	At December 31,				
	2018	2017	2016	2015	2014
	(in millions of *reais*, except as otherwise indicated)				
Balance Sheet Data					
Cash and cash equivalents	4,869.6	6,010.8	6,356.9	5,362.9	6,006.9
Trade accounts receivable, net	2,604.9	3,919.0	3,085.1	3,876.3	3,046.9
Inventories	3,877.3	4,948.2	4,791.6	4,032.9	2,941.4
Assets held for sale	3,326.3	41.6	26.1	32.4	1,958.0
Total current assets	**19,030.9**	**19,185.4**	**18,893.7**	**19,180.1**	**17,488.3**
Property, plant and equipment, net	10,697.0	12,190.6	11,746.2	10,915.8	10,059.3
Intangible assets	5,019.4	7,197.6	6,672.6	5,010.9	4,328.6
Total non-current assets	**23,351.5**	**26,043.1**	**24,051.2**	**21,207.9**	**18,615.4**
Total assets	**42,382.4**	**45,228.5**	**42,944.9**	**40,388.0**	**36,103.7**
Short-term debt	4,547.4	5,031.4	3,245.0	2,628.2	2,738.9
Trade accounts payable	5,552.4	6,445.5	5,839.8	4,745.0	3,522.2
Total current liabilities	**14,488.6**	**14,874.4**	**12,640.4**	**11,621.2**	**9,569.1**
Long-term debt	17,618.1	15,413.0	15,717.4	12,551.1	8,850.4
Total non-current liabilities	**20,362.0**	**18,641.3**	**18,085.1**	**14,931.0**	**10,844.7**
Equity					
Capital	12,460.5	12,460.5	12,460.5	12,460.5	12,460.5
Total equity	**7,531.8**	**11,712.8**	**12,219.4**	**13,836.0**	**15,689.9**
Total liabilities and equity	**42,382.4**	**45,228.5**	**42,944.9**	**40,388.0**	**36,103.7**

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

Health risks related to our business and the food industry could adversely affect 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, 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.

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 *O157: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. We maintain systems designed to monitor food safety risks throughout all stages of production and distribution, but these systems 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.

On February 13, 2019, we announced a voluntary recall of approximately 164.7 metric tons of fresh chicken meat for the Brazilian domestic market and approximately 299.6 metric tons of fresh chicken meat for the international market due to a concern of salmonella contamination. While we believe we have taken all appropriate steps to address this issue, the recall resulted in increased costs and could negatively affect our brands' reputation. 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, results of operations, financial condition and prospects.

Even if our own products are not affected by contamination, our industry may face adverse 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.

We have recently been subject to significant investigations relating to, among other things, food safety and quality control.

Brazilian authorities are investigating Brazil's meat processing industry in the so-called "*Carne Fraca* Operation." The investigation involves a number of companies in the Brazilian industry and, among other things, includes allegations relating to food safety and quality control. On January 22, 2018, the Attorney General's Office of the Third District of the 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, who is a current member of our corporate engineering team, and the former head of quality control at our Mineiros plant, who was dismissed on August 16, 2016. Both of them were charged for allegedly committing crimes against consumers, as provided in article 7, item II of Law 8,137/90. According to the Attorney General's Office of the Third District of the State of Goiás, laboratory tests (dripping tests) have detected excessive levels of water absorbed by the chicken products collected by authorities at our Mineiros plant. The Attorney General's Office of the Third District of the State of Goiás alleges we produced chicken products with higher quantities of water than the limits permitted by the Brazilian Ministry of Agriculture, Livestock and Food Supply (*Ministério da Agricultura, Pecuária e Abastecimento*, or "MAPA"), with potential damages to customers, considering they would potentially be acquiring chicken meat products with a weight lower than that indicated on the packaging, since part of the weight of the frozen chicken would consist merely of water contained therein. The complaint does not contain any allegations of corruption.

On March 5, 2018, BRF learned of a decision issued by a federal judge of the 1st Federal Court of Ponta Grossa in the State of Paraná, which authorized the search and seizure of information and documents from us and certain current and former employees and the temporary detention of certain individuals. In what media reports have identified as the "*Trapaça* Operation," eleven current and former employees of BRF were temporarily detained for questioning, including former Chief Executive Officer Pedro Faria and former Vice President for Global Operations Helio Rubens. All such current and former employees have been released from custody, but all such current employees are on leaves of absence from BRF. A number of other BRF employees and former employees were identified for questioning. The primary allegations in the *Trapaça* Operation involve alleged misconduct relating to quality violations, improper use of feed components and falsification of tests at certain BRF manufacturing plants and accredited labs.

On October 15, 2018, the Brazilian Federal Police issued the final report on the investigation of the *Trapaça* Operation accusing forty-three people, among which twenty-three are BRF employees or former employees, including former Chief Executive Officer Pedro Faria, former chairman of the board of directors Abilio Diniz, and three former vice presidents. All such current employees are on leaves of absence from BRF. Allegations against these senior employees generally focused on communications relating to alleged dioxin contamination. Since then, the police investigation has been under review by the Brazilian Federal Prosecutor responsible for the case to determine whether or not to present criminal charges. See "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Legal Proceedings" for additional information. We are continuing to cooperate with the authorities and are also continuing our internal investigation with respect to the allegations.

As a result of the *Trapaça* Operation, on March 5, 2018, we received notice from MAPA that it immediately suspended exports from our Rio Verde/GO, Carambeí/PR and Mineiros/GO plants to 13 countries with specific sanitary requirements related to Salmonella spp. As a precautionary measure, MAPA also suspended exports from 10 other BRF plants to the European Union on March 15, 2018. This precautionary suspension was lifted on April 18, 2018 by MAPA. On May 14, 2018, the European Union released its decision to remove 12 of our production facilities in Brazil from the list that permits imports of animal products by the countries in the European Union. The European Union generally has stricter requirements related to salmonella levels and other food safety standards compared to Brazil and the international markets in which we operate. Given the ban of imports from our production facilities, we are no longer able to sell our products from such embargoed production plants in the European Union and, therefore, our results of operations may be further adversely affected if we are not able to direct excess production capacity resulting from such suspension to other markets at similar prices or margins.

Any of these investigations 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.

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 BRF 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 risks related to our business and the food industry could adversely affect our ability to sell our products. We have been recently subject to significant investigations relating to, among other things, food safety and quality control."

Some countries, such as Russia and South Africa, have a history of erecting trade barriers to 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. 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 BRF's exports. The investigation ended in February 2019 and Brazilian exporters agreed to certain minimum export prices for sales to China. Additionally, in August 2018, Iraq increased the tariff on poultry products from 10% to 60%.

Many developed countries use direct and indirect subsidies to enhance the competitiveness of their producers in other markets. In addition, local producers in some markets may exert political pressure on their governments to prevent foreign producers from exporting to their market, particularly during unfavorable economic conditions. 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.

For instance, 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. BRF and other Brazilian companies were therefore required to migrate their 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 BRF's plants. One of BRF's plants (Lajeado/RS) that had previously produced chicken meat for the Saudi Arabian market was not included as an authorized plant. However, the eight authorized plants have provided sufficient capacity to meet the demand of this market. Although we expect to be able to continue to shift production of chicken meat for Saudi Arabia to the authorized plants without a significant disruption to our shipments to Saudi Arabia, such changes may result in decreased revenues and additional expenses. Furthermore, there can be no assurance that the Saudi Arabian government will not further restrict our ability to export our products to Saudi Arabia, which could result in a material adverse impact on our business, financial condition and results of operations.

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 control disease. 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: (1) in the case of hogs and certain other animals, foot-and-mouth disease, influenza (H5N1) and African swine fever; and (2) 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. 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.

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 ("WHO"). The cases reported were caused by the H5N1 virus. In 2013, direct human-to-human transmission of the H7N9 virus was proven. Various countries in Asia, the Middle East and Africa reported human cases in the last five years and various European countries reported avian flu cases in poultry. In 2014, there were reports of human cases of avian influenza in Egypt, Indonesia, Cambodia, China and Vietnam. In the Americas, there were reports of human cases of avian influenza in both Canada and the United States. In early 2015, new cases of H5N1 and H5N2 reported in the United States resulted in restrictions on U.S. exports. In 2016, new outbreaks occurred in bird populations across Northern Europe, including France, the Netherlands, Switzerland, Finland, and Germany. Middle Eastern and African countries also had outbreaks during 2016. In early 2017, Chile, a neighboring country to Brazil, confirmed the occurrence of avian influenza. Additionally, beginning in August 2018, China reported a series of outbreaks of African swine fever.

Brazil has not yet had a documented case of avian influenza, although 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.

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.

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

We consider the potential effects of climate change when evaluating and managing our operations and supply chain, recognizing the vulnerability of natural resources and agricultural inputs that are essential for our activities. The main risks we have identified relate to the changes in temperature, changes in rainfall, including drought, flooding, storms and lack of water, which could affect agricultural productivity, animal welfare and the availability of energy. These changes could have a direct impact on our costs, 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 also consider potential regulatory changes and monitor trends in changes to licensing legislation for greenhouse gas emissions at the domestic and international levels.

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 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 result in a temporary disruption in production and delivery of products to customers and additional costs.

A significant portion of Brazil's electricity generation capacity is currently dependent upon hydroelectric facilities. Hydroelectric production is vulnerable to a variety of factors, including the variability of precipitation. If the amount of water available to energy producers becomes increasingly scarce due to drought or diversion for other uses, as has occurred in recent years, our energy expenses may increase. In order to increase our energy efficiency and reduce electricity demand, we are developing more efficient processes to consume less energy, but there can be no assurance that such efforts will be successful.

Among the initiatives we have taken to reduce our exposure to climate change and to maintain our competitiveness in terms of costs is the monitoring of grain stocks and purchases and the constant monitoring of the weather in agricultural regions to guide buying decisions, as well as anticipating price movements in the commodity markets. Other initiatives include technological innovations in our animal-raising installations to improve efficiency and safeguard the welfare of the animals. However, we may fail to effectively implement programs to reduce our exposure to climate change, which may adversely affect our business and results of operations in the future.

Any shortage or lack of water could materially adversely affect our business and results of operations.

A study conducted by the Food and Agriculture Organization indicates that, in the next two decades, the demand for water will increase 50% on a global scale. Additionally, it is estimated that by 2025, 1.8 billion people will live in areas with a shortage of water and two thirds of the global population will live in water-stressed areas. Water is an essential input for our businesses and is used in the production of grains and other agricultural inputs required for our production processes. As a result, the shortage or lack of water represents a critical risk for our business. In addition, we are aware that the industrial use of water may adversely affect its availability. Although Brazil holds nearly a fifth of the world's water reserves, the World Economic Forum warns that water crises remain one of the most relevant global risks.

We have developed procedures to reduce our water consumption, comply with applicable rules and minimize our impact on the environment and the community. In developing these procedures, we analyzed the micro and macro watersheds in the regions in which we operate and the industrial activities and characteristics of the use of water resources in order to understand the local demand growth. However, we may fail to accurately assess the water supply or anticipate water-related risks. This could result in us or our key suppliers encountering water shortages. In addition, the increased industrial use of water by water intensive businesses may also adversely affect the continuing availability and quality of water in Brazil. Whether unexpected or expected, the shortage or lack of water could materially adversely affect our business and results of operations.

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 nº 12,846, the U.S. Foreign Corrupt Practices Act of 1977 ("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.

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 and *Trapaça* Operation. For more details, see "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Legal Proceedings." As a result of the *Carne Fraca* Operation and *Trapaça* Operation and related matters, we incurred expenses and recorded provisions for losses in inventories in the total amount of R$492.8 million and R$363.4 million in 2018 and 2017, respectively, which negatively impacted our results of operations. Additionally, these or other proceedings may result in penalties, fines, sanctions or other forms of liability. 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.

When allegations of non-compliance with applicable anti-fraud, anti-corruption, anti-money laundering or other international laws and regulations arise, we attempt to act promptly to learn relevant facts, conduct appropriate due diligence and take any appropriate remedial action to address the issue. 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. Potential negative developments in the *Carne Fraca* Operation and *Trapaça* Operation may also negatively affect the market price of our common shares and American Depositary Receipts ("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 Banvit and other producers for alleged anticompetitive practices in connection with chicken meat production in Turkey. The TCA imposed an administrative fine of TRY 30,518,617.48, or approximately U.S.$5.2 million, against Banvit. For additional information, see "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Legal Proceedings—Civil, Commercial and Other Proceedings." Although we have internal policies and procedures designed to ensure compliance with applicable antitrust and competition laws and regulations, there can be no assurance that our internal policies and procedures 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, individuals and entities. However, 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 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 such countries. If we are found to be in violation of applicable sanctions laws or regulations, 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 laws and regulations. We may ultimately be held responsible for any such violation of sanctions laws and regulations 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.

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.

Our failure to continually 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. We devote significant resources to new product development and product extensions, but 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 could negatively affect not only our ability to generate innovative solutions, but also the in-market success of any such products. Additionally, BRF employees working on innovation and research and development could move to one of our competitors, which would compromise our ability to deliver new and innovative products and could 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 could 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, including in connection with the *Carne Fraca* Operation and *Trapaça* Operation, could adversely affect our brand image or lead to stricter regulations and greater scrutiny of food marketing practices.

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

We regularly review and pursue opportunities to rationalize our business through divestitures or expand by means of acquisitions, joint ventures and other initiatives. We have completed several divestitures and acquisitions in recent years. For additional details on certain of these transactions, see “Item 4. Information on the Company—A. History and Development of the Company.” Divestments, acquisitions, new businesses and joint ventures, particularly those involving sizeable businesses, may present financial, managerial, operational and compliance 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 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; and
- challenges receiving the necessary approvals from governments and international antitrust authorities.

We may be unable to realize the strategic benefits from our divestitures or acquisitions 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.

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, among others, to the following risks:

- governmental instability;
- geopolitical risk and conflicts (including war, terrorism and civil unrest);
- imposition of exchange or price controls;
- imposition of restrictions on exports of our products or imports of raw materials necessary for our production processes (including embargoes from countries where we have production and/or distribution activities);
- fluctuation of local currencies against the *real*;
- nationalization of our property;
- increases in export tax and income tax rates for our products; and
- unilateral (governmental) institutional and contractual changes, 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. For instance, it is unclear to us if the recent diplomatic crisis between Qatar and other Arab countries may lead to measures, such as trade embargoes, that could ultimately impact our current operations in Qatar and in the Middle East. In addition, Brazil’s current president announced Brazil’s intention to open a business office in Jerusalem. This announcement led to protest and unrest throughout the Middle East. The impact of these changes on our ability to deliver on our planned projects and execute our strategy cannot be ascertained with any degree of certainty, and these changes may, therefore, have an adverse effect on our operations and financial results.

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.

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 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.

Uncertainty as to whether the Brazilian government will implement significant changes 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.

Furthermore, on June 23, 2016, the United Kingdom held an in-or-out referendum on the United Kingdom's membership within the European Union, the result of which favored the exit of the United Kingdom from the European Union, or "Brexit." The United Kingdom was initially expected to depart the European Union on March 29, 2019, but on March 21, 2019, the European Union and the United Kingdom agreed to extend the deadline for Brexit. The European Union and the United Kingdom agreed to a further extension on April 10, 2019. The terms of the United Kingdom's withdrawal and the nature of its future relationship with the European Union are still being decided. Furthermore, the departure may be delayed further. This referendum has caused and may continue to cause political and economic uncertainty, including significant volatility in global stock markets and currency exchange rate fluctuations. If no agreement is reached prior to the deadline for Brexit, the United Kingdom's membership in the European Union could terminate under a so-called "hard Brexit". The effects of Brexit will depend on many factors, including any agreements that the United Kingdom makes to retain access to European Union markets either during a transitional period or more permanently. Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the United Kingdom determines which European Union laws to replace or replicate. In a "hard Brexit" scenario, 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 currently operates 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. Depending on the terms of Brexit, economic conditions in the United Kingdom, the European Union and global markets may be adversely affected by reduced growth and volatility. The uncertainty before, during and after the period of negotiation could also have a negative economic impact and increase volatility in the markets, particularly in the Eurozone.

Our results of operations are subject to cyclicality and volatility affecting both our raw material prices and our selling prices.

Our business is largely dependent on the cost and supply of corn, soy meal, soybeans, hogs 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. These other factors include, among others, fluctuations in local and global poultry and hog production levels, environmental and conservation regulations, economic conditions, weather, animal and crop diseases, cost of international freight and exchange rate and interest rate fluctuations. In addition, prices for our raw materials, including corn, soy meal and soybeans, have been affected, and may continue to be affected, by the ongoing trade dispute between the U.S. and China. It is unclear whether this trade dispute will be resolved and what effects it may have on global political and economic conditions in the long term. Any changes in the price of raw materials required to produce our products as a result of the foregoing or other factors could have a material 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 cyclicality or volatility, which may have an adverse effect on our operations and financial results.

Natural disasters, pandemics or extreme weather, including floods, 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.

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 43.8% of our net sales in 2016, 43.5% of our net sales in 2017 and 43.3% of our net sales in 2018. Our external market is comprised of two business units: Halal (predominantly Islamic markets, including Turkey, North of Africa, Gulf Cooperation Council (GCC) and Malaysia) and International (Asia, Europe, Eurasia, Africa and Americas), where we are subject to many of the same risks described below 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;
- commodities price volatility;
- deterioration in global economic conditions;
- political risks, such as 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;
- strikes or other events affecting ports and other transport facilities;
- 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;

- sabotage affecting our products; and

- negative media exposure related to the Brazilian agriculture and/or meat processing industry, including in connection with the *Carne Fraca* Operation and/or *Trapaça* Operation.

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. 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. Although the main barrier to these companies entering the Brazilian market has been the need to build a comprehensive distribution network, including a network of outgrowers (outsourced farmers), foreign competitors with significant resources could undertake to build and/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.

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 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. Although Brazil currently has limited regulations regarding animal welfare, we have adopted worldwide animal welfare practices to serve our clients. 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.

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, 2018, we had approximately 105,000 employees worldwide. All of our production employees in Brazil and in countries where there is a labor union force are 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 us paying higher wages or benefits to union workers. Additionally, if we are unable to negotiate acceptable union agreements, we may become subject to work stoppages or strikes.

Labor costs are among our most significant expenditures. Such costs represented approximately 14.4% of our cost of sales in 2018. In the event of a review of our employee contract structure, additional operational expenses could be incurred. Additionally, during our normal business operation, we outsource some of our labor force, which subjects us to claims that may arise from these relationships, including claims directly against us as if we were the direct employer of the outsourced workers. In the event that a significant amount of these claims result 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 to be core activities, 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.

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 areas and permanent preservation areas, handling and disposal of waste, discharges of 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 without any caps. Civil penalties may include summons, fines, temporary or permanent bans, the suspension of subsidies by public bodies and the temporary or permanent shutdown of commercial activities. Criminal penalties include fines, temporary interdiction of rights and prison (for individual offenders) and liquidation, temporary interdiction of rights, fines and community services (for legal entities). Additionally, pursuant to Brazilian environmental laws, the corporate entity of a company will be disregarded (such that the owners of the company will be liable for its debts) if necessary to guarantee the payment of costs related to the recovery of environmental damages whenever the legal entity is deemed by a court to be an obstacle to reimbursement of environmental damages.

We have incurred, and will continue to incur, capital and operating expenditures to comply with these 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 could increase from current levels and could adversely affect the availability of funds for capital expenditures and other purposes. Compliance with existing or new environmental laws and regulations, as well as obligations in agreements with public entities, could 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, are not timely renewed or have their request for renewal dismissed by the competent environmental authority, we may incur fines and other administrative penalties, such as suspension of operations or closing of the facilities in question. 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. Furthermore, we cannot operate a plant if the required environmental permit is not valid or updated. Currently, some of our environmental licenses are in the renewal process, and we cannot guarantee that environmental agencies will approve our renewal requests within the required legal period. Brazilian Complementary Law No. 140/2011 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 the interim, we would be permitted to continue operations under the respective license during the renewal process. In addition, the environmental agency may condition the renewal upon expensive facility upgrades if there have been regulatory changes in the environmental standards that the plant is required to meet, which might 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.

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

We are defendants in civil and other proceedings (including administrative, regulatory and environmental), labor and tax proceedings and are also subject to consent agreements (*Termo de Ajustamento de Conduta*, or “TAC”). Unfavorable decisions in our legal proceedings may reduce our liquidity and have a material adverse impact on our business, results of operations, financial condition and prospects.

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 VAT that we accumulate on exportations. We currently have a case involving Tax on the Circulation of Merchandise and Services (*Imposto Sobre a Circulação de Mercadorias e Serviços*, or “ICMS”) on sales of staple foods (*cesta básica*) in which the Supreme Court of Brazil has ruled against us. The case is currently pending judgment of a final appeal and, if the final decision is upheld against some or all of BRF’s operations, it could have a significant impact on our liquidity and financial results. See “Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Legal Proceedings—Tax Proceedings.”

As of December 31, 2018, we had R$1,350 million in provisions for contingencies, of which R$282 million was for civil and other contingencies (including administrative, regulatory and environmental), R$230 million was for tax contingencies, R$469 million was for labor contingencies and R$370 million was for contingent liabilities.

We are also currently being investigated in the *Carne Fraca* Operation and *Trapaça* Operation, which may result in penalties, fines and sanctions from governmental authorities or other forms of liability. For more information about the “*Carne Fraca* Operation” and “*Trapaça* Operation” see “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.” 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.

On March 12, 2018, a shareholder class action lawsuit was filed in the U.S. Federal District Court in the Southern District of New York. On July 2, 2018, the Court appointed the City of Birmingham Retirement and Relief System lead plaintiff in the action (the “Lead Plaintiff”). On August 31, 2018, the Lead Plaintiff filed an amended class action complaint. On December 5, 2018, the Lead Plaintiff filed a second amended complaint. The second amended complaint seeks to represent all persons and entities who purchased or otherwise acquired BRF ADRs during the period from April 4, 2013, through and including March 2, 2018, alleging, among other things, that BRF and certain of its officers and/or directors engaged in securities fraud or other unlawful business practices related to the regulatory issues in connection with the *Carne Fraca* Operation and *Trapaça* Operation. A motion to dismiss briefing has been stayed pending the determination of Lead Plaintiff’s motion to amend the second amended complaint, which was filed on April 1, 2019. Because this lawsuit is in its early stages, we believe the possible loss or range of losses, if any, arising from this litigation cannot be estimated. In the event that this litigation is decided against us, or we enter into an agreement to settle, there can be no assurance that an unfavorable outcome would not have a material impact on us.

BRF was granted an ICMS tax credit of 4.5% by the State of Rio de Janeiro on sales and transfers of meat products. BRF entered into an agreement with the State of Rio de Janeiro related to this tax credit in 2014. The agreement required that BRF: (1) construct a sandwich factory, with an investment of R$11.5 million, which would generate 38 jobs and (2) construct a sausage factory, with investment initially set at R$136 million, which would generate 180 jobs within a period of 18 months. Due to several factors beyond BRF's control, including obtaining environmental licenses and building licenses, and due to changes to our production focus, we did not meet the initial deadlines. As a result, the State of Rio de Janeiro granted additional time for completion of the projects, but also increased the required aggregate investment to R$280 million and the minimum number of jobs to 280. We have commenced construction of the plant and the project is currently on schedule. However, the Brazilian Treasury Department filed an administrative request seeking the cancellation of the tax benefit previously granted to BRF. BRF has filed a writ of mandamus to guarantee the continuation of the current benefit and to protect the credits that BRF has already received. On March 14, 2019, the new Secretary of Finance of Brazil executed an order to cancel the tax benefit and to restore the standard collection of ICMS. The collection of past tax credits can only occur through an infraction notice issued by the Treasury Department, which has not yet occurred. The value of the tax benefits that BRF has received since 2014 is R$307 million (R$435 million when taking into account a potential fine and interest upon the principal amount). If the final decision is upheld against BRF and the tax credits are required to be returned, it could have a significant impact on our financial condition and results of operations.

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. Our ability to compete effectively depends in part on our rights to trademarks, logos and other intellectual property rights we own or license. We have not sought 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 allege that our intellectual property and/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 and/or enter into license 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, we could suffer a material adverse impact on our reputation, business, financial position, results of operations and cash flows.

We are vulnerable to third party transportation and logistics risks.

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 of 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 also 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, that the Brazilian federal government or any other relevant party 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, any other reduction in the dependability or availability of transportation or logistics services or a significant increase in transportation service rates, including as a result of, among other things, flooding in ports, warehouse fires or labor strikes, could impair our ability to satisfy our supply chain requirements and deliver our products economically to our customers. 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.

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, ammonia leakage, 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, bird flu and salmonella 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.

From time to time, our installations may be affected by fires as was the case with our Toledo/PR unit in 2014 and other units in 2016, such as Chapecó/SC and Paranaguá/PR, and more recently in Lajeado/RS in 2017, besides electrical damages or explosion in substations, or widespread truck driver strikes. Although our business interruption insurance covers certain losses in connection with disruptions to our operations, all of our direct and indirect costs and intangible costs may not be covered by our insurance. For example, the negative impacts on our business from the 2018 Brazilian truckers' strike, 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 impact on our business, results of operations, financial condition and prospects.

We have incurred, and expect to continue to incur, significant costs in connection with the *Carne Fraca* Operation, the *Trapaça* Operation and the shareholder class action lawsuit filed on March 12, 2018. The costs associated with these investigations and the costs of defending the class action lawsuit 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. In 2017 and 2018, we experienced a significant number of departures of senior management, including two of our previous CEOs, our CFO, our Chief Human Resources Officer ("CHRO"), our Brazil General Manager and our Vice President of operations. In addition, on March 5, 2018, we called an Ordinary and Extraordinary Shareholders' Meeting (the "Ordinary and Extraordinary General Meeting"), which was held on April 26, 2018, at the request of two of our shareholders, Caixa de Previdência dos Funcionários do Banco do Brasil, or "PREVI," and Fundação Petrobras de Seguridade Social, or "PETROS," which jointly hold approximately 20% of our capital stock. At the Ordinary and Extraordinary General Meeting, the number of members of our board of directors was set at 10 members, new members were elected to the board of directors and the Chairman and Vice-Chairman of the board of directors were elected. Only four of the ten board members elected during the Ordinary and Extraordinary Shareholders' Meeting were previously members of our board of directors. Furthermore, pursuant to *Novo Mercado* rules, we anticipate that Mr. Pedro Pullen Parente's term as Chief Executive Officer will end on June 18, 2019, as he may only hold the positions of Chairman of the Board of Directors and Chief Executive Officer at the same time for a period of one year. In connection with the end of Mr. Pedro Pullen Parente's term as Chief Executive Officer, the Company will appoint a new Chief Executive Officer. On March 28, 2019, Mr. Lorival Nogueira Luz Júnior, the Company's current Chief Operating Officer, was named Mr. Parente's successor as Chief Executive Officer following the end of Mr. Parente's term. On April 25, 2019, Mr. Ivan de Souza Monteiro, who was appointed as Chief Financial and Investor Relations Officer on March 11, 2019, resigned from his position. Mr. Lorival Nogueira Luz Júnior, the Company's current Chief Operating Officer, was appointed on April 25, 2019 as Interim Chief Financial and Investor Relations Officer. 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.

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.

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.

Our information technology systems may be vulnerable to a variety of interruptions and cybersecurity threats and incidents. In the current environment there are numerous and evolving risks related to cybersecurity and privacy, including criminal hackers, hacktivists, 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 could 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. In the event of such actions, we, our customers and other third parties could 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 could 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.

To date, while we continue to monitor for, identify, investigate, respond to and remediate security incidents, including those associated with cybersecurity attacks, there has not been a cybersecurity attack that has had a material adverse impact on us, though there is no assurance that there will not be a cybersecurity attack that has a material adverse impact in the future.

We have implemented technology security initiatives and disaster recovery plans, but these measures may not be adequate or sufficient and there can be no assurance that these measures will be successful in preventing a cybersecurity attack, a general information security incident or a disruption of our information technology systems. 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 with regard to cybersecurity, privacy and data protection issues is increasingly complex and may have impacts on our business, including increased risk, costs and expanded compliance obligations. The Brazil General Data Privacy Law (*Lei Geral de Proteção de Dados Pessoais*), which was signed into law in August 2018 and will become effective in 2020, and an increased number of data protection laws around the globe could continue to result in increased compliance costs and risks. The potential costs of compliance with or imposed by new or existing regulations and policies that are applicable to us may affect the use of our products and services and could have a material adverse impact on our results of operations.

Risks Relating to Our Indebtedness

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

At December 31, 2018, our total consolidated debt (comprised of short-term and long-term debt) was R$22.2 billion.

Our substantial indebtedness could have major 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;

- limiting our ability to obtain additional financing in the future to fund working capital, capital expenditures, acquisitions and general corporate requirements;

- 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;

- 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;

- placing us at a competitive disadvantage compared to competitors that are relatively less leveraged and that may be better positioned to withstand economic downturns; and

- exposing our current and future borrowings made at floating interest rates to increases in interest rates.

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

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

As of December 31, 2018, we had R$4.6 billion of debt that matures in 2019, R$3.4 billion of debt that matures in 2020, R$2.9 billion of debt that matures in 2021, R$3.1 billion of debt that matures in 2022 and R$8.2 billion of debt that matures in 2023 and thereafter.

A substantial portion of our outstanding debt is denominated in foreign currencies, primarily U.S. dollars. As of December 31, 2018, we had R$11.5 billion of foreign currency debt, including R$1.5 billion of short-term foreign currency debt. Our U.S. dollar-denominated debt 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. 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.

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 future 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 any of our debt that becomes due,

we could face liquidity problems and may not be able to pay our outstanding debt when 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 consolidated indebtedness impose significant restrictions on us. These 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 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 the 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 the 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 recent protests against the government;
- 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.

The Brazilian economy has experienced a sharp downturn in recent years due, in part, to the interventionist economic and monetary policies of the Brazilian government and the global drop in commodity prices. The GDP growth rate in 2014 was 0.5%, but GDP decreased 3.5% in both 2015 and 2016. Following this two-year contraction, GDP grew 1.0% in 2017 and grew 1.1% in 2018, while inflation, 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"), and interest rates changed to 3.75% and 6.5% in 2018, respectively, from 2.95% and 7.00%, respectively, in 2017. Unemployment had a slight improvement from 11.8% in 2017 to 11.6% in 2018, although it remained at a high level. For 2019, there is an expectation that such economic indicators will improve modestly.

In addition, various ongoing 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 "*Lava Jato Operation*," have indirectly negatively impacted the Brazilian economy and political environment.

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 and/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, Dilma Rousseff, following a legal and administrative impeachment process for infringement of budgetary laws. Michel Temer, the former Vice-President, who assumed the presidency of Brazil following Rousseff's ouster, is also under investigation on corruption allegations. In addition, the former President, Luiz Inacio Lula da Silva, began serving a 12-year prison sentence on corruption and money laundering charges in April 2018. The new Brazilian president, 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, the new Brazilian President was reported to favor the privatization of state-owned companies, economic liberalization, and social security and tax reforms. However, there is no guarantee that the new Brazilian President will be successful in executing his campaign promises or passing certain favored reforms fully or at all, particularly when confronting a fractured congress. In addition, the current minister of the economy proposed during the presidential campaign the revocation of the income tax exemption for the payment of dividends, which, if enacted, would increase the tax expenses associated with any dividend or distribution by Brazilian companies. This could impact our capacity to receive, from our subsidiaries, future cash dividends or distributions net of taxes and also our ability to make distributions to our shareholders net of taxes. Moreover, the new Brazilian President was generally a polarizing figure during his campaign for presidency, particularly in relation to certain of his social views, and we cannot predict the ways in which a divided electorate may continue to impact his presidency and ability to implement policies and reforms, all of which could have a negative impact on our business and the price of our common shares and ADRs.

In addition, the current Brazilian federal government is expected to propose the general terms of a fiscal reform to stimulate the economy and reduce the forecasted budget deficit for 2019, but it is uncertain whether the Brazilian government will be able to gather the required support in the Brazilian Congress to pass such reforms. As of the date of this annual report, many of the proposed public expenses in Brazil's budget have been maintained and it is not clear whether other expenses will be reduced or entirely eliminated. If some or all of these public expenses are maintained, Brazil will continue to run a budget deficit for 2019 and the years going forward. We cannot predict the effects of this budget deficit on the Brazilian economy. 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 the ADRs.

Brazil has experienced high inflation rates in the past. According to the IPCA, Brazilian consumer price inflation rates were 6.4% in 2014, 10.7% in 2015 and 6.3% in 2016, while downward inflation pressures caused this figure to reach 2.95% in 2017 and 3.75% in 2018. 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."

Although inflation levels have been relatively stable in 2017 and 2018, there can be no assurance that inflation rates will not rise in the near future. 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 the ADRs.

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

The 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 rising interest rates is that a greater return is paid in respect of government securities, which may impact other investments by making them less attractive in comparison. As a result, there may be additional investment in public debt, which absorbs money that could otherwise fund the private sector.

On December 31, 2018, 38.2% of our total indebtedness of R$22,165.5 million was either (1) denominated in (or swapped into) *reais* and bears interest based on Brazilian floating interest rates, such as the Long-Term Interest Rate (*Taxa de Juros de Longo Prazo*, or "TJLP"), the interest rate used in our financing agreements with Brazilian National Bank for Economic and Social Development (*Banco Nacional de Desenvolvimento Econômico e Social*, or "BNDES") or 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 (2) U.S. dollar-denominated and bears floating interest based on the London Interbank Offered Rate ("LIBOR"). Any increase in the CDI, TJLP or LIBOR rates may have an adverse impact on our financial expenses and our results of operations.

Exchange rate movements 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* depreciated 13.4% and 47.0% in 2014 and 2015, respectively, appreciated 16.5% in 2016, depreciated 1.5% in 2017, and depreciated 16.9% in 2018 against the U.S. dollar.

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 debt obligations in an aggregate amount of R$11,538.4 million at December 31, 2018, representing 52.1% 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, the ICMS and some other taxes, such as increases in payroll taxes. These proposals may not be approved and passed into law. Others, such as the R&D tax incentive program ("*Lei do Bem*") and the deduction of interest on shareholders' equity, may be revoked to increase revenues for the government in light of a possible reduction of the income tax rate, which have been and are being studied by the new Brazilian government's financial team. The effects of these proposed tax reform measures and any other changes that could result from enactment of additional tax reforms have not been, and cannot be, quantified yet due to the uncertainty of whether any changes will be implemented. However, some of these measures, if enacted, may result in increases in our overall tax burden, which could negatively affect our overall financial performance. For more information, see "Item 8. Financial Information—A. Consolidated Statements and Other Financial Information—Social Contributions." 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 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 ("ADS") 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 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 depository 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 the Brazilian Corporation Law.

Our corporate affairs are governed by our bylaws and the Brazilian Corporation 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 the Brazilian Corporation 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 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 are 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, holders 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 on the date the judgment is obtained, and such amounts are then adjusted to reflect exchange rate variations through the effective payment date. 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 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. Subject to limited exceptions, these provisions require any shareholder that acquires shares representing 33.3% or more of our share capital 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 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 the capital stock of the Company 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 the capital stock of the Company during the last 30 trading days prior to the date on which the public offer became obligatory.

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.

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 that they intend 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 depositary 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. In case of a non-Brazilian holder selling common shares on the Brazilian stock exchange, the withholding tax rate would be 0% (in the case of a non-Brazilian holder registered as such before Brazilian Central Bank ("Bacen") under the rules of the CMN ("Registered Holder") and not a resident of a tax haven ("Tax Haven Resident")), 15% (in the case of a non-Brazilian holder that is not a Registered Holder and not a Tax Haven Resident) or 25% (in the case of a non-Brazilian holder that is a Tax Haven Resident).

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 a natural or legal person 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 S.A. – Brasil, Bolsa, Balcão (the “B3” or the “São Paulo Stock 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 52% of the aggregate market capitalization of the São Paulo Stock Exchange as of December 31, 2018. In addition, the ten most widely traded stocks in terms of trading volume accounted for approximately 41% of all shares traded on the São Paulo Stock Exchange in 2018. These market characteristics may substantially limit the ability of holders of the 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 market countries, 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 degrees, 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.