

Item 3. KEY INFORMATION

A. [Reserved]

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

Business Operations and Contracts

Our aircraft sales are subject to cancellation and rescheduled delivery provisions that may reduce our future income, profitability, backlog and cash flow.

A portion of our aircraft firm orders is subject to significant contingencies before delivery. Prior to delivery, some of our purchase contracts may be terminated, or all or a portion of a particular firm order may be canceled, for different reasons, including (i) extended delays in delivering aircraft or failure to obtain certification of the aircraft or otherwise meet performance milestones and other requirements, (ii) the failure of a customer to honor its aircraft purchases or (iii) production rate shortfalls.

Our customers may also reschedule deliveries or cancel orders, particularly during an economic downturn. In 2022, we had income of US\$17.8 million related to contractual fines paid by customers due to contract cancellations compared to contractual fine income of US\$7.1 million in 2021 and US\$15.1 million in 2020. Material cancellations, delays or decreases in the number of aircraft delivered in any year would reduce our sales and revenue, and, consequently, our profitability, cash flow and backlog.

We may be required to refund cash contributions in connection with the production or development of our aircraft if certain milestones for our aircraft are not reached.

We have arrangements with our risk-sharing partners, pursuant to which they have contributed to us, in cash over the years, a total of US\$1,369.5 million since the beginning of the development of the EMBRAER 170/190, Phenom 100/300, Legacy 450/500 jet families and the E2 jet family through December 31, 2022. Cash contributions would have to be refunded by us to the risk-sharing partners to the extent that we had failed to fulfill certain agreed-upon milestones. In 2022, we met all the required milestones, and as a result, the full amount of the cash contributions was nonrefundable.

Although, currently, no cash contributions from our risk-sharing partners are refundable, we may enter into similar arrangements, and if we are unable to meet certain milestones agreed upon with our risk-sharing partners, we may be required to refund cash contributions for which we have not established provisions.

We work with a limited number of key suppliers.

We do not manufacture all of the parts and components used in the production of our aircraft. As of December 31, 2022, 74.9% of our consolidated production costs in our Commercial Aviation, Executive Aviation and Defense & Security segments consisted of materials and equipment purchased from our risk-sharing partners and other major suppliers. Risk-sharing arrangements are those in which suppliers are responsible for the design, development and manufacture of major components or systems of our aircraft. In some cases, the aircraft are designed specifically to accommodate a particular component, which cannot be substituted by another manufacturer without significant investments. In addition, there exist only a limited number of suppliers of certain key components of aircraft globally. We work closely with our main suppliers in order to mitigate any potential supply chain risk, but we cannot assure you that these risks, which could negatively and adversely affect our operating and financial performance, will not materialize.

In addition, as a result of post-pandemic economic recovery which resulted in a global increase in demand, our suppliers may not have the ability to fully meet such increasing demands of their customers, including us, especially because of the reductions in workforce and other measures taken in response to the pandemic. Therefore, we cannot assure you that we will not be adversely affected by this change in the global supply-chain dynamics, which is still affecting the industry world-wide.

Any accidents or catastrophic events involving our aircraft could adversely affect us.

We believe that our reputation and the safety record of our aircraft are important selling points for our products. However, the safe operation of our aircraft depends to a significant degree on a number of factors largely outside our control, including our customers' proper maintenance and repair of our aircraft and pilot skill. The occurrence of one or more accidents or catastrophic events involving one of our aircraft could adversely affect our reputation and future sales, as well as the market price of our common shares and the ADSs.

Any decrease in Brazilian government-sponsored customer financing or increases in government-sponsored financing that benefits our competitors, may decrease the competitiveness of our aircraft.

Traditionally, aircraft original equipment manufacturers, or OEMs, from time to time, have received support from governments through governmental export credit agencies, or ECAs, in order to offer competitive financing conditions to their customers, especially in periods of credit tightening from the traditional lending market.

Official government support may constitute unofficial subsidies causing market distortions, which may rise to disputes among governments at the World Trade Organization, or WTO. Since 2007, an agreement known as the Aircraft Sector Understanding, or ASU, developed by the Organization for Economic Co-operation and Development, or OECD, has provided guidelines for the predictable, consistent and transparent use of government-supported export financing for the sale or lease of civil aircraft, in order to establish a "level-playing field." ECAs from signatory countries are required to offer terms and conditions no more favorable than those contained in the ASU's base financial agreement when financing sales of aircraft that compete with those produced by the OEMs of their respective countries. The effect of the agreement is to encourage aircraft purchasers to focus on the price and quality of aircraft products offered by OEMs rather than on the financial packages offered by their respective governments.

The Brazilian ECA, Brazilian Social and Economic Development Bank (*Banco Nacional de Desenvolvimento Econômico e Social*), or BNDES, together with the Brazilian National Treasury Export Guarantee Fund, offer financing and export credit insurance to our customers under terms and conditions required by the ASU. Any reduction or restriction to the Brazilian export financing program, and any increase in our customers' financing costs for participation in this program, above those provided in the ASU's base financial agreement, may cause the cost-competitiveness of our aircraft to decline. Other external factors may also impact our competitiveness in the market, including, but not limited to, aircraft OEMs from countries which are not signatories to the ASU agreement offering attractive financing packages, or any new government subsidies supporting any of our major competitors.

From 2005, when we first delivered EMBRAER 170/190 jet family, through 2022, 29% of our Commercial Aviation deliveries was subject to official export credits. In 2022 and 2021, 26% and 38%, respectively, of our Commercial Aviation deliveries were supported by the Brazilian export financing program. We cannot assure you that the Brazilian government, for policy reasons or otherwise, will not reduce or discontinue this type of funding for the financing of our aircraft or that other sources of funding will be available to our customers. The loss or significant reduction of funds available to our customers, without an adequate substitute, could lead to a reduction in sales of our aircraft or to an increase of eventual aircraft financing arrangements.

Industry and Competition

A downturn in our key markets may reduce our sales and revenue, and, consequently, our profitability.

A substantial portion of our results are comprised of sales of aircraft, which have historically been cyclical due to a variety of factors that are both external and internal to the air travel industry, including general economic conditions, and the outbreak of communicable diseases, which we cannot fully foresee as of the date of this Annual Report.

Economic downturns in our industry, such as the one caused by the COVID-19 pandemic, may reduce air travel demand and corporate and personal spending, and investments by governments in new assets, which may negatively impact our Commercial Aviation, Executive Aviation, Defense & Security and Services & Support segments. These downturns have led in the past and may also lead in the future, to a decrease in the volume of financing available to our customers for aircraft purchases, particularly in the aforementioned segments. A continued downturn in general economic conditions could result in further reductions in air travel and decreased orders for our aircraft. Our customers could also continue to defer or to cancel their purchases of our aircraft. We cannot predict the magnitude or duration of the impact that the events could not only have on the air transport industry as a whole, but also on our business in particular.

We depend on key customers.

In our Commercial Aviation segment, as of December 31, 2022, 88.9% of our firm orders in backlog for the current EMBRAER 170/190 jet family were from Republic Airlines and Horizon Air / Alaska. Our E-Jets E2 family backlog mainly comprises orders from the companies Azul, AerCap, AirCastle, AirPeace, Porter, and Azorra, which represent 83.1% of our E-Jets E2 family orders. We believe we will continue to depend on a select number of key customers, and the loss of or difficulty in maintaining the relationship with any one of them would significantly reduce our sales and market share.

In the Executive Aviation segment, we have been increasingly relying on individual orders as the share of fleet orders in the backlog has been diminishing. Despite the fact that we occasionally sell Praetors and Phenoms to large fractional operators, we believe that fleet renewal demand will occur at a constant and moderate rate over a longer period as the current operator's fleet ages.

In our Defense & Security segment, the Brazilian government is our largest customer of defense products. Revenue from sales to the Brazilian government accounted for 42.5% of the segment revenue for the year ended December 31, 2022. We cannot assure you that the Brazilian government will continue to acquire defense products and services from us in the future at the same rate or at the same level. For instance, in November 2021, the Brazilian Air Force decided to unilaterally reduce the total value of their KC-390 Millennium aircraft agreement with us, which caused a reduction in our backlog and a decrease in revenue. In February 2022, we and the Brazilian Air Force engaged in negotiations, which resulted, among other matters, in the reduction of the total number of KC-390 Millennium aircraft to be delivered under the terms of the agreement from 28 to 22. In October 2022, we and the Brazilian government engaged in further negotiations which resulted, among other matters, in the reduction of the total number of KC-390 Millennium aircraft to be delivered under the terms of the agreements from 22 to 19, with no possibility of unilateral reductions.

We cannot assure you that the Brazilian government will not take similar actions in the future. For further information, see Note 1.1.1 to our 2022 audited consolidated financial statements included elsewhere in this annual report.

We may face a number of challenges resulting from the development of new products and the possible pursuit of strategic opportunities and transactions.

We cannot assure you that our products will be accepted by our customers and the market, and if any of our new products do not meet customer expectations or market demand, our business would be adversely affected. In addition, as we continue to develop new products, we may need to reallocate existing resources and coordinate with new suppliers and risk-sharing partners. Finally, cost overruns and delays in the development and delivery of new products would adversely affect us.

We may pursue strategic opportunities and transactions, just as we have in the past, including joint ventures, partnerships, acquisitions or divestitures. We may face a number of challenges, including difficulties in identifying appropriate partners, assimilating with or adjusting to our partners' or targets' operations and personnel, maintaining internal standards and controls, as well as the diversion of our management's focus from our ongoing business.

For instance, in 2021, we, through our subsidiary Eve UAM, LLC, or EVE, entered into a business combination agreement with Zanite Acquisition Corp., or Zanite, to further develop EVE's urban air mobility ("UAM") solution, through design and production of eVTOL, service and support, fleet operations and urban air traffic management. The business combination was completed in May 2022. The expected results from this business combination are subject to risks, such as the establishment of the UAM market, the adoption by consumers of an entirely new form of mobility offered by eVTOL aircraft and the UAM market, possible underperformance of the UAM solutions developed by Eve Holding, including the eVTOL aircraft, among others. We cannot assure you that our long-term estimates with respect to the prospects, operations, growth potential, integration and other factors related to this business combination, as well as on the process of integration of the acquired assets, will materialize.

We cannot assure you that we will be able to meet challenges related to strategic opportunities and transactions. Accordingly, cannot assure you that our business or the trading price of our common shares or ADSs. will not face disruptions as a result of future opportunities or transactions or the markets' perception thereof.

We face significant international competition, which may adversely affect us.

The worldwide commercial aircraft manufacturing industry is highly competitive. Along with other large international companies, we are one of the world's leading manufacturers of commercial aircraft. Although we have attained a significant market share for our commercial aircraft products, we cannot assure you that we will be able to maintain it. In order to remain competitive in the commercial aircraft manufacturing market in the long-term, we must continue to make technological, efficiency and performance enhancements to our aircraft.

As a relatively new entrant to the executive jets market, we face significant competition from companies with longer operating histories and established reputations in the industry. Some of our competitors in the executive jets market have a longer track record and a more established customer base. In addition, the level of pre-owned aircraft for sale in the market may continue to pressure the demand for new aircraft. This may impact the value of the pre-owned aircraft in our portfolio, despite a recent decrease in the level of pre-owned aircraft for sale in the market. We cannot assure you that we will increase our market share in the executive aviation market, that we will not experience a reduction in our current market share of this business segment, especially taking into account competitors' growth and investments and possible limitations in our supply chain capacity.

Protectionist measures adopted by the governments of specific countries could adversely affect us. Our production is spread globally, with parts manufactured in one or more countries and assembled in another, and as a result any limitations to trade, including quotas, tariffs, subsidies or local content requirements, may increase our production costs and affect our capacity to compete in equal terms in the market for our products.

In addition, geopolitical factors also impact the defense and security industry in general, as sovereign countries have discretion on how, when and how much to invest in military equipment. Accordingly, not always the best technical and commercial solutions are chosen by these sovereign countries, due to the many geopolitical factors involved.

Moreover, the defense and security industry is subject to trade compliance requirements, as well as export control rules and regulations. Our defense and security products are mainly affected by North American and European rules and regulations on trade compliance and export controls. Accordingly, if any of these governments, or the governments of the countries where we have operations, decide to impose restrictions on trade and export activities, we may be unable to sell or deliver aircraft to some countries for a period of time, which may adversely affect our results of operation and financial condition.

Regulatory, Compliance and Legal

Legal proceedings pertaining to the now terminated strategic partnership with Boeing, including arbitration proceedings related to Boeing's termination of and failure to close the MTA and/or the Contribution Agreement, may adversely impact our business, financial condition and results of operations.

We have incurred and continue to incur additional costs in connection with the prosecution, defense or settlement of the currently pending and any future legal proceedings relating to the Boeing Transaction and/or Boeing's termination of and failure to close the Boeing Transaction. Such legal proceedings include, among other matters, the ongoing arbitration proceedings between Embraer and Boeing that have commenced in connection with the wrongful termination of the MTA and/or the Contribution Agreement by Boeing. Both Embraer and Boeing have commenced arbitrations in connection with the termination. Such legal proceedings may also include litigation brought by our stockholders and holders of our ADRs related to the Boeing Transaction and/or Boeing's termination of, and failure to consummate the transactions contemplated by, the MTA and the Contribution Agreement. We continue to strongly believe that Boeing wrongfully terminated the MTA and the Contribution Agreement, that Boeing was under an obligation to continue to comply with the terms of the MTA and the Contribution Agreement, that Embraer was in full compliance with its obligations under the MTA and the Contribution Agreement and that our pending arbitration proceedings against Boeing and its affiliates are a valid enforcement of our rights under the MTA and the Contribution Agreement.

We cannot predict the outcome of any such legal proceedings. Such legal proceedings may also create a distraction for our management team and board of directors and require time and attention. In the case of an adverse determination in the arbitration proceedings, we may not recover any damages from Boeing and we may be required to pay significant monetary damages to Boeing. In addition, even if we ultimately succeed in such legal proceedings, there may be negative publicity attached to such legal proceedings, which may materially and adversely affect our reputation and brand names. As a result, any legal proceedings relating to the Boeing Transaction or Boeing's termination of and failure to close the Boeing Transaction could, among other things, adversely affect our business, financial condition and results of operations.

Intellectual property violations may adversely affect us.

We rely on patent, copyright, trademark and trade secret laws, and agreements with our employees, customers, suppliers and other parties, to establish and maintain our intellectual property rights in technology and products used in our operations. Despite these efforts to protect our intellectual property rights, any of our direct or indirect intellectual property rights could be challenged, invalidated or circumvented. In addition, although we believe that we lawfully comply with the intellectual property rights granted to others, we may be accused of infringement on occasion and could have claims asserted against us in the future. These claims could harm our reputation, lead to fines and penalties and prevent us from offering certain products or services. Any claims or litigation in this area, whether we ultimately win or lose, could be time-consuming and costly, hurt our reputation and/or require us to enter into licensing arrangements. We may not be able to enter into these licensing arrangements on acceptable terms. If any infringement brought against us is successful, an injunction may also be ordered against us to stop infringing the alleged rights, which could adversely affect us, our research and/or production.

We benefit from certain tax and other government-granted benefits and the suspension, cancellation or non-renewal of those benefits would have a material adverse effect on us.

Similarly to other Brazilian companies across multiple industries, we receive certain tax and other government-granted benefits, including incentives related to our export and research and development activities. To take advantage of the tax benefits, we must meet certain requirements, such as making investments in research and development, record taxable profits, among others. For additional information, see “Item 5. Operating and Financial Review and Prospects–A. Operating Results–Tax Incentives.”

Moreover, these incentives may be cancelled or suspended by the Brazilian government at any time without prior notice, and the maintenance of such incentive plans by the Brazilian government depends on factors we cannot control or predict. We cannot assure you that these incentives will be maintained or renewed or that we will be able to obtain new incentives.

We are subject to stringent certification and regulatory requirements, which may adversely affect us.

Our civil aviation products are subject to regulation in Brazil and in each jurisdiction where our customers are located. The aviation authority in Brazil, known as the National Civil Aviation Agency (*Agência Nacional de Aviação Civil*, or ANAC), or the Brazilian Aviation Authority, as well as authorities in other countries in which our customers are located, most notably the FAA and the European Aviation Safety Agency, or the EASA, must certify our civil aviation products before we can deliver them to our customers. We cannot assure you that we will be able to obtain certification of our aircraft on a timely basis or at all. In addition, complying with the requirements of regulatory authorities can be both expensive and time-consuming. If we fail to obtain a required certification from an aviation authority for any of our aircraft, that aviation authority can prohibit the registration of that aircraft within its jurisdiction until certification has been obtained. Changes in government regulations and certification procedures could also delay our start of production as well as entry of a new product into a new market. Despite our continuous efforts to strictly observe and comply with all aviation certification and other regulatory requirements, we cannot predict how future laws or changes in the interpretation, administration or enforcement of those laws will affect us. We may be required to incur significantly more costs to comply with these laws and/or to respond to these changes.

Internal Controls

We have identified material weaknesses in our internal controls over financial reporting. If we fail to maintain proper and effective internal controls, our ability to produce accurate and timely financial statements could be impaired, which could harm our operating results, our ability to operate our business and our reputation.

As part of management’s assessment of its internal controls over financial reporting for the fiscal year ending December 31, 2022, management identified material weaknesses as defined under the Exchange Act and by the U.S. Public Company Accounting Oversight Board, or PCAOB, in our internal controls over financial reporting, as a result of the material weaknesses identified at the consolidated financial statements of EVE, one of our subsidiaries. A material weakness is a deficiency, or a combination of deficiencies, in internal controls over financial reporting, such that there is a reasonable possibility that a material misstatement of the company’s annual financial statements will not be prevented or detected on a timely basis. The material weaknesses identified relate specifically to sufficiency of personnel with appropriate qualifications, experience and training related to certain complex accounting matters.

While we have remediated these material weaknesses, we cannot assure you that our subsidiaries will not identify significant deficiencies or material weaknesses in their internal controls nor that there will not be material weaknesses or significant deficiencies in our internal controls over financial reporting in the future. Our failure to maintain internal controls over financial reporting could severely inhibit our ability to accurately report our financial condition, results of operations or cash flows. In addition, we may not be able to prevent or detect a material misstatement in our financial statements on a timely basis or at all. Such misstatements could result in a future restatement of our financial statements, could cause us to fail to meet our reporting obligations or material adverse effect on our business financial condition, and results of operations.

The material weaknesses did not result in a restatement of our prior year financial statements. For more information, see “Item 15. Controls and Procedures.”

Labor and Workforce

We may suffer from a lack of qualified personnel.

From time to time, there is significant competition within the aviation industry for skilled personnel in general and engineers in particular. To the extent this competition re-emerges, we may be unable to recruit and retain the necessary number of highly skilled engineers and other personnel we require. Failure to coordinate our resources in a timely manner or to attract and retain skilled personnel could slow down our development efforts and cause delays in production and deliveries of our aircraft, which would adversely affect us.

Scope clause restrictions in airline pilot contracts may limit demand for commercial aircraft in the U.S. market.

A key limiting factor in demand for regional jets is the existence of scope clauses contained in airline pilot contracts. These scope clauses, which are more prevalent in North America, but also exist in other important regions, including Europe, are negotiated between the airlines and the pilot unions, usually every three years, for purposes of imposing restrictions relating to the (i) number of aircraft that a regional carrier may operate; (ii) number of seats in an aircraft that a regional carrier may operate; and (iii) the weight of the aircraft that a particular regional carrier may operate. The most recent rounds of negotiations between the major carriers in the United States were concluded in 2022 with no significant changes. As a result, our opportunities for near-term growth in the U.S. regional jets market in the 76-seat jet category may be limited. In this context and considering that the United States is the most important market for the E175 aircraft, on February 18, 2022, we announced a three-year pause on the development of the E175-E2 jet which is expected to entry into service between 2027 and 2028. We cannot assure you that current restrictions will be reduced, or that they will not be expanded, including by amending these scope clauses to cover larger-sized commercial aircraft.

The supply of pilots to the airline industry may be limited.

U.S. Federal Aviation Administration, or FAA, regulations may negatively impact the supply of qualified pilot candidates eligible to be hired in the airline industry. A first officer in U.S. domestic operations must hold an airline transport pilot certificate and an aircraft type rating to fly the aircraft. An airline transport pilot certificate requires that a pilot be 23 years of age and have 1,500 hours total time as a pilot. Due to these requirements, there may be a growing scarcity of new entrant pilots who meet the experience qualifications, mainly affecting regional carriers which are the usual entry airlines for new pilots (major airlines are expected to hire many of their experienced pilots).

In order to mitigate this issue, certain airlines, for example American Airlines, Jet Blue, and United Airlines, especially in the United States, have adopted internal measures, including but not limited to creating professional pilot programs and providing financing alternatives. However, any inability to recruit, train and retain qualified pilots may materially affect our customers’ operations.

As a result of the COVID-19 pandemic, many professional pilots were laid-off and may choose to pursue another career. Additionally, the uncertainty related to the future development of the aviation industry, may decrease newcomers’ interest for the profession.

Cybersecurity

Failure to adequately protect against risks relating to cybersecurity could materially and adversely affect us.

We, like all business organizations in the digital world, are subject to a broad range of cyber threats, with varying levels of sophistication. These cyber threats are related to the confidentiality, availability and integrity of our systems and data, including our customers' confidential, classified or personal information. In addition, because we have access to certain information technology systems of some of our customers, any successful cyberattacks on our systems may tamper with or expose our customers' systems and their data.

We maintain extensive technical security controls, policy enforcement mechanisms, monitoring systems and management oversight in order to address these threats. While these measures are designed to prevent, detect and respond to unauthorized activity in our systems, certain types of threats, including cyber-attacks, could materially and adversely affect our business and reputation. A successful cyberattack may result in unavailability of our services, leak or compromise of the integrity of information and could give rise to the loss of significant amounts of client data, other sensitive information and loss of funds as well as damage to our reputation, directly affecting our clients and business partners.

Furthermore, some of our business partners, such as our suppliers, have access to some limited confidential and strategic information regarding our projects and engineering data. As many of these suppliers face similar security threats, any attacks on their systems could result in unauthorized access to our systems or data.

For instance, on November 24, 2020, we suffered a cybersecurity incident in our IT systems, which was later identified as a ransomware attack. The attack resulted in the encryption of an environment of virtual servers hosted in Brazil, prevented access to certain files and resulted in the inadvertent disclosure of data, some of which were made available on the dark web. We have reported the incident to law enforcement authorities.

Immediately after the incident, we employed significant IT resources, took measures to protect and strengthen the security of our systems, isolated the affected environment and repaired our network. As part of our reaction, we hired Tempest Security Intelligence, a leading cybersecurity firm, to investigate the incident and supplement our remediation efforts.

Despite our extensive security controls and measures to prevent the violation of our systems and data storage, we cannot guarantee that other cyberattacks or similar breaches will not happen in the future.

Environmental, Social and Governance

We are subject to environmental, health and safety risks.

Our products, as well as our manufacturing and service activities, are subject to environmental laws and regulations in each of the jurisdictions in which we operate. These laws regulate product performance or content, energy use, greenhouse gas emissions, air quality, water and noise pollution, hazardous substance management, human health risks arising from the exposure to hazardous or toxic materials, the remediation of soil and groundwater contamination, among other matters.

In addition, environmental regulations related to climate change, including CO₂ emissions standards adopted by the International Civil Aviation Organization, or the ICAO, are one of the main drivers of global aerospace industry research and development investments since they may affect customer preferences. We may incur additional costs to improve or create new compliance programs to meet environmental regulatory requirements. We currently have several comprehensive programs in place to reduce the effects of our operations on the environment. For additional information, see "Item 4. Information on the Company—D. Property, Plant and Equipment."

Moreover, our services and products must comply with health and safety laws and regulations, as well as substances and preparations. We strive to maintain the highest quality standards and closely follow potential and confirmed changes in laws and regulations to adapt, redesign, redevelop, recertify or eliminate our products to remain compliant with those claims. Seizures of non-compliant products may occur, and we may incur penalties. In the event of an accident or other serious incident involving a product, we may be required to conduct investigations and undertake preventive and remedial actions.

Climate change may have adverse effects on our business and financial condition.

Climate change related risks are gaining increasing social, regulatory, economic and political relevance, both in Brazil and internationally. New regulations related to climate change may affect our operations and business strategy, leading us to incur financial costs resulting from: (i) physical risks; and (ii) transition risks, including climate litigation. Physical climate risks are those that arise from changes in weather and climate that impact the economy, including rising global average temperatures, which can cause sea level rise and acute climate risks caused by natural disasters, including but not limited to floods, fires and hurricanes. Such disasters could adversely affect our and our clients' and business partners' operations, including by impairing flight services and aircraft circulation. In addition, physical risks could cause market volatility and negatively affect the trading price of our ADSs. In addition, our facilities and resilience may also suffer physical damages due to severe weather events which may represent increased operational costs.

Transition climate risks are those that arise from the transition to a low-carbon economy. We expect that the market may face significant and rapid developments in terms of new technologies, policy, legal and regulatory demands capable of impacting our activities and the value of our assets.

Effects from both physical and transitional climate risks may also represent losses for our clients and business partners, affecting their profitability as well as their ability to fulfill their obligations.

If we do not adequately identify and embed the risks associated with climate change into our risk framework to appropriately measure, manage and disclose the various financial and operational risks that may result from climate change, or if we fail to adapt our strategy and business model to a changing regulatory and market environment, we could face a material adverse impact on our business growth rates, competitiveness, profitability, capital requirements and financial condition.

We may not be able to achieve our carbon emissions targets or make progress in other environmental, social, and governance initiatives.

In August 2021, we announced our intention to reach carbon neutrality in our operations by 2040 reducing Scope 1 and 2 emissions at least by 50%. This commitment relies mostly on the purchase of Sustainable Aviation Fuels (SAF), electricity from renewable sources and carbon offsets. Our estimates concerning the timing and cost of implementing our targets are subject to several risks and uncertainties, such as low availability of SAF, especially in Brazil where the majority of operations is concentrated, and variations in fuels, energy and offset prices. Accordingly, there can be no assurances that our targets will be achieved.

We are setting our strategies and new products aiming to a net-zero emission aviation by 2050. In order to reinforce this commitment, we signed in 2021 with other representatives of the aerospace sector, the commitment "Fly Net Zero." This goal will be supported by accelerated efficiency measures, energy transition and innovation across the aviation sector and in partnership with governments around the world.

We have also committed to certain diversity, inclusion and education targets, such as having 50% diverse hires in all new entry level employee programs by 2025; securing access of more than 80% of the students from Embraer high schools to public universities and private universities with full-tuition scholarships; having 20% of women in senior leadership positions by 2025, among others.

Although we expect that our ESG commitments will improve our operational and financial performance on the long term, our targets may not materialize within the time frame we expect or at all, since they depend on several factors over which we have no control or influence.

COVID-19

COVID-19 has affected and may continue to affect us.

The COVID-19 pandemic and governmental responses thereto have had, and may continue to have, a severe impact on global and Brazilian macro-economic and financial conditions, including the disruption of supply chains and the closures or interruptions of many businesses, leading to losses of revenues, increased unemployment and economic stagnation and contraction. The COVID-19 pandemic has also resulted in materially increased volatility in both Brazilian and international financial markets and economic indicators, including exchange rates, interest rates and credit spreads. Furthermore, the COVID-19 pandemic has negatively affected the supply of pilots in the United States, many of which decided to change careers or retire as a result of the pandemic.

Measures taken by governmental authorities worldwide, including Brazil, to stabilize markets and support economic growth may not be sufficient to control future volatility or to prevent serious and prolonged reductions in economic activity. While many of the governmental imposed restrictions have since been lifted, there is no way to predict that these policies will not be tightened or that new and different restrictions will not be imposed.

The effects of the COVID-19 pandemic or the outbreak of similar communicable diseases on our business will depend on, among other factors, the ultimate geographic spread of the virus, the duration of the outbreak and the extent and overall economic effects of the governmental response to the pandemic.

For further information on the impact of COVID-19 pandemic on our segments, see Note 1.1.1 to our 2022 audited consolidated financial statements.

Geopolitical and Macroeconomic Risks

Brazilian political and economic conditions have a direct impact on our business and the trading price of our common shares and ADSs.

The Brazilian government has frequently intervened in the Brazilian economy and occasionally has made drastic changes in policy and regulations. The Brazilian government's actions to control inflation and affect other policies and regulations have involved, among other measures, increases in interest rates, changes in tax policies, price controls, currency exchange and remittance controls, devaluations, capital controls and limits on imports. Our business, financial condition, results of operations and the trading price of the common shares and the ADSs may be adversely affected by changes in policy or regulations at the federal, state or municipal level involving or affecting factors, such as:

- interest rates;
- currency fluctuations;
- monetary policies;
- inflation;
- liquidity of capital and lending markets;
- tax policies;
- labor regulations;
- energy and water shortages and rationing; and
- other political, social and economic developments in or affecting Brazil.

Uncertainty over whether the Brazilian government would implement changes in policy, regulation or legislation creates instability in the Brazilian economy, increasing the volatility of the Brazilian securities markets. These uncertainties and other future developments in the Brazilian economy may adversely affect our activities, and consequently our operating results, and may also adversely affect the trading price of our common shares and ADSs. We cannot predict which policies the Brazilian government will adopt or if these policies or changes in current policies may have an adverse effect on us or the Brazilian economy. These factors are compounded as Brazil emerges from a prolonged recession after a period of a slow recovery, with GDP contraction in 2020 and small growth in 2021 and 2022.

The gross domestic product, or GDP, had a growth rate of 2.9% in 2022, compared to a growth rate of 4.6% in 2021 and a contraction rate of 4.1% in 2020, driven by the COVID-19 pandemic, compared to growth rates of 1.1% in 2019 and 2018, 1.3% in 2017 and contraction rates of 3.3% in 2016 and 3.5% in 2015. According to the Focus bulletin dated March 24, 2023, the consensus of Brazilian economists was for expectations of Brazilian GDP to increase 0.9% in 2023.

Our results of operations and financial condition have been, and will continue to be, affected by the growth rate of the Brazilian GDP. Developments in the Brazilian economy may affect Brazil's growth rates and, consequently, the use of our products and services.

Political instability may adversely affect our business and results of operations, the price of our common shares and our debt instruments.

Brazil's political environment has historically influenced, and continues to influence, the performance of the country's economy. Political crises have affected, and continue to affect, the confidence of investors and that of the public in general, resulting in economic downturn and heightened volatility of securities issued by Brazilian companies.

For instance, in the past, Brazilian markets have experienced heightened volatility due to uncertainties derived from investigations on money laundering and corruption conducted by the Brazilian Federal Police and the Federal Prosecutor's Office, and the impact of these investigations on the Brazilian economy and political environment. The ultimate outcome of these investigations is uncertain, but they had an adverse impact on the image and reputation of the implicated companies, and on the general market perception of the Brazilian economy. Political instability and uncertainty regarding political developments and the policies the Brazilian federal government may adopt or alter may have material adverse effects on the macroeconomic environment in Brazil, as well as on the operations and financial performance of businesses operating in Brazil, including ours.

Inflation and government efforts to curb inflation may contribute significantly to economic uncertainty and to heightened volatility in the Brazilian and international securities markets and, consequently, may adversely affect us.

Inflation and interest rate volatility have in the past caused material adverse effects in the Brazilian and global economy. Sudden increases in prices and long periods of high inflation may cause, among other effects, loss of purchasing power and distortions in the allocation of resources in the economy.

In Brazil, inflation and certain actions taken by the Central Bank to curb it have had significant negative effects on the Brazilian economy. Brazil's General Price Index (*Índice Geral de Preços - Mercado*), or IGP-M index, recorded inflation of 5.5% in 2022, 17.8% in 2021, 23.1% in 2020 and 7.3% in 2019. Brazil's National Broad Consumer Price Index (*Índice Nacional de Preços ao Consumidor Amplo*), or IPCA index, recorded inflation of 5.8% in 2022, 10.1% in 2021, 4.5% in 2020 and 4.3% in 2019. Measures to curb high inflation rates include a tightening of monetary policy, with an increase in interest rates, resulting in restrictions on credit and short-term liquidity.

The Brazilian Central Bank's Monetary Policy Committee, or COPOM, is responsible for setting the Brazilian official interest rate, or the SELIC rate. The COPOM frequently adjusts the official base interest rates in situations of economic uncertainty to meet the economic goals established by the Brazilian government. After reaching a historical low of 2.0% in August 2020, the COPOM began increasing interest rates in March 2021 and, as a result, the SELIC rate reached 9.25% in December 2021 and 13.75% in December 2022.

In the international scenario, inflation is reaching record highs; in the U.S. consumer inflation measured by the Consumer Price Index, or CPI, of the U.S. reached 7.1% in 2021 (the highest level since 1982) and 7.2 in 2022. In Europe, consumer inflation measured by the Harmonised Index of Consumer Prices, or HICP, varied from a negative inflation of 0.3% in 2020, to 5.0% in 2021, and 9.2% in 2022.

The rise in inflation in several developed economies has led the authorities of these countries to being reversing through the strongly stimulating policies implemented during the COVID-19 pandemic. The European Central Bank has increased interest rates from 0.0% in 2020 and (0.5)% in 2021 to 2.0% in 2022 and may reach its peak in 2023. The Fed has increased interest rates from 0.09% in 2020 and 0.08% in 2021 to 4.33% in 2022, and the Fed expects rates to rise closer to 5.00% in 2023.

Increases in interest rates could adversely affect our ability to incur additional debt and increase the cost of service of debt, resulting in an increase in our financial costs, which may reduce our liquidity, thereby adversely affecting our ability to meet our financial obligations. As of December 31, 2022, 5.2% of our consolidated cash and cash equivalents were indexed to the variation of the SELIC and CDI rates. Therefore, fluctuations in Brazilian interest rates and inflation may adversely affect us. On the other hand, a significant decrease in the CDI or inflation rates may adversely affect the revenue we receive from our financial investments.

Exchange rate volatility may adversely affect us.

The Brazilian currency has, during the last decades, experienced frequent and substantial variations in relation to the U.S. dollar and other foreign currencies. In 2020, the *real* depreciated against the U.S. dollar in comparison to December 31, 2019, reaching R\$5.1967 per US\$1.00 as of December 31, 2020. In 2021, the *real* depreciated against the U.S. dollar in comparison to December 31, 2020, reaching R\$5.5805 per US\$1.00 as of December 31, 2021. In 2022, the *real* depreciated against the U.S. dollar in comparison to December 31, 2021, reaching R\$5.2177 per US\$1.00 as of December 31, 2022. There can be no assurance that the *real* will not depreciate further against the U.S. dollar.

Depreciation of the *real* against the U.S. dollar creates inflationary pressures in Brazil and causes increases in interest rates, which negatively affects the growth of the Brazilian economy as a whole, curtails access to foreign financial markets and may prompt government intervention, including recessionary governmental policies. Depreciation of the *real* against the U.S. dollar has also, including in the context of an economic slowdown, led to decreased consumer spending, deflationary pressures and reduced growth of the economy as a whole. On the other hand, appreciation of the *real* relative to the U.S. dollar and other foreign currencies could lead to a deterioration of the Brazilian foreign exchange current accounts, as well as dampen export-driven growth. Depending on the circumstances, either depreciation or appreciation of the *real* may materially and adversely affect us.

Although most of our revenue and debt is U.S. dollar-denominated, the relationship of the *real* to the value of the U.S. dollar, and the rate of depreciation of the *real* relative to the prevailing rate of inflation, may adversely affect us, mainly due to the following factors:

- Approximately 11.0% of our total costs are incurred and denominated in *reais*.
- Because taxes on income are largely determined and paid in *reais* based on our Brazilian tax books, the income tax expense line item of our statements of income, which has the U.S. dollar as our functional currency, is significantly impacted by appreciation of the *real* relative to the U.S. dollar to the extent we must record deferred taxes resulting from exchange rate fluctuations on the reported

basis of our nonmonetary assets (mainly property, plant and equipment and intangible assets). If the *real* had devalued or appreciated by 10% against the U.S. dollar in relation to the actual exchange rate as of December 31, 2022, the deferred income tax expense would have been higher or lower by US\$153.0 million. For additional information on the effects of the variation of the *real* against the U.S. dollar, see Notes 23 and 33 to our 2022 audited consolidated financial statements.

- Depreciation of the *real* against the U.S. dollar or other currencies would reduce our real-denominated revenues from our Defense & Security segment, when converted to the U.S. dollar as our functional currency.
- Appreciation of the *real* against the U.S. dollar or other currencies increases the costs of our products when measured in U.S. dollars, and may result in a decrease in our margins.

Depreciations of the *real* relative to the U.S. dollar could also reduce the U.S. dollar value of distributions and dividends on our ADSs and may also reduce the market value of our common shares and ADSs. While our functional currency is the U.S. dollar our shareholders' equity is required under Brazilian Corporate Law to be accounted and maintained in Brazilian *reais*, including amounts to be distributed to shareholders (dividends and interest on own capital). In 2022, while we had retained earnings recorded in U.S. dollars, the foreign exchange losses absorbed these earnings in Brazilian *reais*, causing a loss, which restricted our ability to pay dividends. For more information, see "8. Financial Information—A. Consolidated Statements and Other Financial Information—Dividends and Dividends Policy."

Developments and the perception of risk in other countries, especially other emerging markets, may adversely affect the market price of Brazilian securities, including our ADSs, our common shares and our debt instruments.

The market value of securities of Brazilian issuers, including securities issued by us, may be affected by economic and market conditions in other countries, including the United States, European Union and Latin American countries and other emerging market countries. Although economic conditions in those countries may differ significantly from economic conditions in Brazil, investors' reactions to developments in other countries may have an adverse effect on the market value of securities of Brazilian issuers. Crises elsewhere may diminish investor interest in securities of Brazilian issuers, including ours. This could adversely affect the trading price of our securities and could also make it more difficult for us to access the capital markets and finance our operations in the future on acceptable terms, or at all.

Any further downgrading of Brazil's could adversely affect the market price of our common shares, ADSs and debt instruments.

Credit ratings affect investors' perceptions of risk and, as a result, the yields required on debt issuances in the financial markets. Rating agencies regularly evaluate Brazil and its sovereign ratings, taking into account a number of factors including macroeconomic trends, fiscal and budgetary conditions, indebtedness and the prospect of change in these factors.

As of the date of this annual report, Brazil's sovereign credit ratings were BB- with a stable outlook, Ba2 with a stable outlook and BB- with a stable outlook by S&P, Moody's and Fitch, respectively, which is below investment grade.

We cannot assure you that rating agencies will maintain Brazil's sovereign credit ratings. Any downgrading in Brazil's sovereign credit ratings could increase the perception of risk of investors and, as a result, adversely affect the price of securities issued by Brazilian companies, including our ADSs.

Developments related to the conflict between Russia and Ukraine may adversely affect us.

The global developments relating to Russia's invasion of Ukraine have generated uncertainty in the global economy. As soon as the war was declared, we have suspended parts, maintenance, and technical support services for certain customers to comply with the sanctions imposed on Russia, Belarus, and certain regions of Ukraine by laws of jurisdictions to which we are subject.

As a result of the conflict between Russia and Ukraine, inflation levels have raised and energy prices have also increased, mainly in Europe due to impact in the supply and gas prices. The conflict also had the effect of increasing costs of labor and caused a global shortage of components, affecting our supply chain cycle in 2022.

Russia is one of the largest titanium suppliers in the world, and titanium is a key element for the aircraft manufacturing process. Although there is no concern over the availability of titanium in our supply chain, considering our current inventory position and the existing alternative sources in other countries, we will continue to monitor our supply chain in order to identify any potential constraints. In addition, the conflict between Russia and Ukraine may adversely affect people's safety and activities of our employees, especially those residing in Europe.

We cannot predict how the developments related to the conflict between Russia and Ukraine will evolve and/or to what extent they may affect us.

Risks Relating to Our Common Shares and ADSs

If holders of our ADSs exchange the ADSs for common shares, they risk losing the ability to remit foreign currency abroad and Brazilian tax advantages.

The Brazilian custodian for the common shares has obtained an electronic certificate of registration from the Central Bank permitting it to remit foreign currency abroad for payments of dividends and other distributions relating to the common shares or upon the disposition of the common shares. These remittances under an ADR program are subject to a specific tax treatment in Brazil that may be more favorable to a foreign investor if compared to remitting gains originated from securities directly acquired by the investor in the Brazilian regulated stock markets. Therefore, an investor who opts to surrender ADSs in exchange for the underlying common share may be subject to less favorable tax treatment on gains with respect to these investments.

Pursuant to CMN Resolution No. 4,373, in order for the investor to surrender ADSs for the purpose of withdrawing the common shares represented thereby, the investor is required to appoint a Brazilian financial institution duly authorized by the Central Bank of Brazil and CVM to act as its legal representative, who shall be responsible, among other things, for keeping and updating the investors' certificates of registrations with the Central Bank of Brazil, which entitles registered foreign investors to buy and sell directly on the B3 - *Brasil, Bolsa, Balcão*, or B3. These arrangements may require additional expenses from the foreign investor. Moreover, if the representatives fail to obtain or update the relevant certificates of registration, investors may incur additional expenses or be subject to operational delays which could affect their ability to receive dividends or distributions relating to the common shares or the return of their capital in a timely manner.

The custodian's certificate of registration or any foreign capital registration directly obtained by the holders may be affected by future legislative or regulatory changes, and we cannot assure the holders that additional restrictions applicable to them, the disposition of the underlying common or preferred shares, or the repatriation of the proceeds from the process will not be imposed in the future.

The Brazilian government has veto power over the change in our corporate control, and of our name, trademark or corporate purpose and over the creation or alteration of our Defense & Security programs, and its interests could conflict with the interests of the holders of our common shares and ADSs.

The Brazilian government holds one share of a special class of our common stock called a "golden share," which carries veto power over certain matters such as change of control, name, trademark or corporate purpose and over the creation or alteration of our Defense & Security programs (whether or not the Brazilian

government participates in those programs). For example, in 2010, we changed our corporate name to Embraer S.A. and altered our bylaws to allow us to enter the defense and security market, which required the approval of the Brazilian government. The Brazilian government may veto transactions that may be in the interest of the holders of our common shares or ADSs. We cannot assure you that we will be able to obtain approvals from the Brazilian government in the future to effect important corporate changes or transactions, or other important corporate changes that may be required.

Our bylaws contain provisions that could discourage our acquisition or prevent or delay transactions that you may favor.

Our bylaws contain provisions that have the effect of avoiding the concentration of our common shares in the hands of a small group of investors to promote the dispersed ownership of those shares. These provisions require any shareholder or group of shareholders that acquires or becomes the holder of (i) 35% or more of the total shares issued by us or (ii) other rights over shares issued by us that represent more than 35% of our capital, to submit to the Brazilian government a request for making a public tender offer to purchase all of our shares on the terms specified in our bylaws. If the request is approved, the shareholder or group of shareholders must commence the public tender offer to purchase all of our shares within 60 days of the date of approval. If the request is refused, the shareholder or group of shareholders must sell all of their shares that exceed the 35% limit within 30 days, so that the holding of this shareholder or group of shareholders falls below 35% of our capital stock. These provisions may have anti-takeover effects and may discourage, delay or prevent a merger or acquisition, including transactions in which our shareholders might otherwise receive a premium for their common shares and ADSs. These provisions can only be altered or overridden with the approval of our board of directors and our shareholders in a shareholders' meeting convened for this purpose and with the consent of the Brazilian government, as holder of the golden share.

Our bylaws contain provisions that limit the voting rights of certain shareholders, including non-Brazilian shareholders.

Our bylaws contain provisions that limit the rights of a shareholder or group of shareholders, including brokers acting on behalf of one or more holders of ADSs, to exercise voting rights in respect of more than 5% of the outstanding shares of our capital stock at any general meeting of shareholders. See "Item 10. Additional Information-B. Memorandum and Articles of Association-Voting Rights of Shares-Limitations on the Voting Rights of Certain Holders of Common Shares."

Our bylaws also contain provisions that limit the right of non-Brazilian shareholders to exercise voting rights in respect of more than two-thirds of the voting rights that may be exercised by Brazilian shareholders present at any general meeting of shareholders. This limitation will effectively prevent our takeover by non-Brazilian shareholders and limit the ability of non-Brazilian shareholders to effect control over us. For additional information on our voting rights, see "Item 10. Additional Information-B. Memorandum and Articles of Association-Voting Rights of Shares-Limitation on the Voting Rights of Non-Brazilian Shareholders."

The absence of a single, controlling shareholder or group of controlling shareholders may render us susceptible to shareholder disputes or other unanticipated developments.

The absence of a single, controlling shareholder or group of controlling shareholders may create difficulties for our shareholders to approve certain transactions, because, among other things, the minimum quorum required by law for the approval of certain matters may not be reached. We and our shareholders may not be afforded the same protections provided by the Brazilian Corporate Law against abusive measures taken by other shareholders and, as a result, may not be compensated for any losses incurred. Any sudden and unexpected changes in our management, changes in our corporate policies or strategic direction, takeover attempts or any disputes among shareholders regarding their respective rights may adversely affect our business and results of operations.

Holders of ADSs may not be able to exercise their voting rights.

Holders of ADSs may only exercise their voting rights with respect to the underlying common shares in accordance with the provisions of the deposit agreement governing our ADSs. Under the deposit agreement, ADS holders must vote the common shares underlying their ADSs by giving voting instructions to the depositary. Upon receipt of the voting instructions from the ADS holder, the depositary will vote the underlying common shares in accordance with these instructions. Otherwise, ADS holders will not be able to exercise their voting right unless they surrender the ADS for cancellation in exchange for the common shares.

Pursuant to our bylaws, the first call for a shareholders' meeting must be published at least 30 days in advance of the meeting and the second call must be published at least 15 days in advance of the meeting. When a shareholders' meeting is convened, holders of ADSs may not receive sufficient advance notice to surrender the ADSs in exchange for the underlying common shares to allow them to vote with respect to any specific matter. In addition, the depositary has no obligation to notify ADS holders of an upcoming vote or distribute voting cards and related materials to ADS holders, unless we specifically instruct the depositary to do so. If we ask the depositary to seek voting instructions from ADS holders, the depositary will notify ADS holders of the upcoming vote and will arrange to deliver proxy cards to those holders. We cannot assure you that ADS holders will receive proxy cards in time to allow them to instruct the depositary to vote the shares underlying their ADSs. In addition, the depositary and its agents are not responsible for failing to carry out voting instructions or for an untimely solicitation of voting instructions. As a result, holders of ADSs may not be able to fully exercise their voting rights.

The relative illiquidity and volatility of the Brazilian securities markets may substantially limit the ability of holders of our common shares or the ADSs to sell the common shares underlying ADSs at the price and time they desire.

Investing in securities, including our common shares or the ADSs, of issuers from emerging market countries, including Brazil, involves a higher degree of risk than investing in securities of issuers from more developed countries.

The Brazilian securities markets are substantially smaller, less liquid, more concentrated and more volatile than major securities markets in the United States and other jurisdictions and are not as highly regulated or supervised as some other markets. The relatively small market capitalization and illiquidity of the Brazilian equity markets may substantially limit the ability of holders of our common shares or ADSs to sell the common shares or the ADSs at the price and time desired. For additional information on the B3, see "Item 9. The Offer and Listing-C. Markets-Trading on the B3."

Holders of our ADSs might be unable to exercise preemptive rights with respect to the common shares.

Holders of our ADSs may not be able to exercise the preemptive rights relating to the common shares underlying their ADSs unless a registration statement under 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 or other securities relating to these preemptive rights, and we cannot assure holders of our ADSs that we will file any registration statement. Unless we file a registration statement or an exemption from registration applies, holders of our ADSs may receive only the net proceeds from the sale of their preemptive rights by the depositary or, if the preemptive rights cannot be sold, the rights will lapse.

Judgments of Brazilian courts with respect to our common shares will 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 will 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 those amounts are then adjusted to reflect exchange rate variations through the effective payment date. The then prevailing exchange rate may not provide non-Brazilian investors with full compensation for any claim arising out of or related to our obligations under the common shares or the ADSs.