Risk Factors

This section is intended to be a summary of more detailed discussions contained elsewhere in this annual report. The risks described below are not the only ones we face. Our business, results of operations or financial condition could be harmed if any of these risks materializes and, as a result, the trading price of our shares and our ADSs could decline.

Risks Relating to our Business

We may be unable to successfully implement our business strategy.

Our business will be adversely affected if we are unable to successfully implement our strategic objectives. Factors beyond our control may prevent us from achieving our strategy.

Our business strategy is aimed at improving revenues and selective growth, while maintaining financial discipline. To achieve this goal, we seek to strengthen our market position by leveraging mobile telephony to increase broadband usage and by exploiting opportunities arising from fixed-to-mobile substitution.

Another of our more specific strategic efforts is to increase our presence in the residential broadband market. In order to do so, we are investing significant efforts and resources in residential broadband, expanding our fiber optic broadband services (FTTx) (when we provide fixed broadband with optical fiber until near to the customer residence), called TIM Live, and launching our fixed broadband service through the mobile network, a technology known as WTTx service (when we offer broadband through LTE (4G) network). The provision of FTTx is a highly capital intensive business, bringing a long term return on investments risk to our operation. As a new business, WTTx brings new risks, particularly related to the market response and customer behavior, that could impact our mobile network and possibly affect the quality of our core business service.

Our ability to implement our strategy is influenced by many factors outside of our control, including:

- an increase in the number of competitors in the telecommunications industry that could affect our market share;
- increased competition from mobile virtual network operator, or MVNO, companies, which offer telecommunication services to customers by leasing network capacity from traditional network players, without their own network infrastructure;
- increased competition from global and local OTT, players who offer content and services on the Internet including voice calls and messaging without owning network infrastructure;
- increased competition in our main markets that could affect the prices we charge for our services and could have an unintended adverse effect on our results;
- our ability to strengthen our competitive position in the Brazilian mobile telecommunications market;
- our ability to develop and introduce new and innovative technologies that are received favorably by the market, and to provide value-added services to encourage the use of our network;
- controls and system technology failures, which could negatively affect our revenues and reputation;
- the introduction of transformative technologies that could be difficult for us to keep pace with and could cause a significant decrease in our revenues and/or revenues for all mobile telephone carriers;
- our ability to operate efficiently and to refinance our debt as it comes due, particularly in consideration of political and economic conditions in Brazil and uncertainties in credit and capital markets;
- our ability to most efficiently scale our structure;
- our ability to attract and retain qualified personnel;

- performance of third party service providers and key suppliers on which we depend, such as any difficulties we may encounter in our supply and procurement processes, including as a result of the insolvency or financial weakness of our suppliers;

- government policy and changes in the regulatory environment in Brazil;

- the effect of exchange rate and inflation fluctuations;

- the outcome of litigation, disputes and investigations in which we are involved or may become involved;

- the costs we may incur due to unexpected events, in particular where our insurance is not sufficient to cover such costs;

- the real possibility of an increase in taxes by state governments and federal government in order to balance their financial deficit; and

- the increasing demand on our system bandwidth to manage the continuous growth of mobile data traffic, especially in big cities, where the population is highly concentrated and the costs of network expansion are considerably high.

As a result of these uncertainties, there can be no assurance that our strategic objectives can effectively be attained in the manner and within the time frame described.

We face increasing competition from other providers and services, which may adversely affect our results of operations.

We face increased competition throughout Brazil from providers in the personal communications service, or PCS, market. We compete with providers of wireless services and trunking, and with providers of fixed-line telecommunications and Internet access services, because of the trend towards the convergence and substitution of fixed services for mobile, as well as bundling data and voice services. As a result, the cost of maintaining our revenue share may increase and in the future we may incur higher advertising and other costs as we attempt to maintain or expand our market presence. Other than TIM, the following entities also hold authorizations to provide PCS with national coverage: Claro S.A., under the brand name Claro, Telefônica Brasil S.A., or Telefônica Brasil, under the brand name Vivo, Oi S.A., under the brand name Oi and, Nextel Telecomunicações Ltda., under the brand name Nextel. All PCS providers with national coverage offer third generation, or 3G, and fourth generation, or 4G, mobile telecommunications network technology. Possible market consolidation may allow other telecommunications companies to compete more aggressively against us. Additionally, we may face competitors with greater access to financial resources.

We also expect to face increased competition from other services. Technological changes in the telecommunications field, such as the development and roll-out of 4G and 5G mobile network technology, and Voice over Internet Protocol (including offers from third party OTT competitors), are expected to introduce additional sources of competition. OTT applications are often free of charge, other than for data usage, accessible by smartphones, tablets and computers and allow their users to have access to potentially unlimited messaging and voice services over the Internet, bypassing more expensive traditional voice and messaging services such as two-way short (or text) message services known as SMS, which have historically been, but are no longer a source of significant revenues for mobile network operators such as TIM, and now SMS revenue is becoming irrelevant. With the growing use of smartphones in Brazil, an increasing number of customers are using OTT application services as a substitute for traditional voice or SMS communications. As a result of this scenario, we see the migration of traffic from voice to data and consequently the introduction of offers from almost all competitors of unlimited voice plans in their portfolio, accelerating the process of commoditization of voice service. These and other factors are responsible for the increase in competitive pressure we are facing in the mobile market.

OTT application providers also leverage on existing infrastructures and generally do not operate capital-intensive business models associated with traditional mobile network operators like us. OTT application service providers have recently become more sophisticated competitors, and technological developments have led to a significant improvement in the quality of service, in particular speech quality, delivered by data communications applications from OTTs. In addition, players with strong brand capability and financial strengths have turned their attention to the provision of OTT application services. In the long term, if non-traditional mobile voice and data services or similar services continue to increase in popularity, as they are expected to do, and if we and other mobile network operators are not able to address this competition, this could contribute to further declines in mobile monthly average revenue per user, or ARPU, and lower margins across many of our products and services, thereby having a material adverse effect on our business, results of operations, financial condition and prospects.

OTTs concentrate the content, the means to create it and the distribution channel. With these resources they are dedicated to creating new ways the user can interact and consume content. Operators like TIM, which are as a result challenged to rethink value-added services, may stumble upon limitations beyond technology, such as regulation and as a result not have enough leverage to compete.

We expect that new products and technologies will emerge and that existing products and technologies will be further developed. The advent of new products and technologies such as these could have a variety of consequences for us. New products and technologies may reduce the price of our services by providing lower-cost alternatives, or they may also be superior to, and render obsolete, the products and services we offer and the technologies we use, thus requiring investment in new technology. If such changes occur, our most significant competitors in the future may be new participants in the market without the burden of an installed base of older equipment. The cost of upgrading our infrastructure and technology to continue to compete effectively could be significant.

Rising competition may increase our churn rate and could continue to adversely affect our market share and margins. Our ability to compete successfully will depend on the effectiveness of our marketing efforts and our ability to anticipate and adapt in a timely manner to developments in the industry, including the technological changes and new services that may be introduced, changes in consumer preferences, demographic trends, economic conditions and discount pricing strategies by competitors. It is difficult to predict which of many possible factors will be important in maintaining our competitive position or what expenditures will be required to develop and provide new technologies, products or services to our customers. If we are unable to compete successfully, our business, financial condition and results of operations will be materially adversely affected.

We may be unable to respond to the trend towards consolidation in the Brazilian telecommunications market.

The Brazilian telecommunications market has been subject to consolidation. For example, in September 2014, Telefónica S.A., or Telefónica, entered into a stock purchase agreement to acquire from Vivendi S.A., or Vivendi, all of the shares of GVT Participações S.A., the controlling shareholder of Global Village Telecom S.A., or GVT, and such acquisition, the GVT Acquisition. The GVT Acquisition increased Telefónica's share of the Brazilian telecommunications market, and we believe such trend could continue in the industry as players continue to pursue economies of scale. In June 2017, the Scandinavian group AINMT Holdings, known as Ice Group, acquired 30% of the capital stock of Nextel Brazil from NII Holdings. The agreement between the two companies provided for the possibility of the acquisition of an additional 30% of the Brazilian mobile operator, conditioned on the restructuring of the Company's debt with Brazilian and Chinese banks. This additional acquisition did not occur and the agreement was finalized in February 2018. The economic and regulatory environment faced by some relevant telecommunications companies in Brazil, such as Oi, Nextel and Sky, could also be expected to encourage the consolidation trend or even the entry of a new competitor in the Brazilian telecommunication market. If such consolidation occurs, it may result in increased competition within our market. We may be unable to adequately respond to pricing pressures resulting from consolidation in our market, adversely affecting our business, financial condition and results of operations. We may also consider engaging in merger or acquisition activity in response to changes in the competitive environment, which could divert resources away from other aspects of our business.

We may face difficulties responding to new telecommunications technologies.

The Brazilian wireless telecommunications market is experiencing significant technological changes, as evidenced by the following, among other factors:

- shorter time periods between the introduction of new telecommunication technologies and subsequent upgrades or replacements;

- the expansion of LTE and 4G technology, and the introduction of the 4.5G along with future development of 5G technology and simultaneous management of multiple technology layers, such as GSM, 3G, and 4G through different spectrum bands, which also involves managing the LTE RAN sharing agreement among

TIM and other companies (see “Item 4. Information on the Company—B. Business Overview—Site-Sharing and Other Agreements”);

- new customer behaviors, particularly migrating services from voice to data, requiring new planning models and accelerating the evolution of communications to increasingly occur on the IP network;
- ongoing improvements in the capacity and quality of digital technology available in Brazil;
- the launch of voice over LTE, known as VoLTE, which increase significantly the quality of voice calls and allows companies to traffic voice as data through their 4G networks; and
- continued auction of licenses for the operation of additional bandwidth.

We may be unable to keep pace with these technological changes, which could affect our ability to compete effectively and have a material adverse effect on our business, financial condition and results of operations.

Our operations depend on our ability to efficiently operate our systems and controls that are subject to failure that could affect our business and our reputation.

Our success largely depends on the continued and uninterrupted performance of our controls, network technology systems and of certain hardware. Our technical infrastructure (including our network infrastructure for mobile telecommunications services) is vulnerable to damage or interruption from information and telecommunication technology failures, power loss, floods, windstorms, fires, terrorism, intentional wrongdoing, human error and similar events. Our controls are dependent, not exclusively, on these technological systems and are also subject to the interruptions and failures. Unanticipated problems with our controls, or at our facilities, system failures, hardware or software failures, computer viruses or hacker attacks could affect the quality of our services and cause service interruptions. Any of these occurrences could result in reduced user traffic and reduced revenue and could harm our levels of customer satisfaction, our reputation and compliance with certain of our regulatory obligations.

Sophisticated information and processing systems are vital to our growth and our ability to monitor costs, render monthly invoices, process customer orders, provide customer service and achieve operating efficiencies. We cannot assure that we will be able to successfully operate and upgrade our information and processing systems or that they will continue to perform as expected. Any failure in our accounting, information and processing systems could impair our ability to collect payments from customers and respond satisfactorily to customer needs, which could adversely affect our business, financial condition and results of operations.

Our business is dependent on our ability to expand our services and to maintain the quality of the services provided.

Our business as a mobile telecommunications services provider depends on our ability to maintain and expand our mobile telecommunications services network. We believe that our expected growth will require, among other things:

- continuous development of our controls and operational and administrative systems;
- efficiently allocate our capital;
- increasing marketing activities;
- improving our understanding of customer wants and needs;
- continuous attention to service quality; and
- attracting, training and retaining qualified management, technical, customer relations, and sales personnel.

We believe that these requirements will place significant demand on our managerial, operational and financial resources. Failure to manage successfully our expected growth could reduce the quality of our services, with adverse effects on our business, financial condition and results of operations.

Our operations are also dependent upon our ability to maintain and protect our network. Damage to our network and backup systems could result in service delays or interruptions and limit our ability to provide customers with reliable service over our network. The occurrence of any event that damages our network may adversely affect our business, financial condition and results of operations.

We face various cyber-security risks that, if not adequately addressed, could have an adverse effect on our business.

We face various cyber-security risks that could result in business losses, including, but not limited to, contamination (whether intentional or accidental) of our networks and systems by third parties with whom we exchange data, equipment failures, unauthorized access to and loss of confidential customer, employee and/or proprietary data by persons inside or outside of our organization. We are also exposed to cyber-attacks causing systems degradation or service unavailability, the penetration of our information technology systems and platforms by ill-intentioned third parties, and infiltration of malware (such as computer viruses) into our systems.

Cyber-attacks against companies have increased in frequency, scope and potential harm in recent years. Further, the perpetrators of cyber-attacks are not restricted to particular groups or persons. These attacks may be committed by company employees or third parties operating in any region, including jurisdictions where law enforcement measures to address such attacks are unavailable or ineffective. We may not be able to successfully protect our operational and information technology systems and platforms against such threats. Further, as cyber-attacks continue to evolve, we may incur significant costs in the attempt to modify or enhance our protective measures or investigate or remediate any vulnerability.

The inability to operate our networks and systems as a result of cyber-attacks, even for a limited period of time, may result in significant expenses to us and/or a loss of market share to other communications providers. The costs associated with a major cyber-attack could include expensive incentives offered to existing customers and business partners to retain their business, increased expenditures on cyber-security measures and the use of alternate resources, lost revenues from business interruption and litigation. If we are unable to adequately address these cyber-security risks, or operating network and information systems could be compromised, which would have an adverse effect on our business, financial condition and results of operations.

Certain debt agreements of our subsidiaries contain financial covenants and any default under such debt agreements may have a material adverse effect on our financial condition and cash flows.

Certain of our subsidiaries' existing debt agreements contain restrictions and covenants and require the maintenance or satisfaction of specified financial ratios and tests. See "Item 5. Operating and Financial Review and Prospects." The ability of our subsidiaries to meet these financial ratios and tests can be affected by events beyond our and their control, and we cannot assure that they will meet those tests. Failure to meet or satisfy any of these covenants, financial ratios or financial tests could result in an event of default under these agreements. If we are unable to meet these debt service obligations, or comply with these debt covenants, we could be forced to restructure or refinance this indebtedness, seek additional equity capital or sell assets.

Due to the nature of our business we are exposed to numerous lawsuits, consumer claims and tax-related proceedings.

Our business exposes us to a variety of lawsuits and other proceedings brought by or on behalf of consumers in the ordinary course of our operations as a mobile telecommunications provider in Brazil. We are subject to a number of public civil actions and class actions that have been brought against mobile telecommunications providers in Brazil relating principally to the expiration of prepaid usage credits, minimum term clauses, subscription fees and the use of land to install our network sites. These suits include claims contesting certain aspects of the fee structure of our prepaid plans, hybrid (monthly billed fixed price), or so-called Control plans and postpaid plans, which are commonplace in the Brazilian telecommunications industry.

In addition, federal, state and municipal tax authorities have questioned some tax procedures we have adopted, as well as our calculation of the basis for certain sector-specific contributions (FUST and FUNTTEL, as each are defined in "Item 4. Information on the Company—B. Business Overview—Taxes on Telecommunications Goods and Services").

An adverse outcome in, or any settlement of, these or other lawsuits could result in losses and costs to us, with an adverse effect on our business practices and results of operations. In addition, our senior management may be required to devote substantial time to these lawsuits, which they could otherwise devote to our business. See Note 23 to our consolidated financial statements.

Any modification or termination of our ability to use the "TIM" trade name may adversely affect our business and operating results.

Telecom Italia S.p.A., or Telecom Italia, has rights over the trade name "TIM", which is currently assigned in an unlicensed manner to us. Telecom Italia may prevent us from using the TIM trade name at any time. The loss of use of the trade name "TIM" may have a material adverse effect on our business and operating results.

We are subject to credit risk with respect to our customers.

Our operations depend to a significant extent on the ability of our customers to pay for our services. Under Anatel regulations, we are allowed to undertake certain measures to reduce customer defaults, such as restricting or limiting the services we provide to customers with a history of defaults. If we are unable to undertake measures to limit payment defaults by our subscribers or that allow us to accept new subscribers based on credit history, we will remain subject to outstanding uncollectible amounts, which could have an adverse effect on our results of operations. See "Item 5. Operating and Financial Review and Prospects."

We may be subject to liability related to outsourcing certain functions to third-party service providers.

We may be exposed to contingent liabilities due to our outsourcing of certain functions to third-party service providers for which we may not have made sufficient provisions. Such potential liabilities may involve claims by third party providers that are treated as direct employees as well as claims for secondary liability resulting from work place injury, wage parity and overtime pay complaints. Our financial condition and results of operation may be adversely affected in the event that a material portion of these liabilities are decided against us, for which we have not made provisions.

Furthermore, recent government announcements and legal proceedings have called into question the ability of public services concessionaires to carry out their operations by outsourcing certain functions. Though no definitive position has been reached by any governmental authority, recent court opinions could set legal precedent that could call into question our ability to outsource certain operations.

If the contracting of third party services are considered to involve the main activities of the company, it may be characterized as a direct employment, which would significantly increase our costs and as a result we may be subject to administrative proceedings by the relevant labor regulators and may be required to pay fines to the third party service providers.

We depend on key suppliers, certain inputs and contractual relationships with other telecommunications providers which are critical to our ability to provide telecommunications services to our customers.

We rely on various vendors to supply network equipment, mobile handsets and accessories necessary for our business. These suppliers may, among other things, delay delivery periods, increase their prices, limit the amounts they are willing to supply to us, or may suffer disruptions in their own supply chains. If these suppliers are unable or unwilling to provide us with equipment or supplies on a regular basis, we could face difficulties in carrying out our operations, which could negatively affect our results of operations and limit our ability to execute our agreements.

Furthermore, the constant changes in the telecommunications industry, such as growth of broadband, may result in a limited supply of equipment essential for the provision of services. The restrictions on the number of manufacturers imposed by the Brazilian government for certain inputs pose certain risks, including susceptibility to currency fluctuations and the imposition of customs or other duties for those inputs which are imported. Inputs produced domestically are available from a limited number of domestic suppliers, and accordingly we are highly dependent upon their ability to accurately forecast the domestic demand and manage inventory. The foregoing risks could limit our ability to acquire such inputs in a timely and cost effective manner.

The need to hire many key suppliers requires complex deals, detailed and timely analysis of contractual documents and an integrated, end-to-end management process. We may be subject to failures in the contract or contract management systems and process, which may affect our business and financial condition.

We also rely on certain other telecommunications providers, through contractual agreements with us, to supply key infrastructure and other services, such as Industrial Exploration of Dedicated Lines (*Exploração Industrial de Linhas Dedicadas*), or EILD, interconnection and co-billing (see "Item 4. Information on the Company—B. Business Overview—Site-Sharing and Other Agreements"). Anatel permits such agreements between telecommunications providers in order to avoid unnecessary duplication of networks and infrastructure, and to lower costs and increase penetration of wireless services in Brazil.

In June 2016, one telecommunications provider that we maintain a contractual relationship with, Oi, filed for judicial reorganization (a form of bankruptcy protection under Brazilian law), acknowledging its inability to sustain its financial obligations. The judicial reorganization plan was approved at Oi's general shareholders meeting in December 2017, after intense negotiations among credit holders and shareholders, but continues to be discussed at the Brazilian courts. In March 2018, TIM and Oi settled their claims, which were generally related to infrastructure and interconnection, via a dedicated conflict resolution process at Anatel, however the settlement agreement has not yet been finally analyzed by Anatel. We cannot predict the outcomes of these processes, but changes in the controlling shareholders of Oi could lead to a change in the competitive environment of the industry and/or affect the capacity of Oi to provide essential wholesale services to our company, such as EILD and site sharing.

Our infrastructure could be damaged as a result of natural disasters or others unexpected events.

Our operations may be suspended or interrupted for an indeterminate period if any of our transmission bases are damaged by natural disasters, including by fire, explosion, storms or any others unexpected events. If we are unable to prevent against such damage in the event of a natural disaster and any other unexpected events, the interruption of our operations could have a material adverse effect on the continuity of our operations, financial results and the compliance with regulations.

We use demand forecasts to make investments, however such forecasts may ultimately be inaccurate due to economic volatility and result in lower revenues than expected.

We make certain investments, such as the procurement of materials and the development of our network infrastructure, based on our forecasts of the amount of demand that customers will have for our services at a later date. However, any major changes in the Brazilian economic scenario may affect this demand and therefore our forecasts may turn out to be inaccurate. As a result, it is possible that we may make larger investments based on demand forecasts than were necessary given actual demand at the relevant time, which may directly affect our cash flow. Unanticipated improvements in economic conditions may have the opposite effect and equally pose a risk.

The management of our cash and our financial investments are also subject to the country's economic conditions. We may make financial allocations in which the results of operations are not as expected, generating lower profitability or costs.

Our governance and compliance processes may fail to prevent regulatory penalties and reputational harm.

We operate in a global environment, as we have agreements with companies all over the world. Our governance and compliance processes, which include the review of internal control over financial reporting, may not prevent future breaches of all applicable legal, accounting or corporate governance standards. We may be subject to breaches of our Code of Ethics, anti-corruption policies and business conduct protocols and to instances of fraudulent behavior, corrupt practices and dishonesty by our employees, contractors or other agents. Our failure to comply with applicable laws and other standards could subject us to fines, loss of operating licenses and reputational harm.

Risks Relating to the Brazilian Telecommunications Industry

Anatel classified us as an economic group with significant market power in some markets and are now subject to increased regulation.

The National Telecommunications Agency (*Agência Nacional de Telecomunicações*), or Anatel, is the Brazilian regulatory agency for the telecommunications created under the Federal Law No. 9,472 of 1997 (LGT).

Under Anatel's General Plan for Competition Goals (*Plano Geral de Metas de Competição*), or PGMC, we have been classified as having significant market power, or SMP, in the following relevant markets: (i) passive infrastructure in transport and access networks (provision of cellular towers); (ii) mobile network termination (otherwise referred to as the mobile network termination market); and (iii) national roaming. Due to such classification, we are subject to increased regulation under the PGMC, which could have an adverse effect on our business financial condition, results of operations and compliance with regulations.

On July 4, 2014, Anatel approved, by means of Resolution No. 639/2014, a rule for the definition of maximum reference rates for entities with significant market power, based on a cost model, for Value of Use of Mobile Network (*Valor de Uso de Rede Móvel*), or VU-M, as well as the termination of calls on local fixed line networks, or TU-RL, and EILD. Pursuant to Anatel's rule, reference rates have been decreasing based on a glide path until the cost modeling known as Bottom-Up Long-Run Incremental Cost, or BU-LRIC, which takes into consideration all long-run incremental costs, updated to current values, of providing a particular service and the unit costs of such service based on an efficient network considering the existing regulatory obligations, is applied (2019 for VU-M and TU-RL, and 2020, for EILD). On July 7, 2014, Anatel published the corresponding Acts No. 6,210/2014, 6,211/2014 and 6,212/2014, which determined the specific reference rates effective as of February 2016.

TIM has filed an administrative appeal against the Wholesale Products Reference Offer (*Oferta de Referência de Produtos de Atacado*), or ORPAs, of the Telefônica and Claro groups, which were approved by Anatel, on the grounds that such ORPAs did not comply with the aforementioned cost modeling requirements. Anatel has not yet handed down a determination on our appeal on the merits. TIM had filed an administrative appeal against Oi as well, but considering the agreement reached between the companies in March 2018 and discussed above, we withdrew this claim.

Because of our classification as having SMP in the national roaming market, we must also offer roaming services to other mobile providers without SMP at the rates ratified by Anatel. We are also required to provide other providers without significant market power access to our towers and masts due to our classification as having SMP in that portion of the passive infrastructure market.

PGMC is currently under review by Anatel. As a result of such process, the agency may eliminate or create new relevant markets, as well as modify our classification as having SMP in the such markets.

We cannot assure that we will be able to fully comply with each of the applicable laws, regulations and authorizations or that we will be able to comply with future changes in the laws and regulations to which we are subject. These regulatory developments or our failure to comply with them could have a material adverse effect on our business, financial condition and results of operations.

As a telecommunications provider, we are subject to extensive legal and regulatory obligations in the performance of our activities which may limit our flexibility in responding to market conditions, competition and changes in our cost structure or with which we may be unable to comply.

Our business is subject to extensive government regulation, including any changes that may occur during the period of our authorization to provide telecommunication services. Anatel, which is the main telecommunications industry regulator in Brazil, regulates, among others: (i) industry policies and regulations; (ii) licensing; (iii) rates and tariffs for telecommunications services; (iv) competition; (v) telecommunications resource allocation; (vi) service standards; (vii) technical standards; (viii) quality standards; (ix) consumer rights; (x) interconnection and settlement arrangements; and (xi) coverage obligations.

In addition to the rules set forth by Anatel, we are subject to compliance with various legal and regulatory obligations, including, but not limited to, obligations arising from the following: (i) PCS authorizations under which we operate our cellular telecommunications business; (ii) fixed authorizations (local, national long distance, international long distance and multimedia service) under which we operate our telecommunications business; (iii) limited private services authorization under which we operate a private network formed by point-to-point radio communication (*radioenlaces*); (iv) the Consumer Defense Code; and (v) the General Telecommunications Law (Law No. 9,472/97, as amended).

In addition, we are also subject to national and international anti-corruption laws. We believe that we are currently in material compliance with our obligations arising out of each of the above referenced laws, regulations and authorizations.

Over the last few years, Anatel has instituted certain administrative processes against the Company and other Brazilian telecommunications providers to investigate certain alleged nonconformities related to quality goals and other regulatory obligations. In response to the initiation of such Anatel proceedings, the Company, as well as other active telecommunications companies in the Brazilian market, opted for the negotiation and conclusion of a Term of Conduct Adjustment. The Term of Adjustment of Conduct aims at the remediation of the underlying causes of the ongoing administrative processes by setting commitments for conduct adjustment and investment of additional projects in general.

Currently, the proceeding is in the office of Anatel and is pending deliberation by its board of directors with a decision expected in 2018. However, despite regulatory oversight, other entities, such as the Federal General Accounting Office and the House of Representatives, intervened in the negotiations and requested further clarification, causing a delay in the procedural process.

We cannot assure that we will be able to fully comply with each of the applicable laws, regulations and authorizations or that we will be able to comply with future changes in the laws and regulations to which we are subject. Moreover, compliance with this extensive regulation, the conditions imposed by our authorization to provide telecommunication services and other governmental action may limit our flexibility in responding to market conditions, competition and changes in our cost structure. These regulatory developments or our failure to comply with them could have a material adverse effect on our business, financial condition and results of operations.

The Brazilian government under certain circumstances may terminate our authorizations or we may not receive renewals of our authorizations.

We operate our business under authorizations granted by the Brazilian government. As a result, we are obligated to maintain minimum quality and service standards, including targets for call completion rates, geographic coverage and voice accessibility, data accessibility, voice drop, data drop, data throughput, user complaint rates and customer care call completion rates. Our ability to satisfy these standards, as well as others, may be affected by factors beyond our control. We cannot assure that, going forward, we will be able to comply with all of the requirements imposed on us by Anatel or the Brazilian government. Our failure to comply with these requirements may result in the imposition of fines or other government actions, including, restrictions on our sales and, in an extreme situation, the termination of our authorizations in the event of material non-compliance.

Our radio frequency, or RF, authorizations for the 800 MHz, 900 MHz and 1,800 MHz bands that we use to provide PCS services started to expire in September 2007 and are renewable for one additional 15-year period, requiring payment at every two-year period equal to 2% of the prior year’s revenue net of taxes, by way of investment under the Basic and Alternative Service Plans, which are intended to increase telecommunications penetration throughout Brazil. Anatel has stated that the revenue on which the 2% payment is based should be calculated as including revenues derived from interconnection as well as additional facilities and conveniences. As a result, we are currently disputing these RF authorization renewal payments both administratively and judicially. Although there are administrative procedures still pending on analysis, Anatel has denied the Company’s appeals and issued Precedent No. 13, determining that revenues from interconnection as well as additional facilities and conveniences should be considered on the basis of the calculation of the price due to the renewal of the spectrum licenses. Judicially, the matter is also still under dispute.

Any partial or total revocation of our authorizations or failure to receive renewal of such authorizations when they expire would have a material adverse effect on our financial condition and results of operations.

Anatel's proposal regarding the consolidation of prices could have an adverse effect on our results of operations.

Anatel issued regulations on interconnection rules from 1997 to 2014, and, as noted above, in July 2014, established a fully allocated cost model for reference rates by allocating the various service costs to determine a basic price, effective as of February 2016.

These regulations may have an adverse effect on our financial results given the dynamics of our revenues and costs related to interconnection fees. In addition, Anatel may allow more favorable prices to operators without significant market power.

Actual or perceived health risks or other problems relating to mobile telecommunications technology could lead to litigation or decreased mobile communications usage, which could harm us and the mobile industry as a whole.

The effects of, and any damage caused by, exposure to electromagnetic fields has been and still is the subject of careful evaluation by the international scientific community, but until now there is no scientific evidence of harmful effects on health. We cannot rule out that exposure to electromagnetic fields or other emissions originating from wireless handsets will not be identified as a health risk in the future.

Our mobile communications business may be harmed as a result of these alleged health risks. These concerns could have an adverse effect on the wireless communications industry and, possibly, expose wireless providers, including us, to litigation.

In addition, although Brazilian law already imposes strict limits in relation to transmission equipment, these concerns may cause regulators to impose greater restrictions on the construction of base station towers or other infrastructure, which may hinder the completion of network build-outs and the commercial availability of new services and may require additional investments. The expansion of our network may be affected by these perceived risks if we experience problems in finding new sites, which in turn may delay the expansion and may affect the quality of our services.

Anatel Resolution No. 303 limits emission and exposure for fields with frequencies between 9 kHz and 300 GHz, and Law No. 11,934 establishes limits related to the magnetic and electromagnetic emissions to be as defined by the World Health Organization and requiring that operators had to maintain a record of the measurements of the levels of the magnetic and electromagnetic emissions of each transmitting station. The records must be five years old at most. In 2015, Anatel established a computerized system called Mosaic in order to store the measurement reports and better assess the level of human exposure to electromagnetic fields. Anatel also began working with Brazilian telecommunications operators in January 2015 to ensure their required registered reports were being stored in Mosaic.

Any of these or any other additional regulations could adversely affect our business, financial condition and results of operations. Government authorities could also increase regulation of wireless handsets and base stations as a result of these health concerns or wireless companies, including us, could be held liable for costs or damages associated with these concerns, which could have an adverse effect on our business, financial condition and results of operation. We cannot assure you that further medical research and studies will refute a link between the mobile technology in question and these health concerns.

Measures adopted by Anatel aiming to ensure service quality could have an adverse effect on our results.

In July 2012, with the express goal of improving the quality of mobile telecommunications services provided in Brazil, Anatel issued administrative injunctions suspending three of the primary mobile providers, including our subsidiary TIM Celular, from selling and activating new mobile service plans. Anatel lifted the suspension only after these providers made formal commitments to undertake specific investments related to the expansion of their respective networks and improvement of their respective services.

In November 2012, Anatel issued a new administrative injunction to suspend and stop our "Infinity Day" promotion, in which customers from specific states were charged per day of use for voice service to TIM numbers and local fixed telephones. Anatel, in its preliminary analysis, considered the promotion to be potentially harmful to the quality of our mobile services. The injunction was revoked in January 2013, after Anatel determined that the promotion did not pose a risk to the provision of our mobile services.

Although measures adopted by Anatel such as the aforementioned are likely to be temporary, such measures may, along with any new measures adopted in the future, have a material adverse effect on our financial condition, results of operations and cash flow and may limit our ability to implement our business strategy.

Risks Relating to Brazil

Risks related to Brazilian economic and political conditions may negatively affect our business.

Political conditions in Brazil may affect the confidence of investors and the public in general, as well as the development of the economy. In 2017, the Brazilian economy showed signs of recovery: GDP grew, inflation was kept under control and the interest rate declined, culminating in an increase in overall confidence in the market. However, the recent past has been marked by an unstable political environment evidenced by widespread protests and ongoing investigations into allegations of corruption in private and state-controlled enterprises, that contributed to the decline of the confidence of investors and the public in general.

Currently, with the progress of the different investigations carried out by the Federal Police and by the General Prosecutor's Office, there is significant uncertainty regarding the future of the national political environment and its effect on the Brazilian economy. Some relevant Brazilian companies are facing investigations by the CVM, the U.S. Securities and Exchange Commission, or the SEC, the Brazilian Federal Police and the Brazilian Federal Prosecutor's Office, in connection with corruption allegations, or the "Lava Jato" investigations. Depending on the duration, outcome and possible expansion of such investigations, the uncertainty could affect the country's reputation and result in downgrades from rating agencies. We cannot predict the results of the investigations and which policies the Brazilian government may adopt or change or the effect that might have on our business and on the Brazilian economy.

In 2016, after the legal and administrative process for the impeachment, Brazil's Senate removed President Ms. Dilma Rousseff from office on August 31, 2016, for infringing budgetary laws. Mr. Michel Temer, the former vice president, who has run Brazil since Ms. Rousseff's suspension in May, was sworn in by Senate to serve out the remainder of the presidential term until 2018. However, the recent decision of the Superior Electoral Court (*Tribunal Superior Eleitoral*) that acquitted Ms. Dilma Rousseff and Mr. Michel Temer on charges of illegal campaign financing may be reversed by the Federal Supreme Court if the appeals filed with the Federal Supreme Court are accepted, which may cause the annulment of the presidential election of 2014 and require President Michel Temer to leave the office of president. Mr. Temer remains subject of investigations by the Brazilian Federal Police and General Prosecutor's Office relating to allegations of corruption, however, and may ultimately be subject to impeachment proceedings before his presidential term ends.

Presidential elections to take place in 2018 could also significantly change the course of the ongoing fiscal reforms and the economic policies being undertaken. Uncertainty about the 2018 election may reduce investor and market confidence, and as a result we are unable to predict the country's political and economic direction in coming years.

The Brazilian government has exerted significant influence over the Brazilian economy and continues to do so. This involvement may have an adverse effect on our activities, our business and on the market prices of our shares and ADSs.

The Brazilian government has frequently intervened in the Brazilian economy and occasionally made drastic changes in economic policy. To influence the course of Brazil's economy, control inflation and implement other policies, the Brazilian government has taken various measures, including the use of wage and price controls, currency devaluations, capital controls and limits on imports and freezing bank accounts. We have no control over, and cannot predict what measures or policies the Brazilian government may take or adopt in the future. Our business, financial condition, revenues, results of operations, prospects and the trading price of our securities may be adversely affected by changes in government policies and regulations, as well as other factors, such as: (i) fluctuating exchange rates; (ii) inflation; (iii) interest rates; (iv) fiscal and monetary policies; (v) changes in tax regimes; (vi) liquidity in domestic capital and credit markets; (vii) economic, political and social instability; (viii) reductions in salaries or income levels; (ix) rising unemployment rates; (x) tax policies (including those currently under consideration by the Brazilian Congress); (xi) exchange controls and restrictions on remittances abroad; and (xii) other political, diplomatic, social or economic developments in or affecting Brazil.

Uncertainty regarding changes by the Brazilian government to the policies or standards that affect these or other factors could contribute to economic uncertainty in Brazil and increase the volatility of the Brazilian capital market and of securities issued abroad by Brazilian companies.

Additionally, interruptions in the credit and other financial markets, and the deterioration of the Brazilian and/or global economic environment may, among other effects: (1) have a negative impact on demand, which may reduce sales, operating income and cash flow; (2) decrease consumption of our products; (3) restrict the availability of financing for our operations or investments, or for the refinancing of our debt in the future; (4) cause creditors to modify their credit risk policies and restrict our ability to negotiate any of the terms of our debt in the future; (5) cause the financial situation of our clients or suppliers to deteriorate; or (6) decrease the value of our investments.

Changes in Brazilian tax laws may have an adverse impact on the taxes applicable to our business and over our prices.

Our business is substantially affected by the tax regime in Brazil on telecommunications goods and services, as disclosed in detail in "Item 4. Information on the Company—B. Business Overview—Taxes on Telecommunications Goods and Services."

In the past, the tax on financial operations, or IOF, was levied on investments made in the Brazilian financial and capital markets by foreign investors. However, since October 2014, any financial operation related to these foreign investments benefits from a 0% IOF tax rate.

In 2013, the Brazilian government maintained at 6% the IOF tax rate on international loans with a maturity of equal to or fewer than 360 days. International loans with a maturity of more than 360 days were not subject to any IOF. On June 4, 2014, the minimum maturity for an international loan to not be subject to the IOF was reduced from 361 days to 181 days, and the IOF tax rate applicable to international loans with a maturity equal to or fewer than 180 days was maintained at 6%.

Since December 24, 2013, the transfer of shares that are listed on a stock exchange located in Brazil with the specific purpose of backing the issuance of depositary receipts traded abroad is subject to a 0% IOF rate. From October 8, 2014, operations of trading Fixed Income Index Fund quotas on stock exchanges or organized over-the-counter market are subject to a 0% rate of IOF. Any change in the IOF rate could affect our shareholders and may impact our ADS and common share prices.

On July 1, 2015, Decree No. 8,426 came into effect. The decree restored the obligation of companies to pay *Programa de Integração Social* contributions, or PIS and *Contribuição Social para o Financiamento da Seguridade Social* contributions, or COFINS on financial revenues at a cumulative rate of 4.65% (previously set at 0% by Decree No. 5,442/2005). From that date, all financial revenues became taxable, except for financial revenues related to exchange variations of: (i) exportation of goods and services; (ii) obligations undertaken by the company, including loans and financing. Revenues related to hedging transactions on stock exchange values, also maintain a 0% tax rate under the decree as long as such revenues are related to operating activities and the main objective is to protect the rights and goods of the company.

In addition, Law No. 13,241, published on December 31, 2015, suspended the 0% PIS and COFINS rate on the sale of goods such as smartphones and handsets, which starting from January 1, 2016 were set back to the rate of 7.6% of COFINS and 1.65% for PIS.

Since December 2015, the principal tax applicable to goods and telecommunication services (*Imposto sobre Circulação de Mercadorias e Serviços*), or ICMS, rates were increased in some Brazilian states due to local legislation to an average of 3% and 1%, respectively. Any change in the ICMS rate may affect our financial conditions.

In March 2017, there was a favorable decision of the Brazilian Federal Supreme Court, or STF, published in October, on the composition of the calculation bases of PIS and COFINS. In summary, the court recognized the unconstitutionality of including the ICMS in the calculation of PIS and COFINS, deciding in favor of its exclusion. The Company expects to benefit from this decision in two ways: (i) first, by recovering unduly paid amounts (the

Company and/or its subsidiaries filed lawsuits claiming a refund of such unduly paid amounts, but are still waiting for a final decision as all related causes are suspended until the resolution of the lead case under trial by STF); and (ii) second, by reducing the monthly amounts due for PIS and COFINS.

Provisional Measure No. 687, published on August 18, 2015 (and converted into Law No. 13,196, which was published on December 2, 2015) authorized the monetary adjustment, based on the IPCA, of the Contribution to the Development of the National Film Industry (*Contribuição para o Desenvolvimento da Indústria Cinematográfica Nacional*), or CONDECINE, which is a tax levied on telecommunications services with the objective of promoting the Brazilian audiovisual industry.

Since January 2018, the tax over value-added services has increased with the inclusion of value-added services revenues in the calculation of ISS due to Law No. 157/2016, which is a municipality tax which rates vary from 2% to 5%.

This tax regime has been subject to substantial fluctuation in the past and could be in the future. Further changes in tax regulations, such as the anticipated increase of the PIS and COFINS tax rates that the Federal Government has announced it is considering implementing in order to restore public accounts after the above-mentioned decision by the STF authorizing companies to exclude the ICMS from the calculation of PIS and COFINS, could impact our financial assets and liabilities as well as our pricing, which could have a material adverse effect on our business, financial condition and results of operations.

Inflation, and government measures to curb inflation, may adversely affect the Brazilian economy and capital market, our business and operations and the market prices of our common shares or the ADSs.

In the recent past, Brazil has experienced high rates of inflation and the government's measures taken in an attempt to curb inflation have had significant negative effects on the Brazilian economy. The government's measures to control inflation have often included maintaining a tight monetary policy with high interest rates, thereby restricting availability of credit and reducing economic growth.

Uncertainty regarding certain future government fiscal measures which may be taken to reduce inflation could affect the confidence of investors and the market in general, and, consequently, affect our operating and financial results and increase volatility in the Brazilian capital markets.

Exchange rate movements and interest rate fluctuation may have an adverse effect on our business and the market prices of our shares or the ADSs.

Appreciation of the *real* against the U.S. dollar may lead to a deterioration of the country's current account and the balance of payments, as well as to a dampening of export-driven growth. Any such appreciation could reduce the competitiveness of Brazilian exports and adversely affect net sales and cash flows from exports. Devaluation of the *real* relative to the U.S. dollar could create additional inflationary pressures in Brazil by increasing the price of imported products, which may result in the adoption of deflationary government policies. The sharp depreciation of the *real* in relation to the U.S. dollar may generate inflation and governmental measures to fight possible inflationary outbreaks, including the increase in interest rates, which reduces the purchasing power of consumers and raises the cost in the credit market. Devaluations of the *real* would reduce the U.S. dollar value of distributions and dividends on our common shares and ADSs and may also reduce the market value of such securities. Any such macroeconomic effects could adversely affect our net operating revenues and our overall financial performance.

We acquire equipment and handsets from global suppliers, the prices of which are denominated in U.S. dollars. Depreciation of the *real* against the U.S. dollar may result in a relative increase in the price of our equipment and handsets. Thus, we are exposed to foreign exchange risk arising from our need to make substantial dollar-denominated expenditures, particularly for imported components, equipment and handsets, that we have limited capacity to hedge. See "Item 5. Operating and Financial Review and Prospects."

Most of our indebtedness is denominated in *reais* and subject to Brazilian floating interest rates or subject to currency swaps that are tied to Brazilian floating interest rates. Any increase in the CDI rate, the TJLP rate or the SELIC rate may have an adverse impact on our financial expenses and our results of operations. See "Item 11. Quantitative and Qualitative Disclosures About Market Risk."

The effects of the weak domestic economy could reduce purchases of our products and services and adversely affect our results of operations, cash flows and financial condition.

Although the global economy recently has been showing signs of improvement, domestic economic conditions have been slow to recover. The Brazilian economy has gone through a marked recession in recent years, partially due to the interventionist economic and monetary policies of the previous administration and the general global fall.

The economy performance directly impacts our results of operations as a result of certain of our assets and liabilities being subject to inflation adjustment, and if inflation rises, disposable income of families may decrease in real terms, leading to lack of purchasing power among our customer base. In response to such tighter credit, negative financial news or declines in income or asset values, consumers and businesses may postpone spending, which could have a material adverse effect on the demand for our products and services. A loss of customers or a reduction in purchases by our current customers could have a material adverse effect on our financial condition, results of operations and cash flow and may negatively affect our ability to meet our growth targets.

We may be impacted by volatility in the global financial markets.

We are susceptible to swings in global economic conditions, typified most recently by difficult credit and liquidity conditions and disruptions leading to greater volatility. The global economy has largely recovered from the crisis of 2007, however markets remain subject to ongoing volatility factors including interest rate divergence, geopolitical events, and global growth expectations, and there is no assurance that similar conditions will not arise again. In the long term, as a consequence, global investor confidence may remain low and credit may remain relatively lacking. Hence, additional volatility in the global financial markets may occur.

Additional volatility in the global financial markets could have a material adverse effect on our ability to access capital and liquidity on acceptable financial terms, and consequently on our operations. Furthermore, an economic downturn could negatively affect the financial stability of our customers, which could result in a general reduction in business activity and a consequent loss of income for us.

Developments and the perception of risk in other countries may adversely affect the Brazilian economy and market price of Brazilian issuers' securities.

The market value of securities of Brazilian issuers is affected by economic and market conditions in other countries, including the United States, European countries, as well as in other Latin American and emerging market countries. Although economic conditions in Europe and the United States may differ significantly from economic conditions in Brazil, investors' reactions to developments in these other countries may have an adverse effect on the market value of securities of Brazilian issuers. Additionally, crises in other emerging market countries may diminish investor interest in securities of Brazilian issuers, including our securities. This could adversely affect the market price of our securities, restrict our access to capital markets and compromise our ability to finance our operations in the future on favorable terms, or at all.

In the recent past, there was an increase in volatility in all Brazilian markets due to, among other factors, uncertainties about how monetary policy adjustments in the United States would affect the international financial markets, the increasing risk aversion to emerging market countries, and uncertainties regarding Brazilian macroeconomic and political conditions. These uncertainties adversely affected us and the market value of our securities.

In addition, we continue to be exposed to disruptions and volatility in the global financial markets because of their effects on the financial and economic environment, particularly in Brazil, such as a slowdown in the economy, an increase in the unemployment rate, a decrease in the purchasing power of consumers and the lack of credit availability.

Disruption or volatility in the global financial markets could further increase negative effects on the financial and economic environment in Brazil, which could have a material adverse effect on our business, results of operations and financial condition.

Risks Relating to Our Commons Shares and the ADSs

Our controlling shareholder has power over the direction of our business.

Telecom Italia, through its ownership of TIM Brasil Serviços e Participações S.A., or TIM Brasil, our controlling shareholder, has the ability to determine actions that require shareholder approval, including the election of a majority of our directors and, subject to Brazilian law, the payment of dividends and other distributions. Telecom Italia's single largest shareholder is Vivendi, which is able to exercise significant influence over Telecom Italia. Telecom Italia may pursue acquisitions, asset sales, joint ventures or financing arrangements or may pursue other objectives that conflict with the interests of other shareholders and which could adversely affect our business, financial condition and results of operations.

Holders of our ADSs are not entitled to attend shareholders' meetings and may only vote through the depositary.

Under Brazilian law, only shareholders registered as such in our corporate books may attend shareholders' meetings. All common shares underlying our ADSs are registered in the name of the depositary. A holder of ADSs, accordingly, is not entitled to attend shareholders' meetings. Holders of our ADSs may exercise their limited voting rights with respect to our common shares represented by the ADSs only in accordance with the deposit agreement relating to the ADSs. There are practical limitations upon the ability of ADS holders to exercise their voting rights due to the additional steps involved in communicating with ADS holders. For example, we are required to publish a notice of our shareholders' general meetings in certain newspapers in Brazil. Holders of our shares can exercise their right to vote at a shareholders' general meeting by attending the meeting in person or voting by proxy. By contrast, holders of our ADSs will receive notice of a shareholders' general meeting by mail from the ADR depositary following our notice to the ADR depositary requesting the ADR depositary to do so. To exercise their voting rights, ADS holders must instruct the ADR depositary on a timely basis. This voting process will take longer for ADS holders than for direct holders of our shares.

We cannot assure you that holders will receive the voting materials in time to ensure that such holders can instruct the depositary to vote the shares underlying their respective ADSs. In addition, the depositary and its agents are not responsible for failing to carry out holder's voting instructions or for the manner of carrying out your voting instructions. This means that holders may not be able to exercise their right to vote and may have no recourse if our shares held by such holders are not voted as requested.

Holders of our ADSs or common shares in the United States may not be entitled to participate in future preemptive rights offerings.

Under Brazilian law, if we issue new shares for cash as part of a capital increase, we generally must grant our shareholders the right to purchase a sufficient number of shares to maintain their existing ownership percentage. Rights to purchase shares in these circumstances are known as preemptive rights. We may not legally allow holders of our ADSs or common shares in the United States to exercise any preemptive rights in any future capital increase unless we file a registration statement with the SEC with respect to that future issuance of shares or the offering qualifies for an exemption from the registration requirements of the Securities Act. At the time of any future capital increase, we will evaluate the costs and potential liabilities associated with filing a registration statement with the SEC and any other factors that we consider important to determine whether to file such a registration statement. We cannot assure holders of our ADSs or common shares in the United States that we will file a registration statement with the SEC to allow them to participate in a preemptive rights offering. As a result, the equity interest of those holders in us may be diluted proportionately.

Cash dividends, interest on shareholders' equity and other cash distributions, as well as judgments seeking to enforce our obligations in respect of our shares or ADSs in Brazil will be payable only in reais.

We pay any cash dividends, interest on shareholders' equity and any other cash distributions with respect to our common shares in reais. Accordingly, exchange rate fluctuations affect the U.S. dollar amounts received by the holders of ADSs on conversion by the depositary of dividends and other distributions in Brazilian currency on our common shares represented by ADSs. Fluctuations in the exchange rate between Brazilian currency and the U.S. dollar affects the U.S. dollar equivalent price of our common shares on the Brazilian stock exchanges. In addition, exchange rate fluctuations may also affect our dollar equivalent results of operations. See "Item 5. Operating and Financial Review and Prospects."

If proceedings are brought in the courts of Brazil seeking to enforce our obligations with respect to our shares or ADSs, 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 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 our shares or the ADSs. See "—A. Selected Financial Data—Exchange Rates" for information regarding exchange rates for the Brazilian *real*.

Holders of ADSs or common shares could be subject to Brazilian income tax on capital gains from sales of ADSs or common shares.

According to Article 26 of Law No. 10,833 of December 29, 2003, which came into force on February 1, 2004, capital gains realized on the disposition of assets located in Brazil by non-Brazilian residents, whether or not to other non-residents and whether made outside or within Brazil, are subject to taxation in Brazil. Since January 1, 2017, the rate of the income tax on capital gains accrued by non-Brazilian resident individuals may vary between 15% and 22.5% depending on the capital gain amount. Ultimately, a 25% rate may apply if the capital gain is realized by investors located in a country that does not impose any income tax or that imposes tax at a maximum rate of less than 17% (as amended by National Treasury Ordinance No. 488 of November 1, 2014; prior to this date, the maximum rate was 20%), or a Low or Nil Tax Jurisdiction. Although we believe that the ADSs will not fall within the definition of assets located in Brazil for the purposes of Law No. 10,833, considering the general and unclear scope of Law 10,833 and the absence of any judicial guidance in respect thereof, we are unable to predict whether such interpretation will ultimately prevail in the Brazilian courts. See "Item 10. Additional Information—E. Taxation—Brazilian Tax Considerations."

Gains realized by non-Brazilian holders on dispositions of common shares in Brazil or in transactions with Brazilian residents may be exempt from Brazilian income tax, or taxed at a rate that may vary between 15% and 25%, depending on the circumstances. Gains realized through transactions on Brazilian stock exchanges are exempt from the Brazilian income tax, provided that the transactions are carried out in accordance with Resolution CMN 4,373 (that replaced Resolution CMN 2,689) and the foreign investor is not located in a Low or Nil Tax Jurisdiction. Gains realized through transactions with Brazilian residents or not executed on the Brazilian stock exchanges are subject to tax at a rate (1) that may vary between 15% and 22.5% depending on the capital gain amount if the investors are located in regular taxation jurisdictions, or (2) of 25% if the capital gain is realized by investors located in Low or Nil Tax Jurisdictions. Please refer to "Item 10. Additional Information—E. Taxation—Brazilian Tax Considerations—Taxation of Gains."

An exchange of ADSs for common shares risks loss of certain foreign currency remittance and Brazilian tax advantages.

The ADSs benefit from the certificate of foreign capital registration, which permits J.P. Morgan Chase Bank, N.A., or J.P. Morgan, as depositary, to convert dividends and other distributions with respect to common shares into foreign currency, and to remit the proceeds abroad. Holders of ADSs who exchange their ADSs for common shares will then be entitled to rely on the depositary's certificate of foreign capital registration for five business days from the date of exchange. Thereafter, they will not be able to remit non-Brazilian currency abroad unless they obtain their own certificate of foreign capital registration, or unless they qualify under Resolution CMN 4,373, which entitles certain investors to buy and sell shares on Brazilian stock exchanges without obtaining separate certificates of registration.

If holders of ADSs do not qualify under Resolution CMN 4,373, they will generally be subject to less favorable tax treatment on distributions with respect to our common shares. There can be no assurance that the depositary's certificate of registration or any certificate of foreign capital registration obtained by holders of ADSs will not be affected by future legislative or regulatory changes, or that additional Brazilian law restrictions applicable to their investment in the ADSs may not be imposed in the future.

Brazilian law allows for the Brazilian government to impose temporary restrictions, whenever there is a significant imbalance in Brazil's balance of payments or a significant possibility that such imbalance will exist, on the remittance to foreign investors of the proceeds of their investments in Brazil, as well as on the conversion of the *real* into foreign currencies. The Brazilian government may, in the future, restrict companies from paying amounts denominated in foreign currency or require that any such payment be made in *reais*.

If similar restrictions are introduced in the future, they would likely have an adverse effect on the market price of our shares and ADSs. Such restrictions could hinder or prevent the holders of our shares or the custodian of our shares in Brazil, J.P. Morgan, as, from remitting dividends abroad.

A more restrictive policy could also increase the cost of servicing, and thereby reduce our ability to pay, our foreign currency-denominated debt obligations and other liabilities. If we fail to make payments under any of these obligations, we will be in default under those obligations, which could reduce our liquidity as well as the market price of our common shares, shares and ADSs.