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The Governance of Regulators in Latin America

Evidence from the 2018 Indicators on the Governance of Sector Regulators

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The Governance of Regulators in Latin America: Evidence from the 2018 Indicators on the Governance of Sector Regulators

Alexis Durand* and Anna Pietikainen”

ABSTRACT

This working paper discusses the governance of economic regulators in Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico and Peru based on 2018 indicators. After describing key institutional features and characteristics of surveyed regulators in Latin America, it analyses the governance arrangements designed to preserve independence, practices to promote accountability, and the functions of the regulators in Latin America. It seeks to identify patterns in institutional design and understand how measures in place across OECD and non-OECD member countries compare to good practice.

JEL Classification: N46, L98, L50, K23, D73

Key words: Regulatory policy, governance, economic regulators, network sectors, Latin America, Regulation, independence, accountability

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Abbreviations and acronyms

ANA	Agência Nacional de Águas
ANAC	Agência Nacional de Aviação Civil
ANATEL	Agência Nacional de Telecomunicações
ANTT	Agência Nacional de Transportes Terrestres
ARESEP	Autoridad Reguladora de los Servicios Públicos
ARTF	Agencia Reguladora del Transporte Ferroviario
CNE	Comisión Nacional de Energía
CNH	Comisión Nacional de Hidrocarburos
CNRT	Comisión Nacional de Regulación del Transporte
CRA	Comisión de Regulación de Agua Potable y Saneamiento Básico
CRC	Comisión de Regulación de Comunicaciones
CRE	Comisión Reguladora de Energía
CREG	Comisión de Regulación de Energía y Gas
DGAC	Dirección General de Aeronáutica Civil
ENACOM	Ente Nacional de Comunicaciones
ENARGAS	Ente Nacional Regulador del Gas
ENRE	Ente Nacional Regulador de la Electricidad
ERAS	Ente Regulador de Aguas y Saneamiento
EU	European Union
IFT	Instituto Federal de Telecomunicaciones
NER	Network of Economic Regulators
OECD	Organisation for Economic Co-operation and Development
ORSNA	Organismo Regulador del Sistema Nacional de Aeropuertos
Osinergmin	Organismo Supervisor de la Inversión en Energía y Minería
Osiptel	Organismo Supervisor de Inversión Privada en Telecomunicaciones
Ositran	Organismo Supervisor de la Inversión en Infraestructura de Transporte de Uso Público
PMR	Product Market Regulation
SHCP	Secretaría de Hacienda y Crédito Público
SISS	Superintendencia de Servicios Sanitarios
Subtel	Subsecretaria de Telecomunicaciones
SUTEL	Superintendencia de Telecomunicaciones
USA	United States of America

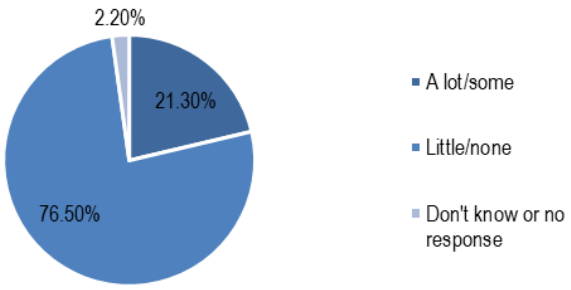
Introduction

Economic regulators play a key role as impartial and technical rule setters and referees in market economies, ensuring the fair and efficient operation of the market in public service and infrastructure sectors. They make regulatory decisions to ensure that consumers have access to safe and quality services, to guarantee that network operators and service providers receive a reasonable rate of return on their investment and to uphold competitive outcomes. Economic regulators regulate infrastructure services that play a vital role in supporting economic activities and growth, such as energy, e-communications, water, and transportation.

Decades of reform in the infrastructure sectors of Latin America have transformed the landscape of regulation, and the complexity of network sectors continues to increase. Operating in evolving technological, institutional and financing environments, economic regulators today face new challenges while experiencing growing expectations for service levels in the regulated sectors (OECD, 2006[1]; OECD, 2007[2]). At the same time, research shows low levels of trust in the governments of Latin American countries (Figure 1).

Figure 1. Citizens' confidence in government is low in Latin America

Includes 2018 data from Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico and Peru



Note: The survey asks ""Por favor, mire esta tarjeta y dígame, para cada uno de los grupos, instituciones o personas de la lista. ¿Cuánta confianza tiene usted en ellas? (please look at the card and tell me how much confidence do you have in each of the groups, institutions or people on the list?)" The chart above shows results for confidence in government. N = 8 204 (N = 1200 in Argentina, Chile, Colombia Mexico and Peru; N = 1000 in Costa Rica, N = 1204 in Brazil).
Source: Latinobarómetro (2018). Database. http://www.latinobarometro.org/latOnline.jsp.

To meet these challenges, regulators must be adaptable, efficient and trustworthy while providing predictability and stability to the sectors they regulate. Good governance is a key enabler of these characteristics, supporting better regulation and regulators' performance. In addition, robust governance arrangements are critical ingredients to build economic regulators' reputation as competent authorities and reinforce overall trust in government and public administrations.

The institutional design and practices of a regulator include measures that contribute to its independence and accountability. Governance arrangements designed to safeguard independence from the government, the regulated industry and other stakeholders help to ensure that the regulator makes its decisions with integrity. In parallel, practices to promote accountability and transparency allow stakeholders to understand

the work of the regulator and measure its performance against objectives. Together with other elements of institutional design and practice, these aspects of good governance are designed to support the performance of regulators with the ultimate goal of improving sector performance and outcomes for consumers.

This working paper uses evidence from the Indicators on the Governance of Sector Regulators developed by the OECD Network of Economic Regulators to map the governance arrangements of thirty economic regulators across seven Latin American countries and five network sectors. The indicators provide a snapshot of the governance arrangements of thirty regulators in Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico and Peru. The Indicators are based on the Best Practice Principles for the Governance of Regulators (summarised below in Box 1) and other OECD normative material, allowing readers to understand how arrangements align with good practice. Evidence collected during in-depth OECD Performance Assessment Framework for Economic Regulators reviews of regulators and directly from regulators themselves supplements the indicator data, providing deeper insight into the practices of regulators. After describing key institutional features and characteristics of surveyed regulators in Latin America, this working paper analyses the governance arrangements designed to preserve independence, practices to promote accountability, and the functions of the regulators in Latin America. Throughout, data and averages showing practice across regulators in OECD countries are provided as a reference.

Box 1. Seven OECD Best Practice Principles for the governance of regulators

- **Role clarity:** An effective regulator must have clear objectives, with clear and linked functions and the mechanisms to co-ordinate with other relevant bodies to achieve desired regulatory outcomes.
- **Preventing undue influence and maintaining trust:** Regulatory decisions and functions must be conducted with the upmost integrity to ensure that there is confidence in the regulatory regime. There need for safeguards to protect regulators from undue influence.
- **Decision making and governing body structure:** Regulators require governance and decision making mechanisms that ensure their effective functioning, preserve their regulatory integrity and deliver the regulatory objectives of their mandate.
- **Accountability and transparency:** Business and citizens expect the delivery of regulatory outcomes from government and regulatory agencies, and the proper use of public authority and resources to achieve them. Regulators are generally accountable to three groups of stakeholders: i) ministers and the legislature; ii) regulated entities; and iii) the public.
- **Engagement:** Good regulators have established mechanisms for engagement with stakeholders as part of achieving their objectives. The knowledge of regulated sectors and the businesses and citizens affected by regulatory schemes assists to regulate effectively.
- **Funding:** The amount and source of funding for a regulator will determine its organisation and operations. It should not influence the regulatory decisions and the regulator should be enabled to be impartial and efficient to carry out its work.
- **Performance assessment:** It is important that regulators are aware of the impacts of their regulatory actions and decisions. This helps drive improvements and enhance systems and processes internally. It also demonstrates the effectiveness of the regulator to stakeholders and helps build confidence in the regulatory system.

Source: OECD (2014) The Governance of Regulators, Best Practice Principles for Regulatory Policy, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264209015-en.

1 OECD Indicators on the Governance of Sector Regulators in Latin America

Coverage of Latin American regulators in the OECD Governance of Sector Regulators Database

The OECD Indicators on the Governance of Sector Regulators include thirty economic regulators across seven Latin American countries: Argentina, Brazil, Chile, Colombia, Costa Rica, Mexico and Peru (see Figure 1.1, or for a full list of participating Latin American regulators, see Annex B). All seven of these countries have reported data from national energy and e-communications regulators. In addition, Argentina and Brazil have reported data from separate gas regulators.[1] The database includes six rail transport regulators, six air transport regulators and five water sector regulators. Where data for a sector is not provided for a country, this is due to i) missing, incomplete or late questionnaires or ii) the absence of an operational economic regulator in the sector. The data captures the situation as of 1 January 2018.

For comparison, most figures in this working paper show the average among regulators in OECD countries. The OECD average includes regulators from all OECD countries except the United States, which had not furnished data at the time of writing. The database includes data from energy regulators in each OECD country (except the USA), and 35 e-communications regulators, 34 rail regulators, 30 air regulators and 18 water regulators.[2] The Latin American sample and the OECD sample overlap, as 3 countries (Chile, Colombia and Mexico) are OECD member states. Following the invitation issued by OECD countries to Costa Rica to become the 38th OECD member country, at time of writing, the process of accession to the OECD Convention had not yet been completed and for the purposes of this paper Costa Rica is not considered an OECD member country.

[1] Argentina and Brazil completed two surveys, one for each regulator; the resulting scores were averaged into a single country score for the energy sector. The air transport data does not include the Peruvian civil aviation authority because the OECD was not furnished with data for this regulator. The rail transport data does not include information on the Colombian rail regulator, the Comisión de Regulación de Infraestructura y Transporte (CRIT), as it was not yet fully operational as of the date of data collection. Finally, the data for water sector regulators does not include information from Peru's national water regulator because OECD was not furnished with this data and from Mexico because the country does not have a national economic regulator of the water sector.

[2] The dataset does not include the e-communications regulator from Estonia; rail regulators from Iceland, Ireland, Korea, Slovenia; air regulators from Finland, Germany, Ireland, Korea and Slovenia; and water regulators from Austria, Canada, Finland, France, Germany, Greece, Iceland, Japan, Luxembourg, Mexico, New Zealand, Norway, Poland, Slovenia, Spain, Sweden, Switzerland, and Turkey.

Box 1.1. The Indicators on the Governance of Sector Regulators, a methodological note

The OECD Indicators on the Governance of Sector Regulators and the corresponding database have been developed as part of the work programme of the OECD Network of Economic Regulators (NER). The NER brings together regulators across a range of network sectors such as e-communications, energy, transport and water from across the world (including regulators from OECD and non-OECD member countries).

Questionnaire structure

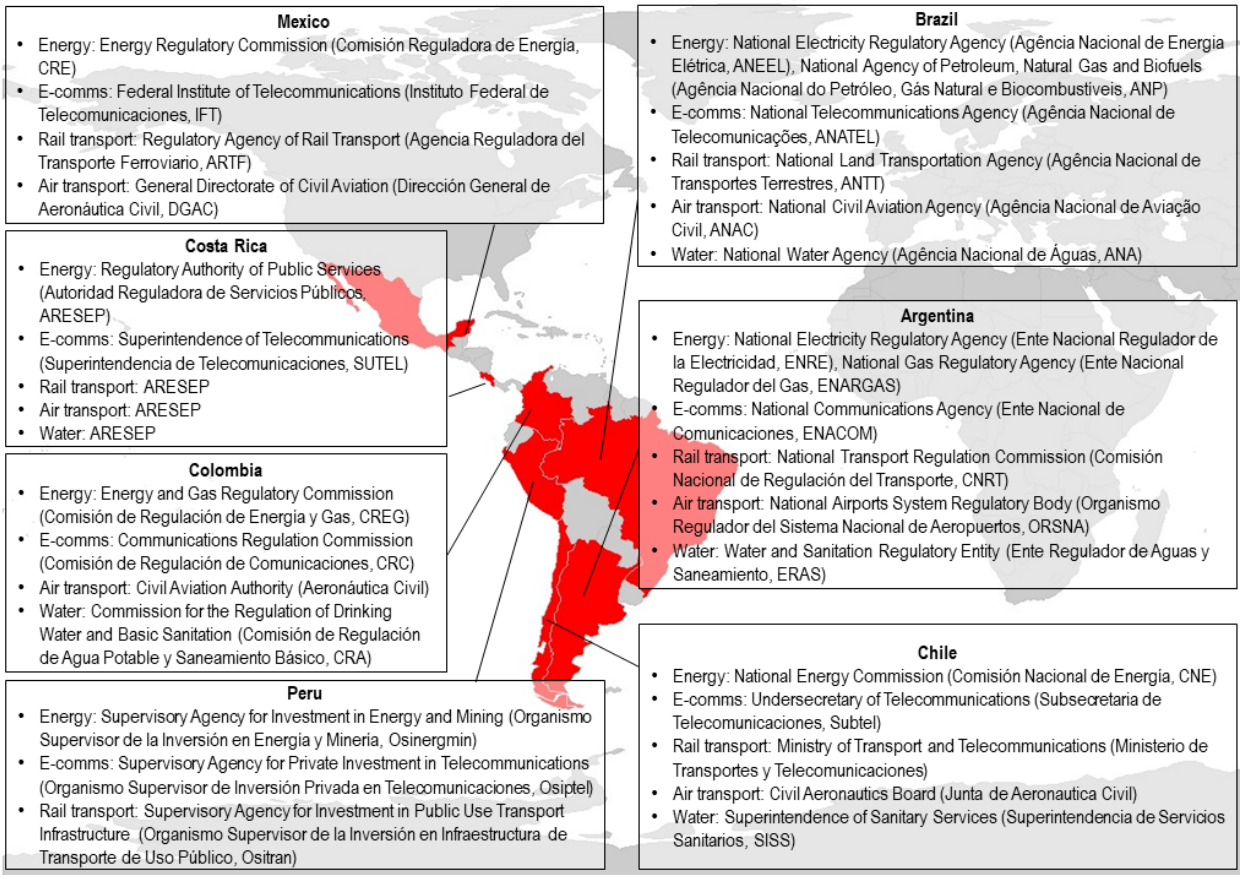
Complementing the Product Market Regulation (PMR) survey, the Indicators on the Governance of Sector Regulators map the regulatory arrangements of economic regulators across 46 countries and five network sectors: energy, e-communications, rail and air transport, and water. The indicators are structured along three components: independence, accountability and scope of action. The independence component maps the degree to which a regulator operates independently and with no undue influence from both the political power and the regulated sectors. The accountability component covers the accountability of the regulator vis-à-vis various stakeholders, including the government, parliament, the regulated industry and the general public. It captures the adherence to regulatory management tools and looks at the collection, use, publication and reporting of performance information. Finally, the scope of action component sheds light on the range of activities that the regulator performs, including tariff-setting, issuing standards, enforcement activities and sanctioning powers.

Methodology

The OECD Secretariat collected and finalised the responses in 2018 and 2019 as part of the 2018 Indicators on the Governance of Sector Regulators update. The OECD Secretariat shared questionnaires for the PMR survey that include the questionnaires for the Indicators on the Governance of Sector Regulators with designated contact points. For this version of the questionnaire, the OECD Secretariat ensured that economic regulators were given the opportunity to answer the questionnaire for the Indicators on the Governance of Sector Regulators, providing the opportunity to submit joint responses to the OECD in co-ordination with their PMR ministry contact points. The OECD Secretariat reviewed the responses received based on the respondents' understanding of the questions, adherence to drop-down menu categories for closed-ended questions, accuracy of answers and completeness of responses.

For each of the five sector regulators analysed, the questionnaire asks 77 closed-ended questions. Answers are scored on a scale from zero (most effective governance arrangement) to six (least effective governance arrangement) in line with the PMR methodology and converted to indicator values by averaging equally-weighted questions and sub-questions. For more information about the methodology behind the Indicators on the Governance of Sector Regulators, see Casullo, Durand and Cavassini (2019[3]).

Figure 1.1. Coverage of Latin American regulators in the 2018 OECD Governance of Sector Regulators Database



Source: prepared by authors.

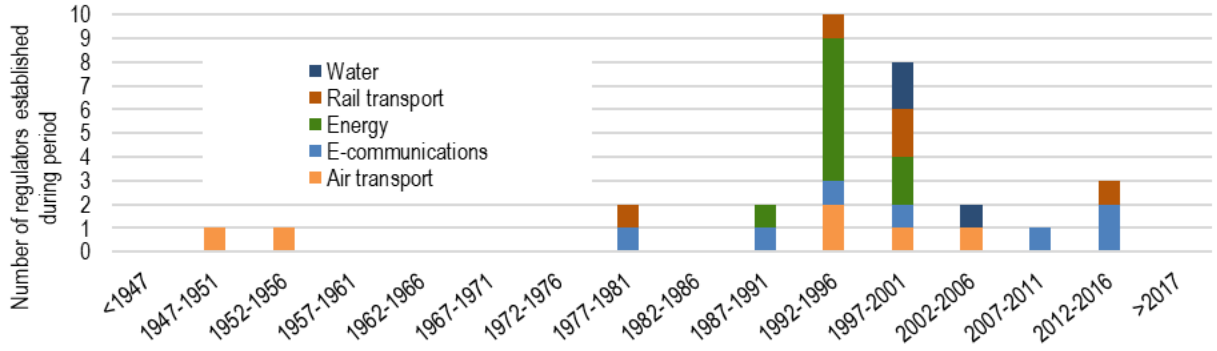
Date of establishment and sectors under the purview of Latin American regulators in the sample

While this working paper is concerned mainly with the institutional characteristics of regulators' governance, this sub-section presents data on two organisational characteristics to introduce the sample of Latin American regulators: date of establishment and number of regulated sectors. The sample of Latin American regulators described in this working paper are, on average, 26 years old and specialised within one of the sectors covered in the indicators.

The majority of the surveyed regulators were created after 1990 (Figure 1.2), accompanying a wave of regulatory reforms including privatisation and liberalisation in key markets in the 1990s. Other conditions may have contributed to this surge of regulatory agencies. Notably, Jordana and Levi-Faur (2003) identified a phenomenon of 'herding towards new convention' in the region, where the creation of one agency is a very strong predictor of the establishment of additional agencies in different sectors or countries (Jordana and Levi-Faur, 2006[4]). Some of the earliest sector regulators were created by Chile, in the energy, e-communications, rail transport, and air transport sectors, although these were created before the 1990s as ministerial regulators.

Figure 1.2. Most regulators were created after 1990

Date of establishment of regulators in the Latin American sample



Note: Authors' research, included in Annex B.

All but one of the thirty regulators in the Latin America sample have purview over a single sector included in the indicators (whether energy, e-communications, rail transport, air transport or water). Two countries have regulators that are specialised further: both Brazil and Argentina have separate electricity and gas regulators. Only one regulator has competences in more than one of the sectors covered in the Indicators – the Costa Rican Regulatory Authority of Public Services (Autoridad Reguladora de los Servicios Públicos – ARESEP) with competences in the energy, transport and water sectors.[3] Multi-sector regulators are more common among non-Latin American OECD countries, where around 15% of regulators have competences in more than one sector.

Indicators for Latin American regulators

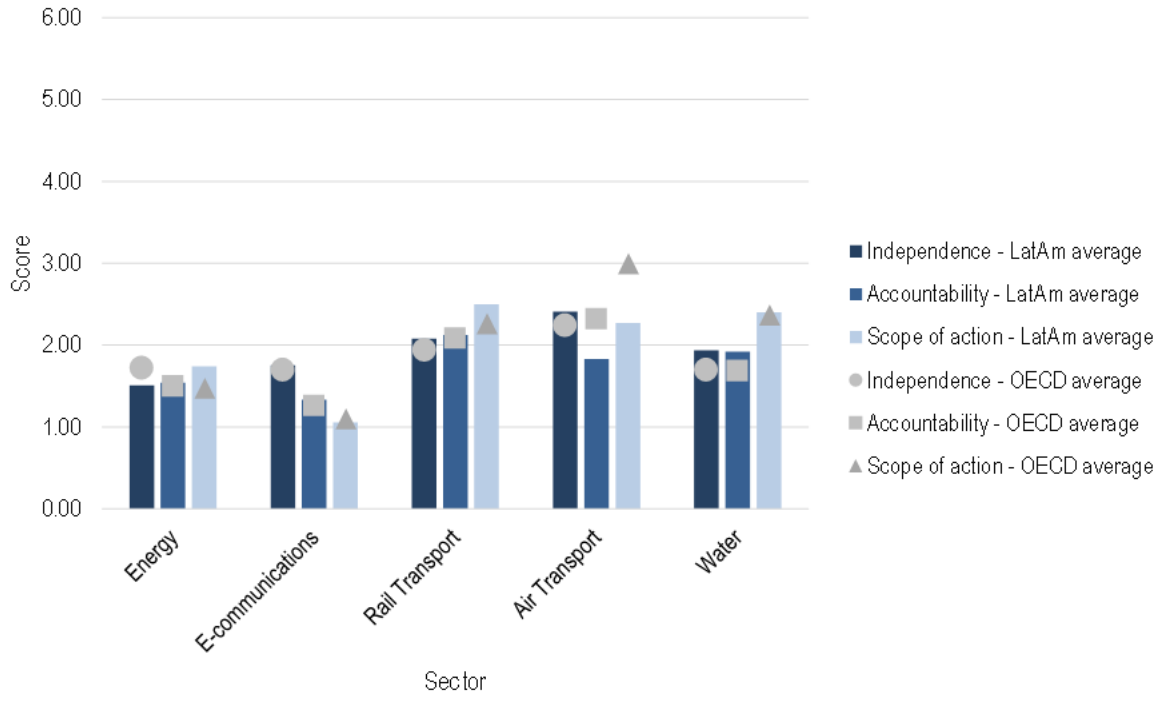
Average indicator scores by sector and indicator for regulators in Latin America and the OECD (Figure 1.3.) show the adoption of governance arrangements related to independence and accountability, and the breadth of regulators' functions (indicator scores are presented by country and sector in Annex B). A lower score in the independence and accountability indicators signals that the governance arrangements in place to preserve independence and promote accountability more closely reflect those identified as good practice in the survey. A lower indicator score in the scope of action component suggests that the regulator engages in a greater range of functions included in the questionnaire, such as price setting, enforcement activities and mediation. Conversely, a higher score in the independence and accountability indicators means that governance arrangements diverge from what is considered good practice, and a higher score in the scope of action indicator suggests a smaller range of functions.

[3] ARESEP was created as a multi-sector regulator in 1996, replacing the electricity and e-communications regulatory agency and adding functions in the post, gas and water sectors.

Figure 1.3. Indicator scores show more good-practice independence and accountability arrangements and a greater breadth of functions in energy and e-communications sectors

Indicator scores by sector and component among Latin American and OECD regulators, 2018

Note to readers: A lower score represents a greater uptake of good-practice governance arrangements in the independence and accountability components. A higher score shows a lower uptake.



Note: Responses were received for separate electricity and gas regulators in Argentina and Brazil, and the figure reflects the average of the scores of the two energy regulators.
The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

The data shows some variation between sectors, and indicator values compare favourably with OECD averages for all three components (Figure 1.4). Sector averages across the seven Latin American countries show us the following:

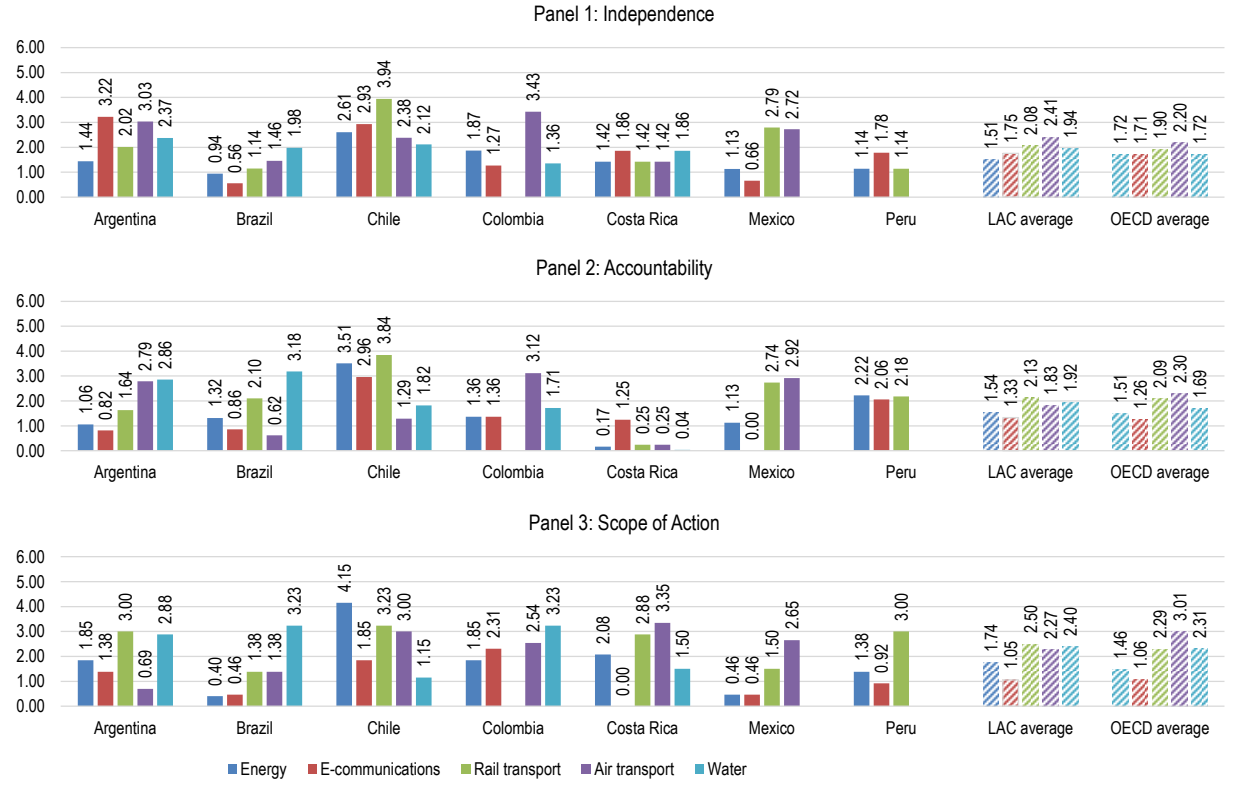
- Latin American **energy and e-communications regulators** have more good-practice governance arrangements for independence and accountability in place than regulators of other sectors in the region (with the lowest independence and accountability scores). E-communications regulators have the lowest score in the scope of action component, suggesting that they are empowered to engage in a broader range of regulatory activities than regulators in other sectors. Furthermore, a lower independence score in the energy sector compared to the OECD average shows a greater adoption of governance arrangements to preserve independence of the energy regulators in the Latin American sample than the OECD sample.
- Regulators in the **transport and water sectors** show lower adoption of good-practice governance arrangements than regulators in the energy and e-communications regulators, as suggested by their higher independence and accountability scores. In addition, the transport regulators and water regulators tend to have a narrower scope of action compared with the other two sectors. Relative

to OECD averages, there is room for improvement in Latin America regarding the independence of rail, air and water regulators and the accountability of water regulators. However, air transport regulators in the Latin American sample show greater adoption of accountability arrangements than those in the OECD sample, and tend to have a greater scope of action.

Figure 1.4. Even within countries, the governance of regulators varies across sectors

Indicator scores by country, including the average among the Latin American and OECD samples, 2018

Note to readers: A lower score represents a greater uptake of good-practice governance arrangements in the independence and accountability components. A higher score shows a lower uptake.



Note: Responses were received for separate electricity and gas regulators in Argentina and Brazil, and the figure reflects the average of the scores of the two energy regulators.
The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

The data shows great variation between regulators, even within some countries (Figure 1.4). The range of indicator values is greatest in the scope of action section, ranging from 0.00 (the Costa Rican e-communications regulator) to 4.15 (the Chilean energy regulator). In this section, a score of 0 indicates that the Costa Rican e-communications regulator has a broad scope of action, conducting all of the activities identified in the questionnaire (such as setting prices or mediating to resolve disputes). The Chilean energy regulator's score shows that this regulator conducts fewer of these functions independently. Indicator values in the independence section range from 0.56 (the Brazilian e-communications regulator) to 3.95 (the Chilean rail transport regulator). In the accountability section, indicators range from 0.00 (the Mexican e-communications regulator) to 3.84 (the Chilean rail transport

regulator). A score of zero does not reflect a perfect regulator, but rather shows that the Mexican e-communications regulator reports having in place all of the good practice arrangements included in the survey. The Chilean rail transport regulator, on the other hand, has fewer of these arrangements in place.

The indicators show that there is often great variation in institutional features and scope of action within countries. The greatest range of the independence indicator within a country can be found in Colombia (with a range of 2.16); for the accountability indicator, Mexico (2.92) and for the scope of action indicator, Costa Rica (3.35). In some countries, the data shows convergence between the institutional designs and practices between regulators. For example, the independence and accountability indicators for Peruvian regulators tend to converge, which may reflect the shared legal framework that governs all economic regulators in the country.[4] Costa Rica presents another example of a country showing convergence between sectors, with a multi-sector regulator in four of the five sectors that shows only minor variations in governance arrangements for independence and accountability between sectors.

In general, energy and e-communications regulators tend to perform better in the areas of independence and accountability compared to transport and water sectors. This pattern also appears among regulators in the OECD sample, where energy and e-communications regulators receive the lowest scores in independence and accountability. This suggests a degree of convergence in the institutional design of regulators in these sectors towards good-practice arrangements for independence and accountability. Badran (2012) uses explanations of policy transfer and isomorphism (whereby "there is an inexorable push toward homogenization" in organisational forms and practice as a set of organisations such as regulatory agencies becomes well-established (DiMaggio and Powell, 1983[5])) to explain the diffusion and dissemination of regulatory models (Badran, 2012[6]). European directives requiring certain measures to increase independence of regulators in energy and e-communications sectors are a driver of the convergence in independence scores in the OECD sample, where over half of member countries are in the EU. Through mechanisms like policy transfer and isomorphism, these directives may influence the diffusion of measures outside of the EU.

The fact that the convergence towards good practice is strongest in certain sectors is consistent with the conclusions of other researchers, who have found that diffusion in organisational model is stronger across sectors than within countries. Jordana and Levi-Faur (2005) observes a pattern of diffusion in the creation of independent agencies in the same sectors across countries in Latin America, and find that this route of diffusion is stronger across countries than within countries. When countries create independent regulators, they tend to design them with certain widely-accepted characteristics, such as the presence of a for-cause removal provisions (Jordana and Levi-Faur, 2005[7]). (See The legal status of regulators and their degree of independence

for a discussion of the extent to which independence in name translates to the presence of common governance arrangements to preserve independence).

[4] Peruvian law establishes the characteristics, functions and main organisational rules for regulators in the Framework Law on Regulatory Agencies for Private Investment in Public Utilities (*Ley Marco de los Organismos Reguladores de la Inversión Privada en los Servicios Públicos*) and Supreme Decree No. 042-2005-PCM (OECD, 2019[22]).

Zooming in: independence

The Indicators on the Governance of Sector Regulators map the legal status of the regulator as well as some practical determinants of independence: relationship with the executive, staffing (including for the most senior positions), budget and spending autonomy. Key findings from the independence component include the following:

- **Most surveyed regulators are independent by law, and independent regulators show greater adoption of arrangements to safeguard their independence.** While the specific governance arrangements among independent regulators vary, common characteristics such as the presence of criteria to prevent arbitrary dismissal of agency leadership, the use of limited leadership terms and opportunities for renewal, lack of government input on regulatory decisions and individual cases are shared by most Latin American regulators.
- **The leadership of most Latin American regulators is bound by rules designed to reduce the possibility of influence and the "revolving door".** In some cases, the proportion of regulators with good-practice governance arrangements related to leadership is greater in the Latin American sample than the OECD sample. For example, a greater proportion of regulators in the Latin American sample have staggered terms for board members. In addition, in a greater proportion of regulators in the Latin American sample, the final appointment of agency leadership involves the legislative branch. Also, a greater proportion of regulators in the Latin American sample have post-employment restrictions in place compared to the OECD sample. On the other hand, the presence of criteria for dismissing agency leadership is an area for improvement, with the leadership of more than one-third of regulators not protected from arbitrary dismissal.
- **When it comes to arrangements that limit executive involvement in actions and decisions, a smaller proportion of the Latin American sample reflects good practice compared to the OECD sample.** A greater proportion of regulators in the Latin American sample do not limit government involvement in appeals, individual cases or regulatory decisions, and work programmes. However, the vast majority (and a much greater proportion than the OECD sample) accept government input in long-term strategy, a good practice arrangement that helps ensure a regulator's strategy is in line with national policy priorities.

De jure and *de facto* independence

De jure independence encompasses measures to protect independence grounded in law. Some common *de jure* arrangements are those that define the rules for appointment or dismissal or leadership, create formal safeguards to protect a regulator's independence. However, *de jure* measures alone are often not sufficient to protect against undue influence. *De facto* independence, which is reflected in regulators actions, decisions and behaviour, as well as its institutional culture of independence are an important facet of a regulator's governance (OECD, 2017[8]). In some cases, there may be a gap between the letter of the law and reality.

While *de jure* arrangements are relatively easy to capture, *de facto* arrangements are difficult to identify and define. The Indicators on the Governance of Sector Regulators capture multiple aspects of the *de jure* independence of participating regulators. The 2018 Indicators capture some aspects of *de facto* independence, asking whether certain practices that often are not enshrined in law are in place. For example, a question in the independence section of the survey asks whether the regulator is responsible for proposing and discussing the regulator's budget if it receives budget appropriations. As another example, a question asks whether regulators make recommendations or issue opinions on draft legislation

or other policy documents from the executive. Regulators can answer this question whether or not there is a formal process in place (see Annex A for a full schemata of survey questions).

Even where safeguards, whether legal or practical, exist to bolster the independence of regulatory authorities, independence is never a "done deal." Independence is not a static characteristic, but rather one that can be continually exposed to stress by external parties, in particular at specific "pinch-points" (pinch-points range from decisions on the budget, resources or leadership of the regulator, specific regulatory decision making by the authority, to the political cycle). With this in mind, there is no perfect or bullet-proof combination of legal and cultural characteristics that will protect regulatory independence in any situation or context. Similarly, good performance on the OECD Indicators on the Governance of Sector Regulators does not mean that the autonomy of the regulator cannot be challenged or that its independence will be immune to undue influence.

Independent regulators

The legal status of regulators and their degree of independence

Regulators are commonly identified as either independent regulatory agencies or ministerial regulators embedded within government, including in establishing legislation. Within these two broad archetypes, regulators may be equipped with a range of good-practice governance arrangements to safeguard independence. Even in the case of ministerial regulators, the regulatory framework can advance a degree of independence from government direction to provide greater confidence that the regulator's decisions are objective, consistent and expert (OECD, 2014[9]).

The questionnaire underlying the Indicators on the Governance of Sector Regulators asks respondents whether the legal status of the regulator is independent or ministerial, as well as asking about the *de jure* and *de facto* attributes of the regulator that contribute to its independence. When this paper refers to "independent regulators," it is recognising regulators that identify as independent (and that show a degree of structural independence, as confirmed during data validation). The data shows that regulators that report that they are independent also show a greater adoption of other *de jure* and *de facto* measures to protect independence, such as appointment or dismissal practices for leadership (for a full list, see the schemata in Annex A). The average independence score among independent regulators in the Latin American sample is 1.40, compared to an independent score among ministerial regulators of 2.61.[5]

Despite the connection between independence in name and the adoption of *de jure* and *de facto* arrangements for independence, the binary classification conceals some variation in the arrangements to protect independence of individual regulators. Independence provisions often used to define independent regulators (such as the presence of criteria to prevent arbitrary dismissal of agency leadership, the use of limited leadership terms and opportunities for renewal, lack of government input on regulatory decisions and individual cases) are shared by most but not all of the independent regulators in the sample.[6] Indeed, the independent regulators in the Latin American sample only have one practice related to independence that they *all* share – the source of all of these regulators' funding is stated in the establishing legislation.

[5] Recall that a lower score indicates a greater uptake of the good practice arrangements in the independence indicator.

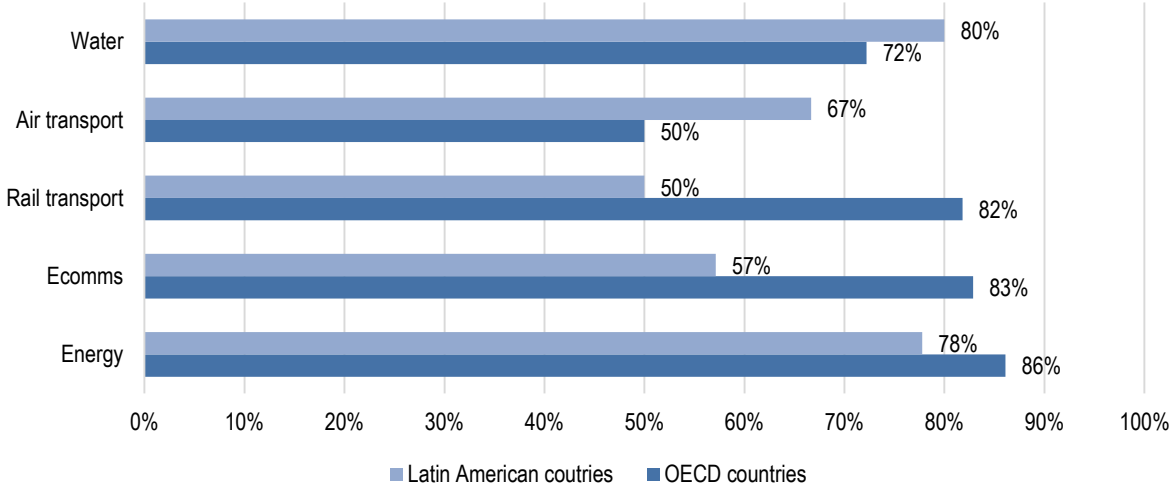
[6] This observation for Latin American countries is consistent with the findings of Datla et al. for the USA: they found that federal independent agencies in the USA did not share a single feature commonly associated with independent regulators (Datla et al., 2013, p. 772[46]).

Independent regulators

The creation of independent regulators has accompanied the transformation of markets and the advent of the regulatory state. In many countries, the government delegates regulatory powers in certain sectors to independent regulators. In network sectors, the independence of regulators can provide assurance of stability when investors are considering investing in capital-intensive, long-lived assets. Data from the Indicators on the Governance of Sector Regulators shows that in OECD countries, a majority of regulators in the energy (86%), e-communications (83%) rail transport (82%), and water (72%) sectors are independent bodies with adjudicatory, rule-making or enforcement powers (as distinct from regulators that are ministerial departments or agencies) (Baxter et al., 2020[10]).

Figure 1.5. A lower proportion of the Latin American sample consists of independent regulators in energy, e-communications and rail transport sectors compared to the OECD sample

Proportion of independent bodies in the Latin American and OECD countries surveyed, 2018



Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

A similar trend in institutional design and policy can be observed in Latin American countries, where a threefold increase in the number of independent regulators in sectors including infrastructure sectors has been observed between 1979 and 2002 (Jordana and Levi-Faur, 2006[4]). Data from 2018 confirms the trend, indicating a majority of independent regulators with adjudicatory, rule-making or enforcement powers across sectors in the Latin American sample of the OECD database (Figure 1.5). The proportion of independent regulators is highest in the energy and water sectors, where around 80% of regulators are independent. The proportion of independent regulators falls in the e-communications and transport sectors; two-thirds of regulators in the air transport sector and around half of regulators in the rail transport and e-communications sectors are independent. Two countries in the sample are outliers: Chile (with ministerial regulators in energy, e-communications and rail transport sectors) and Colombia (with ministerial regulators in the energy, e-communications,[7] air transport and water sectors).

[7] The Indicators on the Governance of Sector Regulators reflect the situation in Colombia as of the 1 January 2018. In 2019, the Law 1978 of 2019 changed the structure of the Colombian e-communications regulator significantly.

The relatively low prevalence of independent regulators in rail transport and e-communications sectors marks a departure from the pattern in OECD regulators. In OECD countries, less than one-fifth of regulators in the rail transport and e-communications sectors are ministerial. One key difference that may drive this departure is the lack of influence of EU directives (which affect the 22 EU countries that are among the 37 OECD member countries) requiring a degree of independence in national regulatory authorities of certain sectors. EU directives mandate the creation of a distinct and independent "stand-alone authority" in the rail sector of member countries and impose a range of requirements to preserve the independence of national regulatory authorities in the e-communications sector. While the difference is less pronounced between energy regulators in the Latin American sample and OECD sample, the OECD sample still has a relatively higher proportion of independent regulators. Similarly, directives applicable to electricity and gas sector regulators in the EU mandate the establishment of regulators that are "legally distinct and functionally independent from any other public or private entity" (Casullo, Durand and Cavassini, 2019[3]).

The case of Chile shows how contextual variation may also influence the establishment of ministerial regulators. Delegation to an independent regulator may be sensible where the need for experts in regulated sectors and the need to provide certainty in the face of political volatility are high (Trillas and Montoya, 2011[11]), as well as where countries have had negative experiences with privatisation initiatives (for example, where particular interest groups have benefited greatly or where corruption has been identified). However, Trillas and Montoya (2011) point to the fact that establishing a formally independent regulator is not the only way to encourage infrastructure investment. They note that Chile has achieved a high degree of utility privatisation despite having regulators that are not formally independent (Chile's energy, e-communications and rail regulators are classified as "ministerial" rather than "independent bodies"). They attribute this to Chile's unique political and institutional system, marked by very detailed and difficult-to-change legislation (Trillas and Montoya, 2011[11]).

Market characteristics are among the determinants for the institutional design of regulators including the establishment of an independent regulator, alongside political, cultural, and practical considerations. For example, the presence of state-owned entities in the sector may make an independent regulator an appropriate institutional design in order to preserve competitive neutrality (OECD, 2014, p. 46[9]). The 2012 Recommendation of the Council on Regulatory Policy and Governance lists three situations in which states should consider the establishment of an independent regulatory agency rather than a ministerial one:

- The regulator must be independent to maintain public confidence,
- The agency regulates state-owned and private entities within the same framework, and
- There is a need to protect the agency's impartiality as decisions of regulators have the potential to have significant economic impacts on regulated entities (OECD, 2012[12]).

The OECD Product Market Regulation (PMR) indicators capture the presence of state-owned firms in certain network sectors (excluding the water sector), which can be cross-referenced with the presence of an independent regulator with functions in the same sectors. State ownership is present in many of the sectors regulated by the Latin American regulators: the PMR data shows that national, state, regional or provincial governments control at least one firm in more than half of the sectors regulated by the sample. Slightly over 60% of regulators with functions in sectors with state control of one or more firms fall into the independent regulatory category (compared to under half of regulators in sectors with no state control). The data shows a difference in the mean independence scores between regulators in sectors with state-ownership of firms and without, regardless of a regulator's categorisation as ministerial or independent. Regulators operating in sectors without state control of at least one firm in the sector segments identified in the PMR survey have an average independence score of 2.15, while regulators in sectors with state control have an average independence score of 1.85. Regulators overseeing sectors with state control of

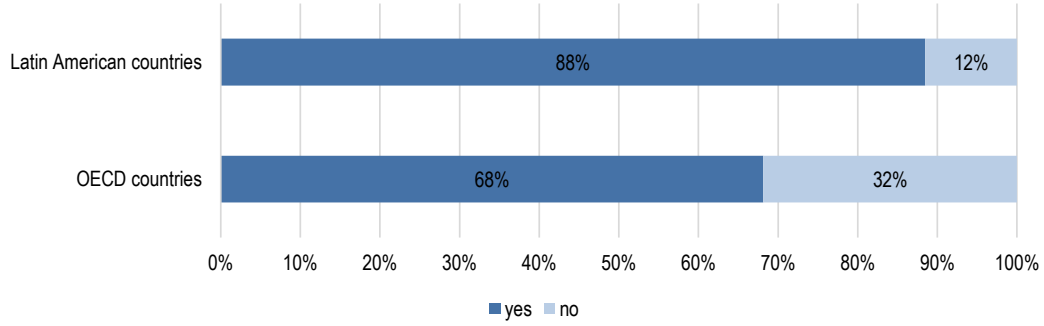
at least one firm in the sector report having more good-practice arrangements in place to safeguard the regulators' independence.[8]

Governing body

A board is the most common decision-making body in Latin American regulators, with 70% of regulators led by boards.[9] The size of boards varies. The boards with the fewest members, those of the Argentinian Water and Sanitation Regulatory Entity (Ente Regulador de Aguas y Saneamiento, ERAS) and the Colombian Communications Regulation Commission (Comisión de Regulación de Comunicaciones, CRC),[10] have three board members (ERAS, n.d.[13]; CRC, 2010[14]). On the other end of the spectrum, the Colombian Energy and Gas Regulation Commission (Comisión de Regulación de Energía y Gas, CREG) has 11 members of the commission, with eight commissioned experts and representatives from three ministries (CREG, n.d.[15]).

Figure 1.6. In most of the Latin American regulators with boards, board appointments are staggered

Responses to the question "If the regulator is led by a board, are appointments of board members staggered?"



Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

[8] While calculating the average independence score, the authors included distinct averages for electricity and gas sectors in Brazil and Argentina, while using a single energy sector average for those countries without distinct electricity and gas regulators. The questions in the PMR ask whether national, state, regional or provincial governments control at least one firm in specified sector segments that vary by sector as follows:

- Electricity: Electricity generation, import, export, or retail supply
- Gas: Gas production, import, export, storage or retail supply
- E-communications: fixed-line networks, retail fixed line services (voice, video and data), mobile networks, retail mobile services (voice, video and data)
- Rail transport: passenger transport or freight transport
- Air transport: domestic passenger transport, international passenger transport, operation of airports

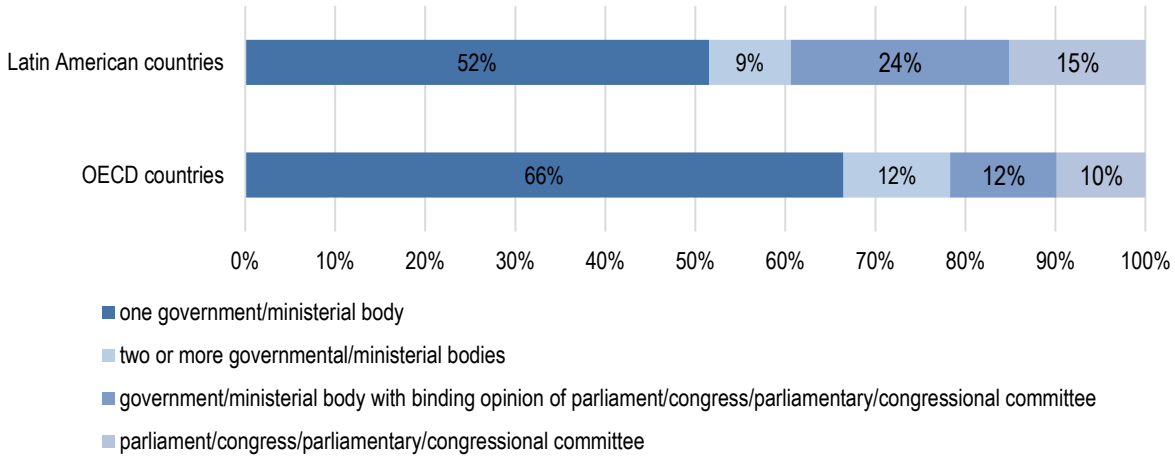
[9] The Indicators on the Governance of Sector Regulators questionnaire does not contain a specific question asking whether the regulator is led by a board or an agency head. Rather, the material here is derived from the answer to a related question and confirmed by desk research. The question "If the regulator is led by a board, are appointments of board members staggered?" provides the basis for the desk research; if a respondent answers "n/a", the reviewer assumes the regulator is not led by a board *prima facie*.

[10] The Indicators on the Governance of Sector Regulators reflect the situation in Colombia as of the 1 January 2018. In 2019, the Law 1978 of 2019 changed the structure of the Colombian e-communications regulator significantly, including the structure of the governing body.

A staggered multi-member board can improve continuity and preserve institutional memory, and can decouple appointments from political cycles (OECD, 2014[16]). The appointments of board members are staggered in most of the Latin American sample. Indeed, the proportion of regulators with staggered appointments is higher in the Latin American sample than the OECD group (Figure 1.7). Requirements to stagger board members vary in terms of their prescriptiveness. For example, Brazil's law for regulatory agencies varies the terms of board members to ensure that mandates are non-coincident. Board members have mandates from two to six years, and the term is renewable only for the board member nominated to a two-year term (this board member's term can be renewed for one five-year period) (Lei nº 13.848, de 25 de Junho de 2019, 2019[17]). In some instances, safeguards in design and law may differ from practice; for example, the mandates of the board matters of Peru's e-communications regulator (Organismo Supervisor de Inversión Privada en Telecomunicaciones - OSIPTEL) are staggered by design, with one appointment per year. However, in 2019 a Supreme Decree issued by the President of the Council of Ministers extended expired mandates, compromising the offsets established in law. The Board was left with only two active members including the President, creating a risk for the continuity and capacity of the Board (OECD, 2019[18]).

Figure 1.7. Government appointment of agency leadership is common, but parliamentary involvement is more common in the Latin American sample than the OECD sample

Responses to the question "Which body has the legal authority to make the final appointment of the agency head/board members?"

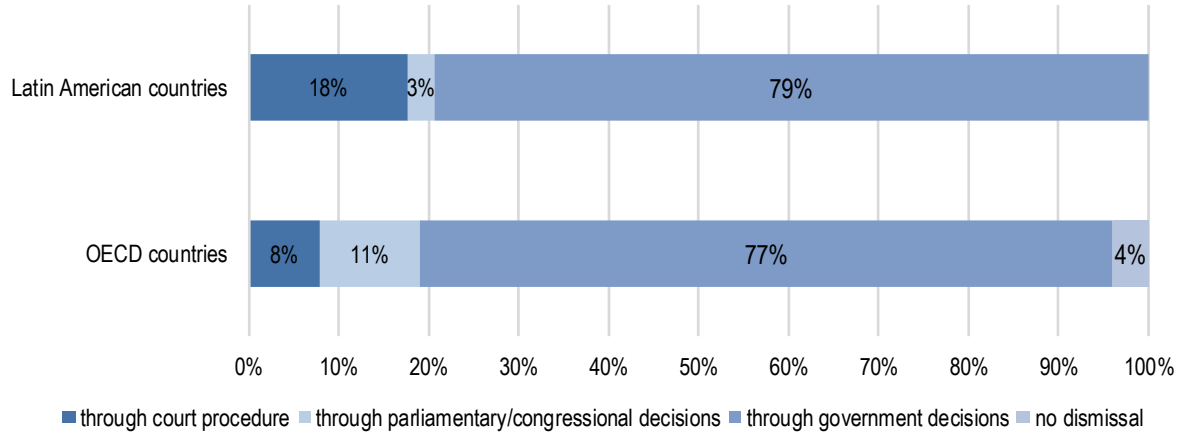


Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

The process of nominating and appointing agency leadership is a critical junction where lack of transparency and accountability can create perceptions of undue influence (OECD, 2017[19]). The body that has the legal authority to make the final appointment of the leadership varies between the regulators in the sample and reveals a distinction from OECD regulators (Figure 1.7). In the Latin American sample, the leadership of most regulators is appointed by the government. The legislature plays a prominent role in appointment in a higher proportion of regulators in the Latin American sample compared to the OECD sample. Parliamentary appointment and binding opinions from the legislature for governmental appointments are more common in the Latin American sample than in OECD regulators.

Figure 1.8. Most regulators can be dismissed through government decisions alone

Responses to the question "How can the agency head/board members be dismissed from office?"

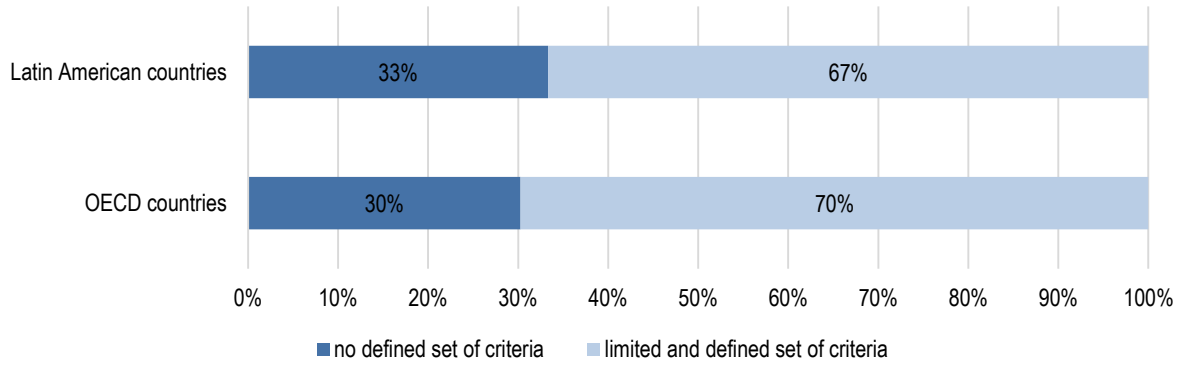


Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

Clear legislative provisions establishing the procedure and grounds for termination of regulator leadership help protect the integrity of the regulator. The agency head or board members in most regulators can be dismissed through government decisions (Figure 1.8). A relatively small proportion of agency heads or board members can be dismissed through court procedure or parliamentary decisions.

Figure 1.9. In most regulators, leadership can only be dismissed within a specific set of criteria for dismissal

Responses to the question "What are the criteria for dismissing agency heads/board members during their term of office?"

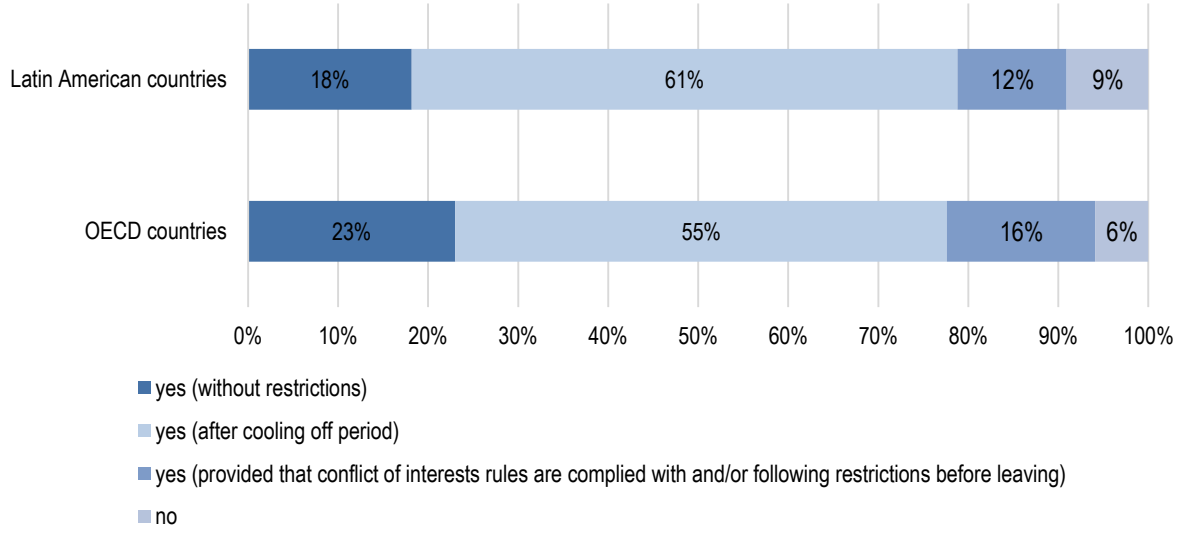


Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

Restrictions in law may provide additional safeguards against the arbitrary termination of leadership of independent regulators, such as the defining of criteria for dismissal. Grounds for termination may include misconduct, conviction of an indictable offence, failure to disclose a conflict of interest, and inability to perform functions or duties (OECD, 2014[16]). The legislative framework of most regulators in the Latin American sample defines criteria for dismissal (Figure 1.9). The proportion of regulators without any such criteria is only slightly greater in the Latin American sample than in OECD countries, suggesting some convergence towards establishing limited and defined criteria to prevent arbitrary dismissal.

Figure 1.10. Agency leadership is generally bound by post-employment restrictions

Responses to the question "Can the agency head/board members accept jobs in the government related to the sector that is regulated by the regulator and/or the sector that is regulated by the regulator after their term of office?"



Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

The design of post-employment restrictions, such as cooling off periods, may help minimise the risk of a "revolving door" between regulators and industry or government (for more information on measures to manage the "revolving door", see Box 1.2). Less than one quarter of regulators in the Latin American sample do not have any such restrictions (Figure 1.10). The largest proportion of regulators adopts cooling off periods between the mandate of an agency head or board member and any employment in the regulated sector or the line ministry.

Box 1.2. Managing the revolving door: practice in OECD countries

Where there is personnel movement between public and private sectors, the "revolving door" phenomenon raises the risk of undermining the regulator's integrity and commitment to the public interest. A lack of strong arrangements to manage this risk in regulators could lead to "regulatory capture," by which public officials supposed to serve in the public interest favour the interests of regulated entities.

OECD member countries have adopted a variety of pre- and post-employment rules and procedures to limit the possibility of conflict of interest. These measures may include requiring employees to identify and manage potential conflicts of interest when assuming or changing positions. When leaving a position, a civil servant may be subject to restrictions and cooling-off periods. The Canadian Lobbying Act, for example, prohibits "formal designated public office holders" from participating in many lobbying activities for five years after the conclusion of their functions. Often, the requirements apply differently to different positions or different public entities, depending on the risk of potential conflicts of interest. For example, senior employees may pose a greater risk and are often subject to special pre- or post-public employment restrictions. In Italy, the law (spelled out in d.lgs.165/2001, art.53, c.16-ter, modified by the Anti-Corruption Law no.190/2012) prohibits public officials in managerial or negotiating positions from engaging in related functions in a private sector entity for three years.

Pre- and post-employment restrictions pose their own challenges. First, the public service must walk a fine line between addressing issues related to pre- and post-employment while continuing to attract a well-qualified workforce by preserving "a reasonable measure of employment freedom." In addition, enforcement of post-employment provisions can be difficult. After leaving the public service, many ex-public officials move further from administrative government controls.

Source: OECD (2010), Post-Public Employment: Good Practices for Preventing Conflict of Interest, OECD Publishing, Paris, https://doi.org/10.1787/9789264056701-en; OECD (Forthcoming), Integrity Review of the State of Mexico, OECD publishing, Paris.

Relationship with the executive for policy, planning and decision-making

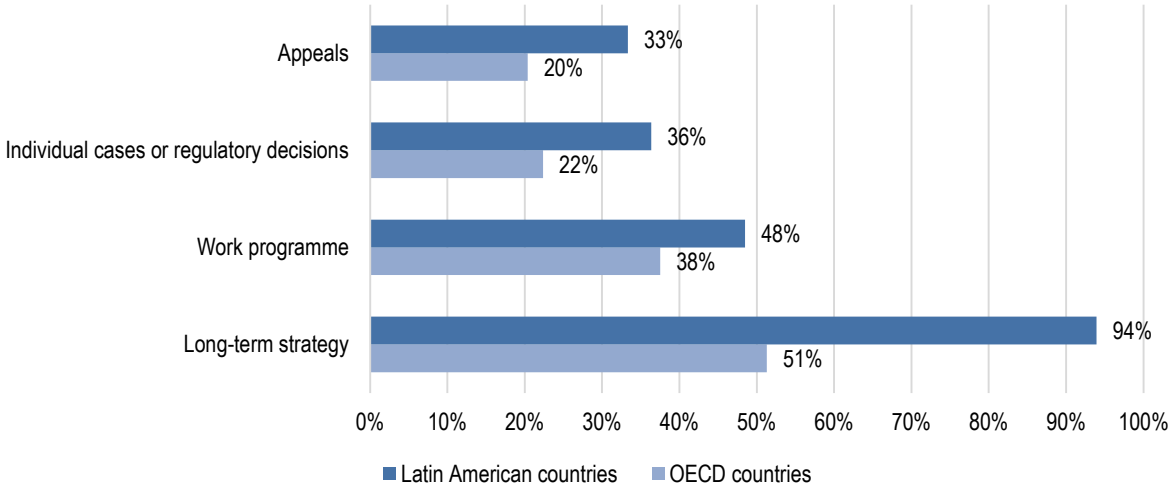
To preserve independence from the executive, governance arrangements may limit executive involvement in some of the regulator's actions and decisions (OECD, 2014[20]). Legislative frameworks often limit government intervention in regulatory decision-making and setting of work programmes and operations of the regulator (such as individual cases or regulatory decisions, appeals and work programme). While such measures strengthen the independence of regulatory decision-making, throughout their life cycles, regulators will face undue influence, in particular at given pinch points such as those linked to agency finances or political cycles. In addition to safeguards set in law, it is therefore essential for regulators to nurture a culture of independence internally (OECD, 2017[19]).

At least half of the Latin American sample has good-practice safeguards in place on government guidance for appeals, individual cases or regulatory decisions and work programmes (Figure 1.11). Around one-third of regulators can receive government guidance on individual cases or regulatory decisions or appeals, and half can receive input from the government on their work programmes. A lower proportion of the OECD sample reports that regulators receive guidance on these outputs, suggesting that these safeguards are more common among regulators in OECD countries.

At the same time, maintaining appropriate executive input on some actions is important. In particular, engaging with the executive on long-term strategy helps to ensure that the strategy is in line with broad strategic national priorities (Koske et al., 2016, p. 17[21]). The vast majority of regulators in the Latin American sample reflect this good practice, with 94% receiving government input on their long-term strategy (Figure 1.11). This represents a greater proportion than the proportion of regulators in the OECD sample; only 51% of OECD regulators receive government guidance on long-term strategy.

Figure 1.11. Less than half of the Latin American sample receives government guidance on work programmes, individual decisions or cases, and appeals

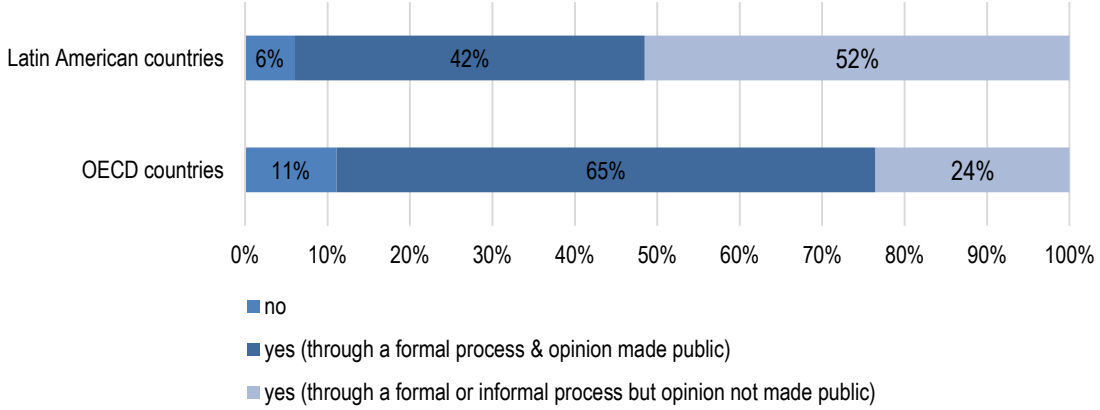
Proportion of regulators in the Latin American and OECD samples receiving government guidance



Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

Figure 1.12. Most regulators provide input on government policy, and many do not publish their input

Responses to the question "Does the regulator make recommendations or issue opinions on draft legislation or policy documents?"



Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

Governments can take advantage of regulators' technical expertise as well as their access to data and proximity with market actors to craft better policies. Most Latin American regulators make recommendations or issue opinions on draft legislation or policy documents proposed by the executive

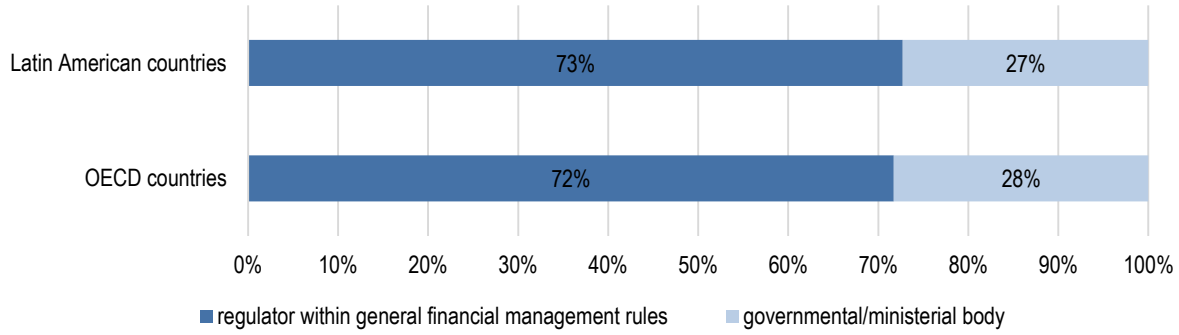
(Figure 1.12). In some countries, this is common practice. For example, the Peruvian e-communications regulator (OSIPTEL) regularly submits technical opinions in response to consultations from their line ministry. The Ministry can solicit technical support from the regulator by law, and OSIPTEL often provides informal input before open consultations (OECD, 2019, p. 20[18]). Overall, informal or formal recommendations or opinions that are not published are more common in the Latin American sample when compared to the OECD sample.

Budget

Appropriate resourcing is critical to ensure a regulator can carry out its mandate, and the sources of funding differ between regulators. Regulators may receive funding from budget appropriations, sources from operations (fees, charges, penalties, interest), or some combination of the two (OECD, 2014[16]). The most appropriate source of funding depends on the sector context – for example, whether regulated entities are publically owned (OECD, 2017[19]). In the Latin American sample, 42% of regulators receive funding from fees only.[11] A smaller group, 36% of the sample, are funded by a combination of fees and budget. Only 21% receive budget funding exclusively. Over half of regulators that receive funding from fees set the level of fees themselves within criteria set by legislation. Regardless of the source of funding, countries should have in place measures to promote the transparency and accountability of funding and financial processes. To demonstrate the fairness of cost-recovery schemes, the foundations and results of the scheme should be as transparent as possible (OECD, 2017[19]).

Figure 1.13. Most regulators decide their own allocation of expenditures within financial management rules

Responses to the question "Which body is responsible for deciding the regulator's allocation of expenditures?"



Source: OECD 2018 Database on the Governance of Sector Regulators. Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.

[11] The authors derived this information from responses to two questions on the Indicators of the Governance of Sector Regulators questionnaire, and confirmed the information with desk research. The Indicators on the Governance of Sector Regulators survey does not ask outright whether regulators are funded through budget, fees, or a combination of the two. Rather, it asks (1) "If the regulator is financed in total or in part through fees paid by the regulated sector, who sets the level of the fees?" and (2) "If the regulator is financed in total or in part through the national budget, who is responsible for proposing and discussing the regulator's budget?" The authors confirmed the assumption extrapolated from the responses to these two questions by researching the regulators' funding sources.

Budgetary independence is linked both to the source of funding and the regulator's capacity for autonomous financial management. The data shows that regulators in the Latin American and OECD sample tend to have responsibility for deciding their allocation of expenditure within general financial rules (Figure 1.13). Financial management rules may require budget review and consultation by the government agency with overall budget responsibility and parliament. In some jurisdictions, the government takes a more active role; indeed, government decides the regulator's allocation of expenditure in nearly a third of both samples.

Financial management rules provide oversight of the efficiency of public entities, but certain measures could undermine the adequacy, timeliness and predictability of resources as well as the principle of cost-recovery of regulatory activities. In Peru, the 2017 Ley de Equilibrio Financiero (renewed for 2018) requires that surplus funds are returned to the Treasury at the end of the fiscal year (OECD, 2019[22]). In combination with austerity measures restricting expenditures, this law affects the ability of regulators to execute their budgets (Box 1.3). Mexico's National Hydrocarbons Commission (Comisión Nacional de Hidrocarburos, CNH) is funded through fees and duties which are paid into a trust fund which is only accessible after the third month of the year (and after receiving approval from the Ministry of Finance and Public Credit), increasing the transaction costs and complicating financial planning (OECD, 2017[23]).

Box 1.3. Cost recovery fees in the Peruvian energy and mining regulator

In the case of the Peruvian energy and mining regulator (Organismo Supervisor de la Inversión en Energía y Minería – Osinergmin), the fees levied on regulated entities fund the regulator's operations entirely. Osinergmin proposes the level of these fees within rules set by the Ministry of Economy and Finance. The fees are approved by a Supreme Decree of the Ministry of Energy and Mines and endorsed by the Ministry of Economy and Finance, the Presidency of the Council of Ministers and the President of the Republic. While the law grants Osinergmin economic and financial autonomy, the 2019 OECD peer review of Osinergmin noted that Congress and the executive have influenced Osinergmin's operating budget through laws and decrees. Recent budget laws required unspent funds to be returned to the Treasury at the end of each fiscal year. The regulator then must make requests to the Ministry of Economy and Finance to carry forward unused funds for future projects. Supreme Decrees (such as recent decrees 27-2019-EF and 002-2020-EF) can impose budgetary limitations on the use of unspent funds from previous years. Osinergmin is also subject to restrictions on how they can spend their budget on trainings, international travel and communications (p. 73[22])

Source: OECD (2019), Driving Performance at Peru's Energy and Mining Regulator, The Governance of Regulators, OECD Publishing, Paris. https://doi.org/10.1787/9789264310865-en. Information provided by Osinergmin, August 2020.

Zooming in: accountability

Regulators do not operate in a vacuum. Governance arrangements to promote accountability to the government, parliament, regulated industry and the public serve as a critical counterbalance to independence. Accountability and transparency measures ensure that the regulator reports regularly on its objectives and the discharge of its functions. Adherence to compliance and accountability instruments such as regulatory management tools and the collection, use, publication and reporting of performance information enhance the transparency and enable scrutiny of regulators' actions. Transparency of decision-making also helps regulators mitigate the risk of actual or perceived undue influence and contributes to the overall predictability of the regulatory regime.

The results show an assortment of accountability practices in Latin American regulators:

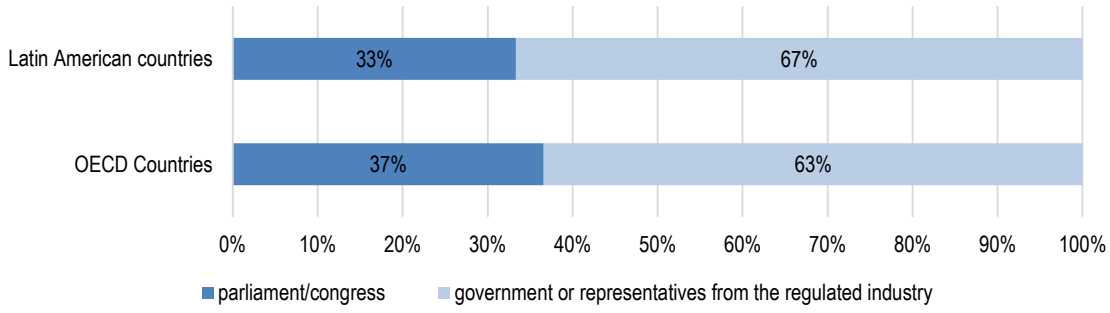
- **Most Latin American regulators produce a regular activity report**. However, a smaller proportion is required to do so by law compared to the OECD sample.
- **There is room for improvement in the reporting of performance information.** While collecting and publishing information on the industry and market performance of the regulated sector is common, other categories of performance information are less commonly collected. A minority of regulators collect information on the quality of the regulator's regulatory process and information about the organisational or corporate governance performance of the regulator, compared to a slight majority in the OECD sample.
- **Results related to stakeholder engagement compare favourably with the OECD sample.** The vast majority of regulators publish draft decisions and collect feedback from stakeholders, compared to 82% of regulators in the OECD sample. The majority also provide feedback on comments from stakeholders.

Direct lines of accountability

Creating a more accountable governance framework starts with the definition of lines of accountability. Only around one-third of regulators in the Latin American sample are by law accountable to parliament or congress. This suggests convergence with the OECD sample, where 37% of regulators are accountable to the legislative branch (Figure 1.14).

Figure 1.14. A minority of regulators is accountable to parliament

Body to whom the regulator is directly responsible among Latin American and OECD regulators, 2018



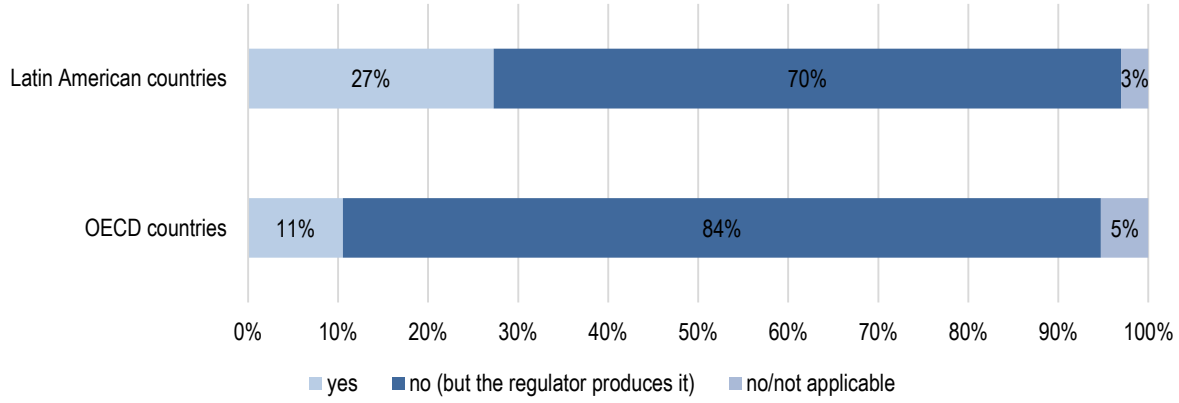
Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

Reporting

Regardless of whether regulators report to government or to parliament, independent regulators' reporting should occur through clear and systematic channels. The importance of defined procedures and mechanisms for reporting is particularly relevant for independent regulators that are accountable to government, in order to avoid compromising the actual or perceived independence of decision-making (OECD, 2014[24]). Many regulators also make reporting information available to the public, including by publishing the information on their websites. However, accountability and transparency require greater effort than simply publishing information. Although this is beyond the scope of the Indicators on the Governance of Regulators, it is important to note that regulators must ensure that information is accessible and understandable to the public (OECD, 2016[25]).

Figure 1.15. Most regulators produce a regular activity report, even if not required by law

Responses to the question "Is there a legislative requirement for the regulator to produce a report on its activities on a regular basis?"



Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

Legal requirements to produce regular reports on regulatory activities are more common among regulators in Latin American countries than those in OECD countries (27% as opposed to 11%) (Figure 1.15); however, despite the difference in terms of a legal requirement to do so, the proportion of regulators that in practice produce reports on their activities is similar (97% in Latin America and 95% in OECD countries). In general, regulators should report on their activities and outcomes to the legislature (OECD, 2014[16]). The practice serves another purpose, to increase understanding and communicate the value of the regulator's work. However, only 48% of Latin American regulators present a report to the legislature in a dedicated session or meeting where these goals could be furthered through discussion.

Box 1.4. Enhancing accountability through budgetary processes in Mexico and Peru

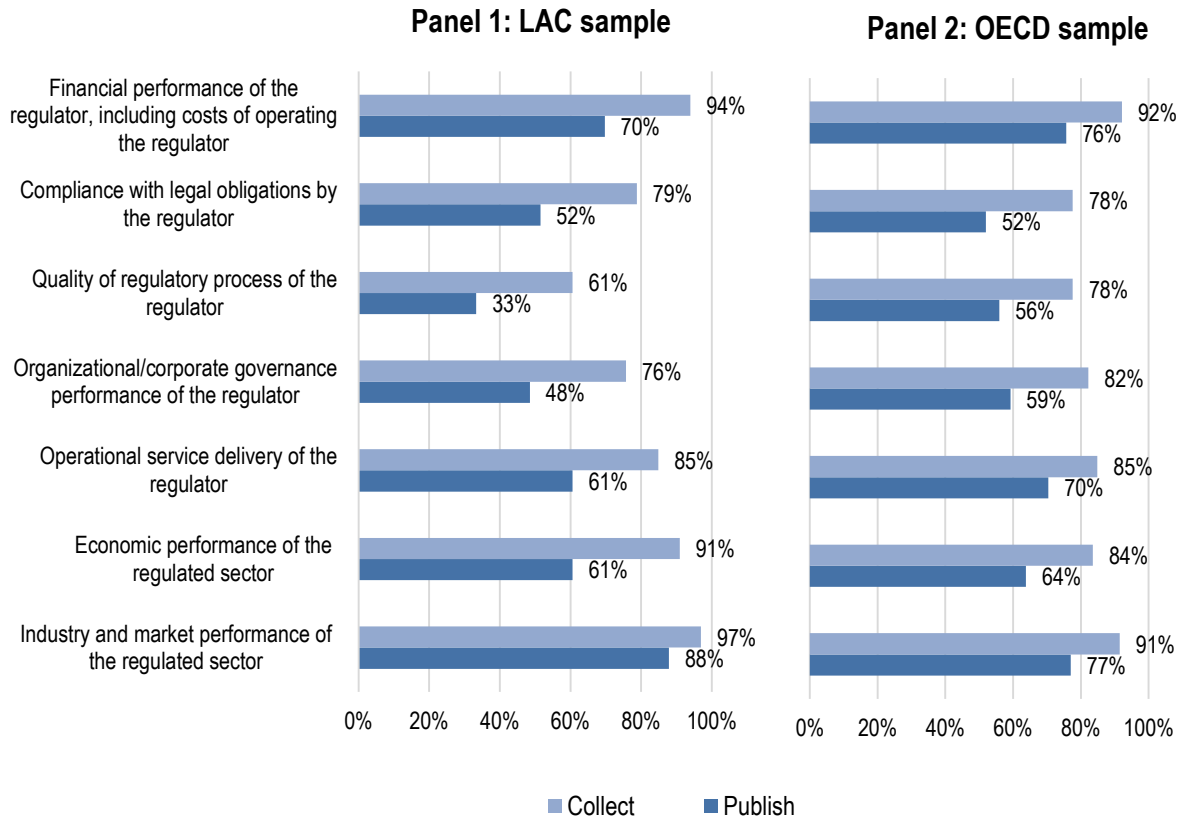
Budgeting processes also serve as a potential accountability check. For example, the Peruvian administration uses a performance-based budgeting system for some public entities. Implemented in 2015, this system's goal is to aligning public budgets to the goals and objectives of the institution established in strategic institutional plans and operational plans. The government monitors budget

execution alongside performance indicators, and works with participating agencies to help them design better indicators (OECD, 2019, p. 79[18]).

Similarly, the budget of the Mexican energy regulator (Comisión Reguladora de Energía - CRE) is aligned with performance through a performance evaluation matrix, making its budget subject to performance assessment by the Ministry of Finance and Public Credit (Secretaría de Hacienda y Crédito Público – SHCP). The matrix includes key performance indicators that show the achievement of results and the programme goals that were met. CRE provides its indicators to SHCP quarterly (OECD, 2017, p. 93[26]).

Source: OECD (2019), Driving Performance at Peru's Telecommunications Regulator, The Governance of Regulators, OECD Publishing, Paris. https://doi.org/10.1787/9789264310506-en; OECD (2017), Driving Performance at Mexico's Energy Regulatory Commission, The Governance of Regulators, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264280830-en.

Figure 1.16. Regulators collect and publish a range of performance information



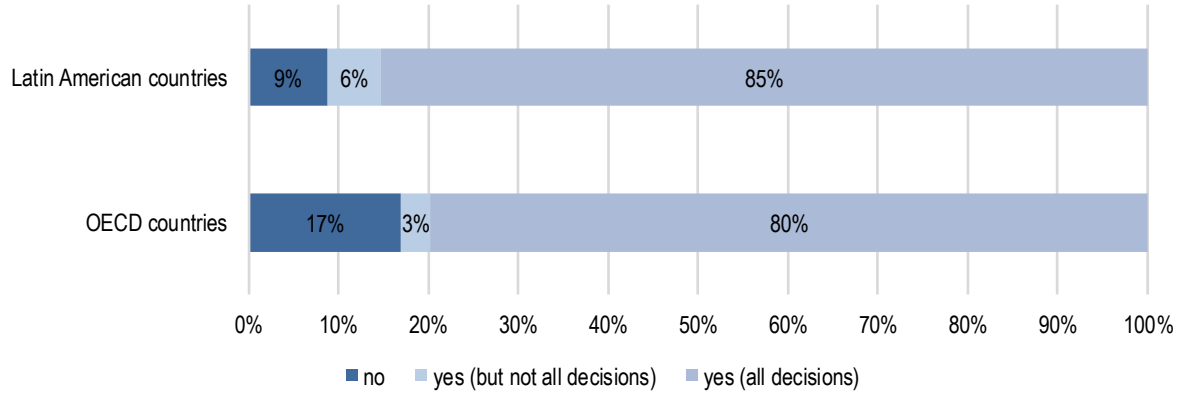
Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

Reporting performance information publically serves several functions: enabling assessment of regulators' performance, enabling stakeholders to hold regulators to account, and incentivising improved regulatory performance (OECD, 2014[16]). The majority of Latin American regulators collect the performance information within the categories shown in Figure 1.16. Collecting information about the regulators financial performance and the industry and market performance of the regulated sector is most common, while

collecting information about the quality of regulatory processes is least common. Fewer regulators publish the performance information that they collect. In particular, there is room for more regulators to publish information about the quality of their regulatory processes. Around half of Latin American regulators who collect this information do not publish it on their website.

Figure 1.17. The majority of regulators must provide motivation for all decisions

Responses to the question "Does the regulator need to motivate its regulatory decisions (e.g. with evidence and data)?"



Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

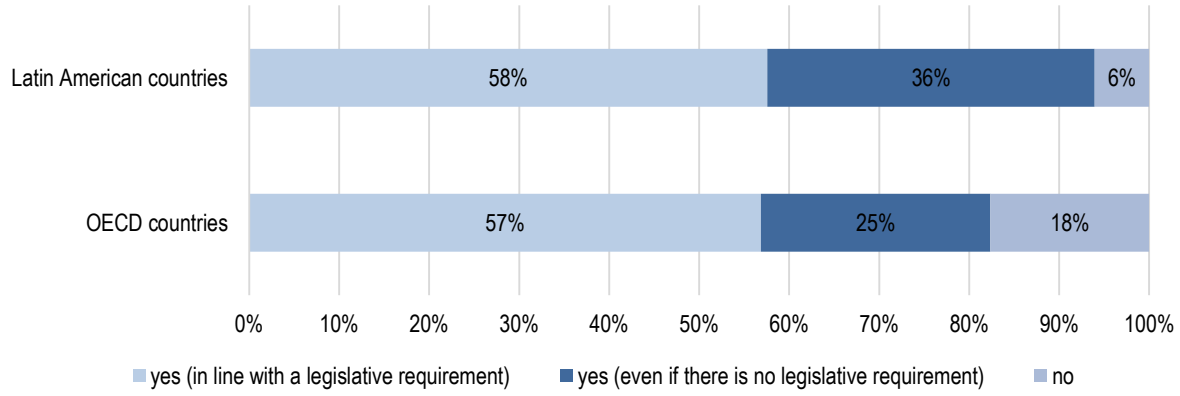
The justification of key decisions with robust and detailed evidence can help maintain trust in decision-making (OECD, 2017[19]). Most regulators in the Latin American sample motivate most or all of their regulatory decisions (Figure 1.17). Compared to regulators on OECD countries, a greater proportion of Latin American regulators motivate their decisions.

Stakeholder engagement

Stakeholder engagement encompasses a range of methods designed to inform and collect feedback from stakeholders to improve regulatory proposals and encourage understanding and acceptance of regulators' actions. Alongside other tools, stakeholder engagement provides the opportunity for reflection and gathering of valuable insights from those affected by regulation. In addition to serving as a critical input to the regulatory process, stakeholder engagement also plays an important role in improving transparency (OECD, 2018[27]). The Indicators on the Governance of Sector Regulators capture the use of basic mechanisms of public consultation by participants, but regulators can use other mechanisms to benefit from engagement. Several regulators in the sample have institutionalised stakeholder engagement through the use of advisory bodies (Box 1.5).

Figure 1.18. Most regulators publish draft decisions for comment

Responses to the question “Does the regulator publish draft decisions and collect feedback from stakeholders?”

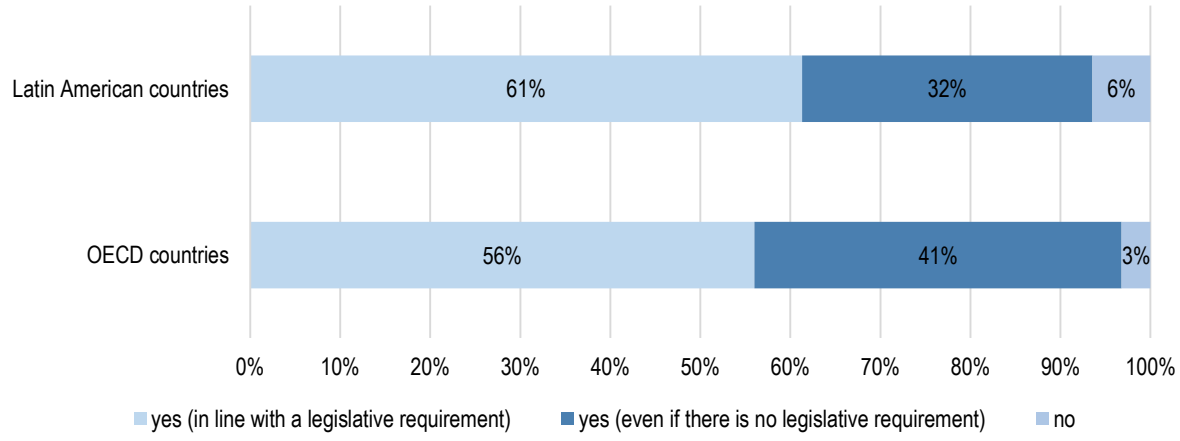


Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

Public consultation is commonly required among Latin American regulators in the sample. In more than half of the Latin American sample, regulators are bound by legislation to publish draft decisions and collect feedback from stakeholders (Figure 1.18). The proportion of regulators who publish draft decisions and collect stakeholder comments in the absence of a legislative requirement is higher than that of OECD countries.

Figure 1.19. Most regulators also provide feedback on stakeholder comments

Responses to the question “Does the regulator provide feedback on comments received by stakeholders?” among regulators who indicated that they collect stakeholder feedback



Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

Providing feedback to commenters is an element of a well-designed public comment campaign, improving transparency of decision-making and helping stakeholders feel that they have been included and fairly treated (OECD, 2018[27]; OECD, 2014[9]; Lind and Arndt, 2016[28]). Of those which indicated they collect

stakeholder feedback on draft decisions, a majority of regulators in Latin American countries are bound by law to respond to received comments, and one-third of regulators do so even in the absence of a legislative requirement (Figure 1.19).

Box 1.5. Institutionalising stakeholder engagement through advisory bodies in Mexico and Peru

The advisory bodies of Mexico's Energy Regulatory Commission

Mexico's Energy Regulatory Commission (Comisión Reguladora de Energía, CRE) has an "Advisory Board" that is established in the Law of Coordinated Energy Regulators and the Commission Internal Statutes. The purpose of the Advisory Board is to contribute to the process of public consultation of CRE´s regulatory projects. Participants may come from prominent institutions in the energy sector, associations bringing together licensees and users, and academic institutions. The governing body of the co-ordinated regulatory bodies in the energy sector (which comprises of commissioners from the relevant regulators) nominates the participants and defines the rules of organisation and functioning for the board.

The advisory and technical committees of Mexico's Federal Telecommunications Institute

Mexico's Federal Telecommunications Institute (Instituto Federal de Telecomunicaciones, IFT) has two consultative bodies: its Advisory Council and a Technical Committee on Radio Spectrum Matters.

Fifteen volunteer members participate in the Advisory Council with one-year mandates that can be renewed indefinitely. The members, appointed by the governing body of the IFT, are specialists with recognised prestige in the subject matter relevant to IFT's work. The Advisory Council issues non-binding recommendations, proposals and opinions, which the technical secretary of IFT communicates to the IFT commissioners. The Advisory Council defines its own annual work plan and calendar, and it finishes the year by releasing an annual activity report on the Advisory Council website.

The Technical Committee on Radio Spectrum Matters has a more specific issue area – radio spectrum management – and is open to a broader base of participants. IFT maintains a permanent public call for participants in the technical committee, inviting participation from industry, academia, public entities, specialised technical associations and other interested parties. An employee of IFT, selected by the IFT's governing body, chairs the Technical Committee and introduces topics for consideration or approves topics requested by other committee members. The Technical Committee feeds a variety of analytical contributions to IFT, and it has six specialised working groups for discussion of more specialised topics.

The user councils of Peru's energy and mining regulator

According to the Framework Law on Regulatory Agencies for Private Investment in Public Utilities (Ley Marco de los Organismos reguladores de la inversión privada en los servicios públicos - Ley Nº 27332), economic regulators are required to have one or more user councils for stakeholder participation in each sector. Council members are appointed by the Board for a two-year period. These councils can be local, regional or national depending on the characteristics of the markets. Regulators publish a call for potential candidates to the council, as well as a provisional list of candidates and a final list of elected members. Member councils come from consumer associations, universities, professional colleges, non-profit organisations and business organisations not related with the regulated entities. The law provides that the positions on the councils are unpaid. However, it also states that the regulators must finance their activities.

Peru's energy and mining regulator (Organismo Supervisor de la Inversión en Energía y Minería, Osinergmin) maintains a user council comprising of five members. The members are elected for a two-year period and do not receive a salary. The membership includes representatives from associations and academic institutions, with one member from each of the five categories below:

1. Consumer or user associations among those recognised by the National Institute for the Defense of Competition and the Protection of Intellectual Property (Instituto Nacional de Defensa de la Competencia y de la Protección de la Propiedad Intelectual - Indecopi),
2. Public universities with faculties related to electricity and natural gas services or liquid hydrocarbons,
3. Private universities with faculties related to electricity and natural gas services or liquid hydrocarbons,
4. Professional associations,
5. Non-profit organisations, or unrelated business sector organisations not including public services providers of the energy sector.

Source: Information provided by CRE, August 2020;.CRE (2014), Ley de los Órganos Reguladores Coordinados en Materia Energética, https://www.cre.gob.mx//documento/lorcme.pdf; CRE (2017), Reglamento Interno de la Comisión Reguladora de Energía, Diario Oficial, http://www.diputados.gob.mx/LeyesBiblio/regla/n120.pdf; IFT (n.d.), Reglas de Operación del Consejo, http://consejoconsultivo.ift.org.mx/. IFT (n.d.) Comité Técnico en Materia de Espectro Radioeléctrico, http://cter.ift.org.mx/dashboard; IFT (n.d.) Reglas de Operación del comité Técnico en Materia de Espectro Radioeléctrico, http://www.ift.org.mx/sites/default/files/anexo1reglasdeoperacionctera2a.pdf; Information provided by Osinergmin and complemented by an analysis of current regulations. In OECD (2019), Driving Performance at Peru's Energy and Mining Regulator, The Governance of Regulators, OECD Publishing, Paris, https://doi.org/10.1787/9789264310865-en; Osinergmin (2019), Resolución de Consejo Directivo N° 234-2019-OS/CD, https://www.gob.pe/institucion/osinergmin/normas-legales/580618-234-2019-os-cd.

The Indicators on the Governance of Sector Regulators do not capture the finer characteristics of stakeholder engagement programmes, but the OECD Indicators of Regulatory Policy and Governance can fill in some gaps. The OECD Indicators of Regulatory Policy and Governance provide complementary insights on the characteristics of stakeholder engagement programmes, suggesting that stakeholder engagement for subordinate regulations in Latin American countries could improve in the areas of systematisation, ease, transparency, co-ordination and oversight, and quality checks (Box 1.6).

Box 1.6. The OECD Indicators of Regulatory Policy and Governance

The Indicators of Regulatory Policy and Governance

Based on the established OECD methodology, the Indicators of Regulatory Policy and Governance (iREG) provide an overview of regulatory systems in select OECD and non-OECD countries, by which they develop, implement and evaluate regulations. The Indicators cover three principles of the 2012 OECD Recommendation on Regulatory Policy and Governance: 1) Stakeholder engagement; 2) Regulatory Impact Assessment (RIA); and 3) *Ex post* evaluation of regulations and administrative simplification.

iREG Latin America 2019 and stakeholder engagement

The iREG indicator for Latin America 2019 draws on responses to the OECD-IDB Surveys on Regulatory Policy and Governance 2015-2016 and 2019. The countries surveyed in 2015-16 were Brazil, Chile, Colombia, Costa Rica, Ecuador, Mexico and Peru. The 2019 survey presents an update of these countries and additionally draws on data from Argentina, the Dominican Republic and

El Salvador, surveyed for the first time in 2019. Responses were provided by government officials and reflect the situation as of 31 March 2019. The data cover regulations initiated by the executive at the national level, with a focus on subordinate regulations.

The indicators for Latin American countries provide a number of insights on the status of stakeholder engagement efforts for subordinate regulations (those issued by the executive and generally approved by the head of government, a minister or the cabinet). All Latin American countries in the iREG database report having legal requirements for stakeholder engagement on subordinate regulations in place, and all of the countries report that they consult on at least some draft regulations. These countries are increasingly offering online consultation, with many policymakers having developed websites to accept feedback on draft regulation out for consultation.

However, the results suggest a few areas for development. First, early consultations in the rulemaking process are not yet common practice among these policymakers. Second, while Colombia, Costa Rica and Mexico have systematic consultation systems in place, other countries limit consultation to sectorial or *ad hoc* consultations or only conduct stakeholder engagement on regulations that affect specific groups of the population. Third, some countries lack mechanisms to take advantage of stakeholder feedback, with only four countries requiring regulators to consider this input in the final regulations. Likewise, only Brazil and Colombia require regulators to respond to feedback, but some regulators respond despite the lack of legal requirement in Costa Rica, Mexico and Peru. Finally, there is room for Latin American countries to improve co-ordination and oversight, as well as evaluating the performance of stakeholder engagement programmes.

Source: OECD (2020), "Stakeholder Engagement for Subordinate Regulations", Government at a Glance: Latin America and the Caribbean 2020, OECD Publishing, Paris, https://doi.org/10.1787/13130fbb-en.

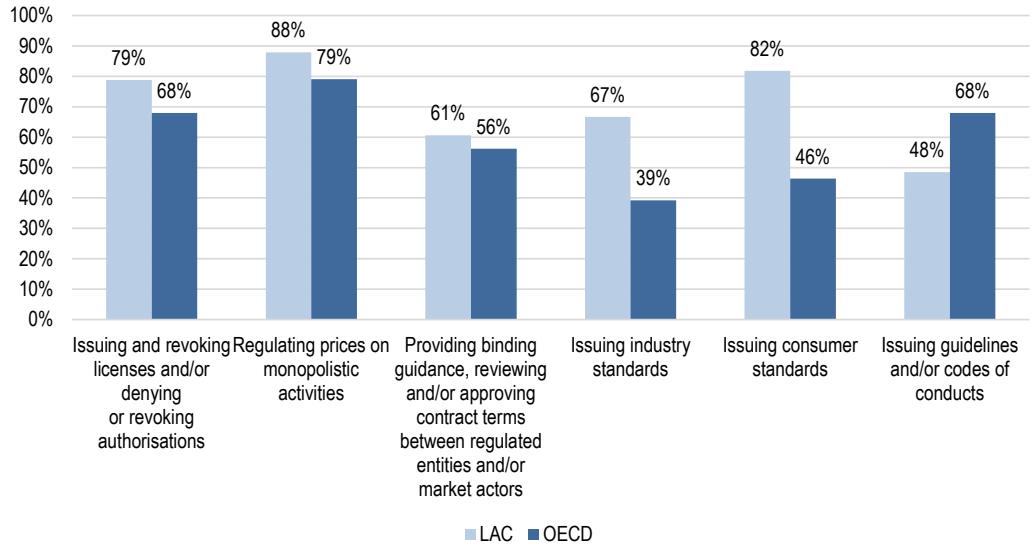
Zooming in: scope of action

Economic regulators possess diverse duties, but are unified by a focus on regulating natural monopolies and promoting market efficiency. To these ends, many economic regulators carry out certain core functions, such as setting tariffs and regulating third-party access to infrastructure (OECD, 2017[29]). Regulatory powers and other functions should be clearly specified in the establishing legislation of the regulator (OECD, 2014[24]). Shared understanding of the remit and functions of the regulator is an essential element for role clarity that helps regulators fulfil their roles effectively within the constellation of actors in a sector.

An economic regulator's role is not static. A 2016 OECD survey of 34 economic regulators showed that 63% of economic regulators experienced a change in their role and functions between 2011 and 2016, including the addition of new responsibilities and changes in the way infrastructure is regulated. Political and policy changes are one driver of changing responsibilities, along with changes in the sector, including the introduction of new technology (OECD, 2017, p. 24[29]).

The scope of action component of the Indicators on the Governance of Regulators asks regulators whether they engage in a range of functions, including price regulation, reviewing contract terms, information collection, issuing industry and consumer standards, issuing guidelines/codes of conducts, enforcement, mediation, and more.[12] While the functions included in the indicators are not comprehensive of all of the possible functions of a regulator, the scores show the breadth of activities (conducted independently and with others) within those included in the survey.

Figure 1.20. Key functions, Latin American and OECD samples



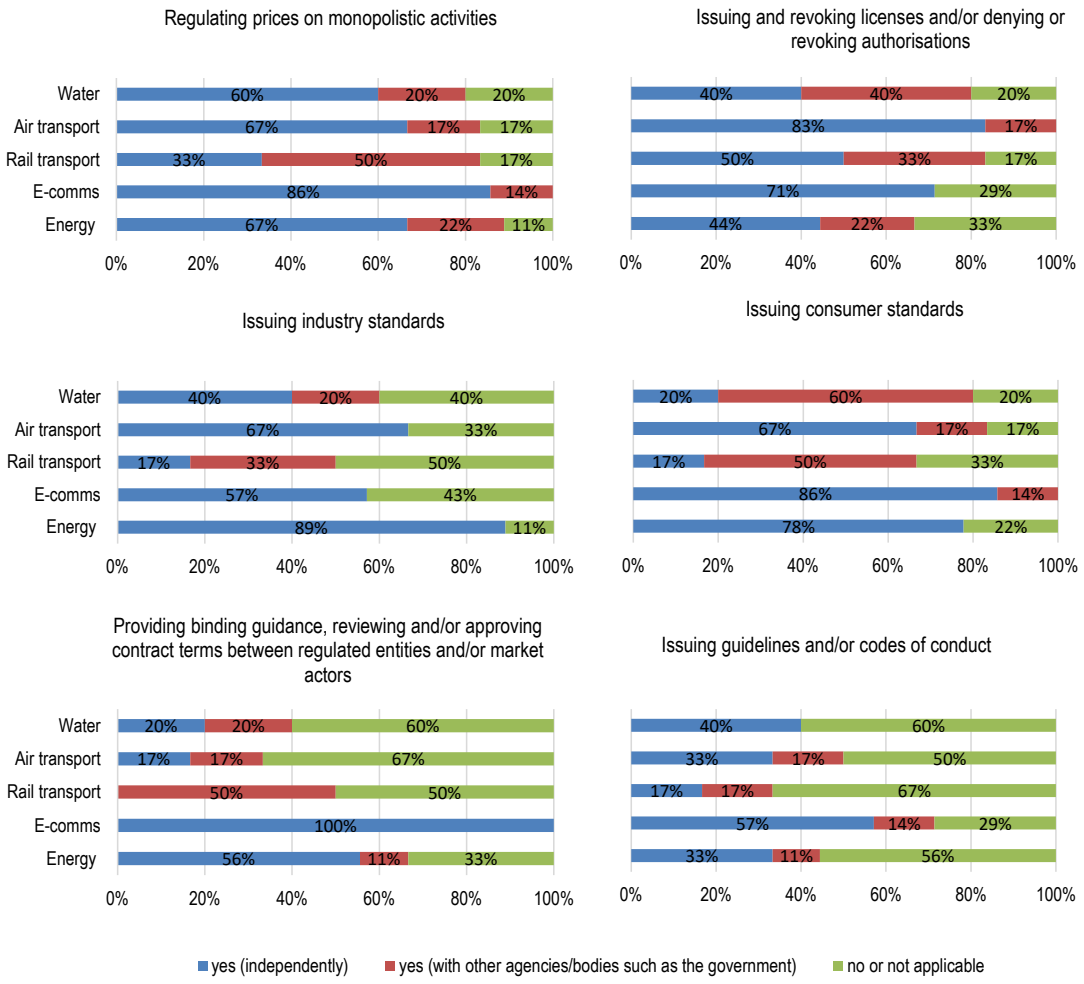
Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

[12] The full list is available in the schemata for the questionnaire in Casullo, Durand and Cavassini (Casullo, Durand and Cavassini, 2019[48]).

The functions of the regulators in the sample vary; although a few core functions are shared by the majority of regulators in the Latin American sample (Figure 1.20):

- Of the activities presented in Figure 1.20, the **most common is regulating prices on monopolistic activities**; 88% of regulators in the sample regulate prices independently or with other bodies.
- **The least common activity for regulators to report are issuing guidelines and/or codes of conduct** (with only 48% reporting that they issue these outputs independently or with another body).
- A lower proportion of regulators in the Latin American sample issue guidelines and/or codes of conduct than the OECD sample. Apart from issuing guidelines and codes of conduct, **a greater proportion of the Latin American sample report each of the functions in Figure 1.20 compared to the OECD sample**. The difference between the two samples is greatest for the issuance of industry and consumer standards: a minority of regulators in the OECD sample issue industry and consumer standards, while a majority of the regulators in the Latin American sample do issue these standards.

Figure 1.21. Key functions by sector, Latin American regulators

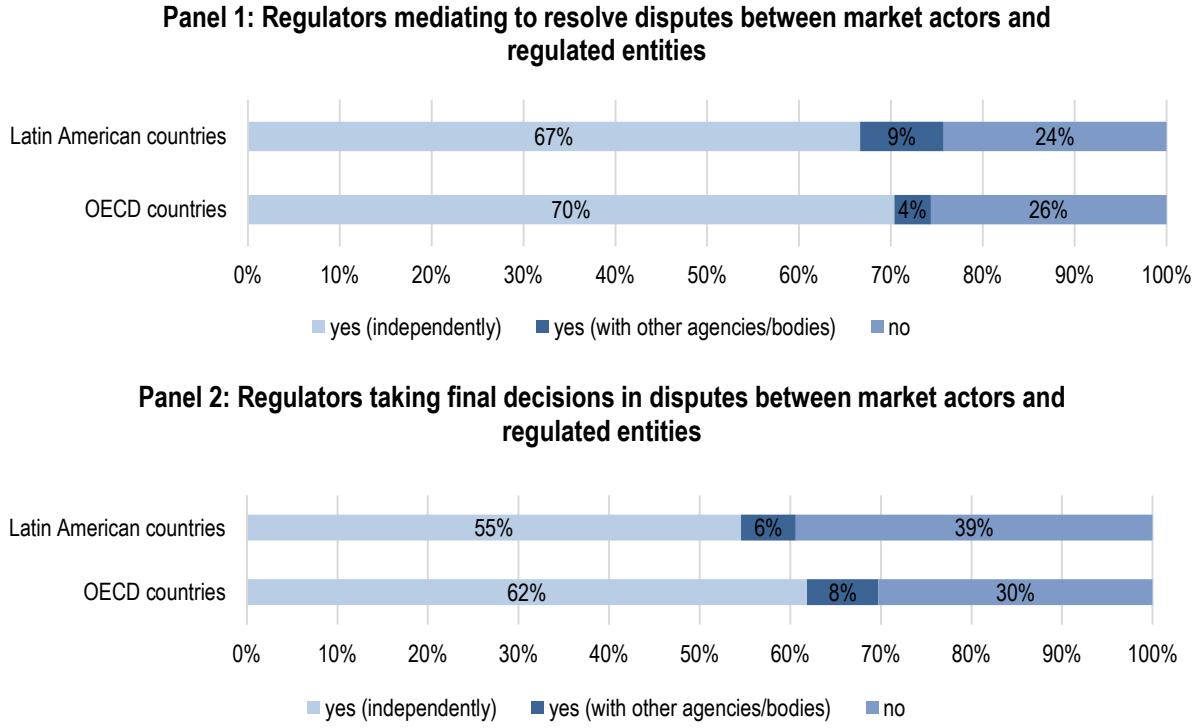


Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

When grouped by sector, the data shows a group of regulators that are diverse in function, as well as form (Figure 1.21):

- **Regulating prices on monopolistic activities** is among the most common activities across sectors, conducted individually or with other bodies. All e-communications regulators regulate prices, and more than 80% of regulators in other sectors regulate prices. A greater proportion of regulators of the rail transport sector regulate prices with other bodies, such as the government.
- **Issuing and revoking licenses, or denying and revoking authorisations** is less common across the energy and e-communications sectors. However, all of the air transport regulators and more than three-quarters of rail transport and water regulators in the sample carry out this function.
- Nearly 90% of energy regulators in the sample **issue industry standards**, a function that less than 2/3 of regulators in other sectors possess. **Issuing consumer standards** is more common across sectors, and all e-communications regulators report having this function.
- All e-communications regulators in the sample **provide binding guidance, review and/or approve contract terms**. This function is less common across the other sectors, with less than 2/3 of regulators in the remaining sectors reporting this function.
- Again, the greatest proportion of e-communications regulators in the sample **issue guidelines or codes of conduct** compared to regulators in other sectors. In other sectors, 50% or less regulators report this activity.

Figure 1.22. More than half of regulators in the Latin American sample mediate or take final decisions to resolve disputes

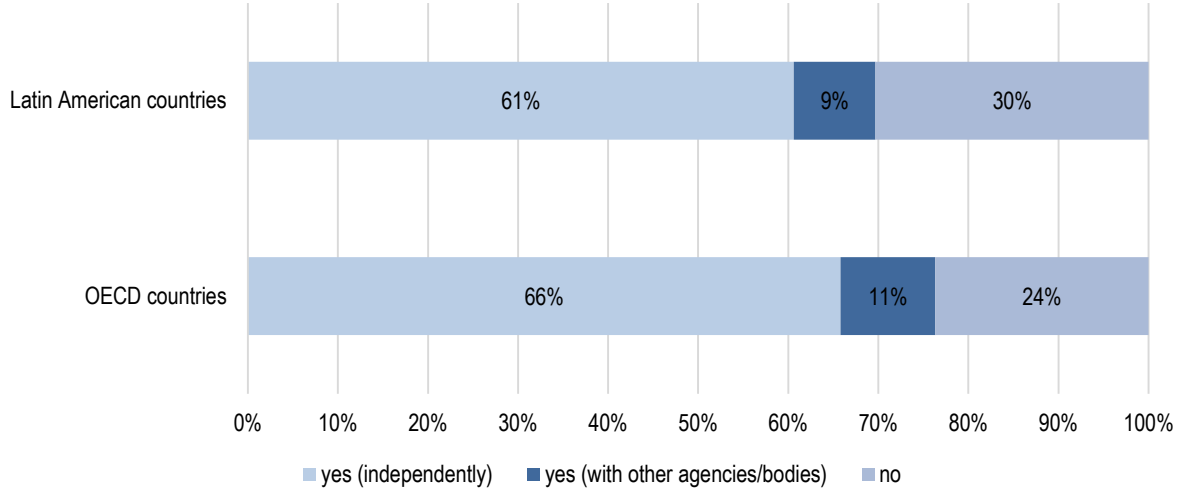


Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

Economic regulators may also have dispute resolution functions. Their role may be one of a mediator or of an arbitrator, where the regulator is empowered to make the final decision. A majority of regulators in the Latin American sample independently mediate to resolve disputes (Figure 1.22). A similar proportion of regulators in the Latin American sample mediate independently compared to the OECD sample, but a larger proportion mediate with other agencies or bodies. Fewer regulators in the Latin American sample take final decisions in disputes, a smaller proportion when compared to the OECD sample. Around 6% of regulators in the Latin American sample execute this function with other agencies or bodies.

Figure 1.23. Most regulators enforce compliance independently

Responses to the question "Does the regulator enforce compliance with industry and consumer standards and regulatory commitments through legal punitive powers for non-compliance?"



Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states.
Source: OECD 2018 Database on the Governance of Sector Regulators.

Appropriate and effective inspection and enforcement to ensure compliance with regulation is a determinate of whether the regulatory system works as intended (OECD, 2018[30]). Nearly two-thirds of the regulators in the Latin American sample enforce compliance independently (Figure 1.23). A slightly greater proportion of regulators do not have these enforcement capabilities (30%) in the Latin American sample than the OECD sample, where around 24% do not have this function. Of course, exercising punitive enforcement powers is only one of the aspects of broad regulatory enforcement. Regulatory enforcement can be considered broadly as activities aimed at promoting compliance and achieving the desired outcomes of regulation, including information, guidance and prevention, data collection and analysis, inspections and enforcement actions (OECD, 2014[31]).

Conclusion

The Indicators on the Governance of Sector Regulators provide a snapshot of the governance arrangements in thirty economic regulators across seven of the largest Latin American economies. The majority of the regulatory authorities were created during reforms in and after the 1990s, and most were created as independent regulators to accompany market liberalisation. There is not one shared governance profile among regulators, and organisational characteristics vary within the group of thirty Latin American regulators surveyed by the OECD.

The data shows some convergence in the leadership structure of regulators in the sample. Staggered, multi-member boards lead most of the regulators. Like in OECD countries, the government has the legal authority to appoint agency leadership. However, the data shows that the legislature plays a more prominent role in appointment in a higher proportion of regulators in the Latin American sample compared to the OECD sample. Dismissal of agency leadership is generally initiated by government decisions within a limited set of criteria, the same as in OECD countries. After their term of office, the law restricts agency heads or board members of most regulators from accepting jobs in the regulated sector or line ministries.

Beyond those dictating the structure and rules of agency leadership, governance arrangements may influence the potential government input in regulatory decision-making and budgetary decisions. Most regulators in the sample have good practice limitations on government input into appeals, and individual decisions or cases. Less than a third of regulators in the Latin American sample do not decide their own allocation of expenditure. In terms of accountability and transparency, regulators in the sample have an opportunity to improve the collection and publication of performance information. The data reveals other stronger *de jure* practices to promote accountability and transparency. For example, legislative requirements for regulators to produce regular activity reports are more common in the Latin American sample than the OECD sample.

Indicator scores show differences across sectors in adoption of good practice independence and accountability arrangements. Energy and e-communications regulators, with the lowest independence and accountability scores, have more good practices for independence and accountability in place than regulators of other sectors in the region. Regulators in the transport and water sectors show lower adoption of good-practice governance arrangements than regulators in the energy and e-communications regulators, as suggested by their higher independence and accountability scores. Scores for regulators in Latin American countries compare favourably with those for regulators in OECD countries, although there is room for improvement in Latin America regarding the independence of rail, air and water regulators and the accountability of water regulators

While the sample size is limited to seven countries and not representative of the Latin American region as a whole, the Indicators on the Governance of Sector Regulators provide insight into the contours of network regulation in some of the region's largest economies. Subsequent editions of the indicators, updated every five years, may expand the Latin American sample or provide additional snapshots in time to explore evolution of governance arrangements over time.

References

(n.a.) (2019), *Driving Performance at Peru's Telecommunications Regulator*, OECD Publishing, Paris, https://www.oecd-ilibrary.org/docserver/9789264310506-en.pdf?expires=1586250014&id=id&accname=ocid84004878&checksum=717466E5A6A625C71E9F810EC5025DA9 (accessed on 7 April 2020). [41]

Agência Brasil (2020), *Bolsonaro decide intervir na revisão da Aneel que afeta energia solar e promete projeto contra medida*, https://agenciabrasil.ebc.com.br/politica/noticia/2020-01/bolsonaro-decisao-sobre-taxacao-de-energia-solar-cabe-aneel (accessed on 2020). [34]

Aubert, C. and J. Laffont (2002), "Designing Infrastructure Regulation in Developing Countries", in Beato, P. and J. Laffont (eds.), *Competition Policy in Regulated Industries: Approaches for Emerging Economies*, Inter-American Development Bank, Washington, D.C., https://publications.iadb.org/en/competition-policy-regulated-industries-approaches-emerging-economies (accessed on 19 March 2020). [40]

Badran, A. (2012), "The Rationale Behind the Creation and Diffusion of Independent Regulatory Agencies: The Case of the Telecommunications Sector in Egypt", *International Journal of Public Administration*, Vol. 35/3, pp. 204-213, http://dx.doi.org/10.1080/01900692.2012.638521. [6]

Baxter, M. et al. (2020), "When the going gets tough, the tough get going: how economic regulators bolster the resilience of network industries in response to the COVID-19 crisis", p. Forthcoming. [10]

Baxter, M. et al. (n.d.), *When the going gets tough, the tough get going: how economic regulators bolster the resilience of network industries in response to the COVID-19 crisis*, OECD. [47]

Casullo, L., A. Durand and F. Cavassini (2019), *The 2018 Indicators on the Governance of Sector Regulators - Part of the Product Market Regulation (PMR) Survey*, OECD Economics Department Working Papers, No. 1564, OECD Publishing, Paris, https://doi.org/10.1787/a0a28908-en. [3]

Casullo, L., A. Durand and F. Cavassini (2019), "The 2018 Indicators on the Governance of Sector Regulators - Part of the Product Market Regulation (PMR) Survey", *OECD Economics Department Working Papers*, No. 1564, OECD Publishing, Paris, https://dx.doi.org/10.1787/a0a28908-en. [48]

CRC (2010), *Decreto 89 de 2010*, EVA - Función Pública, https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=38669 (accessed on 23 June 2020). [14]

CREG (n.d.), *Organización*, https://www.creg.gov.co/creg/quienes-somos/organizacion (accessed on 23 June 2020). [15]

Datla, K. et al. (2013), "Deconstructing Independent Agencies (and Executive Agencies)", *Cornell Law Review*, Vol. 98, p. 769, http://scholarship.law.cornell.edu/clrAvailableat:http://scholarship.law.cornell.edu/clr/vol98/iss4/1 (accessed on 25 July 2020). [46]

DiMaggio, P. and W. Powell (1983), "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields", *American Sociological Review*, Vol. 48/2, p. 147, http://dx.doi.org/10.2307/2095101. [5]

ERAS (n.d.), *Directorio*, http://www.eras.gov.ar/autoridades/directorio/ (accessed on 23 June 2020). [13]

Estache, A. and T. Serebrisky (2020), *Updating infrastructure regualtion for the 21st century in Latin America and the Caribbean*, https://publications.iadb.org/publications/english/document/Updating_Infrastructure_Regulation_for_The_21st_Century_in_Latin_America_and_the_Caribbean_en.pdf. [37]

Fontela, F. (2020), *En esta sección de Consumar te comentamos sobre la Ley de Solidaridad y Reactivación Productiva en el Marco de la Emergencia Pública aprobada por el Senado a días de haber asumido Alberto Fernández.*, http://cesyac.org.ar/novedades/item/974-en-esta-seccion-de-consumar-te-comentamos-sobre-la-ley-de-solidaridad-y-reactivacion-productiva-en-el-marco-de-la-emergencia-publica-aprobada-por-el-senado-a-dias-de-haber-asumido-alberto-fernandez. [35]

Jordana, J. and D. Levi-Faur (2006), "Toward a Latin American regulatory state? The diffusion of autonomous regulatory agencies across countries and sectors", *International Journal of Public Administration*, Vol. 29/4-6, pp. 335-366, http://dx.doi.org/10.1080/01900690500437212. [4]

Jordana, J. and D. Levi-Faur (2005), "The Diffusion of Regulatory Capitalism in Latin America: Sectoral and National Channels in the Making of a New Order", *The ANNALS of the American Academy of Political and Social Science*, Vol. 598/1, pp. 102-124, http://dx.doi.org/10.1177/0002716204272587. [7]

Jordana, J., D. Levi-Faur and X. i Marín (2011), "The Global Diffusion of Regulatory Agencies", *Comparative Political Studies*, Vol. 44/10, pp. 1343-1369, http://dx.doi.org/10.1177/0010414011407466. [44]

Koske, I. et al. (2016), "Regulatory management practices in OECD countries", *OECD Economics Department Working Papers*, No. 1296, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jm0qwm7825h-en. [21]

Lei nº 13.848, de 25 de Junho de 2019 (2019), *Dispõe sobre a gestão, a organização, o processo decisório e o controle social das agências reguladoras*, http://www.planalto.gov.br/ccivil_03/_ato2019-2022/2019/lei/L13848.htm. [17]

León, P. (2019), *El Gobierno intervendrá los entes de la luz y el gas para cambiar el cuadro de tarifas*, https://www.clarin.com/politica/gobierno-intervendra-entes-luz-gas-cambiar-cuadro-tarifas_0_eXHaUB9i.html. [36]

Levi-Faur, D. (2005), "The Global Diffusion of Regulatory Capitalism", *The Annals of the American Academy of Political and Social Science*, Vol. 598/1, pp. 12-32, [45]

http://dx.doi.org/10.1177/0002716204272371.

Lind, E. and C. Arndt (2016), “Perceived Fairness and Regulatory Policy: A behavioral science perspective on government-citizen interactions” 6, pp. 1-41, http://dx.doi.org/10.1787/24140996. [28]

Martin, J. (2020), *PV Tech*, https://www.pv-tech.org/news/brazils-bolsonaro-defies-regulator-to-spare-solar-from-grid-tax (accessed on 4 March 2020). [33]

OECD (2020), *Government at a Glance: Latin America and the Caribbean 2020*, OECD Publishing, Paris, https://dx.doi.org/10.1787/13130fbb-en. [43]

OECD (2019), *Driving Performance at Peru’s Energy and Mining Regulator*, The Governance of Regulators, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264310865-en. [22]

OECD (2019), *Driving Performance at Peru’s Telecommunications Regulator*, OECD Publishing, https://doi.org/10.1787/9789264310506-en. [18]

OECD (2019), *Government at a Glance 2019*, OECD Publishing, Paris, https://dx.doi.org/10.1787/8ccf5c38-en. [42]

OECD (2018), *Integrity for Good Governance in Latin America and the Caribbean: From Commitments to Action*, OECD Publishing, https://doi.org/10.1787/9789264201866-en. [38]

OECD (2018), *OECD Regulatory Enforcement and Inspections Toolkit*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264303959-en. [30]

OECD (2018), *OECD Regulatory Policy Outlook 2018*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264303072-en. [27]

OECD (2017), *Creating a culture of independence: Practica guidance against undue influence*, https://www.oecd.org/gov/creating-a-culture-of-independence-9789264274198-en.htm. [19]

OECD (2017), *Creating a Culture of Independence: Practical Guidance Against Undue Influence*. [8]

OECD (2017), *Driving Performance at Mexico’s Energy Regulatory Commission*, The Governance of Regulators, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264280830-en. [26]

OECD (2017), *Driving Performance at Mexico’s National Hydrocarbons Commission*, The Governance of Regulators, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264280748-en. [23]

OECD (2017), *The Role of Economic Regulators in the Governance of Infrastructure*, The Governance of Regulators, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264272804-en. [29]

OECD (2016), *Governance of Regulators’ Practices: Accountability, Transparency and Co-ordination*, The Governance of Regulators, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264255388-en. [25]

OECD (2015), *Driving Performance at Colombia’s Communications Regulator*, OECD Publishing, http://dx.doi.org/10.1787/9789264232945-en. [39]

OECD (2014), *OECD Best Practice Principles for Regulatory Policy: The Governance of Regulators*, OECD Publishing, Paris, https://www.oecd-ilibrary.org/docserver/9789264209015- [9]

en.pdf?expires=1585646606&id=id&accname=ocid84004878&checksum=F2F1BB7E832AEEA65477CC6AAD1ACCF0 (accessed on 31 March 2020).

OECD (2014), *Regulatory Enforcement and Inspections*, OECD Best Practice Principles for Regulatory Policy, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264208117-en. [31]

OECD (2014), *The Governance of Regulators*, OECD Best Practice Principles for Regulatory Policy, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264209015-en. [20]

OECD (2014), "The Governance of Regulators", *OECD Best Practice Principles for Regulatory Policy*, https://www.oecd-ilibrary.org/docserver/9789264209015-en.pdf?expires=1591541331&id=id&accname=ocid84004878&checksum=652E5C50B55160A562809D73A4F1899C (accessed on 7 June 2020). [24]

OECD (2014), *The Governance of Regulators, OECD Best Practice Principles for Regulatory Policy*, OECD Publishing, http://dx.doi.org/10.1787/9789264209015-en. [16]

OECD (2012), *Recommendation of the Council on Regulatory Policy and Governance*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264209022-en. [32]

OECD (2012), *Recommendation of the Council on Regulatory Policy and Governance*, http://www.oecd.org/regreform (accessed on 7 June 2020). [12]

OECD (2007), *Infrastructure to 2030: Mapping Policy for Electricity, Water and Transport*. [2]

OECD (2006), "Infrastructure to 2030: Telecom, Land Transport, Water and Electricity". [1]

Trillas, F. and M. Montoya (2011), "Commitment and Regulatory Independence in Practice in Latin American and Caribbean Countries", *Competition and Regulation in Network Industries*, Vol. 12/1, pp. 27-56. [11]

Annex A. Schemata

Table A A.1. Scoring of questions in the independence section, relationship with the executive subsection

	Topic weight	Question weight	Subquestion weight	Coding of answers			
	a_i	b_j	c_k				
Relationship with the executive	1/3						
Are the objectives and functions of the regulator defined?				yes (in legislation)	yes (in policy document, non-binding instrument)		no
				0	3		6
The regulator can receive guidance from the government regarding:		1/4		no			yes
Long-term strategy			1/4	6			0
Work programme			1/4	0			6
Individual cases/decisions			1/4	0			6
Appeals			1/4	0			6
Does the regulator make recommendations or issue opinions on draft legislation or policy documents proposed by the executive? Please provide example.		1/4		yes (through a formal process & opinion made public)	yes (through a formal or informal process but opinion not made public)		no
				0	3		6
Which body, other than a court, can overturn the decisions of the regulator?		1/4		none	specialized body	governmental/ministerial body with qualifications	governmental/ ministerial body unconditionally
				0	3	4.5	6
Are the instances where decisions of the regulator can be overturned by a body other than a court clearly defined?		1/4		only court can overturn decisions	defined in legislation	defined in policy document made public	not defined
				0	2	4	6

Table A A.2. Scoring of questions in the independence section, staff subsection

	Topic weight	Question weight	Subquestion weight	Coding of answers			
	a_i	b_j	c_k				
Staff	1/3						
How is the majority of the staff recruited?		1/12		positions are advertised publicly & candidates examined by selection panel	direct call/appointment without advertising positions		secondment from private sector and/or from government bodies
				0	3		6
What is the process for selecting the agency head/board members?		1/12		position is publicly advertised & candidates examined by independent selection panel	ministerial/governmental nomination based on public job ads & independent selection panel		ministerial/governmental nomination without independent selection panel
				0	3		6
Which body has the legal authority to make the final appointment of the agency head/board members?		1/12		parliament/congress/parliamentary/congressional committee	government/ministerial body with binding opinion of parliament/congress/parliamentary/congressional committee	two or more governmental/ministerial bodies	one government/ministerial body
				0	2	4	6
Are there restrictions regarding the employment history of the agency head/board		1/12		yes			no
				0			6
Does the legislation define the skills required by the agency head/board members?		1/12		yes			no
				0			6
May the agency head/board members hold other offices/appointments in the government/the regulated industry?		1/12		no	yes (with the consent of the board)	yes (with restrictions, for regulators with a agency head)	yes (without restrictions)
				0	3	3	6
If the regulator is led by a board, are appointments of board members staggered?		1/12		yes	no		n/a[1]
				0	6		0
How can the agency head/board members be dismissed from office?		1/12		through court procedure	through parliamentary/congressional decisions		through government decisions
				0	3		6
What are the criteria for dismissing agency head/board members during their term of office?		1/12		limited and defined set of criteria			no defined set of criteria
				0			6
Are the criteria for dismissing agency head/board members during their term of office published?		1/12		yes	no		n/a[2]
				0	6		6
Can the agency head/board members accept jobs in the government related to the sector that is regulated by the regulator and/or the sector that is regulated by the regulator after their term of office?		1/12		yes (after cooling off period)	yes (provided that conflict of interests rules are complied with and/or following restrictions before leaving)	no	yes (without restrictions)
				0	2	4	6
How long is the term of office of the agency head/board members?		1/12		5 years or more renewable for a set number of terms or non-renewable	less than 5 years renewable for a set number of terms or non-renewable	5 years or more and renewable without restrictions	less than 5 years and renewable without restrictions or life appointment
				0	2	4	6

Notes: The answer options for the question "[w]hat is the process for selecting the agency head/board members?" do not describe the process of leadership selection for several regulators. First, they do not describe cases where a position is publicly advertised, but an independent selection panel is not involved, a process adopted by the Flemish water regulator (a sub-entity of the Flanders Environment Agency) and the Austrian energy regulator (E-Control). In these cases, reviewers suggested the respondent answer "ministerial/governmental nomination without independent selection panel." Second, they do not describe cases where the head is appointed by the president with the approval of the legislature, such as the Chilean Ministry of Transport and Telecommunications and the Swedish Energy Markets Inspectorate. As a best-fit answer for this version of the questionnaire, reviewers selected "ministerial/governmental nomination without independent selection panel." Finally, they do not describe the selection of the Danish Rail Regulatory Body chair, who is appointed by a presiding judge. Reviewers answered for the rest of the board members, who were appointed by a minister.

Two regulators were led jointly by two authorities: the Israeli water regulator (the Governmental Authority for Water and Sewage) and the Slovakian energy regulator (the Regulatory Office for Network Industries). The Governmental Authority for Water and Sewage has both a director and a council with distinct, complementary functions. Similarly, the Regulatory Office for Network Industries is led by a President and a Board. Because the questions about regulator leadership must be answered for an individual head or a board, the reviewers requested that the questions about leadership were answered for the director and president in order to distinguish between the two authorities.

Table A A.3. Scoring of questions in the independence section, budget subsection

	Topic weight	Question weight	Subquestion weight	Coding of answers				
	a_i	b_j	c_k					
Budget	1/3							
Is the source of the financial budget of the regulator stated in the establishing legislation?				yes			no	
		1/6		0			6	
What is the length of budget appropriations?				at least three years	two years	annual		
		1/6		0	3	6		
If the regulator is financed in total or in part through fees paid by the regulated sector, who sets the level of the fees?				regulator within criteria set in legislation	parliament/congress/committee upon proposal of the regulator	governmental/ministerial body upon proposal of the regulator	governmental/ministerial body	n/a[4]
		1/6		0	2	4	6	0
If the regulator is financed in total or in part through the national budget, who is responsible for proposing and discussing the regulator's budget?				the regulator with no or limited interventions from other governmental/ministerial bodies	the regulator and another governmental/ministerial body	a governmental body other than the regulator	n/a[3]	
		1/6		0	3	6	0	
Does the regulator provide information to the legislature or the relevant budget authority on the costs and resources needed to fulfil its mandate prior to the next budget cycle?				yes		no		
		1/6		0		6		
Which body is responsible for deciding the regulator's allocation of expenditures?				regulator within general financial management rules			governmental/ministerial body	
		1/6		0			6	

Notes: For the question "[w]hich body is responsible for deciding the regulator's allocation of expenditures," the answer for Denmark air does not perfectly fit into any of the drop-down menu categories. The regulator indicated that the body that determines the regulator's expenditures is Danish Parliament through the Finance Act. As a best-fit answer for this version of the questionnaire, the reviewers suggested the respondent answer "governmental/ministerial body" to reflect the role of the Ministry.

Table A A.4. Scoring of questions in accountability section

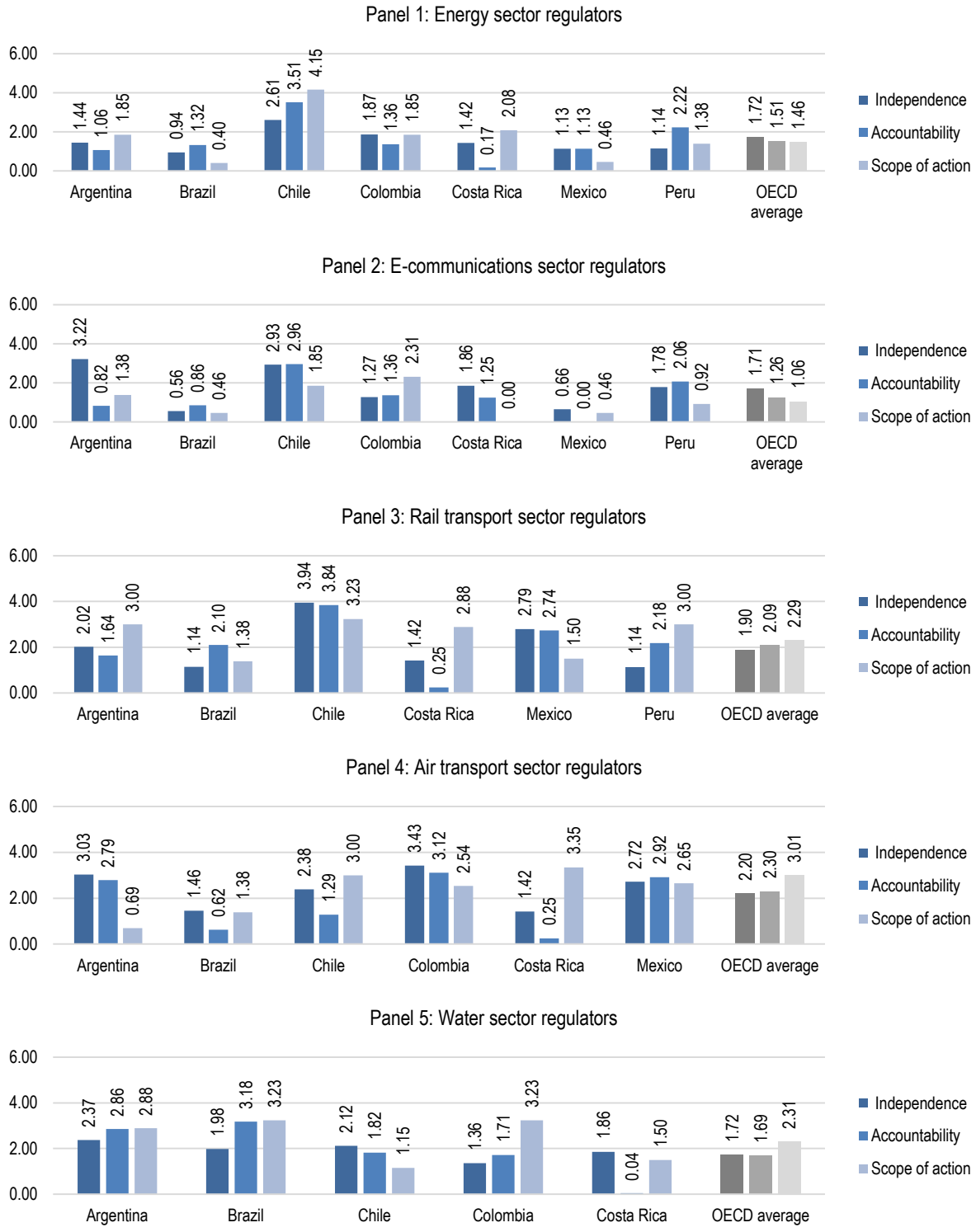
	Question weight	Subquestion weight	Coding of answers			
	a_i	b_j				
To whom is the regulator directly accountable by law or statute?	1/11		parliament/congress 0	government or representatives from the regulated industry 6		
Does the regulator need to motivate its regulatory decisions (e.g. with evidence and data)?	1/11		yes (all decisions) 0	yes (but not all decisions) 3	no 6	
Does the regulator need to submit proposals for new regulation that it is empowered to issue to other bodies for approval?	1/11		to the parliament/congress 3	to the government 6	no 0	n/a[2] 0
Does the regulator publish draft decisions and collect feedback from stakeholders?	1/11		yes (in line with a legislative requirement) 0	yes (even if there is no legislative requirement) 3	no 6	
Does the regulator provide feedback on comments received by stakeholders?	1/11		yes (in line with a legislative requirement) 0	yes (even if there is no legislative requirement) 3	no 6	n/a[3] 6
Is there a legislative requirement for the regulator to produce a report on its activities on a regular basis?	1/11		yes 0	no (but the regulator produces it) 3	no/not applicable 6	
Is there a legislative requirement for the regulator to produce a report on its activities?	1/11		yes 0	no (but the regulator publishes it) 3	no/not applicable 6	
Is there a legislative requirement for the regulator to answer requests from or attend hearings organized by parliamentary/congressional committees?	1/11		yes 0		no/not applicable 6	
Does the regulator present a report on its activities to one or more parliamentary/congressional committees?	1/11		yes 0		no/not applicable 6	
Does the regulator collect information on industry and market performance of the regulated sector?	1/11		yes	yes	no/not applicable	
If such performance information is collected, is it made available on the regulator's website?		1/7	yes 0	no 3	not applicable 6	
Does the regulator collect information on economic Performance of the regulated sector?			yes	yes	no/not applicable	
If such performance information is collected, is it made available on the regulator's website?		1/7	yes 0	no 3	not applicable 6	
Does the regulator collect information on operational/service delivery of the regulator?			yes	yes	no/not applicable	
If such performance information is collected, is it made available on the regulator's website?		1/7	yes 0	no 3	not applicable 6	
Does the regulator collect information on organizational / corporate governance performance of the regulator?			yes	yes	no/not applicable	
If such performance information is collected, is it made available on the regulator's website?		1/7	yes 0	no 3	not applicable 6	
Does the regulator collect information on quality of regulatory process of the regulator?			yes	yes	no/not applicable	
If such performance information is collected, is it made available on the regulator's website?		1/7	yes 0	no 3	not applicable 6	
Does the regulator collect information on compliance with legal obligations of the regulator?			yes	yes	no/not applicable	
If such performance information is collected, is it made available on the regulator's website?		1/7	yes 0	no 3	not applicable 6	
Does the regulator collect information on financial performance of the regulator, including costs of operating the regulator?			yes	yes	no/not applicable	
If such performance information is collected, is it made available on the regulator's website?		1/7	yes 0	no 3	not applicable 6	
Are the following legislative requirements in place to enhance the transparency of the regulator's activities (with confidential and commercially sensitive information appropriately removed if needed)? - Publication of all decisions, resolutions and agreements			yes	yes	no/not applicable	
Is the publication also online on regulator's own website?		1/3	yes 0	no 3	not applicable 6	

Are the following legislative requirements in place to enhance the transparency of the regulator's activities (with confidential and commercially sensitive information appropriately removed if needed)? - Public consultation on relevant activities	1/11		yes	yes	no/not applicable
Is the publication also online on regulator's own website?			yes	no	not applicable
		1/3	0	3	6
Are the following legislative requirements in place to enhance the transparency of the regulator's activities (with confidential and commercially sensitive information appropriately removed if needed)? - Publication of a forward-looking action plan			yes	yes	no/not applicable
Is the publication also online on regulator's own website?			yes	no	not applicable
		1/3	0	3	6
Country scores (0-6)			$\Sigma_i a_i \Sigma_j b_j$ answer$_{ij}$		

Table A A.5. Scoring of questions in the scope of action section

	Question weight	Coding of answers				
	a_i					
What is the status of the regulator?	1/13	independent body with adjudicatory, rule-making or enforcement powers 0		independent body with purely advisory role 3		ministerial department/ agency 6
Can the regulator collect information from the regulated entities by compulsory process?	1/13	yes (with sanctioning power for non-compliance) 0		yes (without sanctioning power for non-compliance) 3		no 6
Does the regulator issue and revoke licenses?	1/13	yes (independently) 0		yes (with other agencies/bodies such as the government or other bodies) 3		no/not applicable 6
Does the regulator regulate prices on monopolistic activities?	1/13	yes (independently) 0		yes (with other agencies/bodies such as the government or other bodies) 3		no 6
Does the regulator conduct research (*e.g.* about costs) as an input for price setting?	1/13	yes (independently) 0		yes (with other agencies/bodies such as the government or other bodies) 3		no 6
Does the regulator provide binding guidance, review and/or approve contract terms between regulated entities and/or market actors?	1/13	0		3		6
Does the regulator issue industry standards?		yes (independently)	yes (independently)	yes (with other agencies/bodies such as the government or other bodies)	yes (with other agencies/bodies such as the government or other bodies)	no
Are these standards published on the regulator's website?		yes	no	yes	no	not applicable
	1/13	0	3	1.5	4.5	6
Does the regulator issue consumer standards?		yes (independently) / not applicable	yes (independently) / not applicable	yes (with other agencies/bodies such as the government or other bodies)	yes (with other agencies/bodies such as the government or other bodies)	no
Are these standards published on the regulator's website?		yes	no	yes	no	not applicable
	1/13	0	3	1.5	4.5	6
Does the regulator issue guidelines and/or codes of conduct?		yes (independently) / not applicable	yes (independently) / not applicable	yes (with other agencies/bodies such as the government or other bodies)	yes (with other agencies/bodies such as the government or other bodies)	no
Are these standards published on the regulator's website?		yes	no	yes	no	not applicable
	1/13	0	3	1.5	4.5	6
Does the regulator enforce compliance with industry and consumer standards and regulatory commitments through legal punitive powers for non-compliance (e.g. inspections and fines)?		yes (independently)		yes (with other agencies/bodies such as the government or other bodies)		no
	1/13	0		3		6
Does the regulator mediate to resolve disputes between market actors and regulated entities?		yes, independently		yes (with other agencies/bodies such as the government or other bodies)		no
	1/13	0		3		6
Does the regulator have the power to take final decisions in disputes between market actors?		yes (independently)		yes (with other agencies/bodies such as the government or other bodies)		no
	1/13	0		3		6
Can the regulator issue sanctions and penalties (*e.g.* financial)?	1/13	done independently by agency or by court or by agency together with court 0		yes (together with other agencies/bodies such as the government) 3		no 6
Country scores (0-6)		$\Sigma_i a_i$ answer$_i$				

Annex B. Indicator scores by country and sector



Note: The Latin American sample and the OECD sample overlap, as three countries (Chile, Colombia and Mexico) are OECD member states. The energy scores for Brazil and Argentina are averages of the indicator scores for the separate electricity and gas regulators in the countries.
Source: OECD 2018 Database on the Governance of Sector Regulators.

Annex C. Participating Latin American regulators and year of establishment

Country	Sector	Regulator name	Year founded
Argentina	Air transport	Organismo Regulador del Sistema Nacional de Aeropuertos (ORSNA)	1997
Argentina	E-communications	Ente Nacional de Comunicaciones (ENACOM)	2016
Argentina	Energy - electricity	Ente Nacional Regulador de la Electricidad (ENRE)	1993
Argentina	Energy - gas	Ente Nacional Regulador del Gas (ENARGAS)	1992
Argentina	Rail transport	Comisión Nacional de Regulación del Transporte (CNRT)	1996
Argentina	Water	Ente Regulador de Aguas y Saneamiento (ERAS)	2006
Brazil	Air transport	Agência Nacional de Aviação Civil (ANAC)	2005
Brazil	E-communications	Agência Nacional de Telecomunicações (ANATEL)	1997
Brazil	Energy - electricity	Agência Nacional de Energia Elétrica (ANEEL)	1996
Brazil	Energy – gas	Agência Nacional do Petróleo, Gás Natural e Biocombustíveis (ANP)	1997
Brazil	Rail transport	Agência Nacional de Transportes Terrestres (ANTT)	2001
Brazil	Water	Agência Nacional de Águas (ANA)	2000
Chile	Air transport	Junta de Aeronáutica Civil	1930
Chile	E-communications	Subsecretaria de Telecomunicaciones (Subtel)	1977
Chile	Energy	Comisión Nacional de Energía (CNE)	1987
Chile	Rail transport	Ministerio de Transportes y Telecomunicaciones	1977
Chile	Water	Superintendencia de Servicios Sanitarios (SISS)	1998
Colombia	Air transport	Aeronáutica Civil	1993
Colombia	E-communications	Comisión de Regulación de Comunicaciones (CRC)	1994
Colombia	Energy	Comisión de Regulación de Energía y Gas (CREG)	1994
Colombia	Water	Comisión de Regulación de Agua Potable y Saneamiento Básico (CRA)	1994
Costa Rica	Air transport	Autoridad Reguladora de Servicios Públicos (ARESEP)	1996
Costa Rica	E-communications	Superintendencia de Telecomunicaciones (SUTEL)	2008
Costa Rica	Energy	Autoridad Reguladora de Servicios Públicos (ARESEP)	1996
Costa Rica	Rail transport	Autoridad Reguladora de Servicios Públicos (ARESEP)	1996
Costa Rica	Water	Autoridad Reguladora de Servicios Públicos (ARESEP)	1996
Mexico	Air transport	Dirección General de Aeronáutica Civil (DGAC)	1956
Mexico	E-communications	Instituto Federal de Telecomunicaciones (IFT)	2013
Mexico	Energy	Comisión Reguladora de Energía (CRE)	1993
Mexico	Rail transport	Agencia Reguladora del Transporte Ferroviario (ARTF)	2015
Peru	E-communications	Organismo Supervisor de Inversión Privada en Telecomunicaciones (Osiptel)	1991
Peru	Energy	Organismo Supervisor de la Inversión en Energía y Minería (Osinergmin)	1997
Peru	Rail transport	Organismo Supervisor de la Inversión en Infraestructura de Transporte de Uso Público (Ositran)	1998