Chapter 3

RISKS

3.1. Risk management and control model
3.2. Risk map and risk profile
3.3. Risk factors detail
3.1. Risk management framework

KEY POINTS

- Aligning risks with the Group’s strategy is essential to achieve our objectives, contributing to value creation.
- The current context and the dynamic nature of technology and digitization, makes us constantly face new challenges and seek out new opportunities.
- Our comprehensive risk management framework facilitates action against risks, both globally and in the main Group operating businesses.

3.1.1. Introduction and reference frameworks

Telefónica has a Risk Management Framework, based on the model established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO)[1]. This framework has been implemented homogeneously throughout the Group’s main operations, so that the Company Managers, within their scope of action, can perform a timely identification, assessment, response and monitoring of the main risks.

This model, which is inspired by best practices, facilitates the prioritization and development of coordinated actions against risks, both from a global Group perspective, and a specific focus on its main operations.

The Telefónica’s Business Principles specifically state that:

“*We establish appropriate controls to evaluate and manage all relevant risks to the Company*”

*Extract from Responsible Business Principles of Telefónica*

In this sense, the Company has a Risk Management Policy, approved by the Board of Directors, and a Corporate Risk Management Manual, both based on experience, best practices and Good Corporate Governance recommendations; contributing to the continuous improvement in business performance.

3.1.2. Risks and strategy

Telefónica Risk management remains embedded in our planning process and is fully aligned with our strategy, in line with the requirements of COSO ERM 2017.

“The main risks are linked to the strategic objectives of the Company Program”

Some of the risks most directly related to the Company’s strategy relate mainly to the need for anticipation and adaptation, in an appropriate time, to constant technological changes and new forms of connectivity (e.g. IoT, “Internet of Things”), as well as changes in customer preferences in the industry.

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**3.1.3. Risks and Opportunities**

We are a technology company that is at the heart of the digital revolution that we are living because the driving force behind that revolution is the connectivity we provide for our customers. Increasingly we are witnessing radical changes in a short time, this means that we encounter opportunities that will allow Telefónica to provide better services and improve the societies where it operates and for all the stakeholders with which it relates. Some examples of potential opportunities are highlighted below:

- Data traffic will continue to grow exponentially and this places infrastructure at the heart of this transformation and speaks to the relevance of our networks.
- We are living in a unique moment because never before in the history of humankind has technology advanced at this speed. It brings together virtual and augmented reality, the explosion of connectivity, the Internet of Things, biotechnology, robotics, blockchain, the softwareization of everything and the ramping-up of artificial intelligence.
- Need to accelerate digitalization across all economic sectors (cloud, industry, remote working, education, health…) drives acceleration of 5G and Fiber.
- In a context of stricter environmental regulations, the transition towards a greener economy presents a clear opportunity for Telefónica, specifically in the positive impact from telecommunications products and services over our clients’ processes, allowing companies to save CO2 emissions by helping them optimize their operations, reducing waste and improving carbon footprint.
- Education also becomes a tool available to many people and a key piece in reducing the social-digital divide.

All this opens up a world of opportunities for our Company. However, this digital revolution has also highlighted the associated risks, that require new governance, for example, the proliferation of digital activity redoubles the importance of the debate about data ownership and privacy protection in the new digital age, as well as opening up new avenues for cyber threats and attacks, among other risky aspects.
3.1.4. Risk culture

In accordance with Telefónica’s Risk Management Policy, one of the basic principles that guide this activity is: “Train and involve employees in the risk management culture, encouraging them to identify risks and actively participate in its mitigation.”

In this sense, Telefónica promotes the following actions:

- **Communication:** in order to spread, through the appropriate channels, the principles and values that should govern risk management.
- **Training:** to promote knowledge and involvement in the aforementioned values and risk management model.

“Training workshops and global awareness campaigns are developed to strengthen the risk management culture in the Company”

3.1.5. Risk Management Governance

Both the Telefónica’s Business Principles and the Risk Management Policy mentioned above, establish that the entire organization has the responsibility to contribute to the identification and management of risks. For the coordination of these activities, the following roles have been established:

**Risk culture**

**Risk Management Governance**

[Diagram illustrating the risk management governance structure with labels for risk owners, risk management model coordinators, supervision of the risk management system, global risk owners, local risk owners, OB’s steering committees, HISPAM, and eRisk (*) as an internal risk management tool.]
Supervision of the Risk management system

The Regulations of the Board of Directors of Telefónica, SA, establish that the primary duty of the Audit and Control Committee shall be to support the Board of Directors[1] in its supervisory duties; including the supervision of the risk management framework, including tax risks. With respect thereto, it shall be responsible for proposing to the Board of Directors a risk control and management policy, which shall identify at least the following: the types of risk facing the company; the setting of the risk level that the Company deems acceptable; the measures to mitigate the impact of the identified risks, should they materialize; and the control and information systems to be used to control and manage the above-mentioned risks.

As a support for the development of these oversight activities by the Audit and Control Committee, a risk management function has been established, within the Internal Audit area, independent of the management, in order to promote, support, coordinate and monitor the implementation of the provisions of this Policy both at Group level and in its main operations.

[1] The profile of the Directors and their competences in the different matters are detailed in the Annual Corporate Governance Report.

For the purpose of ensuring an adequate supervision of the Telefónica’s risk management framework by the Audit and Control Committee, various sessions are held within that committee, through:

• Overall presentations on the risk management model and the situation of the main risks, carried out by Internal Audit. Specifically, during 2020, two general presentations on risks have been made to the Audit and Control Committee of Telefónica.

• Specific presentations of the main risks made by those responsible for their management. Thus, during 2020, monographic sessions on strategic risks have been held, as well as in the areas of Systems and Network, People, Cybersecurity, Tax, Finance, Litigation and Privacy.

Likewise, the Audit and Control Committee periodically reports on these matters to the Board of Directors.

Risk Owner
Risk owners actively participate in the risk strategy and in the important decisions about their assurance and control. To this end, each of the identified risks will be assigned a person (normally a Director) accountable for the risk and its management, preparing a plan for its assurance and control (measures to avoid, mitigate or partially transfer the risks) and effectively monitoring its evolution.

Specifically, with respect to fiscal risks, the Group’s Fiscal Directorate performs the fiscal control function through the Regional Fiscal Directorates, and the local fiscal control officers in the different subsidiaries in accordance with the principles defined in the Group’s Fiscal Control Policy, approved by the Company’s Board of Directors.

3.1.6. Tolerance or risk appetite

The Company has a level of risk tolerance or acceptable risk established at corporate level; which means its willingness to assume a certain level of risk, to the extent that allows the creation of value and the development of the business, achieving an adequate balance between growth, performance and risk.

For the risk assessment, the different typology of the risks that could affect the Company is considered, as described below:

• In general, tolerance thresholds are defined for all risks, by combination of impact and probability of occurrence. These thresholds are updated annually based on the evolution of the main financial figures, both for the Group as a whole and for the main Telefonica companies.

• In the case of risks related to reputation, sustainability and compliance, a zero tolerance level is established.

3.1.7. Risk management process

The risk management process takes the Company’s strategy and objectives as a reference for the identification of the main risks that could affect its achievement. The process consists of four stages, which are described below:

Risk Management Process
Risks identification
The risks are identified by the managers, who consider both the factors that cause them and the effects they may have on the achievement of the objectives.

In this identification phase, risks associated with the strategic plan are considered, as well as potential “emerging risks”, meaning those risks that could eventually have an adverse impact on future performance, although its result and time horizon is uncertain and difficult to predict.

Risk assessment
The objective of the risk assessment is to establish the magnitude or relevance of risks, by considering both their eventual impact and their likelihood of occurrence.

For impact purposes, both the economic impact (quantified - whenever possible - in terms of operational Cash-flow, considering OIBDA plus CAPEX[3]) and the reputational impact (from the variables used in RepTrak[4]) are considered, as well as its potential impact on compliance.

[4] Reptrack: Model developed by the Reputation Institute that allows evaluating how different stakeholders perceive the company.

Likewise, other qualitative additional factors are considered, such as the historical trend, the level of assurance or control; or the perspectives on their future evolution.

Risk response and action plans against risks
In addition to identification and assessment of the risks, the Risk Management Model considers reasonable response and monitoring mechanisms for said risks. In this sense, it contemplates procedures to respond to the new challenges that arise through the alignment between the strategic objectives and the risks that could affect the fulfillment of such objectives.

The different types of risk response are described below:

Risk response

- **AVOID 2**: Change the way you act or not proceed with the activity that causes the risk.
- **MITIGATE 1**: Make the decision to assume some risk according to management criteria.
- **TRANSFER 3**: Transfer the risk to a third party through the contracting of insurance or outsourcing of activities.
- **ACCEPT 4**: Take measures to reduce the risk likelihood of occurrence, its potential impact, or both.

Global measures, mainly involving the use of financial derivatives, are undertaken to mitigate certain financial risks such as those relating to exchange-rate and interest-rate fluctuations. In relation to tax risks, the main issues are identified and monitored. The Group uses Multinational insurance Programs, or insurance policies arranged locally in each country, to cover operational risks, depending on the type of risk and cover required.
Monitoring and reporting
In accordance with the diversity of the types of risk that may arise, the risk monitoring and response mechanisms include global initiatives, homogeneously promoted and coordinated throughout our main operations, and/or specific actions aimed at addressing particular risks in some of our companies.

Business Assurance Model
A management model based on the existing assurance allows prioritizing and being more specific in the actions to be carried out in the area of Risk Management and Internal Control.

3.1.8 Perspectives of the Risk Management Framework
To have a comprehensive model, oriented to the needs and the Group’s own configuration, the ERM Framework considers a risk assessment through four complementary perspectives:

- **Top-down**: This approach starts from the overall strategic objectives of the company and then breaks down the risks into specific areas such as projects, processes, and controls.
- **Bottom-up**: It is based on the concept of Risk Self-Assessment (RSA), according to which managers are responsible for identifying and describing the specific risks of their area, as well as assessing them and defining an adequate response to them.

Perspectives of the Risk Management Framework

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**Business Assurance Model**

- Main risks
- Risk identification and assessment process
- Assurance activities
- Strategic objectives of the Company and related processes
Top-down: this assessment is based on the cross-sectional analysis of those matters considered relevant and common to most of the Group’s companies, complementing the previous bottom-up approach, thus having a global vision of the main risks of the Company as a whole.

Risks in Processes: support to process managers to identify and define their response to those risks that may affect the achievement of their objectives, with a transversal approach.

Project Risks: applicable to those internal projects of special relevance, usually related to transformation initiatives and with a transversal approach.

3.1.9. Digitalization of risk management
With the aim of managing and supervising risks, a Risk Management tool and a Dashboard have been developed, which facilitate the reporting, analysis, assessment and management of risk information within Telefónica Group. These tools are common for all Group Companies that report risks, and their main features are as follows:
3.2. Risk map  GRI 103, 102-15

**KEY POINTS**

- ESG risks are becoming increasingly relevant in our environment, considering aspects such as environmental impact, climate change or respect for human rights in our operations.

- When identifying our risks, we also consider those emerging risks that could have an impact on the development of the Company or the sector in the long term.

- The COVID-19 pandemic is having, and is expected to continue to have an impact on our risk profile.

Taking as a reference the objectives identified in the Company’s Strategic Plan, the risks that could affect the achievement of these objectives are identified, both from a global perspective (through the main global Group areas) and a local one (through local managers and the respective local Steering Committees).

An assessment of the impact and probability of the identified risks is made, which facilitates their prioritization and the definition of response plans to mitigate them, ensuring the necessary coordination between global and local initiatives in order to act against the risks.

**Risk Heatmap**

- Global Areas:
  - Systems and network
  - Customer
  - Privacy
  - Legal
  - Regulation
  - Strategy

- Basic Risks:
  - Sustainability
  - Supply chain
  - People
  - Tax
  - Finance
  - Compliance

- Specific Risks reported by tolerance level

- Other minor risks at a local level

- OBJECTIVES definition and ACTION PLANS execution

- Associated RISKS

Based on the global heatmap, the main risks are disclosed.
3.2.1. Telefonica’s risk catalogue

In order to facilitate the risk identification process by the management of the Company, the Telefónica Group has a general risks catalogue, which is updated periodically, and which allows the information to be homogenized and consolidated, and to comply with the internal and external reporting requirements on the main risks.

Telefónica’s risk catalogue considers the following four risk categories:

<table>
<thead>
<tr>
<th>Risk categories</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>Risks related to the sector and especially to the company’s strategy, such as adaptation to the client’s mentality, technological innovation, competition, the regulatory framework, privacy, as well as events that affect the sustainability and reputation of the company.</td>
</tr>
<tr>
<td>Operational</td>
<td>Risks derived from events caused by the inadequacy or failures of the network and computer systems, security, customer service, human resources, as well as operational management.</td>
</tr>
<tr>
<td>Financial</td>
<td>Risks derived from adverse movements in the economic environment or financial variables, and the inability of the company to meet its commitments or make its assets liquid, including tax issues.</td>
</tr>
<tr>
<td>Legal and of normative compliance</td>
<td>Risks related to litigation and regulatory compliance, including compliance with anti-corruption legislation.</td>
</tr>
</tbody>
</table>

This catalogue adapts to the evolution in the typology of the main risks, revealing a growing relevance of those risks related to intangibles and of global transcendence, such as public image, social impact of organizations or sustainability.
3.2.2. ESG Risks (Environmental, Social and Governance)

Telefónica’s risk catalogue includes **risks related to reputation, sustainability and the long term**, as set out in its Responsible Business Plan, as defined below. In particular for Climate Change risk, we follow TCFD (Task Force on Climate-related Financial Disclosures) guidelines to analyze and manage both physical and transition risks. We analyze these risks in the medium and long term, for two CO2 concentration scenarios (Representative Concentration Pathways - RCP) 2.6 and 8.5 of the IPCC (UN Intergovernmental Panel on Climate Change). For more details, see chapter 2.10 Energy and Climate Change.

### Risks related to reputation, sustainability and the long term

<table>
<thead>
<tr>
<th>Environmental and electromagnetic fields</th>
<th>Climate change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct or indirect impact on Telefónica’s operations due to environmental issues in order to ensure alignment with the new environmental regulations.</td>
<td>Risk of direct or indirect impact on Telefónica’s operations and business lines due to climate change. Includes both physical risks (temperature, precipitation, extreme events...) and transition risks (regulation, market, reputation...) in line with TCFD guidelines.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Human rights</th>
<th>Responsibility with the Consumer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrate human rights principles into the activity of the company or our supply chain.</td>
<td>The Company’s actions, concerning our customers, should be aimed at building a sustainable relationship in the long term with them.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Privacy</th>
<th>Cibersecurity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk of a situation arising from a breach of applicable data protection regulations, currently in force or future, or of stakeholder expectations regarding the effects on the company, in terms of investment, increased costs or obstacles to the development of new services, loss of customer or investor confidence and penalties.</td>
<td>Risk of potential security digital threats, internal or external, intentional or unintentional, may materialize in information systems and affect the organization causing damage to the business.</td>
</tr>
</tbody>
</table>
3.2.3 Emerging risks

In the process of identifying new risks, Telefónica also considers emerging risks.

Emerging risks are those issues identified recently and which are expected to have an adverse impact on the future development of the company or the sector in the long term; although its outcome and time horizon is still uncertain and difficult to predict.

As emerging risks to consider in a long-term scenario, the following should be highlighted:

• **5G development**: management of the roll-outs in line with the evolution of the demand, technological maturity and other factors such as regulation, marketing and environmental and/or energy considerations in their development.

• **Data ethics**: responsible use of the data, both internal of the company, and those circulating through telecommunications networks.

• **Government of Artificial Intelligence**: Adequate use and management of artificial intelligence capabilities.

In addition, other emerging issues have begun to be managed in Telefónica, such as diversity or professional skills management, in line with what is described below:

### Emerging issues: diversity and professional skills management

<table>
<thead>
<tr>
<th>Diversity Management</th>
<th>Skills management for the future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need to adapt the commitment to diversity, as a key lever towards digital transformation, guaranteeing multiculturalism, the variety of gender, age, profiles with different capacities and experiences among our professionals.</td>
<td>Need to acquire and evolve the necessary capacities to execute the strategic plan of the Company, in an environment of technological disruption and shortage of critical skills in the market.</td>
</tr>
</tbody>
</table>

3.2.4. Materialized risks

The Company tracks materialized risks. The strategy and management of Telefónica Group’s activities tend to minimize the impact of materialized risks, as well as to counterbalance the negative effects of some issues with the favourable evolution of others.

During this year, the Covid-19 pandemic has had a significant impact on our risk profile, affecting various areas, although the most important aspects have been identified within a separate Covid-19 Pandemic risk in the Risk Factors Section, which gives an overview of the related uncertainties and their impact on the Group. The Covid-19 pandemic is having, and in this regard and in accordance with current accounting standards, the Telefónica Group reviews on an annual basis, or more frequently when the circumstances require it, the need to introduce changes to the book value of its goodwill, (that as of December 31, 2020, represented 16.4% of the Group’s total assets,) deferred tax assets (that as of December 31, 2020, represented 6.4% of the Group’s total assets) or other assets such as intangible assets and property, plant and equipment. In case of goodwill, the potential loss of value is determined by the analysis of the recoverable value of the cash-generating unit (or group cash-generating of units) to which the goodwill is allocated to at the time it is originated. By way of example, in 2020 impairment losses in the goodwill and other assets of Telefónica Argentina were recognized for a total of 894 million euros.
3.2.5. Prioritization of Risks

The risks of Telefónica Group are prioritized based on their level of criticality, which is obtained from the combination of impact and likelihood assessments for each of them.

For public disclosure purposes, Telefonica’s risks are presented under four categories, as described above, presenting the risk factors in descending order of importance within each category, in line with the requirements of ESMA (European Securities and Markets Authority).

The detail on the main risk factors disclosed by the Company is included in the following section.

The COVID-19 pandemic is having, and is expected to continue to have an impact on our risk profile. Comments into some of the affected risks have been incorporated and, in addition, a separate risk has been included, considering the potential unexpected and uncertain events of this pandemic, providing an overview of the main uncertainties and impacts on the Group.
The Telefónica Group is affected by a series of risk factors that affect exclusively the Group, as well as a series of external factors that are common to businesses of the same sector. The main risks and uncertainties faced by Telefónica, which could affect its business, financial condition, results of operations and/or cash flows are set out below and must be considered jointly with the information set out in the Consolidated Financial Statements.

These risks are currently considered by the Telefónica Group to be material, specific and relevant to consider in making an informed investment decision in respect of the Company. However, the Telefónica Group is subject to other risks that have not been included in this section based on the Telefónica Group’s assessment of their specificity and materiality depending on the Group’s assessment of their probability of occurrence and the potential magnitude of their impact.

Risks are presented in this section grouped into four categories (according to the definitions included in section 3.2. above):

- Business
- Operational
- Financial
- Legal and compliance

These categories are not presented in order of importance. However, within each category, the risk factors are presented in descending order of importance, as determined by Telefónica at the date of this document. Telefónica may change its vision about their relative importance at any time, especially if new internal or external events arise.

### Risks related to the business activities.

**Telefónica’s competitive position in some markets could be affected by the evolution of competition and market consolidation.**

The Telefónica Group operates in highly competitive markets and it is possible that the Group may not be able to market its products and services effectively or respond successfully to the different commercial actions carried out by its competitors, causing it to not meet its growth and customer retention plans, thereby jeopardizing its future revenues and profitability.

In addition, market concentration, including as a result of mergers, acquisitions, alliances and collaboration agreements with third parties (e.g., the possible integration of companies in the content/entertainment sector, such as the mergers of FOX and Disney, and AT&T and Time Warner), could affect the competitive position of Telefónica, as well as the efficiency of its operations.

The reinforcement of competitors, the entry of new competitors, or the merger of operators in certain markets, may affect Telefónica’s competitive position, negatively affecting the evolution of its revenues and market share. In addition, changes in competitive dynamics in the different markets in which we operate, such as in Chile and Peru, where there are aggressive customer acquisition offers, including unlimited data and discounts on certain services, among others, can affect the competitive position and the efficiency of Telefónica’s operations.

If Telefónica is not able to successfully face the challenges posed by its competitors, the Group’s business, financial condition, results of operations and/or cash flows could be adversely affected.

### The Telefónica Group’s strategy which is focused on driving new digital businesses and providing data-based services, increases its exposure to risks and uncertainties arising from data privacy regulation.

The Telefónica Group’s commercial portfolio includes products and/or services which are based on the use, standardization and analysis of data, as well as the deployment of advanced networks and the promotion of new technologies related to Big Data, Cloud Computing, Cybersecurity, Artificial Intelligence and the Internet of Things (“IoT”).

The large amount of information and data that is processed throughout the Group (approximately 345.4 million accesses associated with telecommunications services, digital products and services and Pay TV and 112,797 employees as of December 31, 2020), increases the challenges of complying with privacy regulations. Moreover, there is a risk that measures adopted in response to these regulations may stifle innovation. Conversely, the Group’s efforts to promote innovation may result in increased compliance risks and costs.

One of the most important pieces of regulation for the Telefónica Group’s operations in the European Union is Regulation (EU) 2016/679 of the European Parliament and Council of April 27, 2016, on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (“GDPR”), which content has become a benchmark for all countries where the Telefónica Group operates. In addition, progress continues to be made on the proposal for a future European regulation concerning the respect for privacy and protection of personal data in electronic communications (“e-Privacy Regulation”),...
which would repeal Directive 2002/58/EC. If approved, this proposal could establish additional and more restrictive rules than those established in the GDPR, which may increase compliance risks and costs.

Moreover, on July 16, 2020, the Court of Justice of the European Union issued a judgment which annulled, without granting a grace or transition period, the European Commission's Decision (EU) 2016/1250 of July 12, 2016 on the adequacy of the protection provided by the EU-U.S. Privacy Shield. Accordingly, such framework is not a valid mechanism to comply with EU data protection requirements when transferring personal data from the European Union to the United States. As a result of that decision, the Telefónica Group has been, among other measures, reviewing and where applicable revising, in a short period of time, international data transfers being made by the Telefónica Group companies from the European Economic Area (“EEA”) to suppliers located in the United States with a view to minimizing the risk of breach of the GDPR. However, due to the complexity and uncertainties coming from the aforementioned judgement there can be no assurance that any such measures have been or will be fully effective in preventing a breach of the GDPR. In addition, there can be no assurance that the transfers which began under the framework of the EU-U.S. Privacy Shield did not result in a breach of the GDPR.

In addition, the following recent and prospective regulatory developments may be material to the Telefónica Group’s operations: (i) in the United Kingdom, its exit from the European Union means that the Group must monitor how its operations and business in the United Kingdom are affected in terms of applicable privacy regulations and, specifically, the flow of data to and from the United Kingdom. The Trade and Cooperation Agreement between the United Kingdom and the European Union reached on December 24, 2020, which has been applied provisionally pending ratification by the authorities of the European Union, contains a Final Provision according to which, from January 1, 2021 and for a period of four months, extendable by two more months, the transmission of personal data from the EEA to the United Kingdom will not be considered a transfer to a third country in accordance with the GDPR. The Final Provision will cease to be in effect if, during this period, the European Commission adopts an adequacy decision in relation to the United Kingdom. If the European Commission fails to adopt such a decision during this period, or if such adequacy decision contains terms which are more onerous than those currently in place, the Telefónica Group may face similar challenges as it is currently facing with respect to data transfers to the United States and may have to review and, where appropriate, revise the transfers of personal data to the United Kingdom; and (ii) in Latin America, Law No. 13,709 (LGPD) in Brazil imposes standards and obligations similar to those required by the GDPR, including a sanctioning regime which will be in force from August 2021, with fines for non-compliance of up to 2% of the Group’s income in Brazil in the last financial year subject to a limit of 50 million Brazilian reals (approximately 8 million euros based on the exchange rate as of December 31, 2020) per infraction. In other countries of Latin America where the Group operates, such as Ecuador, Argentina and Chile, there are regulatory proposals to bring regulation more in line with the provisions set forth in the GDPR, which may increase compliance risks and costs.

Data privacy protection requires careful design of products and services, as well as robust internal procedures and rules that can be adapted to regulatory changes where necessary, all of which entails compliance risk. Failure to maintain adequate data security and to comply with any relevant legal requirements could result in the imposition of significant penalties, damage to the Group’s reputation and the loss of trust of customers and users.

Telefónica’s reputation depends to a large extent on the digital trust it is able to generate among its customers and other stakeholders. In this regard, in addition to any reputational consequences, it is important to note that, in the European Union, very serious breaches of the GDPR may entail the imposition of administrative fines of up to the larger of 20 million euros and 4% of the infringing company’s overall total annual revenue for the previous financial year. Furthermore, once it is approved, the e-Privacy Regulation may set forth sanctions for breaches of it similar to those provided for in the GDPR.

Any of the foregoing could have an adverse effect on the business, financial condition, results of operations and/or cash flows of the Group.

The Group requires government concessions and licenses for the provision of a large part of its services and the use of spectrum, which is a scarce and costly resource.

The telecommunications sector is subject to laws and sector-specific regulations. The fact that the Group’s business is highly regulated affects its revenues, operating income before depreciation and amortization (“OIBDA”) and investments.

Many of the Group’s activities (such as the provision of telephone services, Pay TV, the installation and operation of telecommunications networks, etc.) require licenses, concessions or authorizations from governmental authorities, which typically require that the Group satisfy certain obligations, including minimum specified quality levels, and service and coverage conditions. If the Telefónica Group breaches any of such obligations it may suffer consequences such as economic fines or, in a worst-case scenario, other measures that would affect the continuity of its business. Exceptionally, in certain jurisdictions, the terms of granted licenses may be modified before the expiration date of such licenses or, at the time of the renewal of a license, new enforceable obligations could be imposed or the renewal of a license could be refused.

Additionally, the Telefónica Group could be affected by the regulatory actions of antitrust authorities. These authorities could prohibit certain actions, such as new acquisitions or specific practices, create obligations or impose heavy fines.
Any such measures implemented by the antitrust authorities could result in economic and/or reputational loss for the Group, in addition to a loss of market share and/or harm to the future growth of certain of its businesses. For example, on February 22, 2019, the European Commission started an investigation of Telefónica Deutschland in respect of the Group’s compliance with its commitments undertaken in the merger with E-Plus in 2014. In this context, Telefónica Deutschland has adjusted the conditions of 4G wholesale services.

Any of the foregoing could have an adverse effect on the business, financial condition, results of operations and/or cash flows of the Group.

Access to new concessions/licenses of spectrum.

The Group requires sufficient spectrum to offer its services. The Group’s failure to obtain sufficient or appropriate spectrum capacity in the jurisdictions in which it operates, or its inability to assume the related costs, could have an adverse impact on its ability to maintain the quality of existing services and on its ability to launch and provide new services, which may materially adversely affect Telefónica’s business, financial condition, results of operations and/or cash flows.

The intention of the Group is to maintain current spectrum capacity and, if possible, to expand it, specifically through the participation of the Group in spectrum auctions which are expected to take place in the next few years, which will likely require cash outflows to obtain additional spectrum or to comply with the coverage requirements associated with some of the related licenses.

In Europe, two auction processes are expected in the near term: (i) in Spain, on December 23, 2020, the Ministry of Digital Transformation published the conditions of the auction of two national 10 MHz (TDD) concessions in the 3.4-3.6 GHz band, which will take place on February 22, 2021. The allocation of this spectrum is a preliminary step for the reorganization of the entire 3.4-3.8 GHz band in the first quarter of 2021. As for the 700 MHz band, a consultation was launched on the conditions of an auction, expected to take place during March 2021, for a total of 75 MHz; and (ii) in the United Kingdom, an auction for the 700 MHz and the 3.6-3.8 GHz bands is expected to take place in March of 2021, although such auction could be delayed.

In Latin America, several auction processes are expected in the near term: (i) in Brazil, on February 5, 2020, ANATEL published the proposal for the 5G public auction. It is expected that the auction of 20 MHz of the 700 MHz band, 90 MHz of the 2.3 GHz band, 400 MHz of the 3.5 GHz band and 3,200 MHz of the 26 GHz band will take place in 2021; (ii) in Colombia, the “5G Plan” as well as the 2020-2024 Spectrum Public Policy and the 2020-2024 Spectrum Allocation Framework Plan were published. These policy documents announced actions to auction the remaining spectrum in the 700 MHz, 1,900 MHz and 2,500 MHz bands, without indicating a concrete time frame. Additionally, spectrum in the 3.5 GHz band is planned to be assigned in the second quarter of 2021; however, this auction could be postponed until 2022. Telefónica has requested the Ministerio de las Tecnologías de la Información y las Comunicaciones (MinTic) to delay the spectrum auction in the 3.5 GHz band, considering that the market is not yet sufficiently prepared. It has also proposed the revision of the spectrum valuation methodology downwards, in order to align costs with the spectrum value generation capacity. Finally, although it is in favor of increasing the spectrum caps, Telefónica has requested additional measures to avoid resource monopolization by the dominant operator; and (iii) in Peru, auctions were announced for the bands 1,750 - 1,780 MHz, 2,150 - 2,180 MHz and 2,300 - 2,330 MHz, which may take place during 2021. In addition, the Ministry of Transportation and Communications has started a public consultation regarding 5G and an auction model for the 3.5 GHz and 26 GHz bands.

Existing licenses: renewal processes and modification of conditions for operating services.

The revocation or failure to renew the Group’s existing licenses, authorizations or concessions, or any challenges or amendments to their terms, could materially adversely affect Telefónica’s business, financial condition, results of operations and/or cash flows.

In Germany, Telefónica’s and other parties’ legal actions against Decisions III and IV adopted by the German regulator on the conditions of use of frequencies and the rules of the spectrum of the 2 GHz and 3.4-3.7 GHz bands auction, that ended on June 12, 2019, are pending. With its appeals, Telefónica is challenging in particular the imposed coverage obligations and the requirement to negotiate on network access. Other parties inter alia claim that the obligation to negotiate with other operators is not strict enough. It is yet unclear to what extent these different actions will affect the regulator’s Decisions III and IV.

With respect to Latin America:

In Brazil, the publication by ANATEL of two regulations for the development of Law 13,879/2019 regarding the migration from the concession regime to the authorization regime are pending. ANATEL is working on the methodology for calculating the migration balance and there is a risk that consensus will not be reached between the parties regarding the migration calculation. If a decision is made not to migrate, the Telefónica Servicio de Telefonía Fija Conmutada (STFC) concession will remain in force until 2025. In addition, Telefónica could lose its right to operate spectrum in the 450 MHz band, granted in certain cities, if Telefónica’s appeal against a decision adopted by the regulator in June 2019 is not successful. Furthermore, regarding the extension of the 850 MHz band authorizations, ANATEL agreed to extend the current authorizations for the use of radio frequencies in Bands A and B, proposing their approval, on a primary basis, until November 29, 2028, if the legal and regulatory requirements are met. However, Telefónica has appealed the regulator’s decision related to the amount due for the extension, arguing that it should be calculated based on net
present value parameters to reflect the real economic value (market value) of the bands.

In Peru, an arbitration process was started by the Group, to challenge the decision adopted by the Ministry of Transportation and Communications (“MTC”), denying the renewal of concessions for the provision of fixed-line services, valid until 2027. Nevertheless, Telefónica del Perú S.A.A. holds other concessions for the provision of fixed-line services that allow it to provide these services beyond 2027. The renewal of the 1,900 MHz band in all of Peru (except for Lima and Callao), which expired in 2018, and of other telecommunications services were requested by the Group and a decision by the MTC, is still pending. Nevertheless, these concessions are valid while the procedures are in progress.

In Colombia, the period to request the renewal of the license to use 15 MHz in the 1,900 MHz band, will expire in April 2021. Unless it is renewed, the license will expire on October 18, 2021. MinTic must establish the renewal conditions in accordance with law 1978/19, which implies market prices conditions, extends the license periods to a maximum of 20 years and allows paying up to 60% of the price of the spectrum through obligations to do or take action.

In Chile, as a result of the Supreme Court ruling on the 700 MHz tender, Teléfonica Móviles Chile returned 50 MHz in the 3.5 GHz band to the State in two regions in the south of the country and auctioned 10 MHz of the 1,900 MHz band, the result of which was announced on December 21, 2020.

In Argentina, in connection with Decree of Necessity and Urgency 690/2020 (“DNU 690/2020”), Telefónica de Argentina, S.A. and Telefónica Móviles Argentina, S.A. (collectively, “Telefónica Argentina”) has filed a lawsuit against the Argentine State, in connection with a series of contracts for licenses to provide services and spectrum use authorizations entered into between Telefónica Argentina and the Argentine State, including the licenses resulting from the 2014 spectrum auction. Such contracts and their regulatory framework stated that the services provided by Telefónica Argentina were private and prices would be freely set by Telefónica Argentina. However, DNU 690/2020, by providing that the services will be “public services” and that prices will be regulated by the Argentine State, substantially modifies the legal status of those contracts, affecting the performance of their obligations and substantially depriving Telefónica Argentina of essential rights derived from those contracts.

During 2020, the Group’s consolidated investment in spectrum acquisitions and renewals amounted to 126 million euros (1,501 million euros in 2019, 1,425 million euros of which corresponded to spectrum acquisition in Germany), representing 0.3% of the Group’s consolidated revenues for 2020 (3.1% in 2019). In the event that the licenses mentioned above are renewed or new spectrum is acquired, it would involve additional investments by Telefónica.

Further information on certain key regulatory matters affecting the Telefónica Group and the concessions and licenses of the Telefónica Group can be found in the Appendix VI of the Consolidated Financial Statements: “Key regulatory issues and concessions and licenses held by the Telefónica Group”.

**Telefónica depends on its suppliers.**

The existence of critical suppliers in the supply chain, especially in areas such as network infrastructure, information systems or handsets with a high concentration in a small number of suppliers, poses risks that may affect Telefónica’s operations. This may cause legal contingencies or damages to its image in the event that a participant in the supply chain engages in practices that do not meet acceptable standards or that otherwise fail to meet Telefónica’s performance expectations. This may include delays in the completion of projects or deliveries, poor-quality execution, cost deviations and inappropriate practices.

As of December 31, 2020, the Group depended on three handset suppliers (one of them located in China) and eight network infrastructure suppliers (two of them located in China), which, together, accounted for 87% and 80%, respectively, of the aggregate value of contracts awarded in 2020 to handset suppliers and network infrastructure suppliers, respectively. One of the handset suppliers represented 54% of the aggregate value of contracts awarded in 2020 to handset suppliers.

These suppliers may, among other things, extend delivery times, raise prices and limit supply due to their own stock shortfalls and business requirements or for other reasons.

If suppliers cannot supply their products to the Telefónica Group within the agreed deadlines or such products and services do not meet the Group’s requirements, this could hinder the deployment and expansion plans of the network. This could in certain cases affect Telefónica’s compliance with the terms and conditions of the licenses under which it operates, or otherwise adversely affect the business and operating results of the Telefónica Group. In addition, the possible adoption of new protectionist measures in certain parts of the world, including as a result of trade tensions between the United States and China, and/or the adoption of lockdown or other restrictive measures as a result of COVID-19 or any other crisis or pandemic, may have an adverse impact on certain of Telefónica’s suppliers and other players in the industry. The imposition of trade restrictions and any disruptions in the supply chain could result in higher costs and lower margins or affect the ability of the Telefónica Group to offer its products and services and could adversely affect the Group’s business, financial condition, results of operations and/or cash flows.

During 2020, specific monitoring has been carried out and action plans have been developed by the Group with respect to the supply chain challenges resulting from the pandemic, as well as the potential discontinuation of use of some suppliers as a result of the US-China conflict. These developments may adversely affect the Group’s business, financial condition, results of operations and/or cash flows.
Telefónica operates in a sector characterized by rapid technological changes and it may not be able to anticipate or adapt to such changes or select the right investments to make.

The pace of innovation and Telefónica’s ability to keep up with its competitors is a critical issue in a sector so affected by technology such as telecommunications. In this sense, significant additional investments will be needed in new high-capacity network infrastructures to enable Telefónica to offer the features that new services will demand, through the development of technologies such as 5G or fiber optic.

New products and technologies are constantly emerging that can render products and services offered by the Telefónica Group, as well as its technology, obsolete. In addition, the explosion of the digital market and the entrance of new players in the communications market, such as mobile network virtual operators (“MNVOs”), internet companies, technology companies or device manufacturers, could result in a loss of value for certain of the Group’s assets, affect the generation of revenues, or otherwise cause Telefónica to have to update its business model. In this respect, revenues from traditional voice business are shrinking, while new sources of revenues are increasingly derived from connectivity and digital services. Examples of these services include video, IoT, security, Big Data and cloud services.

One of the technologies currently being developed by telecommunications operators, including Telefónica (in Spain and Latin America), is the new FTTx type networks which allow the offering of broadband accesses over fiber optics with high performance. However, the deployment of such networks, in which the copper of the access loop is totally or partially replaced by optical fiber, necessitates high levels of investment. As of December 31, 2020, in Spain, fiber coverage reached 25.2 million premises. There is a growing demand for the services that these new networks can offer to the end customer. However, the high levels of investment required by these networks result in the need to continuously consider the expected return on investment, and no assurance can be given that these investments will be profitable.

In addition, the ability of the Telefónica Group’s IT systems (operational and backup) to adequately support and evolve to respond to Telefónica’s operating requirements is a key factor to consider in the commercial development, customer satisfaction and business efficiency of the Telefónica Group. While automation and other digital processes may lead to significant cost savings and efficiency gains, there are also significant risks associated with such transformation processes. Any failure by the Telefónica Group to develop or implement IT systems that adequately support and respond to the Group’s evolving operating requirements could have an adverse effect on the Group’s business, financial condition, results of operations and/or cash flows.

All of this forces Telefónica to continuously invest in the development of new products, technology and services to continue to compete effectively with current or future competitors, and, for this reason, the Group’s profit and margins could be reduced or such investment could not lead to the development or commercialization of successful new products or services. To contextualize the size of the Group’s investments, total research and development expenditure in 2020 was 959 million euros (866 million euros and 947 million euros in 2019 and 2018, respectively). These expenditures represented 2.2%, 1.8% and 1.9% of the Group’s consolidated revenues in 2020, 2019 and 2018, respectively. These figures have been calculated using the guidelines established in the Organization for Economic Co-operation and Development (“OECD”) manual.

If Telefónica is not able to anticipate and adapt to the technological changes and trends in the sector, or to properly select the investments to be made, this could negatively affect the Group’s business, financial condition, results of operations and/or cash flows.

Telefónica may not anticipate or adapt in a timely manner to changing customer demands and/or new ethical or social standards, which could adversely affect Telefónica’s business and reputation.

To maintain and improve its position in the market vis-à-vis its competitors, it is vital that Telefónica: (i) anticipates and adapts to the evolving needs and demands of its customers, and (ii) avoids commercial or other actions or policies that may generate a negative perception of the Group or the products and services it offers, or that may have or be perceived to have a negative social impact. In addition to harming Telefónica’s reputation, such actions could also result in fines and sanctions.

In order to respond to changing customer demands, Telefónica needs to adapt both (i) its communication networks and (ii) its offer of digital services.

The networks, which had historically focused on voice transmission, are evolving into increasingly flexible, dynamic and secure data networks, replacing, for example, old copper telecommunications networks with new technologies such as fiber optics, which facilitate the absorption of the exponential growth in the volume of data demanded by the Group’s customers.

In relation to digital services, customers require an increasingly digital and personalized experience, as well as a continuous evolution of the Group’s product and service offering. In this sense, new services such as “Smart Wi-Fi” or “Connected Car”, which facilitate certain aspects of the Group’s customers’ digital lives, are being developed. Furthermore, new solutions for greater automation in commercial services and in the provision of the Group’s services are being developed, through new apps and online platforms that facilitate access to services and content, such as new video platforms that offer both traditional Pay TV, video on demand or multi-device access. However, there can be no assurance that these and other efforts will be successful. For example, if streaming television services, such as Netflix or others, become the principal way television is consumed to the detriment of the Group’s Pay TV service, the Group’s revenues and margins could be affected.
In the development of all these initiatives it is also necessary to take into account several factors: on one hand, there is a growing social and regulatory demand for companies to behave in a socially responsible manner, and, on the other hand, the Group’s customers are increasingly interacting through online communication channels, such as social networks, in which they express this demand. The Company’s ability to attract and retain clients depends on their perceptions regarding the Group’s reputation and behavior. The risks associated with potential damage to a brand’s reputation have become more relevant, especially due to the impact that the publication of news through social networks can have.

If Telefónica is not able to anticipate or adapt to the evolving needs and demands of its customers or avoid inappropriate actions, its reputation could be adversely affected, or it could otherwise have an adverse effect on the business, financial condition, results of operations and/or cash flows of the Group.

Operating Risks.

Information technology is key to the Group's business and is subject to cybersecurity risks.
The risks derived from cybersecurity are among the Group’s most relevant risks due to the importance of information technology to its ability to successfully conduct operations. Despite advances in the modernization of the network and the replacement of legacy systems in need of technological renewal, the Group operates in an environment increasingly prone to cyber-threats and all of its products and services, such as mobile Internet or Pay TV services, are intrinsically dependent on information technology systems and platforms that are susceptible to cyberattacks. Successful cyberattacks that disrupt the Group’s operations could prevent the effective provision of products and services to customers. Therefore, it is necessary to continue to identify and remedy any technical vulnerabilities and weaknesses in the Group’s operating processes, as well as to strengthen its capabilities to detect and react to incidents. This includes the need to strengthen security controls in the supply chain (for example, by focusing on the security measures adopted by the Group’s partners and other third parties), as well as to ensure the security of the services in the cloud. Throughout 2020, as a result of the circumstances brought by the COVID-19 pandemic, security measures related to remote access and teleworking of employees and collaborators have been reviewed and strengthened, but no assurance can be provided that such security measures will be effective.

Telecommunications companies worldwide face continuously increasing cybersecurity threats as businesses become increasingly digital and dependent on telecommunications, computer networks and cloud computing technologies. Cybersecurity threats may include gaining unauthorized access to the Group’s systems or propagating computer viruses or malicious software to misappropriate sensitive information like customer data or disrupt the Group’s operations. In addition, traditional security threats, such as theft of laptop computers, data devices and mobile phones may also affect the Group along with the possibility that the Group’s employees or other persons may have unauthorized or authorized access to the Group’s systems and leak data and/or take actions that affect the Group’s networks or otherwise adversely affect the Group or its ability to adequately process internal information or even result in regulatory penalties.

In particular, in the past three years, the Group has suffered several cybersecurity incidents. Attacks during this period include (i) intrusion attempts (direct or phishing), exploitation of vulnerabilities and corporate credentials being compromised for ransomware deployment (through malicious software that encrypts business data); (ii) Distributed Denial of Service (DDoS) attack, using massive volumes of Internet traffic that saturate the service; and (iii) exploitation of vulnerabilities to carry out fraud through online channels, usually through the subscription of services without paying for them.

Some of the main measures adopted by the Telefónica Group to mitigate these risk are vulnerabilities checks, access control measures, log review of critical systems, network segregation in zones and the deployment of protective systems such as firewalls, intrusion prevention systems and virus scanners among other physical and logical security measures. In the event that preventive and control measures do not prevent damage to systems or data, backup systems are designed to provide for the full or partial retrieval of information.

Although Telefónica seeks to manage these risks by adopting technical and organizational measures, such as those referred to above, as defined in its digital security strategy, it cannot guarantee that such measures are sufficient to avoid or fully mitigate such incidents. Therefore, the Telefónica Group has insurance policies in place, which could cover, subject to the policies terms, conditions, exclusions, limits and sublimits of indemnity, and applicable deductibles, certain losses arising out of these types of incidents. To date, the insurance policies in place have covered some incidents of this nature, however due to the potential severity and uncertainty about the evolution of the aforementioned events, these policies may not be sufficient to cover all possible losses arising out of an individual event.

Unanticipated network interruptions can lead to quality loss or the interruption of the service.

Unforeseen service interruptions can be due to system failures, natural disasters caused by natural or meteorological events or phenomena, lack of electric supply, network failures, hardware or software failures, theft of network elements or cyber-attacks. Any of the foregoing can affect the quality of, or cause interruption to, the provision of the services of the Telefónica Group.

Such events, like the one that affected the mobile data services provided by O2 UK at the end of 2018 resulting from a software failure, could cause customer dissatisfaction, a reduction in revenues and traffic, the realization of expensive...
renewals, the imposition of sanctions or other measures by regulatory bodies, and damage to the image and reputation of the Telefónica Group, or could otherwise have an adverse effect on the business, financial condition, results of operations and/or cash flows of the Group.

Financial Risks.

Worsening of the economic and political environment could negatively affect Telefónica’s business.

Telefónica’s international presence enables the diversification of its activities across countries and regions, but it exposes Telefónica to diverse legislation, as well as to the political and economic environments of the countries in which it operates. Any adverse developments in this regard, including exchange rate or sovereign-risk fluctuations, may adversely affect Telefónica’s business, financial position, cash flows and results of operations and/or the performance of some or all of the Group’s financial indicators.

During 2020, Telefónica Spain accounted for 28.8% (26.5% in 2019) of the Telefónica Group’s revenues (sales and services), Telefónica UK accounted for 15.6% of the Telefónica Group’s revenues (14.7% in 2019), Telefónica Brazil represented 17.2% of the Telefónica Group’s revenues (20.7% in 2019) and Telefónica Hispam accounted for 18.4% of the Telefónica Group’s revenues (19.9% in 2019). During 2020, 4.0% of the Telefónica Group’s revenues came from Argentina, 3.8% from Peru and 3.7% from Chile (4.5%, 4.3% and 4.0%, respectively, in 2019). Approximately 23.2% of the Group’s revenues in 2020 came from countries that do not have investment grade credit rating (in order of importance, Brazil, Argentina, Ecuador, Costa Rica, El Salvador and Venezuela), and other countries are just one grade away from losing this status. Likewise, Venezuela and Argentina are considered to be countries with hyperinflationary economies in 2020, 2019 and 2018.

The main risks are detailed below, by geography:

In Europe, there is the risk of both a faster spread of the COVID-19 pandemic if the vaccination schedule does not improve significantly and a tightening of financing conditions for both the private and public sectors that could adversely impact disposable income. Both global factors (including any global economic deterioration) and domestic issues (such as the worsening of the fiscal sustainability in some European countries (e.g. Spain or Italy)) may affect economic conditions in the countries where we operate.

• Spain: there are three other main sources of uncertainty. One of them stems from the economic policies to be implemented from 2021 onwards, given the high level of parliamentary fragmentation and the lack of agreement on key issues. This applies especially to the European Recovery Fund management. Secondly, there is a risk of wider negative economic impact from the pandemic, resulting in a larger proportion of corporate foreclosures and/or higher unemployment levels. Finally, as one of the most open countries in the world, from a commercial point of view, being among the top ten countries in respect of capital outflows and inflows globally, any situation of protectionist backlash could have significant implications.

• United Kingdom: the formal exit of the United Kingdom from the European Union on December 31st, 2020 (“Brexit”) will entail an economic adjustment regardless of the agreement reached on the new economic and commercial relationship between the two regions. The trade and bureaucracy costs of leaving the single market and the customs union (especially those related to non-tariff barriers) could weigh on the country’s net trade. In addition, there are still many gaps to be closed in the area of services (particularly, financial and professional services), so variables such as investment, economic activity and employment could be among the most affected, as well as volatility in financial markets, which could limit or condition access to capital markets. These changes can be costly and disruptive to business relationships in the affected markets, including those of Telefónica with its suppliers and customers. The Group would also be adversely affected if the pound sterling were to depreciate.

• Latin America: exchange risk is particularly important. This risk is due to both external factors (global trade tensions, abrupt movements in commodity prices and concerns about growth and financial imbalances in China) and internal factors (challenges relating to controlling the COVID-19 pandemic and managing the underlying fiscal deterioration, see “Unexpected and uncertain events resulting in a larger proportion of corporate foreclosures and/or higher unemployment levels. Finally, as one of the most open countries in the world, from a commercial point of view, being among the top ten countries in respect of capital outflows and inflows globally, any situation of protectionist backlash could have significant implications.

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• Brazil: fiscal sustainability remains the main risk, which the government is currently tackling through its commitment to structural reforms including administration and tax system reforms, which not only seek to guarantee sustainability but also raise Brazil’s potential growth. The fact that the country’s rating is below investment grade and that its internal financing needs are high, could create a greater financial risk in the event of global financial stress and increasing external and internal financial needs, and could also negatively affect the exchange rate performance.

• Argentina: macroeconomic and exchange rate risks remain high. The challenges the economy is facing, both internally (ongoing process of public deficit reduction in a context of economic recession and high inflation) and externally (with significant refinancing needs in the medium term), make the economy vulnerable to bouts of volatility in the financial markets especially in a context of narrower room for maneuver. Further, the worsening inflation outlook as a result of the exchange rate split and the unsustainable price containment measures that have been adopted, threaten Telefónica’s profitability. In particular, the Decree of Need and Urgency (DNU) launched by the government in the third quarter of 2020, declared the Information and
Communications Technology sector services as essential public services and, among other measures, suspended any price increase from July 31, 2020 to December 31, 2020. As a consequence, any potential increase in the sector’s tariff prices must have the prior approval of the Secretary of Commerce (Ministry of Finance), increasing the number of administrative and political obstacles that must be overcome to successfully operate our business and which could have an adverse impact on revenue growth and margin evolution of Telefónica’s businesses in such country.

• Chile, Colombia and Peru: are exposed not only to changes in the global economy, given their vulnerability and exposure to unexpected changes in commodity prices, but also to an abrupt hardening of global financial conditions. On the domestic side, both the existing political instability and the possibility of new episodes of social unrest could have a negative impact in the short and medium term.

Unexpected and uncertain events, such as the emergence of the COVID-19 (coronavirus) pandemic, significantly affect our operations.

The COVID-19 pandemic and future similar events may significantly affect our operations. Such events may cause delays in the supply chain, due to problems in factories or logistics services, affect employees or third parties with whom the Group works during contagion or quarantine periods, and affect global and regional economic growth. During the COVID-19 pandemic, economic growth has been adversely affected by various adverse impacts on supply (global value chains disruptions, lockdowns and immobilization of productive resources) and demand (deterioration of confidence and expectations, negative income and wealth effects) derived from a substantial deterioration in the financial markets, unprecedented drops in commodity prices, sudden slowdown in commercial activity and strong restrictions on transportation. The final impact of COVID-19 on the Group’s business is difficult to predict due to the uncertainty surrounding the duration of the pandemic and the ability of the economy of the countries where the Group operates, to recover.

According to prevailing economic estimates, we are facing a pandemic whose economic effects are expected to be the largest drop in global GDP in recent decades. Despite continuing to estimate a deep recession for 2020, global growth expectations have been revised slightly upwards (+0.9 p.p. to -3.5% International Monetary Fund), as the recovery observed in the third quarter of 2020 in countries for which information is available shows generally better than expected growth.

In Spain, the decrease in GDP reached 22.2% (in cumulative terms) during the first half of the year 2020 (second quarter -17.8%), which led to 1,359,700 people losing their jobs between March and May. However, the gradual lifting of restrictions on mobility and limitations on non-essential activities, has allowed the Spanish economy to restart its activity and GDP grew 16.4% in the third quarter of 2020, the greatest variation in real terms of its historical series. However, the new measures adopted in the last quarter of 2020 to contain the advance of the pandemic have slowed GDP growth to +0.4%, which resulted in an annual contraction of 11% in 2020.

This contraction has occurred despite the magnitude of the fiscal packages announced by the national government of Spain, composed of both direct spending (3.5% of GDP) and liquidity guarantees (14.2% of GDP), whose aim is to maintain the productive structure and which, given the volume, raises concerns about debt sustainability in the medium and long term.

With regards to the risks arising from the impact of the pandemic on Latin American countries (mainly Argentina, Brazil, Chile, Colombia and Peru), the main concern is the possibility of another lost decade due to the deterioration of the region’s per capita GDP and the consequent setbacks in terms of poverty and social progress. A second focus of uncertainty is related to fiscal sustainability. The significant deterioration experienced by sovereign metrics during the pandemic introduces a non-negligible probability of a credit quality cutback, with the consequent increase in the cost of external financing which may negatively affect foreign exchange performance.

Group management estimates that the negative impact of the pandemic on Group’s revenues in 2020 was approximately 1,905 million euros, while the impact on OIBDA (excluding goodwill impairment) was approximately 977 million euros.

Additionally, the COVID-19 crisis has contributed to the depreciation of the main Latin American currencies against the euro. The change in the exchange rates of the main currencies of the countries in which the Group operates against the euro is shown below:

<table>
<thead>
<tr>
<th>Currency</th>
<th>Variation of closing exchange rate (12/31/2020 vs 12/31/2019)</th>
<th>Variation of average exchange rate (2020 vs 2019)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazilian real</td>
<td>(29.0%)</td>
<td>(24.1%)</td>
</tr>
<tr>
<td>Pound sterling</td>
<td>(5.2%)</td>
<td>(1.3%)</td>
</tr>
<tr>
<td>New peruvian sol</td>
<td>(16.2%)</td>
<td>(6.1%)</td>
</tr>
<tr>
<td>Argentine peso</td>
<td>(34.8%)</td>
<td>(34.8%)</td>
</tr>
<tr>
<td>Chilean peso</td>
<td>(3.6%)</td>
<td>(12.9%)</td>
</tr>
<tr>
<td>Colombian peso</td>
<td>(12.6%)</td>
<td>(12.6%)</td>
</tr>
<tr>
<td>Mexican peso</td>
<td>(13.3%)</td>
<td>(11.5%)</td>
</tr>
</tbody>
</table>

The exchange rate figures evolution has led to goodwill impairment losses. The results of the impairment tests are included in the risk “The Group has and in the future could experience impairment of goodwill, deferred tax assets or other assets”.

The Group has and in the future could experience impairment of goodwill, deferred tax assets or other
assets.
In accordance with current accounting standards, the Telefónica Group reviews on an annual basis, or more frequently when the circumstances require it, the need to introduce changes to the book value of its goodwill (which as of December 31, 2020, represented 16.2% of the Group’s total assets), deferred tax assets (which as of December 31, 2020, represented 6.1% of the Group’s total assets) or other assets, such as intangible assets (which represented 10.9% of the Group’s total assets as of December 31, 2020), and property, plant and equipment (which represented 22.6% of the Group’s total assets as of December 31, 2020). In the case of goodwill, the potential loss of value is determined by the analysis of the recoverable value of the cash-generating unit (or group of cash-generating units) to which the goodwill is allocated at the time it is originated. By way of example, in 2020 impairment losses in the goodwill and other assets of Telefónica Argentina were recognized for a total of 894 million euros. In 2019, impairment losses in the goodwill allocated to Telefónica Argentina were recognized for a total of 206 million euros.

In addition, Telefónica may not be able to realize deferred tax assets on its statement of financial position to offset future taxable income. The recoverability of deferred tax assets depends on the Group’s ability to generate taxable income over the period for which the deferred tax assets remain deductible. If Telefónica believes it is unable to utilize its deferred tax assets during the applicable period, it may be required to record an impairment against them resulting in a non-cash charge on the income statement. By way of example, in 2019, Telefónica Móviles México derecognized deferred tax assets amounting to 454 million euros. In 2020, deferred tax assets corresponding to the tax Group in Spain amounting to 101 million euros were derecognized.

Further impairments of goodwill, deferred tax or other assets may occur in the future which may materially adversely affect the Group’s business, financial condition, results of operations and/or cash flows.

The Group faces risks relating to its levels of financial indebtedness, the Group’s ability to finance itself, and its ability to carry out its business plan.

The operation, expansion and improvement of the Telefónica Group’s networks, the development and distribution of the Telefónica Group’s services and products, the implementation of Telefónica’s strategic plan and the development of new technologies, the renewal of licenses and the expansion of the Telefónica Group’s business in countries where it operates, may require a substantial amount of financing.

The Telefónica Group is a relevant and frequent issuer of debt in the capital markets. As of December 31, 2020, the Group’s gross financial debt amounted to 50,420 million euros (52,364 million euros as of December 31, 2019), and the Group’s net financial debt amounted to 35,228 million euros (37,744 million euros as of December 31, 2019). As of December 31, 2020, the average maturity of the debt was 10.79 years (10.50 years as of December 31, 2019), including undrawn committed credit facilities.

A decrease in the liquidity of Telefónica, or a difficulty in refinancing maturing debt or raising new funds as debt or equity could force Telefónica to use resources allocated to investments or other commitments to pay its financial debt, which could have a negative effect on the Group’s business, financial condition, results of operations and/or cash flows.

Funding could be more difficult and costly in the event of a deterioration of conditions in the international or local financial markets due, for example, to monetary policies set by central banks, including increases in interest rates and/or decreases in the supply of credit, increasing global political and commercial uncertainty and oil price instability, or if there is an eventual deterioration in the solvency or operating performance of Telefónica.

As of December 31, 2020, the Group’s gross financial debt scheduled to mature in 2021 amounted to 8,123 million euros, and gross financial debt scheduled to mature in 2022 amounted to 4,243 million euros.

In accordance with its liquidity policy, Telefónica has covered its gross debt maturities for the next 12 months with cash and credit lines available as of December 31, 2020. As of December 31, 2020, the Telefónica Group had undrawn committed credit facilities arranged with banks for an amount of 13,354 million euros (12,466 million euros of which were due to expire in more than 12 months). As of December 31, 2020, 6.6% of the aggregate undrawn amount under credit lines was scheduled to expire prior to December 31, 2021.

In addition, given the interrelation between economic growth and financial stability, the materialization of any of the economic, political and exchange rate risks referred to above could adversely impact the availability and cost of Telefónica’s financing and its liquidity strategy. This in turn could have a negative effect on the Group’s business, financial condition, results of operations and/or cash flows.

Finally, any downgrade in the Group’s credit ratings may lead to an increase in the Group’s borrowing costs and could also limit its ability to access credit markets.

The Group’s financial condition and results of operations may be adversely affected if it does not effectively manage its exposure to foreign currency exchange rates or interest rates.

Interest rate risk arises primarily in connection with changes in interest rates affecting: (i) financial expenses on floating-rate debt (or short-term debt likely to be renewed); and (ii) the value of long-term liabilities at fixed interest rates.

In nominal terms, as of December 31, 2020, 75.2% of the Group’s net financial debt plus commitments had its interest rate set at fixed interest rates for periods of more than one year. To illustrate the sensitivity of financial expenses to variations in short-term interest rates as of December 31, 2020: (i) a 100 basis points increase in interest rates in all
currencies in which Telefónica had a financial position at that date would have led to an increase in financial expenses of 100 million euros, whereas (ii) a 100 basis points decrease in interest rates in all currencies (even if negative rates are reached), would have led to a reduction in financial expenses of 97 million euros. For the preparation of these calculations, a constant position equivalent to the position at that date is assumed, which takes into account the financial derivatives contracted by the Group.

Exchange rate risk arises primarily from: (i) Telefónica’s international presence, through its investments and businesses in countries that use currencies other than the euro (primarily in Latin America and the United Kingdom); (ii) debt denominated in currencies other than that of the country where the business is conducted or the home country of the company incurring such debt; and (iii) trade receivables or payables in a foreign currency to the currency of the company with which the transaction was registered. According to the Group’s calculations, the impact on results, and specifically on net exchange differences, due to a 10% depreciation of Latin American currencies against the U.S. dollar and a 10% depreciation of the rest of the currencies to which the Group is most exposed (mainly the pound sterling) against the euro would result in exchange gains of 55 million euros for the year ended December 31, 2020. These calculations have been made assuming a constant currency position with an impact on profit or loss for the year ended December 31, 2020, taking into account derivative instruments in place.

During 2020, Telefónica Brazil represented 23.6% (28.2% in 2019), Telefónica United Kingdom represented 15.3% (14.0% in 2019), Telefónica Hispam represented 7.3% (13.4% in 2019) of the OIBDA of the Telefónica Group.

In 2020, the evolution of exchange rates negatively impacted the Group’s results, decreasing the year-on-year growth of the Group’s consolidated revenues and OIBDA by an estimated 6.5 percentage points and 8.0 percentage points, respectively, mainly due to the depreciation of the Brazilian real (3.1 percentage points and 2.2 percentage points, respectively, in 2019). Furthermore, translation differences in 2020 had a negative impact on the Group’s equity of 5,801 million euros (negative impact of 95 million euros in 2019).

The Telefónica Group uses a variety of strategies to manage this risk including, among others, the use of financial derivatives, which are also exposed to risk, including counterparty risk. The Group’s risk management strategies may be ineffective, which could adversely affect the Group’s business, financial condition, results of operations and/or cash flows. If the Group does not effectively manage its exposure to foreign currency exchange rates or interest rates, it may adversely affect its business, financial condition, results of operations and/or cash flows.

Legal and Compliance Risks.

Telefónica and Telefónica Group companies are party to lawsuits, antitrust, tax claims and other legal proceedings. Telefónica and Telefónica Group companies operate in highly regulated sectors and are and may in the future be party to lawsuits, tax claims, antitrust and other legal proceedings in the ordinary course of their businesses, the outcome of which is unpredictable.

The Telefónica Group is subject to regular reviews, tests and audits by tax authorities regarding taxes in the jurisdictions in which it operates and is a party and may be a party to certain judicial tax proceedings. In particular, the Telefónica Group is currently party to certain litigation in Peru concerning certain previous years’ income taxes, in respect of which a contentious-administrative appeal is currently pending, and to certain tax and regulatory proceedings in Brazil, primarily relating to the ICMS (a Brazilian tax on telecommunication services) and the corporate tax.

With respect to the latter, as of December 31, 2020, Telefónica Brazil maintained provisions for tax contingencies amounting to 282 million euros, and provisions for regulatory contingencies amounting to 189 million euros. Although the Group considers its tax estimates to be reasonable, if a tax authority disagrees, the Group could face additional tax liability, including interest and penalties. There can be no guarantee that the payment of such additional amounts will not have a significant adverse effect on the Group’s business, results of operations, financial condition and/or cash flows.

An adverse outcome or settlement in these or other proceedings, present or future, could result in significant costs and may have a material adverse effect on the Group’s business, financial condition, results of operations and/or cash flows.

The Telefónica Group is exposed to risks in relation to compliance with anti-corruption laws and regulations and economic sanctions programs.

The Telefónica Group is required to comply with the anti-corruption laws and regulations of the jurisdictions where it conducts operations around the world, including in certain circumstances with laws and regulations having extraterritorial effect such as the US Foreign Corrupt Practices Act of 1977 and the United Kingdom Bribery Act of 2010. The anti-corruption laws generally prohibit, among other conduct, providing anything of value to government officials for the purposes of obtaining or retaining business or securing any improper business advantage or failing to keep accurate books and records and properly account for transactions.

In this sense, due to the nature of its activities, the Telefónica Group is increasingly exposed to this risk, which increases the likelihood of occurrence. In particular, it is worth noting the continuous interaction with officials and public administrations in several areas, including the institutional and regulatory fronts (as the Telefónica Group carries out a regulated activity in different jurisdictions), the operational front (in the deployment of its network, the Telefónica Group is subject to obtaining multiple activity...
permits) and the commercial front (the Telefónica Group provides services directly and indirectly to public administrations). Moreover, Telefónica is a multinational group subject to the authority of different regulators and compliance with various regulations, which may be domestic or extraterritorial in scope, civil or criminal, and which may lead to overlapping authority in certain cases. Therefore, it is very difficult to quantify the possible impact of any breach, bearing in mind that such quantification must consider not only the economic amount of sanctions, but also the potential negative impact on the business, reputation and/or brand, or the ability to contract with public administrations.

Additionally, the Telefónica Group’s operations may be subject to, or otherwise affected by, economic sanctions programs and other forms of trade restrictions (“sanctions”) including those administered by the United Nations, the European Union and the United States, including the US Treasury Department’s Office of Foreign Assets Control. The sanctions regulations restrict the Group’s business dealings with certain sanctioned countries, individuals and entities. In this context, the provision of services by a multinational telecommunications group, such as the Telefónica Group, directly and indirectly, and in multiple countries, requires the application of a high degree of diligence to prevent the contravention of sanctions (which take various forms, including economic sanctions programs applicable to countries, lists of entities and persons sanctioned or export sanctions). Given the nature of its activity, the Telefónica Group’s exposure to these sanctions is particularly noteworthy.

Although the Group has internal policies and procedures designed to ensure compliance with the above mentioned applicable anti-corruption laws and sanctions regulations, there can be no assurance that such policies and procedures will be sufficient or that the Group’s employees, directors, officers, partners, agents and service providers will not take actions in violation of the Group’s policies and procedures (or, otherwise in violation of the relevant anti-corruption laws and sanctions regulations) for which the Group, its subsidiaries or they may be ultimately held responsible. In this regard, the Group is currently cooperating with governmental authorities (and, where appropriate, conducting the relevant internal investigations) regarding requests for information potentially related, directly or indirectly to possible violations of applicable anti-corruption laws. Telefónica believes that, considering the size of the Group, any potential penalty as a result of matters relating to those specific information requests would not materially affect the Group’s financial condition.

Notwithstanding the above, violations of anti-corruption laws and sanctions regulations could lead not only to financial penalties, but also to exclusion from government contracts, licenses and authorizations revocation, and could have a material adverse effect on the Group’s reputation, or otherwise adversely affect the Group’s business, financial condition, results of operations and/or cash flows.