

Climate change may negatively affect our business and results of operations.

According to the 18th Global Risks Report published by the World Economic Forum in January 2023, risks related to natural disasters, extreme weather and climate change are considered to be the most pressing for the world in the short term (i.e., within the next two years) and for the next 10 years. In November 2022, the United Nations Climate Change Conference (COP27) in Sharm el-Sheikh brought together governments, businesses and civil society to discuss the climate agenda. Participating countries addressed the food and energy crisis, debated the new geopolitics impacted by climate change and took a range of decisions in a collective effort to limit the increase in global temperatures to 1.5 degrees Celsius and mitigate its effects. New pledges were made to support the world's most vulnerable countries financially. Discussions also addressed forests and nature-based solutions as drivers for climate change mitigation, allowing an important connection between climate and biodiversity, in accordance with the discussions initiated at the COP15 on Biodiversity in December 2022, in Montreal, Canada. In addition, the Food and Agriculture Organization of the United Nations (FAO) highlighted the importance of food systems through the Food and Agriculture Initiative for Sustainable Transitions (FAST), which is based on agriculture for tangible products with a focus on governance. FAO also reinforced the importance of developing and implementing the goal for global adaptation to climate change.

There were no significant developments in the discussions agreed upon at the 2021 United Nations Climate Change Conference (COP26) in Glasgow about financially supporting developing countries in achieving the global goal to limit the rise in global temperatures, new rules for international carbon trading mechanisms (Article 6) and regulations determining how countries are held accountable for delivering on their climate action promises and self-defined targets under their Nationally Determined Contributions (NDCs). However, there were earnest demands against greenwashing, reinforcing that businesses committed to Net Zero should ensure that their plans actually reduce emissions to contribute to progress in the global response to climate change. In Brazil, the new federal government renamed the Ministry of the Environment to the “Ministry of the Environment and Climate Change”. New secretariats were created with a focus on the climate agenda, bioeconomy and the fight against deforestation. The goal is to fight climate change, define guidelines for Net Zero and implement initiatives for the protection of biodiversity.

Considering that climate change contributes to food production insecurity and threatens community nutrition, we take into consideration the potential effects of climate change on our operations and supply chain, and we recognize vulnerabilities associated with natural resources and agricultural products that are essential for our activities. The main risks to our business that we have identified with respect to climate change relate to the changes in temperatures (global warming) and rainfall, including drought and natural disasters (such as flooding and storms), which may affect agricultural productivity, animal welfare and the availability of water and energy. These changes may adversely affect our operating costs and results of operations, including by raising the price of agricultural commodities as a result of long periods of drought or excessive rainfall, increasing operating costs to ensure animal welfare, increasing the risk of rationing and raising the price of electricity. We may fail to effectively implement programs or obtain appropriate environmental or sustainability certifications related to reducing our exposure to climate change, which may adversely affect our business and results of operations in the future.

We are also subject to regulatory changes, such as carbon pricing or taxation, and changes in legislation for greenhouse gas emissions at the domestic and international levels. We retained a consulting firm to develop a carbon pricing methodology, allowing us to understand the financial impact of carbon in our projects and helping us to assess global risks and opportunities. By quantifying this variable, we are able to evaluate, compare and prioritize strategic investments incorporating this new perspective. Any changes in carbon pricing or taxation and changes in legislation for greenhouse gas emissions may increase our costs and adversely affect our results of operations.

Our operations are largely dependent on electricity, and energy-related expenses are one of our highest fixed costs. Energy costs have historically fluctuated significantly over time - with significant increases being experienced during droughts or diversion of water for other purposes as the Brazilian energy matrix is mostly supported by hydroelectric power plants - and increases in energy costs could result in reduced profits. A significant interruption in energy supply or outright loss of energy at any of our facilities could also result in a temporary disruption in production and delivery of products to customers and additional costs, materially adversely affecting our results of operations.

Any shortage or lack of water, and any failure to comply with applicable rules and regulations related to water usage and management, could materially adversely affect our business and results of operations.

In the last century, water use has grown globally. According to the United Nations Environmental Programme, water scarcity affects more than 40% of the global population and this percentage is expected to increase. Presently, 2.3 billion people around the world are living in water-stressed areas, and the same will be true of more than half the world’s population by 2050 if no action is taken. Water is an essential resource for our businesses and is used in the production of grains and other agricultural inputs required for our production processes. The industrial use of water may also adversely affect its availability. In some of our units in the Brazilian states of Santa Catarina, Paraná and Goiás and also in our unit in Turkey, we experienced a reduction in water supply. To manage the shortage in water and maintain our regular operations, we incurred incremental costs to obtain water from more abundant river basins that are located further from our production facilities (sometimes using water trucks). As a result, the shortage or lack of water, including the increasing risk of droughts in the regions where we operate and associated costs to minimize the impact on our operations, represent a critical risk for our business and may materially and adversely affect our business and results of operations. We are also subject to restrictions on the volume of water that we can collect from the environment under our water usage permits, which may be lower than the actual water demands of our business in these areas. In the event we cannot collect enough water to meet our operational demands, due to restrictions under water permits or otherwise, our business and results of operations may be materially adversely affected.

The procedures that we have developed to reduce our water consumption and increase water reuse in order to comply with applicable rules and regulations, and to minimize our impact on the environment and the community, may prove to be ineffective or insufficient. Additionally, we assess water shortage risks in the locations where we operate in order to understand the specific impacts of our business on these regions and consequently reduce our water consumption and exposure to risks of water shortages in the applicable unit. The river basins in the region of industrial activities and the characteristics of the use of water resources are analyzed in order to understand growth in local demand and anticipate risks. The methods we employ to analyze the water vulnerability of our industrial plants, as well as our assessments of the micro and macro watersheds in the regions in which we operate and the industrial activities and characteristics of the use of water resources, may be inaccurate in understanding local water demand growth. We may also fail to accurately assess the water supply or anticipate water-related risks, and the increased industrial use of water by water intensive businesses may also adversely affect the continuing availability and quality of water in Brazil. This may result in us or our key suppliers encountering water shortages. Any of these factors may materially adversely affect our business and results of operations.

More stringent trade barriers in key export markets may negatively affect our results of operations.

Because of the growing market share of Brazilian poultry, pork and beef products in the international markets, Brazilian exporters are increasingly being affected by measures taken by importing countries to protect local producers. The competitiveness of Brazilian companies has led certain countries to establish trade barriers to limit the access of Brazilian companies to their markets. Trade barriers can consist of both tariffs and non-tariff barriers. In our industry, non-tariff barriers are of particular concern, especially sanitary and technical restrictions.

As a result of the regulators’ inquiries and the public announcement of allegations of wrongdoing involving us and other companies in the Brazilian meat industry in the context of the *Carne Fraca* Operation and *Trapaça* Operation, some export markets have been temporarily closed, and our average selling prices for some products and in some markets have decreased. For additional information, see “–Health and food safety risks related to our business and the food industry could adversely affect our production and shipping processes as well as our ability to sell our products.” and “–We have been subject to significant investigations relating to, among other things, food safety and quality control, and any similar investigations and proceedings related to such investigations in the future could result in penalties, fines or other forms of liability and could have a material adverse effect on our business, reputation, brand, results of operations and financial condition.”

Some countries, such as Russia and South Africa, have a history of erecting trade barriers on imports of food products. Also, the European Union has adopted a quota system for certain poultry products and prohibitive tariffs for certain products that do not have quotas in order to mitigate the effects of Brazil's lower production costs on European producers. More recently, the European Union and the United Kingdom have been discussing and already applying certain regulations related to sustainability that may result in trade barriers, such as the Due Diligence on Deforestation and the Carbon Tax Adjustment Mechanism. There is a trend in relevant markets to enforce environmental-related regulations that might adversely affect our results in the future if we fail to comply with them. The United Kingdom Environment Act was adopted on November 9, 2021, laying down a framework to address deforestation, pursuant to which a regulated person or entity must not use a commodity associated with forest risk or derived product in its commercial activities. Additionally, on December 6, 2022, the European Parliament, the European Commission and the European Council reached an agreement regarding the European Union Regulation related to deforestation-free supply chains. The U.S. Department of State opened a public consultation, from October to December 2022, entitled "Request for Stakeholder Input on Options for Combating International Deforestation Associated with Commodities", which may result in the discussion or creation of specific legislation on the matter. These regulations or related laws, in particular those included in the "Farm to Fork Strategy" of the European Union, as well as related regulations in other countries inspired by these policies, may impose a greater compliance burden on us and negatively affect our operations and our results.

Other countries have also imposed trade barriers against our products. For example, in August 2017, the Chinese government initiated an antidumping investigation in connection with Brazilian exports of whole chicken and chicken parts, including our exports. The investigation ended in February 2019, and Brazilian exporters agreed to certain minimum export prices for sales to China. In August 2018, Iraq increased the tariff on poultry products from 10% to 60%. In addition, in 2021, the South African government has opened up an anti-dumping investigation against certain Brazilian poultry exporters (we are not being investigated), which may result in the imposition of new restrictive measures towards Brazilian exporters. The South African government imposed a 265% provisional tariff for companies that did not file for an individual defense, which was our case. On August 1, 2022 the dispute settlement system of the existing bilateral agreement with the Southern African Customs Union (SACU) decided in favor of the European Union on a dispute against South Africa over a safeguard measure that included an extra import tariff for frozen chicken of 35.3%. After this decision, the South African government decided to suspend the application of the import tariffs under the anti-dumping investigation affecting Brazilian exporters, including us, for a period of 12 months.

There can be no certainty that the local government will not impose further restriction to poultry and/or food trade. In the Middle East, in Saudi Arabia, one of our main export markets, the Saudi Food & Drug Authority, or the SFDA, tried to decrease imports by reducing the required poultry shelf-life from one year to 90 days. The change in the technical rules for the validity of in natura frozen chicken and its cuts was notified to the World Trade Organization, or WTO, in May 2021, but Saudi Arabia reversed the change in shelf-life in August 2021. In addition, in March 2021, the SFDA started a reinforced control system on imported meat, resulting in up to three months delays in products clearance at WTO ports and thus negatively affecting our business results. However, the SFDA withdrew the implementation of this measure.

We face other risks from a sanitary perspective. For example, African swine fever or highly pathogenic avian influenza in some countries in the Americas carry along with them the risk of market closures in case of an outbreak in Brazilian territory. Especially toward the end of 2022, the Americas region experienced an upsurge in cases of highly pathogenic avian influenza in certain countries, including Canada, the United States, Mexico, Colombia, Chile, Venezuela and Peru. As a result, there is a possibility that certain countries will suspend imports from Brazil, especially considering Brazil does not have many regional trade agreements covering the sale of poultry. If cases of highly pathogenic avian influenza are confirmed within the Brazilian territory, it is uncertain how our export markets will react, considering that any restriction on imports from Brazil might have a negative impact on our business. For more information, see "Outbreaks, or fears of outbreaks, of any animal diseases may lead to cancellation of orders by our customers and create adverse publicity that may have a material adverse effect on consumer demand for our products. Moreover, outbreaks of animal diseases in Brazil may result in foreign governmental action to close export markets for some or all of our products, which may result in the loss of some or all of these animals."

Many developed countries use direct and indirect subsidies to enhance the competitiveness of their producers in other markets. In addition, local producers, importers and even exporters in some markets may exert political pressure on their governments to prevent some foreign producers from exporting to their market, particularly during unfavorable economic conditions, such as the COVID-19 pandemic. Any of the above restrictions could substantially affect our export volumes and, consequently, our export sales and financial performance. If new trade barriers arise in our key export markets, we may face difficulties in reallocating our products to other markets on favorable terms, and our business, financial condition and results of operations might be adversely affected.

Trade disputes between other countries also create uncertainties that may adversely affect Brazilian exports and our operations. For instance, the United States and China engaged in a trade dispute for almost 18 months, which has affected the global economy and prices of certain of our raw materials, including corn, soy meal and soybeans. On January 1, 2020, the United States and China signed the first phase of a trade agreement expected to alleviate the tensions between the two countries. A second phase of the agreement is expected to be even more difficult to achieve. There can be no assurances that the trade dispute will be fully resolved and that the global economy (as well as prices of certain of our raw materials) will not be further affected by it. The United States is expected to maintain the 25% tariffs on a wide range of US\$250 billion of Chinese industrial goods and components used by the U.S. manufacturing sector. Both improvements in the countries' commercial relations and new mutually beneficial trade agreements at the expense of other countries may have a material adverse effect on our results of operations.

However, the current trade deal may not be maintained by the United States under the Biden administration, especially since it has generally been regarded unfavorably, particularly for U.S. industry. The U.S. agribusiness sector, on the other hand, has largely benefited from the agreement, with a significant increase in poultry and pork exports, the reopening of the Chinese market to U.S. poultry exports, which had been halted since 2015 due to an avian influenza outbreak, and the accreditation of over 1,000 U.S. plants. These factors have positively affected the United States' market share of Chinese agricultural imports, which in turn has negatively affected Brazil's market share. We cannot control whether commercial tensions between China and the United States will increase again, or whether our business will be adversely affected as a result.

In addition, in April 2018, Saudi Arabia instituted a no-stunning requirement for the animal slaughtering process. Saudi Arabia claimed that Brazilian companies' chicken slaughtering practices violated Halal principles due to the use of an electric shock to stun the birds. We, along with other Brazilian companies, were therefore required to migrate our production processes to non-stunning slaughters in order to supply the Saudi Arabian market. We have incurred, and expect to incur, additional costs in connection with these requirements for exporting to Saudi Arabia. In January 2019, the Saudi Arabian Food and Drug Authority published a report authorizing 25 Brazilian facilities to produce chicken meat for the Saudi Arabian market, which included eight of our plants. One of our plants (Lajeado, Rio Grande do Sul), which had previously produced chicken meat for the Saudi Arabian market, was not included as an authorized plant. The continuous shifting of our production of chicken meat for Saudi Arabia to the authorized plants may result in decreased revenues and additional expenses.

Beginning in August 2019, Saudi Arabia banned the import of seasoned chicken meat produced in our Kizad facility, in Abu Dhabi, United Arab Emirates. The embargo was a result of Saudi Arabia's Vision 2030 Plan, announced in April 2016 as a national development plan, which included policies to reduce the country's dependence on oil, diversify its economy and substitute imports with local production. Saudi Arabia then expanded the embargo to the other products from our Kizad facility. The embargo was partially lifted in July 2022. In October 2022, we announced that our wholly-owned subsidiary BRF GmbH had executed a joint venture agreement with Halal Products Development Company, a wholly owned subsidiary of the Public Investment Fund (Saudi Arabia's sovereign wealth fund) regarding the development of the Halal industry in Saudi Arabia. We estimate that the investment amount will be around R\$2,647,050 thousand (US\$500,000 thousand, translated to reais at the exchange rate of R\$5.2177 as of December 31, 2022). The transaction is still subject to obtaining regulatory and internal approvals of the parties. There can be no assurance that the Saudi Arabian government will not further restrict our ability to export our products to the country, which may result in a material adverse impact on our business, financial condition and results of operations.

In February 2020, we received notification from the SFDA regarding a report temporarily suspending two of our facilities, the Dois Vizinhos and the Francisco Beltrão plants, both located in the Brazilian state of Paraná, from exporting chicken meat to Saudi Arabia. The SFDA informed us that the measure is temporary and, among other measures, requested that the Brazilian authorities provide more details about investigations carried out between 2014 and 2018 regarding alleged violations committed by us in the production of animal feed and PREMIX compound. For more information about these investigations, see "We have been subject to significant investigations relating to, among other things, food safety and quality control, and any similar investigations and proceedings related to such investigations in the future could result in penalties, fines or other forms of liability and could have a material adverse effect on our business, reputation, brand, results of operations and financial condition." Additionally, the Saudi government has been implementing, since January 2020, a previous import licenses system. In the future, this system may adversely affect our exports to the country, since it might be used by local authorities as a means to control the entry of products and thus, artificially affect demand and offer and, consequently, prices, which run counter to basic principles of international trade rules and regulations.

On August 3, 2021, we became aware through a publication on the website of the General Administration of Customs of the People's Republic of China, or GACC, of the suspension of the export to China of pork meat from our Lucas do Rio Verde-MT pork plant as of that date. The alleged reason was the malfunctioning of the refrigerating system of one single pork meat container, which was later demonstrated through the transporter's system log to be the transporter's sole responsibility and fault. Despite evidence being sent to the Chinese authorities, the suspension has not yet been reversed. On December 16, 2021, we were also informed by Brazilian Ministry of Agriculture, Livestock and Food Supply (*Ministério da Agricultura, Pecuária e Abastecimento*, or "MAPA") and GACC of the suspension of the export to China of poultry meat from Marau under the allegation of the finding of content improper for human consumption in a batch of poultry feet. On March 4, 2022, we were informed by GACC that it was suspending, as of March 5, 2022, the export to China of poultry meat from our Lucas do Rio Verde-MT plant as well. The alleged reason for this suspension were certain nonconformities identified during a videoconference audit executed by GACC, such as the occurrences of COVID-19 infections among our employees that were not disclosed to it and the lack of disinfection tank and detections of salmonella above the maximum limit in the reception of live poultry and in the processing of poultry products.

Trade barriers may also be imposed in our key export markets as a result of the COVID-19 pandemic, for example due to outbreaks of COVID-19 in our plants and restrictions that may be imposed on our products because of these outbreaks. For more information, see “—Pandemics or human disease outbreaks, such as the coronavirus (COVID-19) originated in late 2019 and declared a global pandemic by the World Health Organization on March 11, 2020, may adversely affect our business and operations.”

Furthermore, China announced the end of the 8% special pork import tariff, implemented in 2019, and the consequent return to the normal 12% tariff as of January 1, 2022. The end of the special tariff was a response of the Chinese government to the return of the local price of hogs to its normal levels. According to Boyar China, the total volume of pork and its by products imported by China decreased 43% in 2022 when compared to previous years. A decrease in our ability to export our products to key markets may result in a material adverse impact on our business, financial condition and results of operations.

Breaches, disruptions or failures of our information technology systems, including as a result of cybersecurity attacks, could disrupt our operations and negatively impact our business and reputation.

Information technology is an important part of our business operations and we increasingly rely on information technology systems to manage business data and improve the efficiency of our production and distribution facilities and inventory management processes. We also use information technology to process financial information and results of operations for internal reporting purposes and to comply with regulatory, legal and tax requirements. In addition, we depend on information technology for digital marketing and electronic communications between our facilities, personnel, customers and suppliers. We also process personal data of our employees and customers. We depend on cryptography technology and electronic authentication programs provided by third parties to securely process the collection, storage and transmission of confidential information, including personal data.

Our information technology systems may be vulnerable to a variety of interruptions and cybersecurity threats and incidents. There are numerous and evolving risks related to cybersecurity and privacy, including criminal hackers, hackers, state-sponsored intrusions, industrial espionage, employee malfeasance and human or technological error. Computer hackers and others routinely attempt to breach the security of information technology systems and to fraudulently induce employees, customers and other third parties to disclose information or unwittingly provide access to systems or data. Successful cybersecurity attacks, breaches, employee malfeasance, or human or technological error may result in, for example, unauthorized access to, disclosure, modification, misuse, loss or destruction of data or systems, including those belonging to us, our customers or third parties; theft of sensitive, regulated or confidential data including personal information; the loss of access to critical data or systems through ransomware, destructive attacks or other means; transaction errors; business delays; and service or system disruptions. We have observed an increase in cybersecurity attacks worldwide in 2020 and 2021, and the remote working arrangements that we have implemented due to the COVID-19 pandemic have increased our dependence on information technology systems and infrastructure, and they may further expand our vulnerability to this risk. In the event of such actions, we, our customers and other third parties may be exposed to potential liability, litigation, and regulatory or other government action, the loss of existing or potential customers, loss of sales, damage to brand and reputation and other financial loss. In addition, if we are unable to prevent security breaches, we may suffer financial and reputational damage or penalties because of the unauthorized disclosure of confidential information belonging to us or to our partners, customers, consumers or suppliers. The cost and operational consequences of responding to cybersecurity incidents and implementing remediation measures may be significant and may not be covered by insurance. Our cybersecurity risk also depends on factors such as the actions, practices and investments of customers, contractors, business partners, vendors and other third parties.

Our efforts to monitor, identify, investigate, respond to and remediate security incidents, including those associated with cybersecurity attacks, may not be adequate or sufficient. The measures that we have implemented regarding technology security and disaster recovery plan may not be adequate or sufficient. There can be no assurance that these efforts and measures will be successful in preventing a cybersecurity attack, a general information security incident or a disruption of our information technology systems. The occurrence of any such events may materially adversely affect our operations, business and reputation. Furthermore, as our business and the cybersecurity landscape evolve, we may find it necessary to make significant further investments to protect our data and information technology infrastructure, which may adversely impact our financial condition and results of operations.

The regulatory environment regarding cybersecurity, privacy and data protection issues is increasingly complex and may have impacts on our business, including increased risk, costs and expanded compliance obligations. For example, on May 25, 2018, the Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27, 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, or the General Data Protection Regulation or GDPR, became directly applicable in all member states of the European Union. Violations of the GDPR carry financial risks due to penalties for data breach or improper processing of personal data (including a possible fine of up to 4% of total worldwide annual turnover for the preceding financial year for the most serious infringements) and may also adversely affect our reputation and our activities relying on personal data processing. The Brazilian General Data Protection Law (*Lei Geral de Proteção de Dados Pessoais*), or LGPD, was signed into law in August 2018 and came into effect on September 18, 2020. An increased number of data protection laws around the globe may continue to result in increased compliance costs and risks. See “—We are subject to risks associated with failure to comply with the applicable data protection laws, and we may be negatively affected by the imposition of fines and other types of sanctions.” The potential costs of compliance with or imposed by new or existing regulations and policies that are applicable to us may affect our business and could have a material adverse effect on our results of operations.

We are subject to risks associated with failure to comply with the applicable data protection laws, and we may be negatively affected by the imposition of fines and other types of sanctions.

We are subject to several data protection laws in the jurisdictions in which we operate including, but not limited to, the LGPD, the GDPR, Turkey’s Law on the Protection of Personal Data No. 6698 dated April 7, 2016, or the LPPD and China’s Personal Information Protection Law dated August 20, 2021, or the PIPL. We seek to make our operations compliant with those laws and enhance the security of our personal data processing activities, and while we believe our operations comply with the LGPD in Brazil, we cannot guarantee that we will not be subject to fines and other types of sanctions.

Specifically with respect to Brazil, the LGPD came into effect on September 18, 2020. The LGPD changed the way the protection of personal data is regulated in Brazil. It establishes a new legal framework to be observed in personal data processing operations and provides, among other things, for the rights of the owners of personal data, the legal bases applicable to the protection of personal data, the requirements for obtaining consent, obligations, requirements regarding security incidents, leaks and data transfers, as well as the creation of the Brazilian National Data Protection Authority, or the ANPD. If we do not comply with the LGPD, the GDPR, the LPPD, the PIPL or any other data protection law to which we are subject, both we and our subsidiaries may be subject to sanctions, either individually or cumulatively, including warnings, obligations to disclose incidents, temporary blocking or deletion of personal data, and penalties of up to 4% of our revenue or the revenue of our group. In addition, we may be held liable for material, moral, individual, or collective damages caused by us, and may be held jointly and severally liable for material, moral, individual or collective damages caused by our subsidiaries.

Failure to protect personal data processed by us and our subsidiaries, as well as the failure to adjust to the applicable legislation, may result in significant fines for us and our subsidiaries, disclosure of any incidents in the media, the deletion of personal data from our database, and the suspension of our activities, which could adversely affect our reputation, business, results of operations and financial condition.

Pandemics or human disease outbreaks, such as the coronavirus (COVID-19) originated in late 2019 and declared a global pandemic by the World Health Organization on March 11, 2020, may adversely affect our business and operations.

The worldwide spread of COVID-19 triggered the implementation of significant measures by governments and private sector entities that, in turn, have disrupted consumption and trade patterns, supply chains and production processes on a global scale and specifically relating to our business, including with respect to product shipments.

Our operations include global production and distribution facilities, and if there is an outbreak of a human disease such as COVID-19 in our facilities or the communities where we operate and distribute our products, our production, operations, employees, suppliers, customers and distribution channels could be severely impacted. Ports and other points of entry may be closed or operate at only limited capacity, as workers may be prohibited or otherwise unable to report to work and means of transporting products within regions or countries may be limited for the same reason, along with the potential for transport restrictions related to travel bans. In addition, countries to which we export our products may institute bans on the importation of our products, products produced by our partners or on all or some food products from Brazil in general based on perceived concerns about human disease such as COVID-19.

The COVID-19 pandemic and related social and economic disruptions also destabilized commodity prices and the macroeconomic conditions of many countries, resulting in downturns that could affect the demand for our products and have a material adverse effect on our results. Any future pandemic could also adversely affect consumer demand, as restrictions on public gatherings or interactions may limit the opportunity for our customers and consumers to purchase our products in certain channels. In addition, demand for our products has been affected by the COVID-19 pandemic and related disruptions worldwide, as well as the weakening of global commercial activities, reduction of household incomes and changes in consumption habits.

The COVID-19 pandemic affected our operations through reduction of the available labor force, reduction of the productivity of our manufacturing operations, lack of raw materials and packaging, and maintenance projects due to reduced availability of third-party suppliers. As a result of the pandemic, especially during 2020 and 2021, we incurred expenditures that were incremental and directly attributable to the impacts of the COVID-19 pandemic, mainly related to personnel, prevention, control, logistics and philanthropic donations. During 2022, our working arrangements remained under a hybrid system of remote work and in-office work in some of our corporate offices.

Despite having more visibility on the impact of the pandemic compared to March 2020 (which marked the beginning of the pandemic for us), other COVID-19 variants and outbreaks may still impact our operational performance, which may in turn adversely affect our financial position. We also recognize that unfavorable operating results may have an adverse impact on our financial metrics, such as leverage. At the same time, we may experience increases in general customer default rates in connection with the pandemic and, as a consequence, be subject to increasingly higher credit losses. The possible deterioration of the credit cycle of our customers may adversely affect our results, financial position and cash flows in the future.

The increase in volatility of market risks resulting from the COVID-19 pandemic has significantly affected the fair value of our assets and liabilities, particularly considering wide variations in foreign exchange rates. Additionally, the heightened uncertainty of projections has increased the challenge of accurately measuring certain of our assets and liabilities.

For further information about the impact of the COVID-19 pandemic on our operations, see “Item 5. Operating and Financial Review and Prospects–A. Operating Results–Principal Factors Affecting our Results of Operations–COVID-19 Pandemic”.

Increased regulation of food safety and animal welfare could increase our costs and adversely affect our results of operations.

Our manufacturing facilities and products are subject to governmental inspections and extensive regulation in the food safety area, including governmental food processing controls in all countries in which we operate. We incur significant costs in connection with our efforts to comply with applicable food safety and processing rules. Changes in government regulations relating to food safety, including as a result of the COVID-19 pandemic, or animal welfare could require us to make additional investments or incur additional costs to meet the necessary specifications for our products. Our products are often inspected outside of Brazil by foreign food safety officials, and any failure to pass those inspections could result in us being required to return all or part of a shipment to Brazil, recall certain products, dispose of all or part of a shipment or incur costs because of delays in delivering products to our customers. We have adopted various international animal welfare standards to address our customers’ expectations. Any tightening of food safety or animal welfare regulations could result in increased costs and could have a material adverse effect on our business, results of operations, financial condition and prospects.

Environmental laws and regulations require increased expenditures for compliance.

We, like other Brazilian food producers, are subject to extensive Brazilian federal, state and local environmental laws, regulations, authorizations and licenses concerning, among other things, the interference with protected areas, such as conservation units, archeological sites and permanent preservation areas, handling and disposing of waste, discharging pollutants into the air, water and soil, atmospheric emissions, noise and clean-up of contamination, all of which affect our business. Water management is especially crucial and poses many challenges to our operations. In Brazil, water use regulations impact farming operations, industrial production and hydroelectric power. Any failure to comply with any of these laws or regulations or any lack of authorizations or licenses could result in administrative and criminal penalties, such as fines, cancellation of authorizations or revocation of licenses, in addition to negative publicity and civil liability for remediation or compensation for environmental damage. Administrative penalties may include fines, the suspension of public subsidies and the temporary or permanent shutdown of activities. Criminal penalties include fines, temporary loss of rights and prison (for individual offenders) and liquidation, temporary loss of rights, fines and community service (for legal entities). For example, in April 2020, activities at our production unit located in Rio Verde, in the Brazilian state of Goiás, were suspended for a few days, due to concerns raised about the water supply system by the local Federal Inspection Service.

In addition, if we do not comply with environmental protection legislation, we may also be subject to direct and indirect, strict and joint and several liability, being obliged to repair environmental damages, regardless of our fault. The liability of companies does not exclude individuals, offenders, principals or accessories, often times extending the liability for these acts to the members of management of these companies, who took part in decisions or omitted themselves, when they could have avoided the resulting losses. Moreover, Article 4 of the Brazilian Environmental Crimes Law (Law No. 9,605/98) provides for the piercing of the corporate veil whenever it represents an obstacle to the redress related to environmental damage. In this event, shareholders of companies become personally liable for repairing environmental damage.

We have incurred, and will continue to incur, in operating expenses and capital expenditure requirements to comply with these environmental laws and regulations. Because of the possibility of unanticipated regulatory measures or other developments, particularly as environmental laws become more stringent in Brazil, the amount and timing of future expenditures required to maintain compliance may increase from current levels and may adversely affect the availability of funds for capital expenditures and other priorities. Compliance with existing or new environmental laws and regulations, as well as obligations in agreements with public entities, may result in increased costs and expenses.

Our plants are subject to environmental and operational licensing based on their pollution potential and use of natural resources. If one of our plants is built or expanded without an environmental license, or if our environmental licenses expire, and are not timely renewed or have their request for renewal rejected by the competent environmental authority, we may incur in fines and other administrative penalties, such as suspension of operations or closing of the facilities in question, and in some cases, are subject to civil and/or criminal liabilities. Those same penalties may also be applicable in the case of a failure to fulfill the conditions of validity in the environmental licenses already held by us. Currently, some of our environmental licenses are in the renewal process, and we cannot guarantee that environmental agencies will approve our requests for renewal. Brazilian CONAMA (*Conselho Nacional do Meio Ambiente*) Resolution No. 237 establishes that renewal of environmental licenses must be requested at least 120 days in advance of their expiration, so that the licenses may be automatically extended until a final decision from the environmental authority is reached. In addition, the environmental agency may condition the renewal on expensive facility upgrades if there have been regulatory changes in the environmental standards that the plant is required to meet, which may result in delays, disruptions or in the denial of the license.

We are also subject to similar environmental laws and restrictions in all jurisdictions where we have plants and operations, which may require us to incur significant costs.

Deterioration of general economic and political conditions could negatively impact our business.

Our business may be adversely affected by changes in Brazilian and global economic and political conditions, which may result in increased volatility in our markets and contribute to net losses.

The invasion of Ukraine by Russia has deeply impacted the whole grains and poultry supply chain worldwide. As one of the largest producers and exporters of wheat and poultry, Ukraine faces severe restrictions in its production and export capacity because of the war, which has contributed to an increase in grain and poultry prices internationally. Ukraine's production limitations have reduced the international supply of poultry and raw materials essential to our industry, and they have therefore contributed to higher prices worldwide. It is not possible to predict when the war is going to end and, as a result, when the supply chain will stabilize, which events may adversely affect our margins.

In addition, global inflation, the supply chain disruption caused by the war in Ukraine, the continued destabilizing economic and social impact of the COVID-19 pandemic, especially in developing countries, the current trend of high interest rates set by central banks in many countries to deflect the effects of rising prices and a general expectation of a slowdown in global economic growth may have a negative impact on our results. High inflation rates, especially in food prices, tends to impact more drastically—but not exclusively—the lower income classes, resulting in a broad negative impact on purchasing power and consumption levels.

After the presidential election in Brazil in 2022, the country is undergoing deep political polarization, which may result in social unrest and have a negative impact on our businesses. The recent election of Mr. Luis Inácio Lula da Silva for a third term as president may result in new economic policies that could affect our competitiveness globally. We cannot guarantee that the new administration will adopt policies designed to promote macroeconomic stability, fiscal discipline and adequate levels of domestic and foreign investment. Failure by the new government to adopt adequate economic policies and increasing social instability may have a negative impact on our business.

Global economic downturns and related instability in the international financial system have had, and may continue to have, a negative effect on economic growth in Brazil. Global economic downturns reduce the availability of liquidity and credit to fund the continuation and expansion of our business operations worldwide. While Brazil exports a diversified bundle of products to a variety of countries, a significant decline in the economic growth or demand for imports of any of Brazil's major trading partners, such as the European Union, China or the United States, could have a material adverse impact on Brazil's exports and balance of trade and adversely affect Brazil's economic growth.

Furthermore, because international investors' reactions to the events occurring in one emerging market country sometimes produce a "contagion" effect, in which an entire region or class of investment is disfavored by international investors, Brazil could be adversely affected by negative economic or financial developments in other countries. Such developments may affect the Brazilian economy in the future and, consequently, our results of operations. For example, the world has been affected by the COVID-19 pandemic, which has triggered negative global economic developments, the severity of which we cannot quantify. Accordingly, the purchasing power of the Brazilian population, as in many countries affected by the pandemic, is expected to decrease, which may reduce consumption and investments and adversely affect our business and results of operations.

Uncertainty as to whether the Brazilian government will implement significant reforms in public policy in the future may contribute to economic uncertainty in Brazil and to heightened volatility in the Brazilian securities markets and the securities issued by Brazilian companies. As a result, there may be high volatility in the domestic financial markets in the short term, and economic recovery in the long term may be hindered. Accordingly, improvements in the labor market and income growth may be limited, which could have an adverse effect on our operations and financial results.

On January 31, 2020, the United Kingdom announced it had officially exited the European Union, commonly referred to as Brexit, and entered a transition period. Brexit has caused and may continue to cause political and economic uncertainty, including significant volatility in global stock markets and currency exchange rate fluctuations. The effects of Brexit will depend on many factors, including any trade deals that the United Kingdom makes to retain access to European Union markets. Brexit could lead to legal uncertainty and give rise to potentially conflicting national laws and regulations as the United Kingdom determines which laws of the European Union will be replaced or replicated. There could be increased costs from re-imposition of tariffs on trade between the United Kingdom and the European Union, shipping delays because of the need for customs inspections and procedures, and temporary shortages of certain goods. In addition, trade and investment between the United Kingdom, the European Union, Brazil and other countries will be impacted by the fact that the United Kingdom operated under the European Union's tax treaties. The United Kingdom will need to negotiate its own tax and trade treaties with countries all over the world, which could take years to complete. The potential impact of Brexit on our market share, sales, profitability and results of operations is unclear. The economic conditions in the United Kingdom, the European Union and global markets may be adversely affected by reduced growth and volatility. Also, see "—Geopolitical and other challenges and uncertainties due to the ongoing military conflict between Russia and Ukraine could have a material adverse effect on the global economy, certain material and commodity prices and our business."

We have undertaken, in the share purchase agreement entered into with Tyson International Holding Co., not to do business or otherwise compete in the sale of poultry products for human consumption in certain jurisdictions in Europe, including the European Economic Area (EEA) and the United Kingdom. The non-compete provision has partially lapsed for certain products and channels, and in October 2020, we reached a commercial agreement with Tyson International Holding Co. to accelerate our return to the European continent and regain access to other markets through a phased removal of the non-compete restrictions between 2021 and 2024. While we aim to expand our sales to Europe and other international markets as part of our strategy, continued uncertainty and market volatility could undermine those expansion plans and have a corresponding adverse effect on our operations and financial results.

Additionally, on November 7, 2020, Joseph Biden won the presidential election in the United States and assumed office as the 46th President of the United States on January 20, 2021. The U.S. president has considerable influence, which may materially and adversely affect global economy and political stability. We cannot ensure that the Biden administration will adopt policies designed to promote macroeconomic stability, fiscal discipline, as well as domestic and foreign investment; if such policies are not implemented, the trading price of securities of Brazilian issuers, including our common shares may be materially and adversely impacted. Growing economic uncertainty and news of a potentially recessive economy in the United States may also create uncertainty in the Brazilian economy. These developments, as well as potential crises and forms of political instability arising therefrom or any other yet unforeseen development, may adversely affect our business and results of operations.

In March 2021, in order to allow for payment of emergency aid for the low-income population, the Brazilian National Congress approved a constitutional amendment that changed the government budget rules. From 2022 onwards, Brazilian states, cities and municipalities that reach the indebtedness limit of 95% of their income have had their fiscal and financial incentives granted reduced by 10%. Furthermore, in December 2021, the Brazilian National Congress approved a constitutional amendment to change the rules of credit payments (*precatórios*) between Brazilian states, cities and municipalities. The time limit for such payments was postponed for up to fifteen years. Considering the economic and fiscal scenario in Brazil and the 2022 presidential election, we may not have an increase in federal taxes immediately but the pressure in local government will occur thus leading to taxes increase in the foreseeable future in federal and local states.

In December 2022, even before his inauguration, President Lula obtained congressional approval for a waiver in the fiscal spending limitations and for the enactment of new regulations allowing the new fiscal anchor to be submitted through supplementary legislation, requiring a lower quorum for approval in 2024. There are no guarantees that this or similar policies will not have a negative impact in our business in the future.

We are subject to third-party transportation and logistics risks, and we rely on a limited number of available third-party suppliers to deliver certain specialized materials that we require for our production activities.

We depend on fast and efficient transportation and logistics services to, among other things, deliver raw materials to our production facilities, deliver animal feed to our poultry and pork growers, and distribute our products. Any prolonged disruption of these services may have a material adverse impact on our business, financial condition and results of operations. For example, on May 21, 2018, a national truckers’ strike commenced in Brazil regarding increases in fuel prices. The strike materially disrupted the supply chain of various industries across the country, including the supply chain of raw materials to our production facilities and the delivery of animal feed to our poultry and pork growers, and, at its peak, led to the suspension of the operation of all our production facilities located in Brazil. Furthermore, this strike also materially affected the regular functioning of the ports from where our products are exported. We incurred increased costs in connection with the truckers’ strike and were required to dispose of certain animals as a result of the strike. There can be no assurance that the truckers will not seek to engage in any further strikes, particularly considering the uncertainty related to the new federal government administration and its ability to take adequate measures against the recent steep rise of fuel prices in Brazil resulting from the increase of international oil prices and the devaluation of the Brazilian currency. It is also unclear whether the new Brazilian federal government or any other party involved will be able to meet the demands of the truckers in a satisfactory manner or that any such strike will not adversely affect our supply chain or the operation of our production facilities. In addition, a significant increase in fuel prices and transportation service rates as well as any other reduction in the reliability or availability of transportation or logistics services, including as a result of, among other things, flooding in ports, warehouse fires, global shipping container shortages, or labor strikes, could adversely affect our ability to satisfy our supply chain requirements and deliver our products to our customers in a commercially viable manner. Any such disruption to the transportation or logistics services that we depend on could have a material adverse impact on our results of operations and financial condition.

In addition, some of our production activities require specialized materials that we acquire from a limited number of available third-party suppliers. For example, we rely on purchases of genetic material used in our livestock breeding programs from a very small number of livestock genetics companies. If any of these suppliers is not able to supply the materials in the quantity and at the frequency that we normally acquire them, and we are not able to replace the supplier on acceptable terms or at all, we may be unable to maintain our usual level of production and sales in the affected category of product, which may have a material adverse effect on our business and operations and, consequently, on our results of operations.

We may divest or acquire businesses or enter into joint ventures, which may divert management resources or prove to be disruptive to our company.

We regularly assess and pursue opportunities to focus or generate synergies in our business through divestitures or expansions through acquisitions, joint ventures and other initiatives. We have completed several divestitures and acquisitions in recent years, including Banvit Foods SRL, OneFoods Malaysia Sdn Bhd, companies that compose the Hercosul Group, Mogiana Alimentos S.A. and joint ventures with AES Brasil Energia S.A. and Intrepid Participações S.A. For additional details on certain of these transactions, see “Item 4. Information on the Company–A. History and Development of the Company–Other Transactions.” Divestments, acquisitions, new businesses, and joint ventures, particularly those involving sizeable businesses, may present financial, managerial, operational, legal, compliance and reputational risks and uncertainties, including:

- challenges in realizing the anticipated benefits of the transaction;
- difficulties with managing various macroeconomic variables and their impact on the business;
- difficulties with managing commercial relationships in various countries;
- diversion of management attention from existing businesses;
- difficulties with integrating/carving-out personnel, especially to different managerial practices;
- disruptions when integrating or carving out financial, technological and other systems;
- difficulties in identifying suitable candidate businesses or consummating a transaction on terms that are favorable to us;
- challenges in retaining an acquired company’s customers and key employees;

- challenges related to the loss of key employees in connection with a divestment;
- increased compensation expenses for newly hired employees;
- exposure to unforeseen liabilities or problems of the acquired companies or joint ventures;
- warranty claims and claims for damages which may be limited in content, timeframe and amount;
- legal challenges, including claims for indemnification;
- challenges arising from a lack of familiarity with new markets with differing commercial and social norms and customs, which may adversely impact our strategic goals or require us to adapt our marketing and sales model for specific countries;
- compliance with foreign legal and regulatory systems;
- difficulties in transferring capital to new jurisdictions;
- challenges in receiving the necessary approvals from governments and national and international antitrust authorities, including the Administrative Council of Economic Defense (*Conselho Administrativo de Defesa Econômica*), or CADE; and
- restrictions imposed by local regulators, which were not identified before completion of the transaction.

The strategic benefits from our divestitures or acquisitions may not materialize in the timeframe we anticipate, or at all. In addition, we may be unable to identify, negotiate or finance future divestitures, acquisitions or other strategic initiatives successfully or on favorable terms. Any future joint ventures or acquisitions of businesses, technologies, services or products might require us to obtain additional equity or debt financing, which may not be available on favorable terms, or at all. Future divestitures, acquisitions and joint ventures may also result in unforeseen operating difficulties and expenditures, as well as strain our organizational culture.

Our failure to continuously innovate and successfully launch new products that address our clients' needs and requirements, as well as maintain our brand image, could adversely impact our operating results.

Our financial success depends on our ability to anticipate changes in consumer preferences and dietary habits and our ability to successfully develop and launch new products and product variations that are desirable to consumers. The resources that we devote to new product development and product extensions may be insufficient and we may not be successful in developing innovative new products or our new products may not be commercially successful. For example, trends towards prioritizing health and wellness present a challenge for developing and marketing successful new lines of products to address these consumer preferences. Furthermore, a reduction in our investment in product development may negatively affect not only our ability to generate innovative solutions, but also the in-market success of any such products. Additionally, our employees working on innovation and research and development may move to one of our competitors, which would compromise our ability to deliver new and innovative products and may also result in our competitors gaining information we view as proprietary. To the extent that we are not able to effectively gauge the direction of our key markets and successfully identify, develop, manufacture and market new or improved products in these changing markets in a timely or cost-effective manner, our products, brands, financial results and competitive position may suffer, which may have a material adverse effect on our business, results of operations, financial condition and prospects.

We also seek to maintain and extend the image of our brands through marketing, including advertising and consumer promotions. Due to inherent risks in the marketplace associated with advertising, promotions and new product introductions, including uncertainties about trade and consumer acceptance, our marketing investments may not prove successful in maintaining or increasing our market share. A continued global focus on health and wellness, including weight management, increasing media attention on the role of food marketing and negative press coverage about our quality controls and products may adversely affect our brand image or lead to stricter regulations and greater scrutiny of food marketing practices. For instance, new nutritional labeling rules for packaged foods will require us to change 100% of our packaging labels in Brazil, so that labels present on the front panel the levels that our products exceed the established daily limits of sodium, added sugars and saturated fats as well as an adjustment to our form of nutritional table. In other Latin America countries where these types of health-related regulations are already in place we observed that sales volumes of processed foods was negatively affected and the same may occur in the Brazilian market.

Our success in maintaining, extending and expanding our brand image also depends on our ability to adapt to a rapidly changing media environment, including increasing reliance on social media and online dissemination of advertising campaigns. The growing use of social and digital media increases the speed and extent that information or misinformation and opinions can be shared. Negative posts or comments about us, our brands or our products on social or digital media could seriously damage our reputation and brand image. If we do not maintain or improve our brand image, then our sales, financial condition and results of operations could be materially and adversely affected.

We may face situations of conflict of interest in transactions with related parties. Non-observance of commutative conditions in these transactions may adversely affect our results of operations.

We have contracts with relevant shareholders and subsidiaries involving, for example, the purchase and sale of goods. Situations may arise in which conflicts of interest occur in the relationship between us and such related parties.

If the contracts between us and our related parties are not negotiated and executed on an arm’s-length basis, our results of operations may be adversely affected. Furthermore, if the rules applicable to transactions with related parties are not complied with by us, our operations and management involved may be subject to questioning and penalties by applicable authorities and competent governmental bodies.

For more information regarding our transactions with related parties, see “Item 7. Major Shareholders and Related Party Transactions B. Related Party Transactions” and note 29 of our consolidated financial statements.

We may experience difficulties in expanding our products or in expanding into new lines of business, industries and/or foreign markets.

We may face challenges in connection with the expansion of our products as well as our expansion into new lines of business, industries and/or new geographic regions within or outside of Brazil, in which we may have limited or no experience and in which our business may not be well known. In particular, as we expand into new lines of business we may face challenges in the integration of newly acquired companies to our existing operations or in addressing the learning curve associated with entering into a new line of business. Offering new products and services or offering existing products in new industries or new geographic regions may require substantial expenditures and takes considerable time, and we may not recover our investments in new markets in a timely manner or at all. For example, we may be unable to attract customers, fail to anticipate competitive conditions or fail to adapt and tailor our services to different markets.

We have been subject to significant investigations relating to, among other things, food safety and quality control, and any similar investigations and proceedings related to such investigations in the future could result in penalties, fines or other forms of liability and could have a material adverse effect on our business, reputation, brand, results of operations and financial condition.

Brazilian authorities are investigating Brazil’s meat processing industry in the so-called “*Carne Fraca* Operation.” The investigation involves several companies in the Brazilian industry and, among other things, includes allegations relating to food safety and quality control.

On April 20, 2017, based on an investigation by the Brazilian Federal Police, Brazilian federal prosecutors filed several charges against two of our former employees (one of our regional manufacturing officers and one of our corporate affairs managers). See “Item 8. Financial Information–A. Consolidated Statements and Other Financial Information–Legal Proceedings” for additional information. On January 22, 2018, the Attorney General’s Office of the Third District of the Brazilian state of Goiás filed a complaint against the industrial manager of our Mineiros plant at the time of the events subject to investigation in the *Carne Fraca* Operation, and against the former head of quality control at our Mineiros plant. Both were charged for allegedly committing crimes against consumers, as provided in article 7, item II of Law 8,137/90.

On March 5, 2018, we learned of a decision issued by a federal judge of the First Federal Court of Ponta Grossa, in the Brazilian state of Paraná, which authorized the search and seizure of information and documents pertaining to us and certain current and former employees, as well as the temporary detention of certain individuals, in what media reports have identified as the “*Trapaça* Operation.”

In June 2018 and in May 2019, we learned of administrative proceedings commenced against us by the Brazilian Comptroller General of the Union (*Controladoria-Geral da União*), or CGU, which is primarily related to alleged irregularities in connection with conduct that could represent harmful acts to the public administration under the Brazilian Anti-Corruption Law and other applicable laws. The CGU is an internal control body of the Brazilian federal government responsible for carrying out activities related to the defense of public property and the increase of management transparency, through actions of public audit, correction, prevention and combat of corruption, among others. On December 28, 2022 we entered into a Leniency Agreement with CGU and the Attorney General’s Office (*Advocacia Geral da União*), or the Leniency Agreement, which will settle and extinguish all CGU administrative proceedings against BRF related to Operations *Carne Fraca*, *Trapaça*, *Romanos* and *Pasteur*. Among other commitments, we undertook to pay approximately R\$584 million to Brazilian authorities in connection with the settlement. For more information about the Leniency Agreement, see “Item 8. Financial Information–A. Consolidated Statements and Other Financial Information–Legal Proceedings– Civil, Commercial and Other Proceedings– Controladoria-Geral da União (CGU) Proceedings.”

On February 11, 2020, the SFDA temporarily suspended the export authorization of two of our plants (Dois Vizinhos, SIF 2518, and Francisco Beltrão, SIF 1985) due to the *Trapaça* Operation. The Saudi Arabian government agency based its decision on news reports relating to the investigations. The case has been brought by Brazil as a Specific Trade Concern, or the STC, in the 4th meeting of the WTO Committee on Sanitary and Phytosanitary Measures in November 2020. For additional information, see “–More stringent trade barriers in key export markets may negatively affect our results of operations.”

Any of these existing investigations and proceedings, as described under “Item 8. Financial Information– Consolidated Statements and Other Financial Information–Legal Proceedings,” or any other ongoing or future investigation or proceeding could result in penalties, fines or other forms of liability and could have a material adverse effect on our business, reputation, brand, results of operations and financial condition.

We may fail to ensure compliance with relevant anti-fraud, anti-corruption, anti-money laundering and other international laws and regulations.

We are subject to anti-fraud, anti-corruption, anti-money laundering and other international laws and regulations. We are required to comply with the laws and regulations of Brazil and various jurisdictions where we conduct operations. In particular, we are subject to the Brazilian Anti-Corruption Law n° 12,846, the U.S. Foreign Corrupt Practices Act of 1977, or FCPA and the United Kingdom Bribery Act of 2010. The FCPA prohibits providing anything of value to foreign officials for the purposes of obtaining or retaining business or securing any improper business advantage. As part of our business, we may deal with entities and employees that are considered foreign officials for purposes of the FCPA. In addition, we participate in certain public tenders and competitive bidding rounds for contracts involving public authorities in Brazil and potentially in other markets where we operate, which activities are typically subjected to heightened regulatory scrutiny and often require compliance with specific anti-fraud, anti-corruption, anti-money laundering and other international laws and regulations.

Although we have internal policies and procedures designed to ensure compliance with applicable anti-fraud, anti-corruption, anti-money laundering and other international laws and regulations, potential violations of law have been identified on occasion as part of our compliance and internal control processes. In addition, we were notified of allegations involving potential misconduct by some of our employees in the context of the *Carne Fraca* Operation, *Trapaça* Operation and other investigations. For more details, see “We have been subject to significant investigations relating to, among other things, food safety and quality control, and any similar investigations and proceedings related to such investigations in the future could result in penalties, fines or other forms of liability and could have a material adverse effect on our business, reputation, brand, results of operations and financial condition,” “Item 8. Financial Information–A. Consolidated Statements and Other Financial Information–Legal Proceedings–*Carne Fraca* Operation” and “Item 8. Financial Information–A. Consolidated Statements and Other Financial Information–Legal Proceedings– *Trapaça* Operation.” As a result of the *Carne Fraca* Operation and *Trapaça* Operation and related matters, we incurred expenses in the total amount of R\$4,797 thousand for the year ended December 31, 2022 and R\$9,003 thousand for the year ended December 31, 2021, which negatively impacted our results of operations. Additionally, we have entered into a Leniency Agreement with the CGU in connection with those proceedings and, among other commitments, we undertook to pay approximately R\$584 million in connection with the settlement. For information about the Leniency Agreement, see “Item 8. Financial Information–A. Consolidated Statements and Other Financial Information–Legal Proceedings– Civil, Commercial and Other Proceedings– Controladoria-Geral da União (CGU) Proceedings.” Furthermore, any negative reflection on our image or our brand from these or other activities could have a negative impact on our results of operations, as well as our ability to achieve our growth strategy.

Given the size of our operations and the complexity of our production chain, there can be no assurance that our internal policies and procedures will be sufficient to prevent or detect all inappropriate or unlawful practices, including fraud or violations of law or violations of our internal policies and procedures by our employees, directors, officers, partners or any third-party agents or service providers. Furthermore, there can be no assurance that such persons will not take actions in violation of our policies and procedures (or otherwise in violation of applicable laws and regulations) for which we or they may ultimately be held responsible. Violations of anti-fraud, anti-corruption, anti-money laundering or other international laws and regulations could have a material adverse effect on our business, reputation, brand, selling prices, results of operations and financial condition, including as a result of the closure of international markets. We may be subject to one or more enforcement actions, investigations or proceedings by authorities for alleged infringement of these laws. These proceedings may result in penalties, fines, sanctions or other forms of liability and may also negatively affect the market price of our common shares and American Depositary Receipts, or ADRs.

We are subject to antitrust and competition laws and regulations and we may fail to ensure compliance with such laws and regulations.

We are subject to antitrust and competition laws and regulations in the jurisdictions in which we operate. Consequently, we may be subject to regulatory scrutiny in certain of these jurisdictions. For instance, on March 14, 2019, the Turkish Competition Authority (“TCA”) announced a decision regarding its investigation into our Turkish subsidiary Banvit and other producers for alleged anticompetitive practices in connection with chicken meat production in Turkey. The TCA imposed an administrative fine equivalent to R\$22,507 thousand (TRY30,518 thousand, translated to reais at the exchange rate of R\$0.7375 as of September 30, 2019), against Banvit. The decision was confirmed on September 17, 2019, and Banvit paid the fine with a 25% discount (a benefit available under Turkish law). For additional information, see “Item 8. Financial Information–A. Consolidated Statements and Other Financial Information–Legal Proceedings–Civil, Commercial and Other Proceedings.”

There can be no assurance that our internal policies and procedures designed to ensure compliance with applicable antitrust and competition laws and regulations will be sufficient to prevent or detect all inappropriate or unlawful practices. As a result, we may be subject to one or more enforcement actions, investigations or proceedings by authorities for alleged infringement of these laws. These proceedings may result in penalties, fines, sanctions or other forms of liability and could have a material adverse effect on our business, reputation, brand, selling prices, results of operations and financial condition, including as a result of the closure of international markets. Furthermore, there can be no assurance that the introduction of new competition laws in the jurisdictions in which we operate, the interpretation of existing antitrust or competition laws, the enforcement of existing antitrust or competition laws by authorities or civil antitrust litigation by private parties, or any agreements with antitrust or competition authorities, against us or our subsidiaries will not have a material adverse impact on our business, results of operations or financial condition.

A failure to comply with export control or economic sanctions laws and regulations could have a material adverse impact on our results of operations, financial condition and reputation.

We operate on a global basis and face risks related to compliance with export control and economic sanctions laws and regulations, including those administered by the United Nations, the European Union and the United States, including the U.S. Treasury Department’s Office of Foreign Assets Control. Economic sanctions programs restrict our dealings with certain sanctioned countries, territories, individuals and entities. Export controls restrict the export or transfer of certain goods, technology, and software (collectively, “goods”) to certain end-users or locations. Economic sanctions and export controls are complex, frequently changing, and often increase in number, and may impose incremental prohibitions, fines, restrictions on dealings with or involving additional countries, territories, individuals, entities or items or compliance obligations on our dealings in certain countries and territories or involving certain items. We have conducted, and may in the future seek to conduct, business in certain countries that are subject to sanctions under the laws of the United States, the European Union, or other countries. Although we have pursued these transactions, and intend to pursue any future transactions, in full compliance with applicable laws and regulations, we may not be successful in ensuring compliance with limitations or restrictions on business with companies in any sanctioned countries and/or other sanctions targets, and we could potentially become targeted by sanctions as a result of such business even where such business was conducted in compliance with applicable laws and regulations. If we are found to be in violation of applicable sanctions or export controls laws or regulations or to have engaged in sanctionable conduct, we may face criminal or civil fines or other penalties, we may suffer reputational harm and our results of operations and financial condition may be adversely affected. Additionally, there can be no assurance that our employees, directors, officers, partners or any third parties that we do business with, including, among others, any distributors or suppliers, will not violate sanctions or export controls laws and regulations or engage in sanctionable conduct. We may ultimately be held responsible for any such violation of sanctions or export controls laws and regulations, or sanctionable conduct, by these persons, which could result in criminal or civil fines or other penalties, have a material adverse impact on our results of operations and financial condition and damage our reputation. Also, see “–Geopolitical and other challenges and uncertainties due to the ongoing military conflict between Russia and Ukraine could have a material adverse effect on the global economy, certain material and commodity prices and our business.”

Political and economic risks in regions and countries where we have exposure could limit the profitability of our operations and our ability to execute our strategy in these regions.

Since we have business operations around the world, we are subject to a variety of risks that may adversely affect our financial results. In the regions where we have production and distribution activities, we are subject to the following risks, among others:

- political instability;
- geopolitical risks and conflicts, such as war, terrorism and civil unrest;
- the imposition of exchange or price controls;
- the imposition of restrictions on exports of our products or imports of raw materials necessary for our production processes, including embargoes from countries where we undergo production or distribution activities;
- the fluctuation of global currencies against the *real*;
- the nationalization of our property;
- political influence by local governments in communities where we operate requiring investments or other expenditures;
- increases in export tax and income tax rates for our products;
- increases on non-tariff barriers;
- free trade agreements between countries and regions excluding Brazil;
- change in regulations of the markets to which we export;
- lack of transparency and/or bribery or any illegal gains' attempted by foreign officials; and
- institutional and contractual changes unilaterally imposed by governments, including controls on investments and limitations on new projects.

As a result of these factors, our results of operations and financial condition in the regions where we have production and distribution activities may be adversely affected, and we may experience significant variability in our revenue from those operations. This risk may be heightened as a result of the COVID-19 pandemic, for example due to outbreaks of COVID-19 in our plants and restrictions that may be imposed on our products because of these outbreaks. For more information, see “—Pandemics or human disease outbreaks, such as the coronavirus (COVID-19) originated in late 2019 and declared a global pandemic by the World Health Organization on March 11, 2020, may adversely affect our business and operations.” In another trade-related development in 2020, certain member states of the European Union negotiating a trade agreement with the Mercosul trade bloc, of which Brazil is the largest member, indicated that progress would slow in light of concerns over Brazilian environmental protection policies and enforcement in connection with fires in the Amazon rainforest. Such delays could undermine efforts to expand our access to European markets. Additionally, several countries in Asia currently do not tax the importation of poultry and pork meat, which increases our products’ competitiveness in these countries. However, we understand that this import tax regulation may be changing in the near future. We are unable to control any such change in import tax regulation, which may have a material adverse effect on our products’ competitiveness. The impact of these changes on our ability to deliver our planned projects and execute our strategy cannot be ascertained with any degree of certainty, and these changes may adversely affect our operations and financial results.

Additionally, specific trade deals between key markets and other competing exporting countries may negatively affect our results of operations and competitiveness. For example, the U.S.-South Korea free trade agreement and economic partnership agreement reduced the import tariff on European and U.S. livestock products in 2022. These agreements caused an impact on our competitiveness in the region and put additional pressure on our market share.

Our external market sales are subject to a broad range of risks associated with cross-border operations.

External market sales account for a significant portion of our global net sales, and represented 44.8% of our net sales in 2022, 44.5% of our net sales in 2021 and 43.7% of our net sales in 2020. Our external market is reported within our International business segment, which comprises Islamic markets (including Turkey, North of Africa, Gulf Cooperation Council (GCC) and Malaysia), Asia, Europe, Eurasia, Africa and Americas, where we are subject to many of the same risks described herein in relation to Brazil. Furthermore, we may seek to expand sales of our products to additional international markets. Our future financial performance depends, to a significant extent, on the economic, political and social conditions in those regions as well as on our supply conditions.

Our future ability to conduct business operations in external markets could be adversely affected by factors beyond our control, such as:

- exchange rate and interest rate fluctuations and the impact of hyperinflation;
- commodities price volatility;
- deterioration in global economic and geopolitical conditions;
- political risks, such as social unrest, turmoil and instability, foreign exchange controls and uncertainty regarding government policies;
- decreases in demand, particularly from large markets such as China and Saudi Arabia;
- imposition of increased tariffs, anti-dumping duties or other non-tariff trade barriers;

- restrictions on international trade and financial flows imposed due to balance of payments deficits;
- unpredictable international border closings that restrict products, materials and people;
- compliance with differing foreign legal and regulatory regimes;
- strikes, not only of our employees, but also of port employees, truck drivers, customs agents, sanitary inspection agents and other government agents at the Brazilian ports from which we export several of our products;
- access to adequate infrastructure, which could be affected by flooding or similar events;
- damage to our products;
- negative media exposure related to the Brazilian agriculture or meat processing industries, particularly in connection with the *Carne Fraca* Operation, *Trapaça* Operation or other investigations;
- negative preconceptions influenced by Brazil's worsening international reputation due to deforestation and other environmental and sustainability issues; and
- unpredictable or uncontrollable epidemics and pandemics, either affecting both human and/or animal life.

We face significant competition from Brazilian and foreign producers, which could adversely affect our financial performance.

We face strong competition from other Brazilian producers in both the domestic and external markets. In addition, we compete with foreign producers in our external markets. The Brazilian market for whole poultry, poultry and pork cuts is highly fragmented. Small producers, some of which operate in the informal economy, are able to offer lower prices by meeting lower quality standards. For example, farming livestock cooperatives are increasingly significant competitors in our markets, as they have certain tax advantages and generally enjoy greater mobility in directing their production to foreign markets at times when exports become more attractive than their respective domestic market. With respect to exports, we compete with other large, vertically integrated producers that have the ability to produce quality products at similarly low costs.

In addition, the size and growth potential of the Brazilian market for processed food, poultry, pork and beef, combined with Brazil's low production costs are attractive to international competitors. The main barrier impeding these companies from entering the Brazilian market has been the need to build a comprehensive distribution network, including a network of outsourced farmers, known as outgrowers. Nevertheless, foreign competitors with significant resources could undertake to build or acquire such capabilities.

The Brazilian poultry and pork cuts markets, in particular, are highly price-competitive and sensitive to product substitution. Even if we remain a low-cost producer, with strong brands, consumers may choose to purchase other products or brands. We expect to continue to face strong competition in all of our markets and anticipate that existing or new competitors may broaden their product lines and extend their geographic scope. Any delay or failure by us in responding to product, pricing and other strategies by competitors may negatively affect our financial performance.

Our business depends on the supply of raw materials produced by farmers and integrated producers, and our performance depends on our ability to attract and retain a network of qualified farmers and integrated producers.

We are a vertically integrated producer of food products, and we depend on a large number of raw materials of animal origin, or animal byproducts, to conduct our business. A substantial portion of the animal byproducts we use to conduct our business is produced by a network of integrated farmers and producers with whom we have entered into integrated production contracts. Such integrated producers are responsible for managing and raising the poultry and pork that we, as integrators, supervise. For the year ended December 31, 2022, we acquired approximately 3.2 million tons of broilers, 138 thousand tons of turkey and 76 thousand tons of pork from our integrated producers.

The selection and retention of farmers and producers is highly competitive, and such competition between integrators has intensified in recent years. Our integrated producers are primarily located near our industrial units, where competing integrators conduct activities similar to the activities we conduct. We may be unable to select and retain such farmers and producers, particularly as a result of greater competition, or we may be obligated to pay higher prices for such byproducts or offer greater benefits to retain such farmers and producers. Our inability to retain an adequate number of such farmers and producers may negatively impact our strategic plans and operational performance.

In addition, our integrated producers are mostly financed through rural credit financing that they contract directly with financial institutions. Such rural credit financing are offered in the context of financial collaboration agreements that we enter into with the respective financial institutions, which establish obligations related to: (i) selecting integrated producers suitable for obtaining financing; (ii) maintaining a sufficient payment stream to such integrated producers to amortize and settle the financial installments granted within the scope of such financial collaboration agreements; and (iii) supervising the application of the financial resources granted to such integrated producers. In exceptional cases, such as the operational suspension, sale or lease of one of the industrial units that we use to purchase the production of our integrated producers financed through such financial collaboration agreements, we may be obligated to prepay the financing obtained by our integrated producers, or we may be required to maintain a sufficient payment stream to such integrated producers to amortize and settle the financial installments until a new integrator succeeds the affected industrial unit with respect to the integrated production contracts, which may adversely affect our results.

Our performance depends on favorable labor relations with our employees, our compliance with labor laws and the safety of our facilities. Any deterioration of those relations, increases in labor costs or injuries at our facilities could adversely affect our business.

As of December 31, 2022, we had approximately 100,000 employees worldwide. Our production employees in Brazil and in countries where organized labor is prevalent are generally represented by labor unions. Upon the expiration of existing collective bargaining agreements or other collective labor agreements, we may be unable to reach new agreements with the labor unions and any such agreements may not be on terms satisfactory to us, which could result in higher payments of wages or benefits to union workers. Additionally, if we are unable to negotiate acceptable collective bargaining agreements, we may become subject to work stoppages or strikes, which could adversely affect our business.

Our negotiations with labor unions may become more challenging and we may be subject to higher wages and more work stoppages or strikes if the new Brazilian federal government is successful in implementing changes in the labor laws and increasing funds to labor unions. As part of the labor law reform in 2017 (“Labor Reform”), union financing by workers is no longer mandatory in Brazil. However, in October 2022, Brazilians reelected Mr. Luiz Inácio Lula da Silva as president, and he took office in January 2023. Mr. Lula da Silva began his career as a trade unionist and was elected president of Brazil for the first time in 2002, remaining in office from January 2003 until December 2010. If the new government guides changes to the Labor Reform and the return of mandatory financing of unions and related administrative bodies (such as labor union centers, federations and confederations), such entities may improve the bargaining power for further workers’ rights, including our Brazilian employees. As a result, unions may be able to pursue more aggressive negotiations for wage increases, including minimum wages above inflation. For example, their influence over collective bargaining in the short term may result in the increase in the Brazilian national minimum wage above inflation. Consequently, regional minimum wages could also be raised above inflation. Labor costs are among our most significant expenditures. Such costs represented 10.3% of our cost of sales in the year ended December 31, 2022. In the event of a review of our employee contract structure and an increase in wages, additional operational expenses could be incurred.

In addition, former president Mr. Jair Bolsonaro was generally a polarizing figure, particularly in relation to certain of his social views. We cannot predict in which ways the change in the federal government will increase polarization in the country, and if a divided electorate may continue to impact the implementation of policies and reform. Political and social instability may create a negative market perception, which may result in higher inflation directly affecting collective bargaining.

Additionally, in the ordinary course of business, we outsource some of our labor force, which subjects us to claims that may arise from these relationships. In the event that a significant amount of these claims results in an unfavorable outcome against us, we may be held liable for amounts higher than our provisions, which may have a material adverse effect on our business, financial and operational condition and results of operations. In addition, if the outsourced activities are deemed by the authorities as employment relationships, outsourcing may be considered illegal and the outsourced workers may be considered our employees, which would result in a significant increase in our costs and could subject us to administrative and judicial procedures by the relevant authorities and fines. We are also subject to increases in our labor costs due to Brazilian inflation and increases in health insurance costs. Material increases in our labor costs could have a material adverse effect on our business, results of operations and financial condition and prospects.

In addition, we face risks related to the safety of our facilities. If we fail to implement safety procedures or if the procedures, we implement are ineffective or are not followed by our employees or others, our employees and others may be injured, which could result in costs for the injuries and lost productivity. Any of the foregoing could have an adverse impact on our business, results of operations and reputation.

We cannot guarantee that our suppliers will not engage in irregular practices.

We cannot guarantee that our suppliers will not have issues regarding working conditions, sustainability, outsourcing of the production chain and improper safety conditions and/or corruption. If any of our suppliers engage in these practices, our reputation may be harmed and, consequently, our customers' perception of us may be adversely affected. Also, depending on the irregularity attributed to the supplier, if it has acted for our benefit, whether exclusively or not, we may be subject to the sanctions provided for in the applicable anti-corruption law. Although we have an internal integrity system that follows the best national and international compliance practices, which is applicable to all our suppliers and business partners; there is no assurance that we will be able to timely identify and/or prevent any such violations by our suppliers.

We may be liable for environmental damage caused by our suppliers.

If the companies that provide us outsourced services do not meet the requirements of the applicable legislation, we may be considered liable for the environmental damage caused by these companies.

Additionally, environmental damage in Brazil implies strict and joint liability. This means that the obligation to repair the degradation caused may affect all those who, directly or indirectly, contributed to the occurrence of environmental damage, regardless of the agents' guilt, which may adversely affect our results and activities. Also, the hiring of third parties to carry out any management of our activities, such as management of contaminated areas, renovations or final disposal of waste, does not exempt us from liability for any environmental damage caused by a supplier engaged by us. If we are held liable for any such damages, our results and image may be adversely affected.

We depend on the operating results of our subsidiaries.

In addition to having our own operations, we hold equity interests in other companies. Therefore, in addition to the results generated by our own operation, we also depend on the operating results of our subsidiaries and controlled companies. Our ability to meet our debts and other obligations depends not only on our cash flow generation, but also on the cash flow generation of our subsidiaries, controlled companies and affiliates and their ability to make cash available to us in the form of payment of interest on equity, payment of debt, dividends, among others.

Any adverse change in the financial condition or results of operations of our subsidiaries, controlled companies and affiliates could materially and adversely affect our business, financial condition or results of operations.

Also, the income tax exemption on the distribution of dividends provided for in current Brazilian legislation may be reviewed and dividends may become taxable in the future, negatively impacting us, as a holding company, given that taxes may be due on the distribution of dividends by our subsidiaries to us.

In addition to the risk factor above, subsidiaries that carry out our significant operations are subject to the same risks applicable to us.

Unfavorable outcomes in administrative and legal proceedings may reduce our liquidity and negatively affect us.

We and some members of our management are defendants in civil, administrative, regulatory, environmental, labor and tax proceedings and we are also subject to consent agreements (*Termo de Ajustamento de Conduta*, or TAC). Unfavorable decisions in such administrative and legal proceedings may reduce our liquidity and have a material adverse impact on our business, results of operations, financial condition and prospects. In addition, our management and employees may be subject to judicial, arbitral and/or administrative investigations, inquiries, proceedings and claims.

With regard to tax contingencies, we are currently defendants in a number of cases, which include, for example, disputes regarding the offset of tax credits and the use of tax incentives in several states that have not yet reached a final ruling in the Brazilian courts. In addition, we may face risks arising from potential impairment of input state value-added tax, or VAT, that we accumulate on exports.

As of December 31, 2022, we have R\$1,415,537 thousand in provisions for contingencies, of which R\$358,304 thousand are for civil and other contingencies (including administrative, regulatory and environmental), R\$399,675 thousand are for tax contingencies and R\$526,710 thousand are for labor contingencies and R\$130,848 thousand are for a contingent liabilities recognized at fair value as of the acquisition date, arising from the business combinations with Sadia, Hercosul and Mogiana. Proceedings classified as possible losses, as of December 31, 2022, totaled R\$15,343,060 thousand, which could adversely affect our financial situation in the event of change in circumstances in the classification of probability of loss, due to the complexity and discretion involved in the assessment, measurement and definition of the time of recognition and disclosure of legal claims between the various spheres in which they are processed.

On March 12, 2018, a shareholder class action lawsuit was filed against us, some of our former managers and a current officer of ours in the U.S. Federal District Court in the Southern District of New York. The class action alleged, among other things, that we and certain officers or directors of ours engaged in securities fraud or other unlawful business practices related to the regulatory issues in connection with the *Carne Fraca* Operation and *Trapaça* Operation. For more information about the “U.S. Class Action,” “*Carne Fraca* Operation” and “*Trapaça* Operation,” see “Item 8. Financial Information–A. Consolidated Statements and Other Financial Information–Legal Proceedings–U.S. Class Action,” “Item 8. Financial Information–A. Consolidated Statements and Other Financial Information–Legal Proceedings–*Carne Fraca* Operation” and “Item 8. Financial Information–A. Consolidated Statements and Other Financial Information–Legal Proceedings–*Trapaça* Operation.” The parties reached an agreement on March 27, 2020 to settle this class action for an amount equivalent to R\$204,436 thousand (US\$40,000 thousand, translated to *reais* at the exchange rate of R\$5.1109 as of March 27, 2020). The court approved this settlement on October 23, 2020.

In addition, in 2020 we received a final and unappealable judicial decision regarding the exclusion of ICMS from the tax basis of the social contributions of PIS and COFINS, which permitted us to recognize a significant amount of recoverable taxes, which are described in note 9.2 to our consolidated financial statements. For a number of procedural reasons involved in finalizing the settlements for these judgments, it could take an extended period of time for us to receive these amounts, either as compensation or through obtaining a court ordered financial obligation (*precatório*). In 2021, we started to use these tax credits to offset federal taxes payable. The total amount used for this purpose in the year ended December 31, 2022 was R\$384,956 thousand.

In March 2020, three confidential arbitration proceedings were brought against us in the Market Arbitration Chamber (*Câmara de Arbitragem do Mercado*) of the B3 S.A. – Brasil, Bolsa, Balcão, or the B3 or the São Paulo Stock Exchange, in Brazil by investors that had purchased our shares traded on the B3, seeking recovery from alleged losses incurred by them, due to the price fall of our shares, during the period starting from April 4, 2013 and afterwards. In September 2020, the Chairman of the Market Arbitration Chamber of B3 decided to consolidate these three arbitrations into a single arbitration proceeding. In November 2022, the arbitral tribunal was convened, and in December 2022, we formally commenced the arbitration proceedings. We are currently awaiting the next steps of the arbitration to be decided, and because this arbitration is in its initial stage, we believe the possible loss or range of losses, if any, cannot be estimated. In the event that this litigation or arbitration proceeding is decided against us, or we enter into an agreement to settle, there can be no assurance that an unfavorable outcome or settlement would not have a material adverse impact on us.

We cannot guarantee that the results of these proceedings or investigations and/or that new proceedings or new investigations will have favorable outcomes for us and our management. Any investigation from governmental authorities currently unknown to us with respect to any potentially unlawful business practice may also result in penalties, fines and sanctions or other forms of liability. With respect to proceedings to which we are a party, we cannot guarantee the dimension of the impacts that the results may have on our business, financial condition and/or reputation, or that we maintain or will maintain provisions in sufficient amount to cover all liabilities that may arise from these proceedings. In addition, we cannot guarantee that any person, directly or indirectly related to us, whether shareholder, employee, officer, director, supplier, service provider, subcontractors or alike, will not be involved in legal, administrative or arbitration proceedings, investigations or police inquiries.

Our inability or failure to protect our intellectual property and any intellectual property infringement against us could have a negative impact on our operating results.

Our principal intellectual property consists of our domestic and international brands, patents and designs. Our ability to compete effectively depends in part on our rights to trademarks, designs and other intellectual property rights we own or license. We have not sought and it is not always possible to register or protect every one of our trademarks in every country in which they are or may be used, which means that third parties may be able to limit or challenge our trademark rights there. Furthermore, because of the differences in foreign intellectual property or proprietary rights laws, we may not receive the same level of legal protection in every country in which we operate.

Litigation may be necessary to enforce our intellectual property rights, and if we do not prevail, we could suffer a material adverse impact on our business, goodwill, financial position, results of operations and cash flows. Further, third parties may claim that our intellectual property or business activities infringe their own intellectual property or proprietary rights, and any litigation in this regard would be costly, regardless of the merits. If we are unsuccessful in defending any such third-party claims, or settling such claims, we could be required to pay damages or enter into joint licensing or intellectual property sharing agreements, which might not be available under favorable terms. We may also be forced to rebrand or redesign our products to avoid the infringement, which could result in significant costs in certain markets. If we are found to infringe on any third-party's intellectual property rights, we could suffer a material adverse impact on our reputation, business, financial position, results of operations and cash flows.

Damages not covered by our insurance policies might result in losses for us, which could have an adverse effect on our business.

Certain kinds of losses cannot be insured against via third-party insurance, and our insurance policies are subject to liability limits and exclusions. For example, political risks, environmental and climate events, fraud, strike, product recalls, fines and penalties, terrorism, the livestock itself, ammonia leakage, financial risks such decrease in stock prices, cybersecurity risks, sabotage, industrial espionage, natural disasters or other catastrophic events may cause damage or disruption to our operations, international commerce and the global economy, and thus could have a material adverse effect on us. Additionally, we are exposed to certain product quality risks, such as criminal contamination, avian influenza, swine fever, salmonella and other livestock diseases that can impact our operations and which are not covered under insurance. If an event that cannot be insured occurs, or the damages are higher than our policy limits, we may incur significant costs. In addition, we could be required to indemnify parties affected by such an event. Furthermore, even where we incur losses that are ultimately covered by insurance, we may incur additional expenses to mitigate the loss, such as shifting production to different facilities. These costs may not be fully covered by our insurance.

On occasion, our facilities may be negatively affected by fires, explosions, electrical damages, widespread truck driver strikes and other similarly destructive events. For example, our facilities in Vitória de Santo Antão, in the Brazilian state of Pernambuco, suffered from fires in 2022, there were explosions in our facilities in Lucas do Rio Verde, in the Brazilian state of Mato Grosso in 2022, and in Uberlândia, in the Brazilian state of Minas Gerais in 2021. There was flooding in our facility in Bandirma, Turkey in 2018, and our substation facility in Concordia, in the Brazilian state of Santa Catarina, collapsed in 2021. In addition, our operations were adversely affected by the COVID-19 pandemic, and we may not be able to recover compensation for the resulting losses under our insurance policies. For more information on the effects of COVID-19 on our business, see “—Pandemics or human disease outbreaks, such as the coronavirus (COVID-19) originated in late 2019 and declared a global pandemic by the World Health Organization on March 11, 2020, may adversely affect our business and operations.” Our business interruption insurance may not cover all of our direct and indirect costs and intangible costs in connection with disruptions to our operations. For example, the negative impacts on our business from the 2018 Brazilian truckers’ strike and the trucker’s protests associated with the Brazilian elections in 2022, including the suspension of operations at our production facilities and increased transportation and logistics costs, were not covered by any of our insurance policies. Any similar events in the future could have a material adverse effect on our business, results of operations, financial condition and prospects.

Moreover, our insurance policies may not cover legal costs in general incurred to defend ourselves against legal and administrative proceedings. We have incurred, and expect to continue to incur, significant costs in connection with the *Carne Fraca* Operation and the *Trapaça* Operation. The costs associated with these investigations and the costs of defending ourselves against legal and administrative proceedings may not be covered by our insurance policies. Furthermore, there can be no assurance that we will be able to obtain insurance coverage in the future, related to the foregoing or any other matters, on terms acceptable to us. As a result, we may incur significant additional expenses which may adversely impact our financial condition and results of operations.

We depend on members of our senior management and on our ability to recruit and retain qualified professionals to implement our strategy.

We depend on members of our senior management and other qualified professionals to implement our business strategies. Efforts to recruit and retain professionals may result in significant additional expenses, which could adversely affect our results. In addition, loss of key professionals may adversely affect our ability to implement our strategy, as well as expenses associated to these losses can impact our results. From 2019 to 2021, we had the departure of one CFO in 2019, the departure of a Vice President in 2020 and the departure of a Vice President in 2021. During 2022 the global geopolitical challenges impacted our performance and resulted in important changes in our strategy and leadership team. In April we announced the departure of our CFO – Mr. Carlos Aberto Bezerra de Moura. In July Ms. Grazielle Tallia Parenti, our Institutional Relations & Sustainability Vice-President and Mr. Sidney Roferio Manzano, our Brazil Vice-President left their positions. In October, we announced the departure of our CEO – Mr. Lorival Nogueira Luz Júnior. These changes, and other potential changes, in the composition of our senior management team and our board of directors may result in modifications to our business strategy and have a material adverse effect on us.

General labor shortages, our inability to recruit or retain workers for our industrial plants and increased competition with other businesses for workers may negatively affect our results of operations.

To support the operations of our industrial plants, we must hire and retain a sufficient number of workers and pay them sufficient compensation. The continuous operations of our industrial plants at target activity levels could be interrupted by our failure to recruit or retain the necessary number of workers. If it becomes necessary for us to operate our facilities significantly below the corresponding installed capacity, then our results of operations may be adversely affected. In addition, if we operate with a reduced number of workers, we may need to choose a product mix that requires fewer workers in the production line, but which may not represent the most profitable alternative among our productive capacity options, which could have a negative impact on our results of operations.

We have been experiencing a general labor shortage in our facilities located in the Brazilian states of Mato Grosso and Santa Catarina. In these locations, where the prevailing unemployment rate could be lower than 4%, the number of residents in the workforce may be limited. To reduce the negative impact on our operations, we bring workers from other regions of the country where unemployment rates are higher, which results in additional costs related to relocation. For example, in the Brazilian state of Mato Grosso, approximately 70% of our workers come from the North or Northeast regions of Brazil or are refugees or immigrants from neighboring countries.

These conditions increase the competition we face for workers from other industries, and they may force us to raise our compensation package to retain workers and properly manage excessive turnover. This directly impacts our production process and may lead to an increase in our production costs. The agribusiness sector is one of the fastest growing businesses in Brazil, and there is significant competition for workers. For example, Frimesa, a Brazilian industrialized meat and dairy producer, announced 7,000 new job openings in their new facility, which is located 40 kilometers from our industrial plant in Toledo, in the Brazilian estate of Paraná. We may be unable to retain an adequate number of workers, particularly as a result of greater competition, or may incur higher costs in our operations to offer higher compensation than our competitors. Our inability to offer attractive compensation or to properly meet our workforce demand because of the labor shortage may negatively impact our strategic plans and operational performance.

Failure to maintain adequate internal controls could adversely affect our reputation and business.

Our management is responsible for establishing and maintaining adequate internal controls over financial reporting that provide reasonable assurance of the reliability of the preparation and reporting of our financial statements for external use. Inadequate internal controls may result in our failure to meet public reporting requirements accurately and on a timely basis and harm our reputation. The internal controls over financial reporting may not prevent or detect all misstatements or fraud, regardless of the adequacy of those controls, and, therefore, we cannot assure that material weaknesses will not be identified in the future.

Part of our activities are carried out in third-party properties. If we are unable to maintain or renew our lease agreements or to enter into new agreements under conditions that are commercially adequate for us, we may be adversely affected.

Part of our activities are developed in third-party real estate properties which are subject to lease agreements.

In accordance with applicable law, generally, either party may request in a judicial lawsuit the review of the rental price after the third year of the effectiveness term of the agreement or of the last renegotiation of the rental price. A significant increase in the amount of the rent as a result of such lawsuits review could adversely affect our financial position and our operating result.

In addition, our lease agreements provide that the rents will be annually adjusted by an official inflation index. In a scenario of hyperinflation, such adjustments may adversely affect our financial results.

If, for any reason, we are unable to (i) maintain our lease agreements; (ii) enter into new agreements; or (iii) renew them under conditions that we deem appropriate, we may have our activities interrupted and/or be adversely impacted, due to (i) costs arising from the reallocation of our operations, and (ii) loss and/or decrease in revenue, including if we are not able in a timely manner to relocate our activities to suitable properties and/or take a long time to rent any such properties or if we rent them at high prices. In any such cases, our financial condition and results of operations may be adversely affected.

Failure to comply with, obtain or renew the licenses required of the real estate properties where we develop our activities may have a material adverse effect on us.

Our activities depend on several registrations, authorizations, federal, state and municipal licenses and permits, including inspection records issued by Fire Departments (*Autos de Vistoria do Corpo de Bombeiros*), certificates of occupancy (*habite-se*) of the facilities we use and operating licenses issued by the respective municipalities in order to carry out our operations. Most of these licenses have an expiration term and must be timely renewed, and may be subject to the payment of renewal fees. In addition, any irregularities or alterations to the facilities of the properties may also have an adverse effect on the maintenance of such real estate licenses. The expansion of our operations and/or changes in applicable legislation may also require new licenses, grants, authorizations, permits and/or registrations to be requested before the competent authorities.

We cannot assure that such licenses have been or will be obtained with respect to each property whereby we carry out our activities or that they have been or will be regularly maintained in force or timely renewed. The lack or the irregularity of our licenses could result in the imposition of infraction notices and fines by the competent authorities. If we are unable to remedy any irregularities in our licensing process in a manner that leads to an interruption or suspension of our operations or that would require us to make significant and unexpected investments, this could result in a material adverse effect on our business, financial situation, reputation and results of operations. Also, we may have to incur with unexpected costs with the reallocation of establishments, in case of the impossibility to obtain or renew any of these licenses. These scenarios may negatively affect our business.

Risks Relating to Our Indebtedness

The occurrence of a change of control may result in the default, acceleration, cross-default, cross-acceleration or termination of certain of our financing agreements.

We are party to certain financing agreements containing default, acceleration, cross-default, cross- acceleration and/or termination provisions in case of a change in control. In the event of a change in control, we may not be able to timely obtain waivers of such provisions from the respective contractual counterparties.

Default, acceleration, cross-default, cross-acceleration and/or termination of a relevant number of our financing agreements may adversely affect our financial condition and may materially adversely affect us.

We have substantial indebtedness, and our leverage could negatively affect our ability to refinance our indebtedness and grow our business.

As of December 31, 2022, our total consolidated debt (comprised of loans and borrowings) was R\$ 23,517,000 thousand, and while we have not incurred significant increases in indebtedness resulting from the COVID-19 pandemic since it was declared, an increase in our leverage could result in adverse consequences for us, including:

- requiring that a substantial portion of our cash flows from operations be used for the payment of principal and interest on our debt, reducing the funds available for our operations, capital expenditures or other capital needs;
- limiting our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate because our available cash flow after paying principal and interest on our debt might not be sufficient to make the capital and other expenditures necessary to address these changes;

- increasing our vulnerability to general adverse economic and industry conditions because, during periods in which we experience lower earnings and cash flows, we would be required to devote a proportionally greater amount of our cash flows to paying principal and interest on debt;
- increasing our expenditures due to depreciations of the Brazilian real, which can lead to an increased amount of capital needed to service indebtedness that are denominated in U.S. dollars; and
- making it difficult for us to refinance our indebtedness or to refinance such indebtedness on terms favorable to us, including with respect to existing accounts receivable securitizations.

If one or more of these consequences or limitations were to materialize, they could adversely affect our results of operations and financial position.

Our cost of funding is affected by our credit ratings and any risks may have an adverse effect on our credit ratings and our cost of funds. Any downgrade in our credit rating, would likely increase our cost of funding and adversely affect our results of operations.

Credit ratings affect the cost and other terms upon which we are able to obtain funding. Rating agencies regularly evaluate us, and their ratings of our long-term debt are based on a number of factors, including our financial strength, conditions that generally affect the meat processing industry and the economic environment in which we operate.

In view of our current credit metrics and according to the policies and guidelines set by rating agencies in order to evaluate a company's creditworthiness, as well as other factors, our credit rating is currently rated below "investment grade" by all of the rating agencies that rate us.

We cannot assure you that those rating agencies that have a negative outlook with respect to us will revise such outlooks upward. Our failure to maintain favorable ratings and outlooks would likely increase our cost of funding and adversely affect our results of operations.

We have substantial debt that matures in each of the next several years.

As of December 31, 2022, we have R\$4,326,351 thousand outstanding in principal amount plus interest of loans and borrowings that matures from January 1, 2023 through December 31, 2023, R\$1,602,875 thousand outstanding in principal amount plus interest of loans and borrowings that matures from January 1, 2024 through December 31, 2024, R\$2,704,626 thousand outstanding in principal amount plus interest of loans and borrowings that matures in 2025, R\$2,263,426 thousand outstanding in principal amount plus interest of loans and borrowings that matures in 2026, R\$4,420,322 thousand outstanding in principal amount plus interest of loans and borrowings that matures in 2027 and R\$20,822,441 thousand outstanding in principal amount plus interest of loans and borrowings that matures in 2028 and thereafter.

A substantial portion of our outstanding loans and borrowings is denominated in foreign currencies, primarily U.S. dollars. As of December 31, 2022, we have R\$12,549.2 thousand outstanding in principal and interest of foreign currency loans and borrowings, of which R\$1,954.1 thousand is classified as short-term debt. Our U.S. dollar-denominated loans and borrowings must be serviced by funds generated from sales by our subsidiaries, the majority of which are not denominated in U.S. dollars. Consequently, when we do not generate sufficient U.S. dollar revenues to cover that debt service, we must use revenues generated in reais or other currencies to service our U.S. dollar-denominated debt. As of December 31, 2022, the real appreciated against the U.S. dollar by 6.50% compared to December 31, 2021.

Depreciation in the value of the real or any of the other currencies of the countries in which we operate, compared to the U.S. dollar, could adversely affect our ability to service our debt. Foreign currency hedge agreements may not be effective in covering these currency-related risks. Additionally, the environment of rising interest rates could cause changes in financing availability, the cost of debt, and exchange rate fluctuations.

Any future uncertainty in the stock and credit markets could also negatively impact our ability to access additional short-term and long-term financing, which could negatively impact our liquidity and financial condition. If, in coming years:

- the pressures on credit return as a result of disruptions in the global stock and credit markets;
- our operating results worsen significantly;
- we are unable to complete any necessary divestitures of non-core assets and our cash flow or capital resources prove inadequate; or
- we are unable to refinance or repay any of our outstanding debt that becomes due, which could have a material adverse effect on our consolidated business and financial condition.

The terms of our indebtedness impose significant restrictions on us.

The instruments governing our existing indebtedness impose significant restrictions on us, and the instruments governing any indebtedness we may incur in the future may also impose the same or additional restrictions on us. The existing restrictions limit, and any future restrictions may limit, directly or indirectly, our ability, among other things, to undertake the following actions:

- borrow money;
- make investments;
- sell assets, including capital stock of subsidiaries;
- guarantee indebtedness;
- enter into agreements that restrict dividends or other distributions from certain subsidiaries;
- enter into transactions with affiliates;
- create or assume liens; and
- engage in mergers or consolidations.

Although the covenants to which we are currently subject have exceptions and qualifications, the breach of any of these covenants could result in a payment default under the terms of other existing debt obligations. Upon the occurrence of such an event of default, all amounts outstanding under the applicable debt instruments and the debt issued under other debt instruments containing cross-default or cross-acceleration provisions, together with accrued and unpaid interest, if any, might become or be declared immediately due and payable. If such indebtedness were to be accelerated, we may have insufficient funds to repay in full any such indebtedness. In addition, in connection with the entry into new financings or amendments to existing financing arrangements, our subsidiaries' financial and operational flexibility may be further reduced as a result of the imposition of covenants that are more restrictive, the requirements for additional security and other terms.

Risks Relating to Brazil

Brazilian economic, political and other conditions, and Brazilian government policies or actions in response to these conditions, may negatively affect our business, results of operations and the market prices of our common shares and ADRs.

The Brazilian economy has historically been characterized by interventions by the Brazilian government and unstable economic cycles. The Brazilian government has often changed monetary, price controls, taxation, credit, tariff and other policies to influence the course of Brazil's economy. Our business, results of operations, financial condition and prospects as well as the market prices of our common shares and ADRs may be adversely affected by, among others, the following factors:

- exchange rate fluctuations;
- expansion or contraction of the Brazilian economy;
- inflation rate fluctuations;
- changes in fiscal or monetary policies;
- commodities price volatility;
- increases in interest rates;
- exchange controls and restrictions on remittances abroad;
- volatility and liquidity of domestic capital and credit markets;
- natural disasters and changes in climate or weather patterns;
- energy or water shortages or rationing;
- changes in environmental regulation;
- social and political instability, particularly in light of the uncertainties involving the administration of new president Mr. Luiz Inácio Lula da Silva;
- strikes, not only of our employees, but also of port employees, truck drivers, other transport facilities, customs agents, sanitary inspection agents and other government agents; and
- other economic, political, diplomatic and social developments in or affecting Brazil, including with respect to alleged unethical or illegal conduct of certain figures in the Brazilian government and legislators, which are currently under investigation.

Following a two-year contraction of 3.5% in GDP both in 2015 and 2016, the Brazilian economy posted moderate increases of 1.0% and 1.1% in 2017 and 2018, respectively, and again of 1.1% in 2019. Due to the global economic downturn triggered by the COVID-19 pandemic, the Brazilian economy in 2020 contracted by 4.1% of GDP. In 2021, the Brazilian economy showed signs of recovery as measured by its GDP, which increased 4.6% year-on-year according to IBGE. As of December 31, 2022 the Brazilian economy increased by 2.9% of GDP, and inflation, decreased to 5.79% accumulated over the last twelve months prior to December 31, 2022, from 10.06% in 2021 and 4.52% in 2020, as measured by the Extended National Consumer Price Index (*Índice Nacional de Preços ao Consumidor Amplo*), or IPCA, published by the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*), or IBGE. As of December 31, 2022, the SELIC, the Brazilian primary reference interest rate, increased to 13.75%, from 9.25% in 2021, and 2.0% in 2020. As of the date of this annual report, the SELIC was 13.75%. As of December 31, 2022, unemployment decreased from 14.2% in 2020, to 11.1% in 2021 and 7.9% in 2022, according to the National Household Sample Survey (*Pesquisa Nacional por Amostra de Domicílio*) published by the IBGE.

In addition, various investigations into allegations of money laundering and corruption being conducted by the Office of the Brazilian Federal Prosecutor, including the largest such investigation, known as the “Lava Jato Operation,” have indirectly negatively impacted the Brazilian economy and political environment and are still ongoing.

A number of senior politicians, including current and former members of Congress and the Executive Branch, and high-ranking executive officers of major corporations and state-owned companies in Brazil were arrested, convicted of various charges relating to corruption, entered into plea agreements with federal prosecutors or have resigned or been removed from their positions as a result of these Lava Jato investigations. These individuals are alleged to have accepted bribes by means of kickbacks on contracts granted by the government to several infrastructure, oil and gas and construction companies. The profits of these kickbacks, which were not publicly disclosed, allegedly financed the political campaigns of political parties forming the previous government’s coalition that was led by former President Dilma Rousseff. These funds were also allegedly used for the personal enrichment of certain individuals. The effects of Lava Jato as well as other ongoing corruption-related investigations resulted in an adverse impact on the image and reputation of those companies that have been implicated as well as on the general market perception of the Brazilian economy, political environment and the Brazilian capital markets. We have no control over, and cannot predict, whether such investigations or allegations will lead to further political and economic instability or whether new allegations against government officials will arise in the future.

Amidst this background of political uncertainty, in August 2016, the Brazilian Senate approved the removal from office of Brazil’s then-president, Ms. Dilma Rousseff, following a legal and administrative impeachment process for infringement of budgetary laws. Mr. Michel Temer, the former vice president, who assumed the presidency of Brazil following Rousseff’s ouster, was first arrested on March 2019, having been convicted of the crimes of cartel involvement, active and passive corruption, money laundering and public auction fraud. In addition, the current president Mr. Luiz Inácio Lula da Silva, began serving a 12-year prison sentence on corruption and money laundering charges in April 2018, but he was released from prison in November 2019 following a Federal Supreme Court ruling. The Brazilian Supreme Court annulled the criminal convictions against Mr. Lula da Silva, and subsequently reinstated his political rights, which enabled him to run for president in the elections that took place in 2022. Historically, in election years, especially presidential elections, levels of foreign investment in the country are reduced; and political uncertainty creates greater instability and volatility in the political-economic scenario. In summary, the impact of the outcome of the 2022 presidential election on the Brazilian economy is uncertain and can adversely affect our operations and financial results. The President of Brazil has the power to determine policies and issue governmental acts related to the conduct of the Brazilian economy and, consequently, affect the operations and financial performance of companies, including ourselves. We cannot predict which policies Mr. Lula da Silva will adopt, much less whether such policies or changes in current policies can adversely impact us or the Brazilian economy.

The former Brazilian president, Mr. Jair Bolsonaro, a former member of the military and three-decade congressman, was elected on October 28, 2018 and took office on January 1, 2019. During his presidential campaign, he was reported to favor the privatization of state-owned companies, economic liberalization and social security and tax reforms. The Ministry of Economy, during his time in office, had a critical view on incentives to certain economic sectors and argued such incentives were harmful to the efficient allocation of capital. An amendment to the Brazilian constitution was approved aiming to reduce tax benefits (*Programa de Emenda Constitucional* No 186/2019). However, the Proposed Federal Government's Budget Law (*Projeto de Lei Orçamentária Anual*) for 2023 included (i) R\$52.9 billion in relief for energy commodities, including PIS/COFINS on diesel, biodiesel, LPG, natural gas and kerosene and CIDE tax on fuel, (ii) R\$27.3 billion in other tax reductions, including PIS/COFINS on financial income of certain business entities using the non-cumulative basis regime. In addition, the content of the Proposed Federal Government's Budget Law for 2023 was inconsistent with the political campaign of the federal government. Even considering the most optimistic economic parameters and deficit in fiscal policy, the budget did not account for readjustments in income tax brackets, maintenance of the social aid program of R\$600 (*Auxílio Brasil*) in 2023 and salary increase for public employees, all of which were promised during the presidential campaign.

Initial GDP and inflation estimates by the Brazilian executive branch indicate that the actual results for 2023 will be worse than projected by the Brazilian federal government. The parameters of the Federal Government's Budget Law are used as the basis for all projections of the income and expenses of the government, and deviations may adversely affect the accuracy of the budget. IPCA and the National Index of Consumer Prices (*Índice Nacional de Preços ao Consumidor*) projected by the executive branch are higher than the market has estimated. That may result in R\$24.5 billion artificial flexibility in the public spending cap, and may wrongfully increase expenses related to labor benefits, pension plans and social assistance by R\$9.4 billion. Projections for economic growth in 2023 made by the government and the markets differ, which indicates that the Brazilian federal government may have overestimated economic growth. Actual lower levels of inflation alone, when compared to those in the Federal Government's Budget Law, may already negatively impact governmental income. SELIC, inflation and exchange rates had similar projections to those of the market, indicating a gradual reduction in inflationary pressure and SELIC and a relatively stable exchange rates.

The Federal Government's Budget Law estimates a net income of R\$1,804.5 billion and net expenses of R\$1,868.2 for 2023, causing a fiscal deficit of R\$63.7 billion. The reduction in primary expenses (i.e. social security benefits or public salaries) proportionate to GDP will be significant, from 19.0% to 17.6%. Such reduction is mostly related to discretionary expenses of the executive branch, which were reduced by 36.0% when compared to the budget for 2022. This effect is a result of the combination of the budgetary flexibility adopted by the Brazilian federal government in 2022 with a limitation imposed by the spending cap for 2023 (of which 93.0% of the expenses are primary, especially those related to the public pension plan).

According to IFI (*Instituição Fiscal Independente*), the estimated tax revenues for 2023 are based on uncertain assumptions about GDP and the basis used in 2022. The Brazilian executive branch adopted the positive tax revenues trend in 2022 as a structural result expected to be repeated in 2023. Other income sources will be negatively affected, considering the lack of new privatizations, a decrease in income from raw material sales, dividend payments and lower profit sharing related to oil trading prices and the ongoing tax exemptions on fuels for 2023 (especially the CIDE tax on fuel). For 2023, the Brazilian federal government expects that income tax revenues will represent almost half of the federal tax revenues unrelated to social welfare. This casts further doubts on the likelihood that the 2022 campaign promises made by both Mr. Lula da Silva and Mr. Bolsonaro regarding the readjustment in federal income tax brackets would be made.

Half of the ministries in the executive branch had their budgets reduced, especially the Ministry of Regional Development with a reduction of 49.3%, the Ministry of Science and Technology with a reduction of 19.0% and the Ministry of Infrastructure with a reduction of 7.5%. The budgets for only five ministries will not be considerably reduced for 2023, namely the Ministry of Education, Ministry of Health, Ministry of Labor and Ministry of Citizenship and Defense, although almost all of such budgets are expected to be used for payroll and social benefits. The expenses are expected to grow more considerably in the Ministry of Labor and Social Security (an increase of 8.2%), which is responsible for paying for the benefits related to the public pension plan. For the other branches of the government, the growth in expenses is expected to be around 11.0% in all offices, considering either an increase in spending caps or taking in consideration unused funds in 2022.

With the end of certain checks and balances on government spending in 2022, a federal budget deficit is expected for 2023. In 2022, the nominal expansion of GDP contributed to an increase in nominal tax revenues as a result of inflation, a return of in person working, record commodity prices and a series of short term measures adopted in Brazil (increase in *Auxílio Brasil*, anticipation of the 13rd salary, availability of R\$1,000 from labor security funds (FGTS) and other measures). With the end of such efficiency gains, the Federal Government's Budget Law predicts a deficit of around R\$60 billion in 2023, but that number may be underestimated, considering that the estimated deficit does not reflect certain ongoing subsidies in 2023 (i.e. *Auxílio Brasil* and readjustments in income tax brackets). In addition, government projections for the public debt trends in the next decade are more optimistic when compared to market projections. Actual economic performance is highly dependent on Brazil's GDP growth.

We cannot predict which policies the Brazilian federal government may adopt or change or the effect that any such policies might have on our business or on the Brazilian economy. Any such new policies or changes to current policies may have a material adverse impact on our business, results of operations, financial condition and prospects. Worsening political and economic conditions in Brazil may increase production and supply chain costs and adversely affect our results of operations and financial condition. Uncertainty as to whether the Brazilian government will implement changes in policies or regulations affecting these or other factors in the future may contribute to economic uncertainty in Brazil and to heightened volatility in our production operations.

Inflation and government measures to curb inflation may adversely affect the Brazilian economy, the Brazilian securities market, our business and operations, financial condition and the market prices of our common shares and ADRs.

Brazil has experienced high rates of inflation in the past, while recent downward inflationary pressures caused the Brazilian consumer price inflation rates to reach 4.52% in 2020, 10.06% in 2021 and 5.79% in 2022, according to the IPCA, published by the IBGE. See "Item. 5. Operating and Financial Review and Prospects—A. Operating Results—Principal Factors Affecting Our Results of Operations—Brazilian and Global Economic Conditions" and "—Effects of Exchange Rate Variations and Inflation."

There can be no assurance that inflation rates will decrease nor stabilize. Although inflation levels have been relatively stable from 2018 to 2020, Brazil experienced an abrupt increase in inflation levels during 2021 and 2022 reaching the highest levels since 1994. Periods of higher inflation slow the growth rate of the Brazilian economy, which may lead to lower growth in consumption of food products. High inflation also puts pressure on industry costs of production and expenses, which may force companies to search for innovative solutions in order to remain competitive. We may not be able to pass any such increase in costs onto our customers and, as a result, it may adversely impact our results of operations and financial condition. In addition, high inflation generally leads to higher domestic interest rates, and, as a result, the costs of servicing our debt may increase. Furthermore, inflation and its effect on domestic interest rates can lead to reduced liquidity in the domestic capital and lending markets, which could affect our ability to refinance our indebtedness and may have an adverse effect on our business, results of operations, financial condition and the market prices of our common shares and ADRs.

Fluctuations in interest rates may have an adverse effect on our business, financial condition and the market prices of our common shares and ADRs.

The Brazilian Central Bank uses interest rates to attempt to keep inflation under control or to stimulate the economy. If interest rates decrease, there is generally greater access to credit and consumption of goods typically increases. This increase in demand can in turn result in inflation. On the other hand, if interest rates go up, the cost of borrowing increases which may inhibit consumption and additional investments. Another consequence of a rising interest rate is that a greater return is paid in respect of government securities, which may impact other investments by making them less attractive by comparison. As a result, there may be additional investment in public debt, which absorbs money that could otherwise fund the private sector.

As of December 31, 2022, 35.1% of the outstanding amount of principal and interest of our loans and borrowings of R\$23,517,000 thousand was either: (i) denominated in (or swapped into) *reais* and bears interest based on Brazilian floating interest rates, such as the Interbank Deposit Certificate Rate (*Certificado de Depósito Interbancário*), or CDI, an interbank certificate of deposit rate that applies to our foreign currency swaps and some of our other real-denominated indebtedness, or the IPCA; or (ii) U.S. dollar-denominated and bears floating interest based on the London Interbank Offered Rate, or LIBOR, and secured overnight financing rate, or SOFR. Any increase in the CDI, IPCA, SOFR or LIBOR rates may have an adverse impact on our financial expenses and our results of operations.

Exchange rate fluctuations may adversely affect our financial condition and results of operations.

From time to time, there have been significant fluctuations in the exchange rate between the Brazilian currency and the U.S. dollar and other currencies. The *real* appreciated 16.5% in 2016, and depreciated 1.5%, 17.1%, 4.0%, 22.4% and 7.39%, in 2017, 2018, 2019, 2020 and 2021, respectively, against the U.S. dollar. Following the start of the COVID-19 pandemic, the *real* depreciated significantly against the U.S. dollar, reflecting low interest rates, a deteriorating economic environment and a political crisis. The *real* appreciated 6.50% in 2022, starting at a historical high and appreciating along the year, reflecting higher interest rates in Brazil and higher prices for commodities exports. As of December 31, 2022, the *real*/U.S. dollar exchange rate was R\$5.2177 to US\$1.00 and as of April 14, 2023, the *real*/U.S. dollar exchange rate was R\$4.9449 to US\$1.00.

Appreciation of the Brazilian *real* against the U.S. dollar may lead to a dampening of export-driven growth. Our production costs are denominated in *reais*, but our international sales are mostly denominated in U.S. dollars. Revenues generated by exports are reduced when translated to *reais* in the periods in which the *real* appreciates in relation to the U.S. dollar. Any appreciation could reduce the competitiveness of our exports and adversely affect our net sales and our cash flows from exports. On the other hand, a depreciation of Brazilian *real* against the U.S. dollar may lead to higher exports and revenues, but costs may be higher.

Costs are also directly impacted by exchange rates. Any depreciation of the *real* against the U.S. dollar could create additional inflationary pressures in Brazil by increasing the price of imported products and requiring deflationary government policies. In addition, the prices of soy meal and soybeans, which are important ingredients for our animal feedstock, are closely linked to the U.S. dollar, and many of the mineral nutrients added to our feedstock must be purchased in U.S. dollars. The price of corn, another important ingredient for our feedstock, is also linked to the U.S. dollar, but to a lesser degree. In addition to feedstock ingredients, we purchase sausage casings, breeder eggs, packaging and other raw materials, as well as equipment for use in our production facilities, from suppliers located outside Brazil whom we must pay in U.S. dollars or other foreign currencies. When the *real* depreciates against the

U.S. dollar, the cost in *reais* of our U.S. dollar-linked raw materials and equipment increases, and these increases could materially adversely affect our results of operations. We have established policies and procedures to manage our sensitivity to such risks included in our Financial Risk Management Policy. This policy, however, may not adequately cover our revenue and cost exposure to exchange rates.

We had total foreign currency-denominated loans and borrowings in an aggregate amount of R\$12,549,181 thousand as of December 31, 2022, representing 53.3% of our total consolidated indebtedness at that date. Although we manage a portion of our exchange rate risk through foreign currency derivative instruments and future cash flows from exports in U.S. dollars and other foreign currencies, our foreign currency debt obligations are not completely hedged. A significant devaluation of the *real* in relation to the U.S. dollar or other currencies would increase the amount of *reais* that we would need in order to meet debt service requirements of our foreign currency-denominated obligations.

Changes in tax laws or changes in their interpretation may increase our tax burden and, as a result, negatively affect our results of operations and financial condition.

The Brazilian government regularly implements changes to tax regimes that may increase our and our suppliers' and customers' tax burdens, which may in turn increase the prices we charge for the products we sell, restrict our ability to do business in our existing markets and, therefore, materially adversely affect our results of operations and financial condition.

These changes include modifications in the tax rates and, on occasion, enactment of temporary taxes, the proceeds of which are earmarked for designated governmental purposes. In the past, the Brazilian government has presented certain tax reform proposals, which have been mainly designed to simplify the Brazilian tax system, to avoid internal disputes within and between the Brazilian states and municipalities, and to redistribute tax revenues. The tax reform proposals provide for changes in the rules governing the federal Social Integration Program (*Programa de Integração Social*) or PIS, and Contribution for Social Security Funding (*Contribuição para o Financiamento da Seguridade Social*), or COFINS, taxes, ICMS and certain other taxes, such as increases in payroll taxes and in the withholding tax over dividend distributions. The proposals are being discussed by the Brazilian National Congress which has increased the pressure on the Brazil government to advance on tax reforms. Other tax regimes, such as the research and development tax incentive program (*Lei do Bem*) and the deduction of interest on shareholders' equity, may be revoked to increase the government's revenues in light of a possible reduction in the income tax rate, which has been and is being discussed in the Brazilian National Congress. The effects of these proposed tax reform measures and any other changes that could result from the enactment of additional tax reforms have not been, and cannot be, quantified yet due to the uncertainty of whether any changes will be implemented. Changes in Brazilian state tax legislation may also have a negative impact on our business and financial results, especially considering the results of the 2022 Brazilian elections, in which various newly elected and re-elected state governors made campaign promises to pursue greater fiscal discipline and balanced budgets for their respective states. The most negative effects of the pandemic in Brazil have been gradually improving, but Brazilian states still need to address the increase in social policy demands and the reduction in tax revenues caused by the limited application of ICMS on fuel, electricity and telecommunications services. Under these circumstances, proposals for taxation of production tend to increase in popularity, such as has been observed in the Brazilian states of Goiás, Paraná and Mato Grosso. The newly elected and re-elected state governors may adopt more extreme measures to increase tax revenues for the states. This situation has been further exacerbated by the uncertainties related to the compensation of losses in tax revenues of the states by the federal government. Some of these measures, if enacted, may result in increases in our overall tax burden, which may adversely affect our overall financial performance. Moreover, certain tax laws may be subject to controversial interpretation by tax authorities. In the event that tax authorities interpret tax laws in a manner that is inconsistent with our interpretations, we may be adversely affected.

Risks Relating to Our Common Shares and Our ADRs

Holders of ADRs may find it difficult to exercise voting rights at our shareholders' meetings.

Holders of ADRs may exercise voting rights with respect to our common shares represented by American Depositary Shares, or ADSs, and evidenced by ADRs only in accordance with the deposit agreement governing the ADRs. Holders of ADRs face practical limitations in exercising their voting rights because of the additional steps involved in our communications with ADR holders. For example, we are required to publish a notice of our shareholders' meetings in specified newspapers in Brazil. Holders of our common shares are able to exercise their voting rights by attending a shareholders' meeting in person or virtually (whenever the shareholders' meeting is held under a partial or 100% digital format), by means of the distance voting form (*boletim de voto a distância*) or by voting by proxy. By contrast, holders of ADRs will receive notice of a shareholders' meeting by mail from the ADR depositary if we give notice to the depositary requesting the depositary to do so. To exercise their voting rights, holders of ADRs must instruct the ADR depositary on a timely basis. This voting process necessarily takes longer for holders of ADRs than for holders of our common shares. If the ADR depositary fails to receive timely voting instructions for all or part of the ADRs, the depositary will assume that the holders of those ADRs are instructing it to give a discretionary proxy to a person designated by us to vote their ADRs, to the extent permitted by the New York Stock Exchange rules.

Holders of ADRs also may not receive the voting materials in time to instruct the depositary to vote our common shares underlying the ADSs that are evidenced by their ADRs. In addition, the depositary and its agents are not responsible for failing to carry out voting instructions of the holders of ADRs or for the manner of carrying out those voting instructions. Accordingly, holders of ADRs may not be able to exercise voting rights, and they have little, if any, recourse if the common shares underlying the ADSs that are evidenced by their ADRs are not voted as requested.

Non-Brazilian holders of ADRs or common shares may face difficulties in protecting their interests because we are subject to different corporate rules and regulations as a Brazilian company, and our shareholders may have less extensive rights.

Holders of ADRs are not direct shareholders of our company and may be unable to enforce the rights of shareholders under our bylaws and Brazilian Law No. 6,404, dated December 15, 1976, as amended, or Brazilian Corporate Law.

Our corporate affairs are governed by our bylaws and Brazilian Corporate Law, which differ from the legal principles that would apply if we were incorporated in a jurisdiction in the United States, such as the State of Delaware or New York, or elsewhere outside Brazil. Even if a holder of ADRs surrenders its ADRs and becomes a direct shareholder, its rights as a holder of our common shares under Brazilian Corporate Law to protect its interests relative to actions by our board of directors or executive officers may be limited compared to the laws of those other jurisdictions.

Although insider trading and price manipulation are crimes under Brazilian law, the Brazilian securities markets are subject to different levels of regulations and supervision compared to the U.S. securities markets or the markets in some other jurisdictions. In addition, rules and policies against self-dealing or for preserving shareholder interests may be less well defined and enforced in Brazil than in the United States and certain other countries, which may put non-Brazilian holders of our common shares or ADRs at a potential disadvantage. Corporate disclosures also may be less complete or informative than for a public company in the United States or in certain other countries.

Non-Brazilian holders of ADRs or common shares may face difficulties in serving process on or enforcing judgments against us and other persons.

We are a corporation (*sociedade anônima*) organized under the laws of Brazil, and all of our directors and executive officers and our independent public accountants reside or are based in Brazil. Most of the assets of our company and of these other persons is located in Brazil. As a result, it may not be possible for non-Brazilian holders of ADRs or common shares to effect service of process upon us or these other persons within the United States or other jurisdictions outside Brazil or to enforce against us or these other persons judgments obtained in the United States or other jurisdictions outside Brazil. Because judgments of U.S. courts for civil liabilities based upon the U.S. federal securities laws may only be enforced in Brazil if certain conditions are met, non-Brazilian holders of ADRs or common shares may face greater difficulties in protecting their interests in the case of actions by us or our directors or executive officers than would shareholders of a U.S. corporation.

Judgments of Brazilian courts with respect to our common shares may be payable only in reais.

If proceedings are brought in the courts of Brazil seeking to enforce our obligations in respect of the common shares, we may not be required to discharge our obligations in a currency other than *reais*. Under Brazilian exchange control limitations, an obligation in Brazil to pay amounts denominated in a currency other than *reais* may only be satisfied in Brazilian currency at the exchange rate, as determined by the Central Bank, in effect (1) on the date of actual payment, (2) on the date on which such judgment is rendered or (3) on the date on which collection or enforcement proceedings are commenced. The then prevailing exchange may not afford non-Brazilian investors with full compensation for any claim arising out of or related to our obligations under the common shares or the common shares represented by ADRs.

Holders of ADRs and non-Brazilian holders of our common shares may be unable to exercise preemptive rights and tag-along rights with respect to our common shares underlying the ADSs evidenced by their ADRs.

Holders of ADRs and non-Brazilian holders of our common shares may be unable to exercise the preemptive rights and tag-along rights relating to our common shares (including common shares underlying the ADSs evidenced by their ADRs) unless a registration statement under the U.S. Securities Act of 1933, as amended, or the “Securities Act,” is effective with respect to those rights or an exemption from the registration requirements of the Securities Act is available. We are not obligated to file a registration statement with respect to the shares relating to these preemptive rights, and we cannot assure you that we will file any such registration statement. Unless we file a registration statement or an exemption from registration is available, a holder may receive only the net proceeds from the sale of his or her preemptive rights or tag-along rights, or if these rights cannot be sold, they will lapse and the holder will receive no value from them.

Provisions in our bylaws may prevent efforts by our shareholders to change our control or management.

Our bylaws contain provisions that may discourage, delay or make more difficult a change in control of our company or removal of our directors. These provisions require any shareholder that acquires shares representing 33.33% or more of our share capital, or the Equity Percentage Threshold, to disclose such information immediately through a filing with the Securities and Exchange Commission of Brazil (*Comissão de Valores Mobiliários*), or CVM, and, within 30 days from the date of such acquisition or event, commence a public tender offer, or the Public Takeover Tender Offer, with respect to all of our shares for a price per share that may not be less than the greater of: (i) 140% of the average trading price on the stock exchange trading the greatest volume of shares of our capital stock during the last 120 trading sessions prior to the date on which the public offer became obligatory; and (ii) 140% of the average trading price on the stock exchange trading the greatest volume of shares of our capital stock during the last 30 trading days prior to the date on which the public offer became obligatory. This provision is subject to limited exceptions. Particularly, our bylaws does not require the launch of a Public Takeover Tender Offer if the ownership of our shares by any given shareholder equals or exceeds the Equity Percentage Threshold upon the acquisition of shares as a result of either (a) statutory succession, to the extent the relevant shareholder sells the shares exceeding the Equity Percentage Threshold within 60 days, (b) merger of another legal entity into the Company, (c) merger of shares of another legal entity into the Company, or (d) the subscription of newly issued shares of the Company, in a single primary issuance approved by the Company’s general shareholders meeting, in accordance with the applicable regulations.

These provisions of our bylaws may delay, defer or prevent a transaction or a change in control that might otherwise be in the best interests of our shareholders.

Our capital stock may make us susceptible to the emergence of shareholders with significant stakes, alliances between shareholders, possible conflicts between shareholders and other events arising from the absence of a controlling shareholder or control group, and that may lead to changes in our corporate policies and strategies.

We are subject to the emergence of controlling shareholders, control groups or even shareholders with significant stakes or agreements between our shareholders, which could subject us to a situation analogous to the existence of a control group.

If a shareholder or group of shareholders with a significant stake of our voting equity arises and exercises decision-making powers and prevails in general meetings, we may undergo changes in or negative impacts on our corporate policies and strategies, including with respect to the composition of our management. For instance, our current board of directors was elected based on a slate proposal presented on February 22, 2022 by our shareholders Marfrig Global Foods S.A., or Marfrig, and Fundo de Investimento em Ações Colorado - Investimento no Exterior, which jointly owned 33.25% of our capital stock at the time. See “Item 6. Directors and Senior Management and Employees–A. Directors and Senior Management–Board of Directors” for further information regarding our board of directors. In addition, in Marfrig’s annual audited financial statements for the year ended December 31, 2022, that it published on its public website in March 2023, Marfrig stated in note 5.12 that as of April 1, 2022, Marfrig obtained “control” of BRF in accordance with applicable Brazilian accounting rules, as Marfrig is considered to have a significant stake of our voting equity and influence over us. We note that the definition of “control” for accounting purposes and for considering the applicability of the business combination standard differs from the definition of “controlling shareholder” and “controlled company” pursuant to Brazilian corporate law, which defines a company as being controlled if its parent company, directly or through other subsidiaries, holds shareholder rights that ensure, on a permanent basis, a preponderance for voting on corporate resolutions and the power to elect the majority of management of the company. See “Item 7. Major Shareholders and Related Party Transactions A. Major Shareholders.” for further information regarding our major shareholders. Any significant change in the composition of our management, business policy or strategic direction, as well as any process of acquisition of control, or any dispute between shareholders regarding their respective rights, may change or negatively affect our business, strategy or results of operations.

For more information, see “–Provisions in our bylaws may prevent efforts by our shareholders to change our control or management.”

Holders of ADRs could be subject to Brazilian income tax on capital gains from sales of ADRs.

Historically, any capital gain realized on a sale or other disposition of ADRs between non-Brazilian holders outside Brazil was not subject to Brazilian income tax. However, a December 2003 Brazilian law (Law No. 10,833, of December 29, 2003) provides that the acquirer, individual or legal entity resident or domiciled in Brazil, or the acquirer's attorney-in-fact, when such acquirer is resident or domiciled abroad, shall be responsible for the retention and payment of the income tax applicable to capital gains earned by the individual or legal entity resident or domiciled abroad who disposes of property located in Brazil. The Brazilian tax authorities have issued a normative instruction confirming their intention to assess income tax on capital gains earned by non-Brazilian residents whose assets are located in Brazil. It is unclear whether ADSs representing our common shares and evidenced by ADRs, which are issued by the ADR depository outside Brazil, will be deemed to be property located in Brazil for purposes of this law. Accordingly, we cannot determine whether Brazilian tax authorities will attempt to tax any capital gains arising from the sale or other disposition of the ADRs, even when the transaction is consummated outside Brazil between non-Brazilian residents.

Brazilian taxes may apply to a gain realized by a non-Brazilian holder on the disposition of common shares to another non-Brazilian holder.

The gain realized by a non-Brazilian holder on the disposition of common shares to another non-Brazilian holder (other than a disposition of shares held pursuant to Resolution No. 4,373, as amended of the Brazilian National Monetary Council (*Conselho Monetário Nacional*), or CMN is generally viewed as being subject to taxation in Brazil. Pursuant to Article 26 of Law No. 10,833/03, Brazilian tax authorities may assess income tax on capital gains earned by non-Brazilian residents in transactions involving assets that are located in Brazil. Under Brazilian law, the rules and applicable rates of the withholding income tax on such gains can vary depending on the domicile of the non-Brazilian holder (if the non-Brazilian holder is or is not resident or domiciled in a Tax Haven), the type of registration of the investment held by the non-Brazilian holder with the Brazilian Central Bank and how the disposition is carried out. Capital gains are subject to withholding income tax at a rate of up to 25%, depending on the specific case applicable.

Any other gains realized on the disposition of common shares that are not carried out on the Brazilian stock exchange:

- are subject to income tax at the following progressive rate when realized by any non-Brazilian holder that is not a Tax Haven Resident, whether or not such holder is a Registered Holder:
 - i. 15% upon the portion of capital gains not exceeding R\$5,000,000.00;
 - ii. 17.5% upon the portion of capital gains that exceeds R\$5,000,000.00 but not exceeding R\$10,000,000.00;
 - iii. 20% upon the portion of capital gains that exceeds R\$10,000,000.00 but not exceeding R\$30,000,000.00; and
 - iv. 22.5% upon the portion of capital gains that exceeds R\$30,000,000.00.
- are subject to income tax at a rate of 25% when realized by an individual or legal entity that is a Tax Haven Resident, whether or not such holder is a Registered Holder.

The relative volatility and limited liquidity of the Brazilian securities markets may negatively affect the liquidity and market price of our common shares and ADRs.

The Brazilian securities markets, including the B3 exchange, are substantially smaller, less liquid and more volatile than major securities markets in the United States. The Brazilian securities markets are also characterized by considerable share concentration.

The ten largest companies in terms of market capitalization represented approximately 47% of the aggregate market capitalization of the São Paulo Stock Exchange as of December 31, 2022. In addition, the ten most widely traded stocks in terms of trading volume accounted for approximately 40% of all shares traded on the São Paulo Stock Exchange as of December 31, 2022. These market characteristics may substantially limit the ability of holders of ADRs to sell common shares underlying ADSs evidenced by ADRs at a price and at a time when they wish to do so and, as a result, could negatively impact the market prices of these securities.

Developments and the perception of risks in other countries, especially emerging markets, may adversely affect the market price of our common shares and ADRs.

The market for securities issued by Brazilian companies is influenced, to varying degrees, by economic and market conditions in other emerging markets. Although economic conditions are different in each country, the reaction of investors to developments in one country may cause the capital markets in other countries to fluctuate. Developments or adverse economic conditions in other emerging markets have at times resulted in significant outflows of funds from, and declines in, the amount of foreign currency invested in Brazil. In addition, economic and political crises in Latin America or other emerging markets may significantly affect perceptions of the risk inherent in investing in the region, including Brazil.

The Brazilian economy, as well as the market for securities issued by Brazilian companies, is also affected, to varying degree, by international economic and market conditions generally, especially economic and market conditions in the United States. Share prices on the São Paulo Stock Exchange, for example, have historically been sensitive to fluctuations in U.S. interest rates as well as movements of the major U.S. stock indexes.

Additionally, uncertainties related to global economic activity may result in significant volatility in both Brazilian and international financial markets and economic indicators, including exchange rates, interest rates and credit spreads. For example, as a result of heightened volatility generated by the onset of the COVID-19 pandemic and its perceived future impact on global economic activity, the B3's circuit breaker was triggered eight times in March 2020. We are unable to estimate or quantify all economic and operational consequences of the COVID-19 pandemic, particularly in emerging markets, or the macroeconomic effects this or other worldwide dislocations may have on equities traded on global stock exchanges, including the trading of our common shares and ADRs.

In addition, the invasion of Ukraine by Russia has created a period of acute economic uncertainty, volatility and disruption for global markets, leading to an increase in the prices of energy and biomass inputs and, consequently, higher inflation. Although the length and impact of the ongoing military conflict is highly unpredictable, the conflict in Ukraine and any other geopolitical tensions could have an adverse effect on the market price of our common shares and ADRs. For additional information, see “—Geopolitical and other challenges and uncertainties due to the ongoing military conflict between Russia and Ukraine could have a material adverse effect on the global economy, certain material and commodity prices and our business.”

In this way, any significant change in the global financial markets or the Brazilian economy may decrease the interest of investors in assets from Brazil and other countries in which we do business, including our common shares, which may adversely affect the trading price of our common shares and ADRs, or decrease liquidity of our common shares and ADRs generally in addition to hindering our access to the equity capital markets and to financing in the future on acceptable terms or at all.

We may become a passive foreign investment company, which could result in adverse U.S. tax consequences to U.S. investors.

Based on our financial statements, relevant market and shareholder data, and the projected composition of our income and valuation of our assets, including goodwill, we do not believe that we were a passive foreign investment company, or “PFIC”, for U.S. federal income tax purposes for 2022, and we do not expect to be a PFIC for 2023, although we can provide no assurances in this regard. If we become a PFIC, U.S. holders of our common shares or ADRs may become subject to increased tax liabilities under U.S. tax laws and regulations and will become subject to burdensome reporting requirements. The determination of PFIC status is fact-specific and will depend on the composition of our income and assets from time to time, and a separate determination must be made each taxable year as to whether we are a PFIC (after the close of each such taxable year). Specifically, for any taxable year we will be classified as a PFIC for U.S. tax purposes if either (i) 75% or more of our gross income in that taxable year is passive income or (ii) the percentage of our assets (which includes cash) by value (determined on the basis of a quarterly average) in that taxable year which produce or are held for the production of passive income is at least 50%. The calculation of the value of our assets (including goodwill and certain intangible assets) will be based, in part, on the quarterly market value of our common shares and ADRs, which is subject to change. Accordingly, it is possible that we may become a PFIC for 2023 or future taxable years due to changes in our income or asset composition.

We may need to raise additional funds in the future and may issue additional common shares or convertible securities, which may result in a dilution of your interest in our common shares underlying the ADSs. In addition, a dilution of your interest in our common shares underlying the ADSs may occur in the event of our merger, consolidation or any other corporate transaction of similar effect in relation to companies that we may acquire in the future.

We may have to raise additional funds in the future through private or public offerings of shares or other securities convertible into shares issued by us. The funds we raise through the public distribution of shares or securities converted into shares may be obtained with the exclusion of right of first refusal of our existing shareholders, including investors in our common shares underlying the ADSs, as provided by the Brazilian Corporate Law, which may dilute the interest of our then-existing investors. In addition, a dilution of your interest in our common shares underlying the ADSs may occur in the event of merger, consolidation or any other corporate transaction of similar effect in relation to companies that we may acquire in the future.

Our shareholders may not receive dividends or interest on capital.

Pursuant to our bylaws, we must pay our shareholders at least 25% of our annual net income, calculated and adjusted in accordance with the Brazilian Corporate Law, in the form of dividends or interest on equity. Our net income may be capitalized, used to offset losses or retained in accordance with the Brazilian Corporate Law and, therefore, may not be fully available for the payment of dividends or interest on equity. In addition, the Brazilian Corporate Law allows a company not to make such mandatory distribution of dividends in a given fiscal year, if it is incompatible with its financial situation. For more information, see “Item 10. Additional Information--B. Memorandum and Articles of Association--Description of Share Capital”, “--Allocation of Net Income and Distribution of Dividends” and “--Payment of Dividends and Interest on Shareholders’ Equity”. In the last 6 fiscal years, we did not distribute dividends or paid interest on shareholders’ equity. Furthermore, based on our financial information as of December 31, 2022, our accumulated loss was R\$2,363,073 thousand. We may only distribute dividends after offsetting the accumulated losses with operating profits or using reserves. In the event of such events, holders of our common shares may not receive dividends or interest on shareholders' equity.

Finally, the income tax exemption on the distribution of dividends and the taxation currently levied on the payment of interest on equity provided for in current legislation may be reviewed and both received and distributed dividends may become taxed and/or or, in the case of interest on equity, have its taxation increased in the future, impacting the net amount to be received by our shareholders as profit sharing.

If you surrender your ADSs and withdraw common shares, you risk losing the ability to remit foreign currency abroad and certain Brazilian tax advantages.

As an ADS holder, you benefit from the electronic certificate of foreign capital registration obtained by the custodian for our common shares underlying the ADSs in Brazil, permitting the custodian to convert dividends and other distributions with respect to our common shares into non-Brazilian currency and remit the proceeds abroad. If you surrender your ADSs and withdraw common shares, you will be entitled to continue to rely on the custodian's electronic certificate of foreign capital registration for only five business days from the date of withdrawal. Thereafter, upon the disposition of distributions relating to our common shares, unless you obtain your own electronic certificate of foreign capital registration, or you qualify under Brazilian foreign investment regulations that entitle certain foreign investors to buy and sell shares on Brazilian stock exchanges without obtaining separate electronic certificates of foreign capital registration, you would not be able to remit abroad non-Brazilian currency. In addition, if you do not qualify under the foreign investment regulations, you will generally be subject to less favorable tax treatment of dividends and distributions on, and the proceeds from any sale of, our common shares.

We and the depositary are entitled to amend the deposit agreement and to change the rights of ADS holders under the terms of such agreement, and we may terminate the deposit agreement, without the consent of the ADS holders.

We and the depositary are entitled to amend the deposit agreement and to change the rights of the ADS holders under the terms of such agreement, without the consent of the ADS holders. We and the depositary may agree to amend the deposit agreement in any way we decide is necessary or advantageous to us. Amendments may reflect, among other things, operational changes in the ADS program, legal developments affecting ADSs or changes in the terms of our business relationship with the depositary. In the event that the terms of an amendment are disadvantageous to ADS holders, ADS holders will only receive 30 days' advance notice of the amendment, and no consent of the ADS holders is required under the deposit agreement. Furthermore, we may decide to terminate the ADS facility at any time for any reason. For example, terminations may occur when we decide to list our shares on a non-U.S. securities exchange and determine not to continue to sponsor an ADS facility or when we become the subject of a takeover or a going-private transaction. If the ADS facility is to be terminated, ADS holders will receive prior notice, but no consent is required from them. In the event that we decide to make an amendment to the deposit agreement that is disadvantageous to ADS holders or terminate the deposit agreement, the ADS holders may choose to sell their ADSs or surrender their ADSs and become direct holders of our underlying common shares, but will have no right to any compensation whatsoever.