S&P Global
Ratings

Environmental, Social, And Governance Evaluation

# Telefónica S.A.

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## Summary

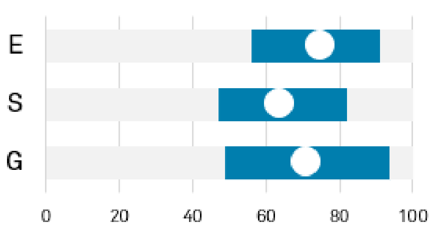
Telefonica (TEF) is a multinational telecommunications group, with operations in Europe and the Americas. TEF is the incumbent telecom operator in Spain (37% of 2020 organic operating income before depreciation and amortization), and has large mobile operations in Germany and the U.K. (17% and 15%, respectively). The group's second-largest market is Brazil (24%), where it is the leader in mobile, and has a strong position in fixed broadband and voice. TEF also has a strong presence in eight Latin American countries via its fixed-line and mobile operations. The group's shareholder base is broadly diversified, with its only significant shareholders, BBVA, CaixaBank S.A., and Blackrock, each holding about a 5% stake.

The ESG Evaluation of 72 on TEF reflects S&P Global Ratings' view of the company's robust management of environmental, social, and governance risks, combined with its adequate preparedness to respond to future disruptions. We believe the company's ongoing diversification toward digital solutions, investments in networks, and simplification of its organizational structure will support its long-term resilience in an industry that remains exposed to technological, regulatory, and competitive disruptions. We also view positively its commitment to further embed sustainability in its strategy, given the rising ESG awareness of regulators and customers.

TEF operates in an industry facing multiple social risks, from data privacy and network stability to digital access. Its management of those risks is in line with global industry peers', including cyberrisks, although we see this as an ongoing challenge for the industry. Our assessment also incorporates TEF's role in expanding fiber in Spain, its initiatives to address the digital divide, including in Latin America, and good management of recent redundancy programs. TEF's exposure to environmental risks is lower than companies in heavier industries, and its environmental management systems have proven effective. The company notably reduced its greenhouse gas (GHG) emissions while sharply increasing data traffic in its network.

### ESG Profile Score

**70 /100**




Company-specific attainable and actual scores

### Preparedness Opinion (Scoring Impact)

**Adequate (+2)**

### ESG Evaluation

**72/100**

A higher score indicates better sustainability

# Component Scores

## Environmental Profile

| Sector/Region Score | | 41/50 |
|---|---|---|
| | Greenhouse gas emissions | Strong |
| | Waste and pollution | Good |
| | Water use | Lagging |
| | Land use and biodiversity | Good |
| | General factors (optional) | None |
| **Entity-Specific Score** | | 34/50 |
| **E-Profile (30%)** | | **75/100** |

## Social Profile

| Sector/Region Score | | 32/50 |
|---|---|---|
| | Workforce and diversity | Good |
| | Safety management | Good |
| | Customer engagement | Good |
| | Communities | Strong |
| | General factors (optional) | None |
| **Entity-Specific Score** | | 32/50 |
| **S-Profile (30%)** | | **64/100** |

## Governance Profile

| Sector/Region Score | | 29/35 |
|---|---|---|
| | Structure and oversight | Good |
| | Code and values | Good |
| | Transparency and reporting | Strong |
| | Financial and operational risks | Neutral |
| | General factors (optional) | None |
| **Entity-Specific Score** | | 42/65 |
| **G-Profile (40%)** | | **71/100** |

**ESG Profile** (including any adjustments) **70/100**

This figure is subject to rounding

## Preparedness Summary

We believe that TEF is adequately prepared to navigate potential future disruptions. In line with other incumbent telecom operators, we anticipate that it will continue to operate in a rapidly changing and potentially disruptive environment. The company's long-term strategy--focused on digitalization, network quality, sustainability and efficiency--could support its preparedness if effectively executed. The board's good awareness of future strategic risks, combined with its robust, diverse, and collaborative tools to explore their potential impact, further support our view. Our assessment also factors in TEF's willingness and commitment to embed sustainability within its strategy, operations, investment decisions, and value chain.

| **Capabilities** | |
|---|---|
| Awareness | Good |
| Assessment | Excellent |
| Action plan | Good |
| **Embeddedness** | |
| Culture | Good |
| Decision-making | Excellent |

**Preparedness Opinion (Scoring Impact)** **Adequate (+2)**

**ESG Evaluation** **72/100**

# Environmental Profile

75/100

### Sector/Region Score (41/50)

TEF operates in the telecom sector, which has lower exposure to environmental risks than industrial sectors. That said, rising data traffic is increasing electricity demand and exposes the sector to transition risks. The management of waste from end-of-life network equipment and hardware is also material. The sector's impact on land and water resources is more limited.

### Entity-Specific Score (34/50)

| Greenhouse gas emissions | Waste and pollution | Water use | Land use and biodiversity | General factors |
|---|---|---|---|---|
| **Strong** | **Good** | **Lagging** | **Good** | **None** |

We anticipate TEF's direct GHG emissions will remain lower than global peers'. Its scope 1 and 2 emissions intensity is among the lowest of the world's 10-largest telecom companies, at 14 carbon dioxide-equivalent tons per $1.0 million of revenue in 2020, and in line with the sector median in Europe. The company has reduced this metric by 47% since 2016, while increasing traffic managed by 241%. This strong performance mostly results from the replacement of copper by fiber, and its transition to renewables, which made up 87.5% of electricity consumed in 2020, up from 49% in 2016. TEF's renewables mix includes power purchasing agreements and self-generation, which we view positively. We expect continued network transformation and its transition to 100% renewable energy will further reduce TEF's absolute GHG emissions. TEF's sale of towers to American Tower announced in January 2021 may also help improve the network's energy efficiency by increasing asset colocation.

TEF's tracking and management of indirect GHG emissions (scope 3) is stronger than that of many global peers. Many of the world's 10-largest telecom companies do not track indirect GHG emissions, or do not track them across their whole value chain (upstream and downstream), unlike TEF. The company has committed to reducing those emissions by 39% between 2015 and 2025 and already achieved a 26.8% reduction by 2020. However, we note TEF's renewal of network equipment and devices related to 5G should increase scope 3 emissions significantly, and may prevent the group from achieving its reduction target.

TEF's waste intensity has significantly increased since its migration to fiber in 2018. We expect this metric will stabilize in coming years and remain in line with industry peers'. TEF tracks the number and type of equipment collected at end of life. In 2020, the company collected about 4 million units, and it aims to increase this amount over time. The collected equipment is then either recycled (74% in 2019) or reused (25%). The recycling rate in its maintenance activities and offices is among the highest in Europe, at 98%.

While water intensity is less material than for other sectors, we expect TEF's will remain higher than many global peers'. In 2020, it used about 52 cubic meters (m3) of water per $1.0 million of revenue, against 20m3-30m3 on average in Europe. TEF's use is limited to office uses, in line with the industry. It launched a project in 2019 to improve data collection and efficiency.

TEF's management of land and biodiversity is in line with the rest of the industry. TEF faces some land-related risks in Spain and Brazil, two countries with high biodiversity. While the company does not track any metrics, it is implementing new information systems to determine the impact of its infrastructure on biodiversity and potential mitigation plans.

# Social Profile

**64/100**

## Sector/Region Score (32/50)

TEF operates in the telecom sector, which has medium exposure to social risks relative to other sectors. Most material risks include data privacy, network stability, human capital management, and connectivity, especially in rural areas. Its main countries of operations have limited exposure to social risks, except Brazil, where it generates about 20% of revenue.

## Entity-Specific Score (32/50)

| Workforce and diversity | Safety management | Customer engagement | Communities | General factors |
|---|---|---|---|---|
| **Good** | **Good** | **Good** | **Strong** | **None** |

We expect TEF's customer satisfaction will continue to improve as it rolls out a new customer strategy, and network perception improves. The company has implemented new processes--incorporating ethical and sustainable benchmarks in the development of new services--and incentives to improve its net promoter score (NPS; 24 in 2020 in its four key markets, from 17 in 2019), including linking 11% of the CEO's variable remuneration to TEF's absolute NPS and relative NPS versus peers'. Since 2019, TEF has included NPS in all employees' variable remuneration. TEF's board has a committee that monitors customer experience indicators and initiatives developed. The company benefits from its good network quality and improving churn rates in line with European peers. Its data privacy policy is in line with industry standards and transparent. It includes direct reporting of the data protection officer to the board as well as regular employee training and audits. TEF has protocols to respond to the ongoing risk of cyberattacks, which have had limited impact on its operations and customers so far.

TEF has higher long-term evolution (LTE) coverage than many global peers, at 82% portfolio-wide, and ultra-fast broadband access increased by 6.5% year on year in 2020. The company has played a key role in the deployment of fiber in Spain--which now has the highest fiber coverage in Europe--and is committed to connecting 100% of its Spanish retail clients by 2025. It also has initiatives to improve connectivity in remote areas and lower-income communities across its footprint, which we view as an advanced practice. In Peru, for example, the company has launched the "Internet for all" project to increase internet access in remote regions (1,800,000 beneficiaries in 2020 according to its estimates). We understand that it is developing metrics to quantify the social benefits of those initiatives. We note that 3% of the CEO's variable remuneration was linked to TEF's REPTrak score in 2020, a third-party measure of reputation.

TEF managed its redundancy programs well and achieved above-average gender diversity. It has gone through several redundancy schemes in Spain, Brazil and Peru, reflected in an involuntary turnover rate above the industry median, at about 16% since 2016. It has managed related social risks well, in our view, through negotiations with trade unions and initiatives to support the relocation of employees. Its voluntary turnover and absenteeism rates remained stable over that period. TEF also has a robust gender diversity policy, which promotes women's careers in strategic areas, including technology and engineering. The proportion of female managers has increased to 27% from 20% since 2015, slightly above the median of the top-10 global telcos, at about 23%. TEF's proportion of female employees is also slightly above that of global peers, at 38% in 2020. Safety policies are in line with peers, cover key stakeholders such as contractors, and include the tracking of health and safety metrics of employees and contractors.

# Governance Profile

**71**/100

### Sector/Region Score (29/35)

TEF follows the advanced governance standards in Spain, where it is headquartered. The company has limited exposure to governance risks in its countries of operations, except Brazil.

### Entity-Specific Score (42/65)

| Structure and oversight | Code and values | Transparency and reporting | Financial and operational risks | General factors |
|---|---|---|---|---|
| **Good** | **Good** | **Strong** | **Neutral** | **None** |

TEF's board is diverse in terms of skills, gender, and international experience, but is more complex and less independent than that of many publicly listed companies globally. Directors have background in finance, risks, innovation, and technology, which we view as strategic skills. In 2020, 29% of board members were women, up from 11% in 2016, although still below the recommendation for listed companies in Spain (40%). While most board members are Spanish, they all have experience in Europe and Latin America, where TEF operates. However, the board is larger than in many companies--with 17 members, including three vice chairs, and five committees--and chaired by the company's CEO, which could in our view complicate decision-making. Half of the board members are independent and have an average tenure of slightly less than three years, which partly mitigates the influence of the combined roles of CEO and chair. The company has also appointed a lead director, which we view as good practice. He chairs the nominating committee and sits on six other boards, including on one of Spain's largest banks as the vice chair, which we believe could affect his availability and the board's effectiveness. TEF uses staggered elections to renew its board members, who are elected for a period of four years, in line with local requirements. While this lengthens the entire renewal of the board, this has not lengthened average board tenure, which currently stands at about seven and a half years.

Recent changes made to TEF's remuneration policy bring it in line with international standards. The company introduced a long-term incentive plan in 2018. We view positively the use of shares-based compensation to complement cash-based compensation, which is more aligned with international practices and may incentivize longer-term decisions. In 2020, the remuneration package of executives included a fixed remuneration (20%-25% of total remuneration), an annual variable remuneration (35%-40%), and a long-term incentive in shares (c. 40%). TEF has made public statements about the ethics and values it aims to apply across its value chain, including to customers, employees, and suppliers. In 2020-2021, 100% of the board received anti-corruption training, and 93% of employees and directors have been trained on business principles and human rights.

TEF has comprehensive financial and nonfinancial disclosures, in line with Spanish standards and advanced industry practices. Nonfinancial disclosure includes consistently reported metrics over the past five years. It follows the Global Reporting Initiative standards and is audited. Social information, such as the company's gender pay gap, training hours, and employee NPS, is often broken down by country. The company also provides a breakdown of the tax paid by country, in line with Spanish regulation, and publishes its principles of fiscal strategy.

# Preparedness Opinion

**Adequate (+2)**

| | | | | | |
|---|---|---|---|---|---|
| **Preparedness** | Low | Emerging | **Adequate** | Strong | Best in class |

| | | | |
|---|---|---|---|
| Awareness | Developing | **Good** | Excellent |
| Assessment | Developing | Good | **Excellent** |
| Action | Developing | **Good** | Excellent |
| Culture | Developing | **Good** | Excellent |
| Decision-making | Developing | Good | **Excellent** |

## Summary

Our assessment of TEF's adequate preparedness reflects our view of the company's ongoing efforts to diversify away from commoditized telecom services and incorporate sustainability objectives in its strategic decisions, in an industry highly exposed to technological, regulatory, and competitive disruptions. In line with many incumbents, TEF has been challenged over the past decade by mounting regulation, macroeconomic risks--especially in its Latin American operations--and competition from technology players. The group has taken actions as a result, including investing in its networks, strengthening its digital offering, and announcing its intention to spin off its Latin American business (excluding Brazil). If effectively executed, those plans could support the group's strategic resilience and reduce its organizational complexity. Further supporting our view of TEF's adequate preparedness is the board's good awareness of potential future disruptions, and its robust, diverse, and collaborative tools to explore their potential impact.

Connecting people and making technology more accessible is at the center of TEF's long-term strategy. The company's objectives of growth, efficiency, and trust reflect its commitment to support economic and social progress through digitalization, promoting a greener future, and building trust among its stakeholders. TEF has taken multiple initiatives to integrate sustainability within its business strategy, core operations, and investment decisions, as demonstrated by its track record of sustainable investment and measures to support communities during the COVID-19 pandemic (including anticipating payments to some of its suppliers). We believe this focus on sustainability may support the company's long-term resilience, given the increasing awareness of regulators and customers on ESG-related topics.

TEF's short-term strategic objectives include: accelerating the group's simplification, digitalization, and efficiency improvements; optimizing its infrastructure assets; diversifying its digital offering; and reducing its macroeconomic and foreign currency exposure, while focusing on its four key markets--Spain, Germany, the U.K., and Brazil--as a platform for long-term growth and value creation.

| | | | |
|---|---|---|---|
| **Awareness** | Developing | **Good** | Excellent |

## Preparedness

TEF's senior leadership demonstrates good awareness of potential future disruptions and strategic risks, in line with other large established peers. The board discusses on a monthly basis the main strategic risks faced by the company, usually with the presence of one member of the executive committee or an external expert. Short-term strategic risks--below one year--include macroeconomic risks, foreign exchange risks, and upcoming changes in the competitive environment, among others. Medium-term risks comprise technological changes and substitution risk, cybersecurity, group debt planning, and changing customer behavior over the next three years. The board also explores potential disruptions beyond three years including technological shifts and changes in the supply chain. To support its awareness of strategic risks, we understand that the board relies heavily on its five board committees--primarily the Strategy and Innovation committee (which supports the analysis and monitoring of TEF's strategic policies and innovation projects), and the Sustainability and Quality committee (which supervises the implementation of TEF's ethical framework and sustainability roadmap)--as well as direct discussions with employees. Since 2016, the board has also extended the dialogue to all its stakeholders, including shareholders, investors, customers, media, and suppliers, among others, with the creation of panel discussions at local and global levels. There is evidence that the board incorporates the feedback from those panel discussions into its discussions and decisions.

In line with other large incumbents, however, we believe TEF has faced challenges due to significant disruptions in the industry over the past decade. These include the increasingly commoditized nature of the telecom business, mounting competition with technology players, and regulatory decisions that have favored consumer protection at the expense of operators. We will continue to monitor how TEF adapts to this changing landscape and anticipate future disruptions in a rapidly changing industry.

| Assessment | Developing | Good | **Excellent** |
|---|---|---|---|

TEF is excellent at assessing emerging disruptions and exploring future uncertain risks in a rapidly changing industry. The board leverages a variety of tools to perform this assessment, including scenario, sensitivity, and materiality analysis. We understand that scenario analysis is used to explore the impact of uncertain or longer-term risks, including transition and physical climate risks, as well as future regulation. Other strategic risks are assessed using a standard materiality matrix, based on their probability of occurrence and likely impact. TEF assesses the economic impact of each risk (quantified whenever possible in terms of operational cash flow, namely organic operating income before depreciation and amortization minus capital expenditures [capex]), alongside their potential compliance and reputational impact (based on a third-party measure of reputation). The board compares these impact assessments with TEF's tolerance thresholds, which are refined each year depending on the group's performance.

| Action Plan | Developing | **Good** | Excellent |
|---|---|---|---|

We see TEF's action planning as good because the company has demonstrated its ability to manage many of its strategic and emerging risks. TEF has deployed an ultra-fast broadband network in its home market, and made significant investments in digital solutions and products ahead most of its peers. We believe this has strengthened its ability to deliver on its strategic objectives of improving connectivity and operating a more energy-efficient network. We also believe those initiatives provide flexibility to the group to adjust capex, especially in a downturn. This is because the group can more easily switch off legacy networks and optimize pending deployment plans than some of its peers, for which the bulk of investments still lies ahead. TEF has identified cybersecurity as an increasingly important risk for the group and its stakeholders, and has taken mitigation measures. These include improving prevention and awareness at all level of the organization, while setting up a robust group structure to manage cybersecurity exposure, for instance by reinforcing its cybersecurity-dedicated team through targeted hirings and strengthening its IT processes**.** These actions have limited the impact from cyberattacks with no major breaches in the past years. However, we believe this risk remains material for the sector, and partly outside companies' control.

TEF is in the process of managing some of its strategic risks, especially macroeconomic risks and exposure to foreign currency swings in Latin America, which have been weighing on the group's growth and deleveraging strategy and have been exacerbated by the pandemic. As part of its 2019 corporate strategy, TEF announced its intention to spinoff its Hispam business, which would improve the group's visibility on earnings and cash flows, in our view.

TEF has taken some actions to tackle challenges imposed by the pandemic. We understand those actions aimed to improve the agility of its internal organization, reinforce the resilience of its network, and improve the digitalization of network management and supply chain monitoring. While management states that some actions should prevail, their acceleration and permanence remain to be seen.

| **Culture** | Developing | **Good** | Excellent |
|---|---|---|---|

We assess TEF's culture as good, reflecting the group's initiatives to embed its sustainability objectives and key values--integrity, commitment, and transparency--across its organization and value chain, in particular among employees and suppliers. TEF's approach to embed its desired culture combines upskilling and surveying. The group conducts trainings on its long-term strategy and sustainable objectives, tracks employees and manager NPS, and gathers their feedback, including on sustainability-related topics. It has also focused on upskilling its workforce to adapt its competences to evolving technological needs, including its increasing digital offering.

TEF has implemented a robust screening process to select suppliers that share common values and standards. This process includes the evaluation of their ESG practices by two independent third parties and annual audits targeting mostly suppliers operating in countries deemed riskier. The company also conducts training on sustainability-related topics for its suppliers.

While we recognize TEF's initiatives to encourage key sustainability principles across its organization and value chain, we believe fully embedding those principles will take time given the company's large and geographically dispersed operations across several continents.

| **Decision-Making** | Developing | Good | **Excellent** |
|---|---|---|---|

We view decision-making at TEF as excellent, because its senior management has taken steps to diversify the group's activities ahead many of its peers. TEF has notably created Telefonica Tech, which offers cybersecurity, internet of things, big data, and cloud solutions to support the digital transformation of its clients. We believe these types of solutions will support long-term growth (€2.0 billion of additional revenues expected by 2022) and help the group diversify away from commoditized telecom services and pay-TV offers that are less of a differentiator than in the past. In parallel, the company has dedicated significant capex toward network improvement and expansion to support the increasing digitalization of the economy, in line with other incumbents.

We also view positively TEF's initiatives to embed ESG into its strategic vision and decision-making, and believe these are more advanced than many peers'. The company has a strong track record of issuing sustainability financing under its sustainable financing framework, published in late 2018. In January 2019, the company issued a €1 billion green bond to finance projects aimed at increasing its energy efficiency by transforming the network from copper to fibre optic in Spain.

## Preparedness

This issuance was the first green bond issuance in the telecom sector and among Spanish companies. In January 2020, TEF also issued a €500 million green hybrid bond to finance the network transformation and promote self-generation of renewable energy. Finally, in February 2021 TEF issued a €1.0 billion sustainable hybrid bond, extending the scope of its financing activity to social projects in Spain, Germany, and Brazil, in addition to environmental initiatives in line with January 2019 and 2020 instruments. This issuance is the first sustainable hybrid bond of the telecom sector. We also view positively the inclusion of nonfinancial objectives (including customer and society trust indicators, GHG emission objectives, and gender diversity key performance indicators) in executives' short-term remuneration.

# Climate-Related Financial Disclosure

| TCFD Recommendations Alignment Assessment: | Not adopted | Partially adopted | Adopted |
|---|---|---|---|

We assessed to what extent the entity has adopted the Financial Stability Board's Taskforce on Climate-related Financial Disclosures' (TCFD) recommendations. We do not opine on the quality of the entity's disclosure or the climate change scenario assumptions, if any, but rather comment on the number of disclosures made, based on the TCFD's suggested disclosure list.

Based on the entity's publicly available information, in our opinion TEF has fully adopted the TCFD recommended disclosures.

Our assessment is based on the company's mainstream annual financial filing as recommended by the TCFD and response to CDP's annual Climate Change Program, which is available on the TEF's website. The company cross-references its CDP response in its annual report.

TEF provides a detailed description of its climate-related risks and opportunities over three time horizons (2011-2040, 2041-2070, and 2071-2100). It describes in both qualitative and quantitative terms the impact of those risks and opportunities on its businesses, strategy and financial planning. The company discloses the governance of climate risks at board and management level, as well as the processes for identifying climate risks and assessing their materiality. It also discloses the processes for managing climate-related risks and how these are integrated into the organization's overall risk-management framework.

TEF provides the key metrics used to measure and manage climate-related risks and opportunities in line with ISO14001. The company has a track record of disclosing its scope 1, 2, and 3, its GHG and energy reduction targets, and its performance against those targets.

| Governance | Strategy | Risk management | Metrics and targets |
|---|---|---|---|
| Description of the board's oversight of climate-related risks and opportunities. | Description of the climate-related risks and opportunities identified over the short, medium, and long term. | Description of the organization's processes for identifying and assessing climate-related risks. | Disclosure of the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process. |
| **Adopted** | **Adopted** | **Adopted** | **Adopted** |
| Description of management's role in assessing and managing climate-related risks and opportunities. | Description of the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning. | Description of the organization's processes for managing climate-related risks. | Disclosure of scope 1, 2 and, if appropriate, 3 GHG emissions, and the related risks. |
| **Adopted** | **Adopted** | **Adopted** | **Adopted** |
| | Description of the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario. | Description of how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management. | Description the targets used by the organization to manage climate-related risks and opportunities and performance against targets. |
| | **Adopted** | **Adopted** | **Adopted** |

# Sector And Region Risk

| | |
|---|---|
| **Primary sector(s)** | Telecom |
| **Primary operating region(s)** | Spain, Brazil, U.K., and Germany |

## Sector Risk Summary

### Environmental exposure

The telecom sector is experiencing a rapid rise in energy consumption underpinned by the explosion of data usage and processing across its networks. The growth in data traffic directly results in higher electricity consumption and indirectly relates to global GHG emissions. Telecom-related emissions are mostly Scope 2 (related to energy consumption) and come from both the production of devices (including smartphones) and their usage (in data centers, networks, and direct consumer usage). Environmental responsibility for telcos also includes the end-of-life implications of handsets and equipment used in telecom networks. In many countries, especially in emerging market, there are no facilities to recycle handsets. The telecom sector has more limited exposure to water and land use risks, with the exception of water consumption in data centers. In addition to its effect on the environment, the sector is exposed to climate risks because a notable portion of its operating infrastructure (as well as customers) is exposed to extreme weather conditions like hurricanes, tornadoes, ice storms, or flooding.

### Social exposure

Data privacy and network stability are the main social factors for telecoms because they are responsible for transmitting information. Failure to protect people's privacy could have significant regulatory and reputational implications for a telco. Also, debate over the societal impact of excessive social media use and the effects of misinformation could increase social pressure to reduce or change usage patterns. Rising health concerns around potential radiation from telecom equipment and devices could affect consumer perceptions of telecom service providers. Telcos are also large employers, typically with a significant unionized workforce (in particular for incumbent players), so human capital management is another key social risk. Given the sector's large and ethnically diverse customer base, community relationships and sensitivity are low but important social-cohesion risks. Safety management risks stem from the industry's technicians and personnel building, and maintaining the telecom infrastructure including towers and data centers. Given the sector's expansive reach and visibility, consumer confidence in telcos' community engagement, social equity, and corporate citizenship also contribute to our social risk assessment.

## Regional Risk Summary

### Spain

Spain has a strong rule of law and institutions despite undergoing important internal political challenges including from regional independence movements. Spain's corporate governance framework for listed companies has two components: binding provisions from the company law and voluntary recommendations of the Spanish Corporate Governance Code published in 2015 by the Comisión Nacional del Mercado de Valores (CNMV), Spain's national securities commission. In January 2020, the CNMV started to review the code, proposing amendments to executive pay, voting rights, and increasing gender quotas on boards to 40% from 30%--all on a comply-or-explain basis only. The code followed significant legal reforms such as the Law 31/2014, which included binding votes on remuneration policy, stricter regulations on directors' classifications, and new ownership thresholds for shareholders' rights. By law, Spanish boards must establish committees for audits, remuneration, and nominations. Companies must disclose an annual corporate governance report. While the stock exchange does not have specific ESG requirements in its listing rules, companies of over 500 employees are implementing the EU Non-Financial Reporting Directive's recommendations, which mandate disclosing ESG (including diversity) risk.

## Brazil

Brazil's regulations and complex federal and state tax code impose heavy compliance costs for businesses and encourage informality and tax evasion. Most of the workforce remains in the informal sector of the economy and poverty has been rising. Corruption at the highest government levels has created a strong public backlash and led to several political and business leaders being jailed as part of the Lava Jato investigations. In terms of corruption, Brazil is stagnating in the bottom half of South American countries, ranking 106 out of 180 on the Transparency International 2019 Corruption Perceptions Index. The judicial system, which operates at federal and state levels, can make applying laws complex and slow. While Brazil has comparatively strong laws and regulations, particularly on corporate governance, the main issue is implementation. We expect this will strengthen following recent significant improvements, such as stronger B3 stock exchange listing rules on governance (Novo Mercado segment), new governance guidelines for state-owned enterprises, and greater shareholder-rights protection. For instance, instruction 614 from the Brazilian Securities Exchange Commission (CVM) which came into effect on Jan. 1, 2020, improves shareholders' rights in relation to the election of directors. Concentrated ownership is common and the use of multiple-class share structures with unequal voting rights may negatively affect minorityshareholders. The Brazilian Institute of Corporate Governance's Corporate Governance Code is the best practice reference document in the market. It is not mandatory, but since 2017 companies must report on its recommendations on a comply-or-explain basis. Despite improvements to board independence and diversity, Brazil lags behind developed markets. There are limited formal requirements for ESG disclosure, but companies, particularly large ones, tend to report widely on their environmental and social efforts.

## United Kingdom

The U.K. benefits from strong institutions and corporate governance practices. This includes robust and independent institutions and high rule-of-law standards, as well as very low actual and perceived levels of corruption. Governance guidelines are primarily based on the U.K. Code of Corporate Governance published by the Financial Reporting Council (FRC) and updated in 2018. The revised and strengthened code provides a broad set of recommendations including executive remuneration and board composition, follows a comply-or-explain model, and is widely regarded as best practice internationally. The recent version strengthened provisions on the role of the audit and nomination committees, chair tenure, and stakeholder engagement. An updated version of the U.K. Stewardship Code published by the FRC also came into effect on Jan. 1, 2020. It sets out principles for investors. Overall levels of corporate disclosure on ESG are strong and the country benefits from a very active institutional investor base, which has been fueling the demand for better disclosure and corporate engagement. Legislation that took effect in 2019 will also require pension funds to disclose the financial risks they face arising from ESG factors.

## Germany

Germany has strong institutional and governance effectiveness, with much transparency and accountability. Rule of law is strong, the judiciary is independent, and corruption is viewed as a minor issue. Germany has a moderate amount of ESG regulation. While Deutsche Börse AG does not require ESG reporting as a listing rule, companies of over 500 employees are implementing the

# Appendix

EU Non-Financial Reporting Directive's recommendations, which mandate the disclosure of ESG data like diversity and pay ratios. The German Corporate Governance Code (Kodex) is the reference document for Germany's best practices and works on a comply-or-explain basis. A new version of the Kodex came into effect on Jan. 1, 2020, when the EU Shareholder Rights Directive II was transposed into German law. Notable improvements include recommendations on board independence, as well as board oversight of related party transactions and executive pay. While the recommendations are less specific than most European codes, companies exhibit strong governance practices. Companies are typically governed by a two-tier board system: a management board of executives, which is overseen by a supervisory board comprising nonexecutives including shareholder and employee or labor union representatives. While not world-leading, there are corporate disclosure requirements for selected ESG aspects and both occupational pension funds and insurers must state whether and how they account for ESG considerations when managing pension fund assets under their control.

*This report does not constitute a rating action.*