

## The DNA of Regional Integration

Latin Americans' views on high-quality convergence: innovation, equality and care for the environment

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> TECHNICAL NOTE Nº IDB-TN-1120

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Cataloging-in-Publication data provided by the Inter-American Development Bank Felipe Herrera Library Beliz, Gustavo. The DNA of regional integration: Latin Americans' views on high-quality convergence: innovation, equality and care for the environment / Gustavo Beliz, Santiago Chelala. p. cm. — (IDB Technical Note; 1120) Includes bibliographic references. 1. Latin America-Economic integration-Public opinion. 2. Latin America-Commerce-Public opinion. 3. Latin America-Foreign economic relations-Public opinion. 4. International economic integration. I. Chelala, Santiago. II. Inter-American Development Bank. Institute for the Integration of Latin America and the Caribbean. III. Title. IV. Series. IDB-TN-1120

JEL Codes: J14; J15; O1.

Keywords: Latin America, Trade, Regional Integration, International Relations, Economic Integration, Political Integration, Infraestructure, Innovation, Environment, Equality, Country Brand, Public Opinion.

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INTAL/LATINOBARÓMETRO



# REGIONAL INTEGRATION

LATIN AMERICANS' VIEWS ON HIGH-QUALITY CONVERGENCE: INNOVATION, EQUALITY, AND CARE FOR THE ENVIRONMENT

> Gustavo Beliz Santiago Chelala





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## PREFACE

This report is the outcome of an Inter-American Development Bank (IDB) regional public good (RPG) that different Latin American and Caribbean countries helped to create by identifying the information they needed to perfect the decision-making process on matters of trade and integration.

The mechanism that the IDB foresaw is a three-way process, in which decisions are made in partnership with technical institutions and countries, which share their experience and knowledge of social demands. In this case, the countries of the region played a key role in designing an opinion poll on trade and integration, the results of which we compare with national statistical indicators. This was made possible by the strategic partnership between the Institute for the Integration of Latin America and the Caribbean (IDB/INTAL), part of the Integration and Trade Sector, and Latinobarómetro, marking the start of the dialogue between two databases with very specific features. The first of these is the highly complete information on trade and integration that INTAL has acquired over its 51-year history. The second, the public perceptions that Latinobarómetro, a pioneering public opinion poll, has been measuring in the region for over two decades.

Cross-referencing the results of over 20,000 exclusive surveys that were carried out in 18 Latin American countries with national statistics has helped create a powerful tool for designing integration and trade strategies.

Comparing citizens' opinions and national statistics allows researchers to find correlations and asymmetries between public perceptions and the region's actual performance, thus contributing to improving planning and impact assessment in public policy design.

We believe that integration processes should reflect both dimensions: they must not overlook classic indicators but they also need to include the voice of the people of Latin America, which is an essential part of any regional strategy seeking to construct a form of governance that is underpinned by the demands of society.

We know that there are asymmetries in the actual performance of public policies. This is why we need to identify our differences, build on our similarities, establish precise goals, segment audiences, and create clear messages that enable us to take firm steps toward improving trade between our nations. We will have achieved this goal if we can design a sort of Waze for integration, which shows us the clearest roads forward and where there is congestion or problems that might slow us down.

We understand integration in a broad sense, including both traditional tariff-related issues and other factors that are becoming increasingly important in trade negotiations, such as labor and environmental standards, technology transfer, and cooperation around investment and infrastructure. Consequently, we have included specific questions on innovation and nation branding, adding value to production, and export diversification.

The results that we present in this publication are supported by an analysis

## PREFACE

of the different dimensions of regional integration and the current state of trade negotiations between countries and regional blocs.

The publication clearly reveals that Latin Americans also associate integration with environmental factors, social issues, and academic, scientific, and technological exchanges. It also shows that they are demanding high-quality integration that improves their access to sustainable goods and services and new technologies.

In a world where protectionism is on the rise, Latin Americans still want to pursue integration. The map of information and knowledge for each area that we present here is what makes up the DNA of regional integration. It reveals our continent to be a very diverse one that needs to converge around fundamental issues that bolster multifaceted integration processes and prioritize the common good.

Antoni Estevadeordal	Gustavo Beliz	Marta Lagos
Manager, Integration	Director	Director
and Trade Sector, IDB	INTAL - IDB	Latinobarómetro

#### INTEGRATION AND DEVELOPMENT

There is an enormous consensus among Latin Americans around deepening integration processes. In the region, up to 89% of people support integration, which clearly reflects countries' leanings and sets Latin America apart from other regions. In a world in which protectionism is on the rise, Latin Americans want to pursue integration.

In addition to this consensus, integration with the region and the world is a development priority for one out of every four Latin Americans, although their number one priority is social policies. An average 77% of Latin Americans support economic integration, a figure even greater than the 60% who support political integration. These figures are high in comparison with those for other survey questions, such as support for democracy, which an average 54% of respondents said they were in favor of.

There is no clear correlation between this deep-rooted sense of regional belonging and citizens' evaluations of integration policies in each country. Some 55% of respondents approved of their country's integration strategy while 36% felt that their country had done "very little" or "nothing" to integrate into the region and the world. Integration policies thus need to go the extra mile to live up to the population's demands for integration.

In relation to how this link with the rest of the world should be structured, demand for greater integration is more marked in countries whose exports are more concentrated (in terms of quantity of products) and which have signed fewer trade agreements. This is a key starting point from which to move forward with export diversification policies that will enable a wider range of production sectors to play a part in integration processes. Foreign investment is welcome in Latin America. Some 71% of Latin Americans say that foreign capital is beneficial for local economies, while only 15% believe it to be harmful. Over the last two decades, resistance to foreign investment has come down by 5 percentage points (from 20% to 15%), which reflects less aversion toward foreign investors, a key aspect of the business climate in each country.

#### PHYSICAL CONNECTIVITY

On a scale of 1 to 10, people's willingness to pay taxes or take on loans to improve infrastructure that would facilitate integration was 3.8 on average. This willingness was greater in countries with less competitive infrastructure. Latin America and the Caribbean invests just 3% of its gross domestic product (GDP) in infrastructure, half the level of more developed countries. Logistics costs for SMEs in the region can represent more than 40% of product values, while in more advanced economies they stand at just 8%. Despite this deficit and the resulting loss in competitiveness, Latin Americans are still not sufficiently willing to make the necessary efforts to improve their infrastructure and they rank other priorities related to social policies more highly. In countries where infrastructure is most lacking, greater efforts are needed to improve physical connectivity (integration hardware) and it is encouraging that the populations of these countries are more willing to support such efforts.

#### INNOVATION AND NEW TECHNOLOGIES

Latin Americans place great value on innovation. In relation to different aspects of daily life—such as children's education, creativity at work, or even in terms of the country as a whole—innovation was ranked higher than 9 on a scale of 1 to 10. Far from being separate from integration processes, innovation is increasingly associated with these. Almost four out of every ten Latin Americans claim that integration has had a positive impact on access to technology. Their technology-related expectations revolve principally around healthcare: some 48% of Latin Americans argue that healthcare and medical treatment are the areas where technology will make the greatest progress and which they feel should be priorities for scientific research. Some 32% agreed that it would be a positive thing if the use of robots who could care for sick people and the elderly became widespread.

However, other cutting-edge technologies are not so widely accepted. This was true of cultured or synthetic meat (and of drones and driverless cars, among other technologies), which only 8% of Latin Americans considered a positive invention. It may be the case that these less positive assessments are related to the threats that these new technologies pose to some productive activities (as artificial meat does to traditional meat farming). One way of taking on these fears would be to observe the impact of new technologies on production and employment with a view to the future so that countries could take the neces-

sary precautions to cushion the impact of possible shocks to the market. Such initiatives have yet to be undertaken at a regional level.

#### NATION BRANDING AND REGION BRANDING

Sports, tourism, and food are the three mainstays of "brand Latin America." Some 57% of Latin Americans believe that the rest of the world is familiar with their country because of its sporting achievements. Carnivals and violence are other features that are frequently associated with Latin America. Local consumer preferences focus on the United States, which is Latin Americans' favorite source of music (12%), clothing (27%), and food (10%) and their preferred tourist destination (25%). Their favorite soap operas come from Mexico (23%), their favorite electrical appliances from China (21%), and their favorite sports stars from Brazil (13%).

In general, there was an overlap between nation branding and the objective characteristics of each economy. Rethinking ways of improving international perceptions of each sector is fundamental if Latin America is to successfully target the export diversification process. A solid nation-branding process and a good reputation are incentives for local entrepreneurs and facilitate the opening up of new markets.

#### SOCIAL AND ENVIRONMENTAL SUSTAINABILITY

Sustainability is another priority for Latin Americans in both social and environmental terms. Some 51% of respondents agreed that social policies should be the top development priority and 40% said that integration had a positive impact on employment, which runs contrary to the preconception that "foreigners come here to take away our jobs." The countries that send the largest numbers of immigrants to the rest of the region are also the most willing to pay more for products that are manufactured in a way that respects the rights of both local and foreign workers. On average, 46% of the region's population are willing to pay more for products if the manufacturing process respects workers' rights. Latin America is one of the most unequal regions in the world and is facing the challenge of how to crush the hard core of inequality, which is illustrated by the fact that the most unequal countries in the region are also the ones that are least willing to pay more for socially sustainable products.

In terms of environmental sustainability, 49% of Latin Americans said they would be willing to pay up to 20% more for products if the production process did not harm the environment. In the age of smart consumption, sustainability is an asset that is valued by Latin American consumers. Concern for the environment is also related to the structure of the energy matrix and pollution levels: the countries with the highest pollution levels are the ones demanding a technological response to that problem. Some 31% of Latin Americans trust that technological innovations will have a positive impact on the energy supply.

#### RESULTS FOR 2016 VS 2015

The comparison between the 2015 and 2016 surveys showed that Latin Americans' opinions of integration issues are relatively stable. Their beliefs on the importance of integration, their support for trade in goods and services, and their willingness to pay taxes or take on debt to improve integration infrastructure remained at the same average levels as the previous year. People's willingness to pay more for products that respect the environment and workers' rights increased in both cases by 5 percentage points, going from 44% to 49% in relation to the environment and from 41% to 46% for employment.



Source: Compiled by the authors using data from Latinobarómetro 2015 and 2016

Although it does not explore causal relationships, this study lists a series of stylized facts and conclusions that may be of interest. The exercises that involved cross-referencing the two tables—subjective data from surveys on the one hand and national statistical data on the other—also allowed us to point to certain typologies and stylized facts, such as the fact that countries with the highest exports per capita and the most primarized economies are the ones where there is most demand for foreign investment.

#### SUBJECTIVE AND OBJECTIVE DIMENSIONS

Based on these exercises, we have built a dynamic map of integration in the region to find out how public policies impact citizens' opinions and vice versa; in other words, which specific public opinions could be useful when formulating integration policies.

The table below summarizes the questions included in the opinion poll and the 21 indicators from the real economy that were compared with these subjective results.





• Revenue from transportation, warehousing, and communication (US\$ per capita)

#### INNOVATION

- How important do citizens think innovation is for development?
- How important do citizens think creativity is in children's education?
- How much do citizens know about new technologies and their potential impact?
- What should countries' scientific innovation priorities be in the future?
- Research and development expenditure (% of GDP)
- Exports of high-technology products (% of exports of manufactured products)
- Fixed broadband internet subscribers (per hundred people)

#### NATION BRANDING

What are the main features of Latin American countries in the eyes of the rest of the world?
What country do citizens prefer the goods and services that they purchase to come from?

- Revenue from international tourism (% of total exports)
- Homicide rate per 100,000 inhabitants

#### ENVIRONMENT

- How important do citizens think care for the environment is for development?
- How willing are citizens to pay more for products that respect workers' rights?
- How will innovations impact energy-related matters?
- CO2 emissions per capita (tons per inhabitant)
- Carbon footprint (hectares per person)
- Use of alternative and nuclear energy (% of total energy use)
- Electricity production based on renewable sources, excluding hydropower (% of total)

#### SOCIAL INCLUSION

- How willing are citizens to pay more for products that respect workers' rights?
- What impact is integration perceived as having on employment?
- How important do citizens think social policies are for development?
- Total immigrants from other countries in Latin America
- Index of restrictions on the movement of people and capital
- Gini coefficient

Source: Prepared in-house using data from Latinobarómetro, 2015 and 2016

Latin Americans no longer associate integration exclusively with the traditional aspects of trade, but instead are demanding more intelligent relations between their countries and the rest of the world. In other words, they are seeking high-quality integration that will contribute to improving lives and in which other factors also play an important part, be they environmental, social, or related to academic, technological, or scientific exchanges.

Through these surveys, we are getting to know different facets and dimensions of the voice of the Latin American people, which is a step toward decoding the DNA of integration in the region.

## THE DNA OF REGIONAL INTEGRATION IN LATIN AMERICA

#### **1. A SPACE FOR INTEGRATION**

- + Between 46% and 89% of the population support regional integration processes
- Some 77% of respondents were in favor of economic integration, while 60% supported political integration.

#### 2. INTEGRATION + DEMOCRACY

- Countries which showed greater support for integration also showed greater support for democracy.
- Countries which showed greater support for integration also showed higher levels of trust in their government.

#### **3. THE INTEGRATION GAP AND PUBLIC POLICIES**

- CITIZENS OF COUNTRIES WITH LESS DIVERSIFIED EXPORT BASKETS DEMANDED GREATER INTEGRATION.
- CITIZENS OF COUNTRIES WITH FEWER TRADE AGREEMENTS DEMANDED GREATER INTEGRATION.

#### 4. TWO-SPEED INTEGRATION

- Countries that specialize in agricultural products demand economic integration more than others.
- Some 71% of people believe that foreign investment is beneficial for their countries. There is greater support for investment in agriculture and less for investment in financial services.

#### 5. INTEGRATION HARDWARE

• Some 43% of Latin Americans believe that infrastructure is important for development.

• On a scale of 1 to 10, people's willingness to pay taxes or take on loans to finance better infrastructure was 3.8, on average.

#### 6. INTEGRATION AND NATION BRANDING

- Sports, tourism, and food are the three mainstays of "brand Latin America."
- The United States is the country where Latin Americans prefer to buy their clothes, music, and food, and visit as tourists.

#### 7. INN-TEGRATION: INNOVATION + INTEGRATION

- CITIZENS OF COUNTRIES WHOSE EXPORTS HAVE GREATER TECHNOLOGY CONTENT VALUE INTEGRATION MORE.
- Personal creativity and innovation score highly among Latin Americans, who gave them more than  $9\ \text{points}$  out of 10.

#### 8. INTEGRATION AND SOLIDARITY

- Some 46% of people are willing to pay more for products if the production process respects workers' rights.
- Countries that are more tolerant toward immigration are more likely to demand that LABOR STANDARDS BE UPHELD.

#### 9. GREEN INTEGRATION

- Some 49% of Latin Americans believe that the environment is important for development.
- IN COUNTRIES WITH THE HIGHEST POLLUTION LEVELS, PEOPLE ARE MORE WILLING TO PAY MORE FOR ENVIRONMENTALLY FRIENDLY PRODUCTS.

#### **10. POSTCONTAINER INTEGRATION**

• Some 83% of Latin Americans think that some aspect of integration is important, be it physical, environmental, labor-related, or technological.

• PEOPLE'S WILLINGNESS TO PAY MORE FOR ENVIRONMENTALLY AND SOCIALLY SUSTAINABLE PROD-UCTS IS GROWING.

## OBJECTIVITY AND SUBJECTIVITY: WHY WE CROSS-REFERENCED THE TABLES\*

#### BACKGROUND

This study is the fruit of a strategic alliance between the Institute for the Integration of Latin America and the Caribbean (INTAL) and Latinobarómetro. It compares the results from a 2016 opinion poll with trade and integration data from the countries in the region.<sup>2</sup>

In so doing, we have moved forward with our work on this joint venture which the countries in the region are directly involved in. The outcome is an RPG that has brought together opinions from 18 countries in the region and creates studies that aim to satisfy the demand for information in the region.<sup>3</sup>

We first approached the issue through the Technical Note "Objective and Subjective Dimensions of Regional and Global Integration in Latin America," which INTAL published in March 2016 and which outlined some initial findings on the relationships between national and regional statistics and public opinions of integration.

By cross-referencing the tables containing information from national and regional statistics with a regional opinion barometer, we are innovating and beginning to gather and construct information that will help us better understand our societies (Morlino 2011).<sup>4</sup> This process will also improve our understanding of the demand for integration in Latin America and the impact of public policies that seek to satisfy this demand, which will, in turn, enable policy makers to fine-tune policy designs to ensure they lead to the desired outcomes.

In INTAL (2016), we argued that comparing data is a relatively novel feature in undertaking integration studies, one that contrasts the economic variables that states measure with citizens' perceptions.

The aim of the partnership between INTAL and Latinobarómetro is to produce an RPG that will provide close monitoring of Latin Americans' opinions of topics that are key to regional integration. These range from how they perceive each country's integration strategy to be impacting employment or investment to their willingness to finance integration infrastructure.

The member states took part in the process of drafting the opinion poll at INTAL's Summer Colloquium. It includes questions on citizens' perceptions of innovation and nation branding in addition to those on classic factors such as investment, trade, and the environment, among others.<sup>5</sup>

The Continuous Monitoring System for Integration Processes (SEPI), which leverages Latinobarómetro's indicator base and the databases run by INTAL, IN-Trade, INTAL Interactive, and COSIPLAN/IIRSA (regional infrastructure), will now be complemented by a new online data visualization tool that is available at www.iadb.org/intal/alianzalb (link in Spanish).

<sup>\*</sup> The authors want to thank Antoni Estevadeordal, Marta Lagos, Alejandro Ramos Martínez, Carlos Scartascini, Patricia Iannuzzi, Carlos D'Elía, Alejandra Wulff, Paula Alzualde, Pablo Valenzuela, and Andrea Pellegrino for their contributions and Soledad Codoni, Lorena Miranda Gutiérrez, and Andrea Pereira Palacios for their research assistance. We are especially grateful to Ana Inés Basco for all her hard work coordinating the project and as the RPGs Team Leader.

There is no doubt that our societies are increasingly interested in integration processes and the direct and indirect consequences of these. The Trans-Pacific Partnership (TPP), the negotiations between the MERCOSUR and the European Union, or the possible expansion of the Pacific Alliance to include new members are all issues that are attracting the attention of the average citizen, pushing the integration agenda to the top of the list of public policy priorities. Surveys first began to be used to better understand societies through public opinion in the 1960s. Europeans were the first to carry out opinion polls on integration through the Eurobarometer program, which began in the 1970s. Latin America took its first tentative steps in this direction with the Latinobarómetro program between 1995 and 2015, at which point it expanded its analysis of Latin American integration by forming a partnership with INTAL.<sup>6</sup>

This paper aims to continue this work and contribute to creating a body of knowledge that plays a significant part in the future of regional integration.

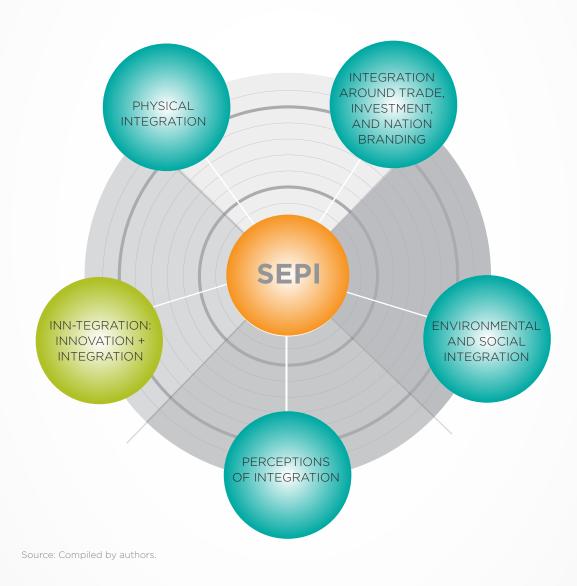
#### TECHNICAL DETAILS

In 2016, 20,204 face-to-face interviews were conducted using probability sampling. These were representative at the national level with an error margin of between 2.8% and 3.1%, depending on the country. Between May 15 and June 15, 2016, 1,000 interviews were held in each country in Central America, and 1,200 in Mexico and South America (Argentina, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Chile, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, and Venezuela). The survey attempts to capture the population's demand, hopes, and perceptions of the impact of integration. By "integration," we mean a broad set of processes that link the country in question with other countries in economic, political, technological, and even cultural terms. The existence of these links is explained by "a wide range of variables which include structural factors within the different countries' economies, shared historical traditions, and the propensity of these countries and their governments to create and build on these links, which in the limited area of trade strategies may manifest themselves through multilateral instruments for preferential trade agreements."7

For the first time ever, this set of measurements taken by the INTAL/Latinobarómetro alliance has included specific questions on citizens' perceptions of innovation. By so doing, we have added a fifth dimension to the four existing aspects of regional integration—the physical, commercial, environmental and social aspects of integration and public perceptions of this. We have called this fifth dimension "inn-tegration": innovation + integration.

<sup>\*\*</sup> In the coming months, we will expand on this report with additional analyses of the differences and similarities between the for regional blocs and the socio-economic status of the population (education, income level, gender, and so on), among other issues.

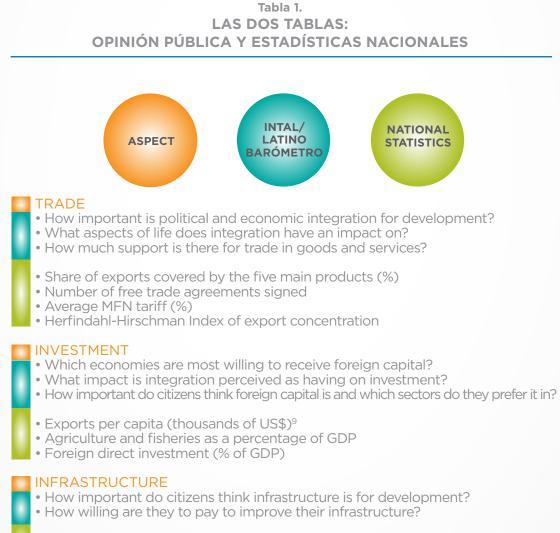
#### CONTINUOUS MONITORING SYSTEM FOR INTEGRATION PROCESSES (SEPI)



To measure citizens' perceptions of innovation, we analyzed both the importance they place on creativity in different areas of economic life and their knowledge of potentially disruptive technologies (robotics, drones, driverless cars, and so on).

We used the Pearson correlation to observe the connection between survey data and national statistics, as this measures the linear relationship between two random quantitative variables regardless of their scale.

The following table summarizes the data series used for each dimension and its relationship with the survey questions.<sup>8</sup>



- Infrastructure competitiveness ranking
- Revenue from transportation, warehousing, and communication (US\$ per capita)

#### INNOVATION

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- How important do citizens think creativity is in children's education?
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- What impact is integration perceived as having on employment?
- How important do citizens think social policies are for development?
- Total immigrants from other countries in Latin America
- Index of restrictions on the movement of people and capital
- Gini coefficient

Source: Compiled by the authors.

The task at hand thus consists of comparing public opinion indicators with national statistics to identify a degree of correlation which does not point to a causal relationship but rather is a stylized fact. This suggests empirical relationships that must then be analyzed so that they can be of use to political and social stakeholders and anyone with an interest in studying the development of public policies on trade and integration. The indicators used in this exercise were selected based on three factors: first, they needed to measure the same phenomenon for both aspects of the study (public opinion and regional statistics); second, they had to be available for all 18 countries in the region included in this analysis at acceptable intervals and be reasonably up to date; and third, the researchers' own criteria. INTAL has more than 50 years' experience in the field of regional integration, and it has drawn on this expertise to identify relevant indicators and data series that reflect dynamics that play a part in integration.

The statistics used in this study illustrate the capacity and willingness of the countries in the region to make their economies more integrated and open to the rest of the world. A lower average MFN tariff and the signing of free trade agreements are evidence of a greater propensity to establish trade links with other countries—that is, they are policy instruments that reflect countries' decisions.<sup>10</sup> Both the Herfindahl-Hirschman Index and the share of exports accounted for by the five main export products provide a measure of country's export diversification, the complexity of its export supply, and its capacity to handle adverse trade circumstances.

By comparing actual investments received and exports per capita with how people perceive foreign investment, we will be able to pinpoint the characteristics of those countries that value foreign capital most highly. We will look specifically at their features in terms of both trade and the structure of domestic production, for which we use the data series on agriculture and fisheries as a percentage of GDP, which also indicates the level of primarization of the economy. The share of foreign direct investment (FDI) in GDP indicates the intensity with which the country facilitates the movement of foreign capital within its own economy, in order to take advantage of foreign savings and capture the benefits of technological innovations developed in other countries.<sup>11</sup>

We used two variables to examine infrastructure. The first of these is the World Economic Forum's infrastructure competitiveness ranking, which weights different variables related to the transportation of goods, the supply of electricity services, and telecommunications. A higher ranking on this index implies that local infrastructure is more competitive and thus that the country can integrate more easily with the region and the world.<sup>12</sup> We also evaluate revenue from transportation, warehousing, and communication (US\$ per capita), which we use as a parameter for the importance of this sector within domestic economies.

In the chapter on innovation, we take up the analysis of the importance of technological goods within export baskets that we began in INTAL (2016). This indicator measures the "sophistication" or quality of commercial integration as expressed by the country's exports.<sup>13</sup> The number of fixed broadband internet subscribers (per hundred people) is the classic indicator of how integrated tele-communications are in local economies, based on the assumption that when technology is more readily available it facilitates diverse aspects of integration,

such as the possibility of doing e-commerce with customers and suppliers in other countries. We have also added the classic measure of expenditure on investment and development (R&D as a percentage of the GDP), a standard measurement of the relative importance a given society places on innovation. Nation branding is connected to the investment chapter and is fundamental to the country's position in competitive markets. Questions related to people's perceptions of this were compared with actual revenue from international tourism (as a percentage of total exports), one of the standards for investment attraction in Latin America and a core pillar of several economies in the region. At the other extreme, one of the main factors crowding out investment is legal insecurity and crime rates. We have compared this aspect of public perception in each country with the actual per-capita homicide rate, one of the traditional measures of crime.

To generate environmental metrics, we used carbon dioxide (CO2) emissions per capita and carbon footprint (hectares per person), two standard objective measures of commitment to the environment which we then cross-referenced with willingness to take on integration commitments that include environmental components. In relation to energy, we looked at the use of alternative and nuclear energy (as a percentage of total energy use) and electricity production based on renewable sources, excluding hydropower (percentage of total). This is a fundamental issue, considering the commitments countries took on at the COP21 Paris Summit in 2015 and the need to protect the environment by using less polluting forms of energy. At present, nearly every trade agreement includes a chapter on environmental sustainability, some based on green production standards and others on technology transfer in relation to new forms of energy.

The same is true of the social dimension of integration, where chapters on migration and the movement of people have become just as important as those on the movement of capital, or perhaps more so. In this section, we compare variables such as the total migrants moving to other countries in Latin America and an index of restrictions on the movement of people and capital with subjective demands relating to the rights of local and foreign workers. Finally, the Gini coefficient provided indicators of the relationship between these demands and income distribution, based on the assumption that when integration policies are effective, they should ultimately translate into increased equality and social inclusion.<sup>14</sup>

We were particularly curious to discover how far these indicators are from citizens' perceptions of public integration policies or policies that are somehow connected to integration. These are the factors we have used to represent the different dimensions of integration. This initial examination will point the way to how we can continue to expand on these comparisons to gradually cover the entirety of the complex phenomenon that is integration.

#### HOW THE STUDY IS STRUCTURED

The multidimensional approach we have proposed here allows us to distinguish how the two sources of data relate to one another, identify each country's position in relation to the average regional values for each dimension of integration, and design strategies to tackle demand or the absence of demand in relevant public policy areas.

When cross-referencing different data sets, it is essential to bear the limitations of this exercise in mind and recognize where conclusions can be drawn without pushing the data too far. We must not fall into the temptation of trying to extract more information than the data itself has to offer, while also seeking convincing explanations of the relationship between these different dimensions. This is the only way that it will be possible to truly build on this exercise to design public policies that take social demands into account and are then assessed, calibrated, and corrected considering their impact on public opinion. This study can be read on three levels. First, public opinion indicators. Second, the comparison between these and national and regional statistics. Finally, a series of boxes analyzes the current state of each facet of integration in the region.

The next section looks at what "integration" means for Latin Americans. We then focus on specific issues relating to economic and political integration, trade, investment, infrastructure, innovation, nation branding, the environment, and social inclusion.

The text closes with a series of records and results for each country that were created based on the survey and in which the main results for each country are compared to the regional average. The final pages of the contain conclusions and point to future lines of research that may derive from it.

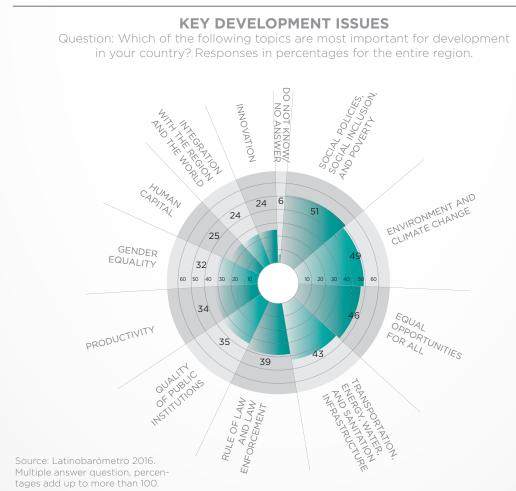
## WHAT DOES INTEGRATION MEAN FOR LATIN AMERICANS?

#### THE RELATIONSHIP BETWEEN INTEGRATION AND DEVELOPMENT

Many countries in Latin America are currently actively negotiating integration agreements either bilaterally or as part of their involvement in mega-agreements with other countries in the region or other regional blocs. The consequences of these agreements for domestic economies extend beyond trade and have repercussions for the labor market, environmental protection policies, technology transfer, and investments in infrastructure, transportation, and communications projects.

The proliferation of these agreements has meant that integration is no longer merely a matter of tariffs but instead involves multiple dimensions. Integration is becoming an increasingly dense issue because of these multiple interrelated factors, which come hand-in-hand with new social demands.

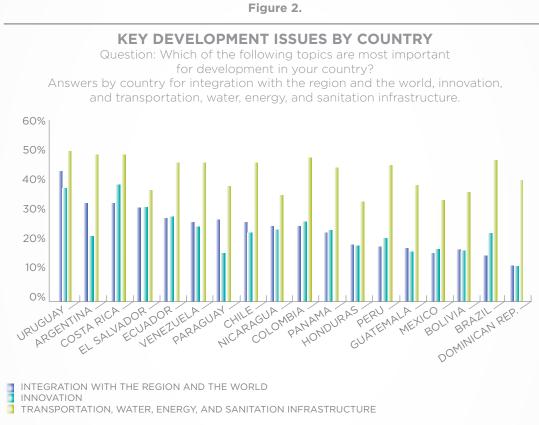
How much do Latin Americans know about integration policies and the repercussions of these? As was the case in 2015, some 24% of Latin Americans in 2016—that is, almost one out of every four people—argued that integration with the region and the world is a key issue for development.



THE DNA OF REGIONAL INTEGRATION

Figure 1.

This result points to a certain stability in how important people think integration is. Topping the 2016 list of priorities are social policies, with 51% of mentions, followed by the environment, with 49%. The 2015 list was the other way around, with the environment ranking first, followed by social policies. The change in 2016 reflects a growing concern around social inclusion and poverty. One of the main hard aspects of integration, physical infrastructure, ranks fourth, with 43% of mentions. Interest in the latter has grown since 2015, when it only received 33% of mentions.



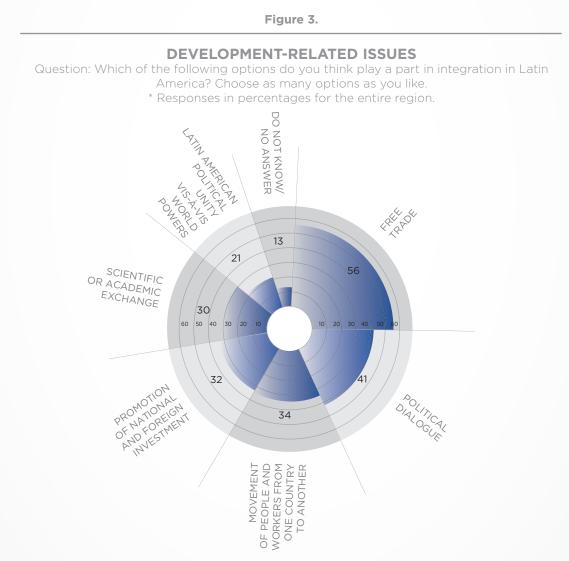
Source: Compiled by the authors using data from Latinobarómetro 2016

The answers by country show a correlation of 0.80 between answers for integration with the region and the world and the answers for innovation. This means that countries rank the two issues roughly equally. The correlation between integration and infrastructure is 0.53—the average value for the latter is systematically higher in all countries.

The contents of integration agreements and even the integration that goes on outside of these agreements through exchanges between people and companies have shifted over the last 20 years. So, what does integration mean for Latin Americans?

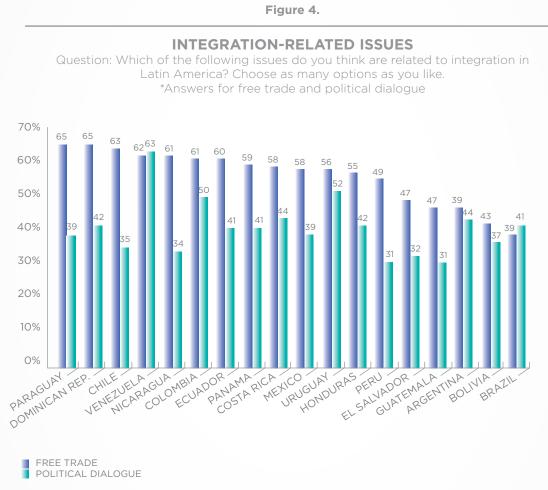
#### THE FEATURES OF INTEGRATION

This year, most Latin Americans associated integration with traditional meanings. The most frequently chosen option was "free trade," which 56% of people selected, followed by "political dialogue," with 41% of mentions. Options such as the movement of people, investment promotion, and scientific exchange also obtained 30% or more of responses, which shows that although the traditional meaning of integration still ranks highest, a significant number of Latin Americans also recognize other aspects of integration.



Source: Compiled by the authors using data from Latinobarómetro 2016. Multiple answer question, percentages add up to more than 100.

Comparing the answers per country for the most frequently chosen options reveals that mentions of "free trade" ranged between 39% and 65% depending on the country: the association between integration and free trade was strongest in Paraguay and weakest in Brazil. Answers for "political dialogue" ranged between 31% and 63%; the relationship was strongest in Venezuela and weakest in Argentina and Peru.



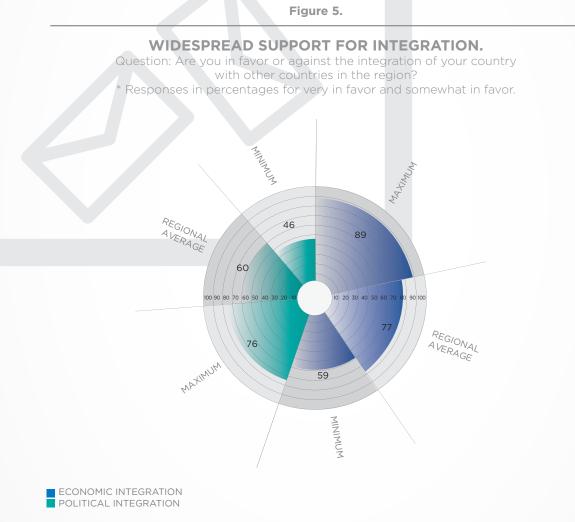
Source: Compiled by authors/Latinobarómetro 2016. Multiple answer question, percentages add up to more than 100.

Dialogue and trade are the two main features of a form of integration in which migration-related issues also play a significant role, in third place. At the same time, the idea that Latin America should come together to take on global powers appealed to people much less than other integration options, and was the least chosen category, with only 21% of mentions and great disparity in how countries in the region reacted to it, with peaks of 36% in Uruguay and 27% in Argentina and Venezuela.

## ECONOMIC AND POLITICAL INTEGRATION

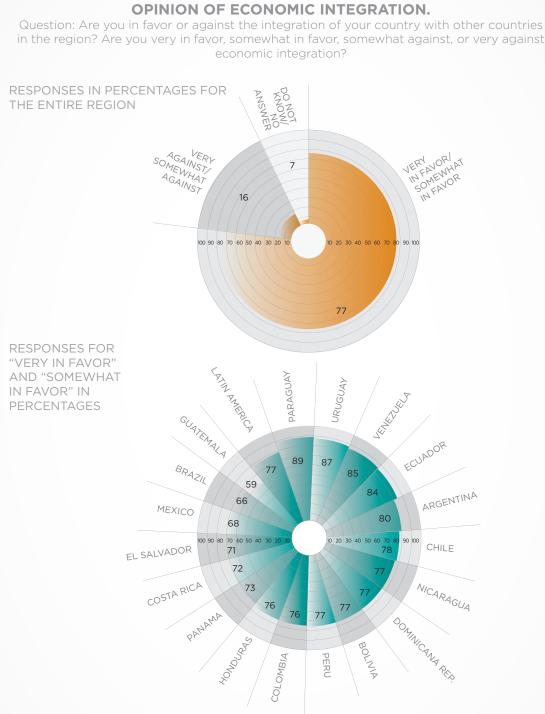
#### THE TWO SIDES OF INTEGRATION

In a global context in which anti-integration trends seem to be on the rise,<sup>15</sup> Latin America stands out for its widespread support for both economic and political integration. Support for economic integration in the region was highest in Paraguay, where it reached 89%, and lowest in Guatemala, with 59%. The values for political integration are somewhat lower, with a high of 76% in Venezuela and a low of 46% in Mexico, although these are still surprisingly high in the current global context.



Source: Compiled by the authors using data from Latinobarómetro 2016.

Political dialogue and trade in goods and services are other factors underpinning integration, which may lean more toward the economic or the political, which is why one of the survey questions attempts to explore this difference.



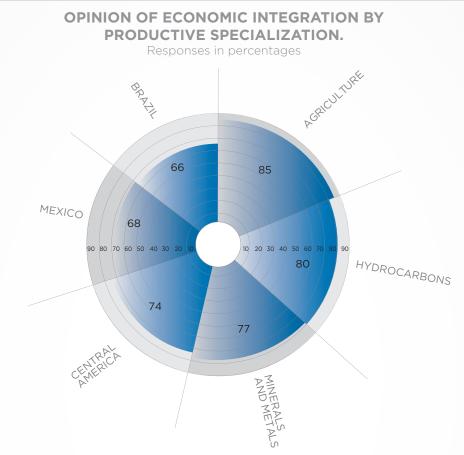
in the region? Are you very in favor, somewhat in favor, somewhat against, or very against

Figure 6.

Source: Compiled by the authors based on data from Latinobarómetro 2016.

Of the total for the region, 77% Latin Americans are in favor of economic integration while 16% are against this and 7% opted not to answer





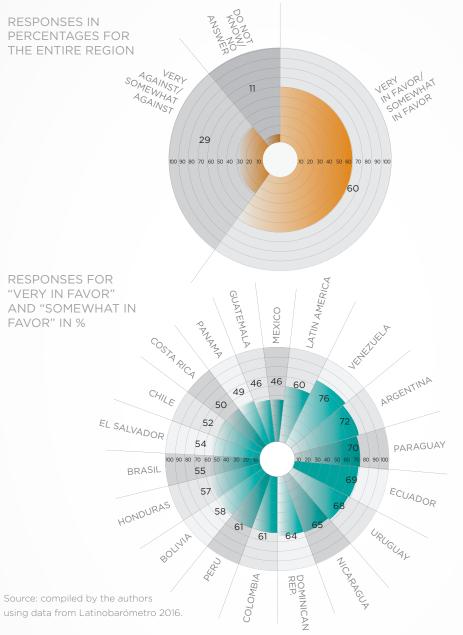
Source: Compiled by the authors using data from Latinobarómetro 2016.

Examining these responses in the light of each country's productive specialization using the classifications from the Trade and Integration Monitor (IDB, 2015) reveals interesting results. The countries that specialize in agricultural products (Argentina, Paraguay, and Uruguay) showed much higher average levels of support for economic integration than the other countries—as high as 85%. In second place was the group of countries whose exports revolve heavily around hydrocarbons (Bolivia, Colombia, Ecuador, and Venezuela), with average levels of 80%. Third were mineral and metal exporters (Peru and Chile) with 77%, followed by the countries of Central America (Costa Rica, El Salvador, Honduras, Panama, Guatemala, and the Dominican Republic) with 74%. At the bottom of the list are the region's two biggest economies: Mexico, with 68%, and Brazil, with 66%.<sup>16</sup>

Respondents tended to know the origin of the products they consume regularly, such as meat, wine, fish, coffee, and so on. In other words, they had considerable knowledge of the region through these products and these results had a positive impact on their answers. For example, countries that specialize in agricultural products and where citizens consume these products on a daily basis are more inclined toward economic integration than countries that export products that do not feature so heavily in people's daily lives.

#### **OPINION OF POLITICAL INTEGRATION**

Question: Are you in favor or against the integration of your country with other countries in the region? Are you very in favor, somewhat in favor, somewhat against, or very against political integration?

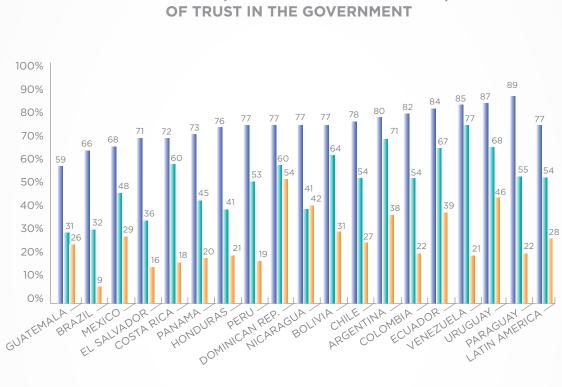


Levels of agreement with political integration were lower, with 60% of mentions. Levels of disagreement with political integration stood almost twice as high as disagreement with economic integration, accounting for 29% of responses. The countries that were most in favor of political integration were Venezuela (76%), Argentina (72%), and Paraguay (70%), while Mexico and some countries in Central America (Guatemala, Panama, and Costa Rica) were less in favor.

This supports the conclusions that can be drawn from the data presented above, in the sense that people react to integration based on their day-to-day experiences rather than in conceptual terms. People thus perceive economic integration as being more distant than political integration.

#### INTEGRATION AND INSTITUTIONS

Cross-referencing agreement with economic integration and support for democracy revealed high levels of correlation (0.74) between countries that support each factor. The correlation between support for economic integration and trust in the government is also positive, standing at 0.34.<sup>17</sup>



ECONOMIC INTEGRATION, SUPPORT FOR DEMOCRACY, AND LEVELS OF TRUST IN THE GOVERNMENT

Figure 9.

PERCENTAGE OF THE POPULATION IN FAVOR OF THEIR COUNTRY INTEGRATING ECONOMICALLY WITH OTHER COUNTRIES IN THE REGION

- SUPPORT FOR DEMOCRACY
- TRUST IN THE GOVERNMENT

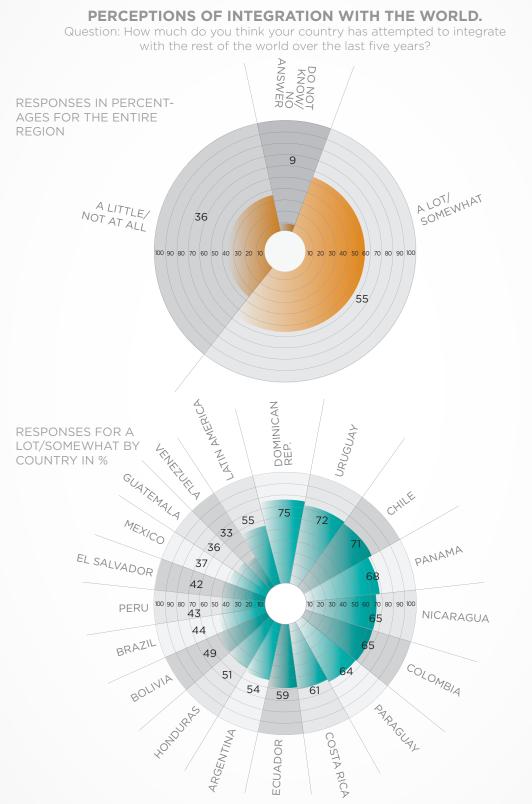
Source: Compiled by the authors using data from Latinobarómetro 2016.

#### WHERE DOES INTEGRATION HAVE AN IMPACT?

All the governments in the region have international integration strategies, although their policies in this regard may be more or less active. How do citizens perceive this strategy? Do they think it has had an impact on their lives? Some 55% of the population of the entire region believes that their country has attempted to integrate a lot or somewhat with the world. Some 36% believe that it has attempted this a little or not at all.

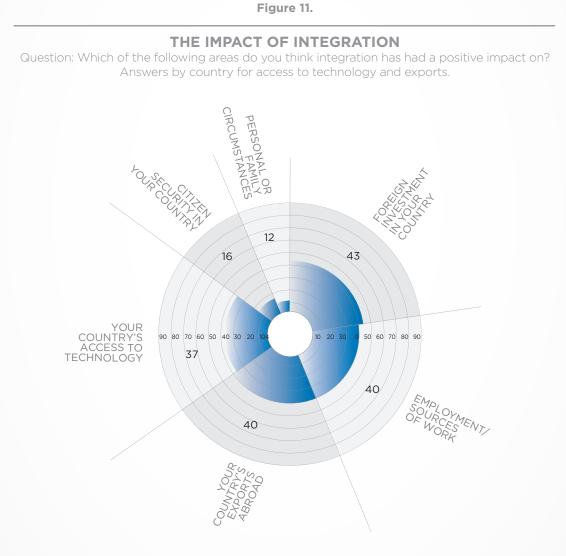
The countries that most value their governments' integration efforts are the Dominican Republic (75%), Uruguay (72%), and Chile (71%).

Figure 10.



Source: Compiled by the authors using data from Latinobarómetro 2016.

The 43% of respondents who answered "a lot or somewhat" to the above question (on their country's integration strategy over the last five years) claimed that this integration strategy had had a positive impact on foreign investment in the country, which was the most frequently chosen option. Next on the list were employment and sources of work, and exports, which both received 40% of positive mentions. Furthermore, almost one in every four Latin Americans believed that the country's integration strategy had had a positive impact on access to technology (37%).<sup>18</sup>



Source: compiled by the authors using data from Latinobarómetro 2016. Multiple answer question, percentages add up to more than 100. There was a broad dispersion in the distribution by country. For example, positive answers regarding the impact of integration on access to technology peaked at 65% in Uruguay but stood at only 15% for Guatemala. The same is true for other options. Sometimes there is a significant correlation in the percentage of answers for one option and another between countries: for example, the correlation between the impact of integration on access to technology and impact on exports is as high as 0.94, in other words, the difference from one country to the next is relatively stable in terms of the factors people perceive integrating as impacting, despite this being widely distributed. The greatest impact by option and by country was in the Dominican Republic, where 78% of respondents claimed that integration had a positive impact on employment.

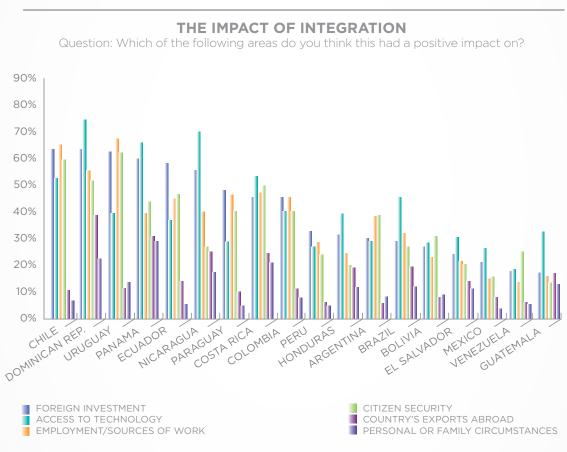


Figure 12.

Source: Compiled by the authors using data from Latinobarómetro 2016. Multiple answer question, percentages add up to more than 100.

In relation to trade in goods and services, the share of Latin Americans who were in favor of this remained stable in comparison with 2015 levels and stood at 69% for the region as a whole. However, there were variations at the country level that made up for one another in the regional average. Positive opinions of trade increased in countries that were already more in favor of this: in Venezuela, these levels went from 72% to 89%, in Paraguay from 59% to 88%, and in Nicaragua from 71% 84%. In contrast, there was a significant downturn in Brazil, where these levels went from 78% in 2015 to 71% in 2016; in Peru, where they went from 69% to 59%; and in the Dominican Republic, where they dropped from 85% to 77%.

Figure 13.

#### AGREEMENT WITH TRADE IN GOODS AND SERVICES

Question: Imagine that your country signs an integration agreement with other countries in the region (Latin America and the Caribbean). Would you agree or disagree that your country should be able to buy goods and services from any other country in the region and that any other country should be able to sell goods and services to your country?

Responses for "strongly agree" and "agree."



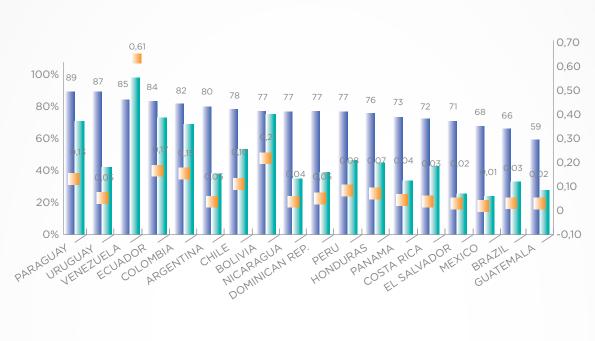
Source: Compiled by the authors using data from Latinobarómetro 2016. Note: \*No data were available for Mexico for 2015.

#### INTEGRATION AND EXPORT DIVERSIFICATION

Comparing opinion data and real economic variables allowed us to identify relationships between these two aspects of integration. In this case, we compared the proportion of the population that supports economic integration with the degree of the country's export diversification, which we measured through the share of exports that are covered by the five main export products and the Herfindahl-Hirschman Index (HHI).<sup>19</sup>

The correlation between these variables was positive: 0.69 in the first case and 0.48 for the HHI per product. This means that those societies demanding greater economic integration tend to have more diversified exports, as is the case in Paraguay, Venezuela, and Ecuador. <sup>20</sup>

Figure 14.



AGREEMENT WITH ECONOMIC INTEGRATION AND EXPORT DIVERSIFICATION

PERCENTAGE OF THE POPULATION IN FAVOR OF THEIR COUNTRY INTEGRATING ECONOMICALLY WITH OTHER COUNTRIES IN THE REGION

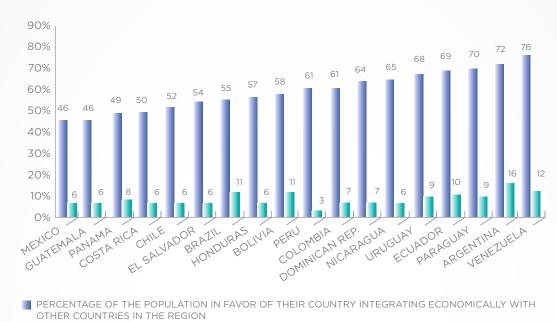
SHARE OF EXPORTS COVERED BY THE FIVE MAIN PRODUCTS (%) RIGHT AXIS: HERFINDAHL-HIRSCHMAN EXPORT CONCENTRATION INDEX

RIGHT AXIS. HERFINDARL-HIRSCHMAN EXPORT CONCENTRATION INDEX

Source: Compiled by the authors using data from Latinobarómetro 2016 and INTRADEBID.

#### INTEGRATION AND TARIFF POLICY

Comparing support for integration with MFN tariffs reveals that the countries that most support political integration have the highest tariffs: there is a positive correlation of 0.56 between the two variables. The conclusions reached in INTAL (2016) therefore still hold true: when we compared tariff policy with people's overall opinions of integration, we also concluded that "countries with the highest levels of trade protection (above-average foreign tariffs) believe integration to be a priority."



AGREEMENT WITH POLITICAL INTEGRATION AND TARIFFS

Figure 15.

AVERAGE MFN TARIFF (%)

Source: compiled by the authors using data from Latinobarómetro 2016 and INTRADEBID.

# **CURRENT NEGOTIATIONS**

Latin America and the Caribbean has a long history of involvement in integration processes. The region has made many forays into different forms of integration of varying levels of depth. These experiences are vast and include multilateral and regional agreements; arrangements that are already in force and others that are being negotiated; customs unions and free trade agreements; and treaties with political, economic, commercial, or physical integration objectives. According to the Legal Instruments of Integration (IJI) database, in 2015 the countries of Latin America had 40 negotiations underway, of which the Pacific Alliance is the only one seeking to form part of a mega-agreement, in this case involving other Pacific rim countries. The United States and the European Union have traditionally been the region's main trading partners. However, signing integration agreements has helped Latin American economies diversify their trade not only in terms of their partners but also in terms of how this breaks down by product. Although intraregional trade between Latin American blocs is low in comparison with other integration schemes outside the region, manufactures account for a higher relative share of this trade than in exports to the rest of the world.

Source: INTAL Interactive No Borders / Integrated / Partners/ Horizontal Trading / Between Us / Mega-Regionalism

# EXPORT CONCENTRATION: PRODUCTS AND DESTINATION MARKETS

The main determinants of the scale of an economy's export basket are its pattern of productive specialization; income per capita; the absolute scale of its economy; factor endowment; closeness to its main foreign destination markets; innovation capacity; infrastructure; and trade policy, among others. There is great variation among the countries of Latin America in these determinants of export diversification and notable differences in the degree of diversification of each country's export supply. In other words, there is significant variation between subregions in relation to how concentrated their exports are, as measured using the Herfindahl-Hirschman Index (HII). This measure of export concentration ranges from 0 to 1: the higher the value, the more concentrated exports are. This is true for both export products and trading partners.



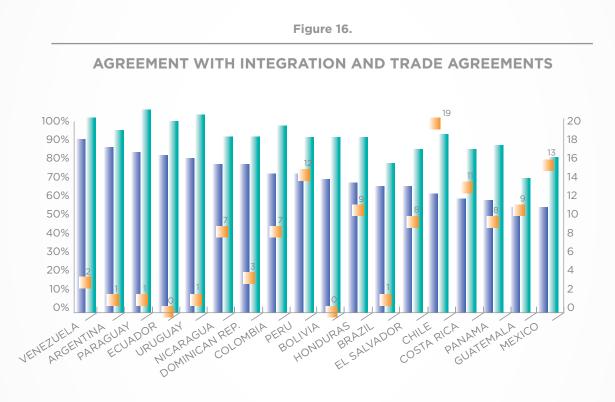
Source: Compiled by the authors using data from INTRADEBID. Note: \* Data for Nicaragua and Venezuela is from 2014.

In general terms, countries with export baskets that include a greater share of manufactures (Mexico and Central America) have more diverse export supply in terms of products than the countries of South America, where unprocessed primary goods or manufactures of agricultural/mineral/metal origin account for a greater share of the export basket (Figure a). The main determinants of the result for product diversification are specialization pattern, factor endowment, and trade and FDI policy (including, for example, some special trade regimes). In contrast, when we assessed export diversification by destination market, we found South American countries' baskets to be more diversified than those of Mexico and Central America (Figure b). In this case, greater physical proximity to the United States and the network of trade agreements between these countries has led to greater concentration of the export basket to this destination, which is the region's main trading partner. Since 2010, when commodity prices reached an all-time high, adverse economic times have affected the region's economies to different degrees. In Argentina, Uruguay, Bolivia, Colombia, and the Dominican Republic, concentration by product increased in 2015 in comparison with 2010. However, the drop in sales of certain products (probably manufactures) was made up for by sales to new markets, and diversification by destination market has improved. Venezuela is the only country that has not managed to counterbalance this increased concentration in terms of products with new destination markets. In contrast, in 2015, other countries such as Ecuador, Chile, Peru, Brazil, Costa Rica, Honduras, and Mexico were able to export a greater variety of products (improved export diversification by product) but to fewer markets (worse diversification by destination market). Despite the unfavorable context, a third group has been able to improve its diversification in terms of both products and destination markets-Paraguay, Panama, Nicaragua, El Salvador, and Guatemala.

This is a vital issue as trade promotion and facilitation policies contribute to export diversification and help reduce the impact of an unfavorable context when there is a change in the international trade cycle.

#### INTEGRATION AND TRADE AGREEMENTS

Is the number of trade agreements that a country signs related to how its population perceives integration? To answer this question, we compared the proportion of the population that is in favor of economic and political integration with the number of free trade agreements (FTAs) each country has signed. In 2016, this revealed a negative correlation of -0.67 between the number of FTAs and support for political integration, which dropped to -0.41 for support for economic integration. This means that there is greater demand for integration in countries that have signed fewer FTAs.



PERCENTAGE OF THE POPULATION IN FAVOR OF THEIR COUNTRY INTEGRATING POLITICALLY WITH OTHER COUNTRIES IN THE REGION

PERCENTAGE OF THE POPULATION IN FAVOR OF THEIR COUNTRY INTEGRATING ECONOMICALLY WITH OTHER COUNTRIES IN THE REGION

RIGHT AXIS: NUMBER OF FTAS SIGNED

Source: Compiled by the authors using data from Latinobarómetro 2016.

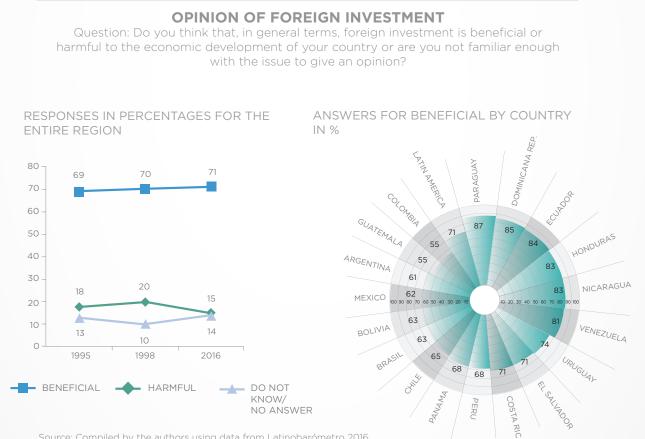
In INTAL (2016) we used the results from the 2015 survey to analyze the correlation between the openness of the economy and demand for integration, and found a negative relationship between the two, in that countries with lower openness coefficients were where demand for integration was greater.

# INVESTMENT. HOW IMPORTANT DO CITIZENS THINK FOREIGN CAPITAL IS?

## **OPINIONS OF FOREIGN INVESTMENT**

In a global context of low interest rates, Latin America offers a range of investment opportunities for capitals that are willing to take a gamble on the region. How do Latin Americans perceive the arrival of these capitals? Do they think that foreign investment is beneficial or harmful for development? As is the case with integration, support for investment is very high among the region's citizens. Some 71% of Latin Americans say that foreign capital is beneficial for local economies, while only 15% believe it to be harmful. Over the last 20 years there has been a decrease in the proportion of the population that rejects foreign investment. This peaked at 20% in 1998, but the share of those who believe it to be beneficial has gradually increased. However, the share of the population that would rather not give an opinion on the matter has increased from 10% in 1998 to 14% in 2016.

Figure 17.



Source: Compiled by the authors using data from Latinobarómetro 2016.

Looking at responses by sector, foreign investment is more welcome if it targets the production of primary goods. Some 46% of respondents think that it is positive for there to be foreign capital in the agricultural sector, 35% in chemicals and medicines, and 30% in energy and water services and the automotive industry.

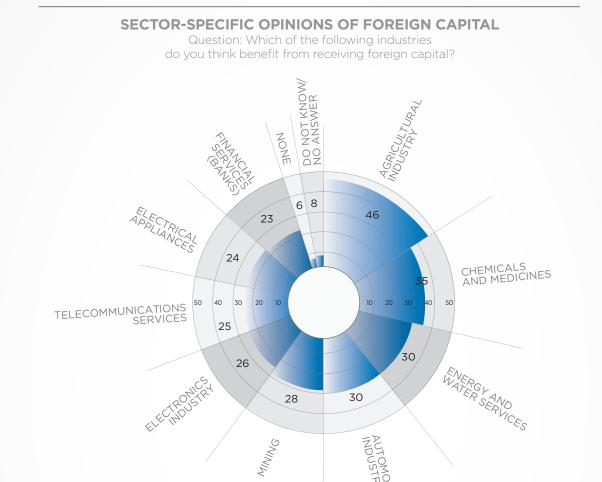


Figure 18

Source: Compiled by authors/Latinobarómetro 2016. Multiple answer question, percentages add up to more than 100.

In relation to the agricultural sector, which was the most frequently selected option, Venezuela was the country that was most in favor of receiving foreign capital, with 63% support ratings, followed by Nicaragua with 60%, and Ecuador with 58%. Those that were most reluctant to receive such investment include four Southern Cone countries: Brazil (36%), Uruguay (38%), Chile (25%), and Argentina (19%). The population often tends to show greater support for foreign investment in those sectors that are most competitive and play a leading role in their respective economies. This is the case for telecommunications in Costa Rica, for the automotive industry in Brazil, and the mining industry in Peru. However, this rule is not always true: in Argentina, which has low acceptance rates for foreign investment in four of the nine sectors, support for foreign capital in the agricultural industry is low despite this sector's importance in the country's economy.

#### Figure 19.

#### SECTOR-SPECIFIC OPINIONS OF FOREIGN CAPITAL

QUESTION: WHICH OF THE FOLLOWING INDUSTRIES DO YOU THINK BENEFIT FROM RECEIVING FOREIGN CAPITAL?

60%

45%

43%

40%

39%

39%

36%

36%

33%

33%

30%

30%

29%

29%

27%

26%

25%

25%

**CHEMICALS AND** 

MEDICINES

VENEZUELA

COSTA RICA

COLOMBIA

ECUADOR

PANAMA

EL SALVADOR

GUATEMALA

URUGUAY

#### AGRICULTURAL INDUSTRY

VENEZUELA

#### NICARAGUA 60% ECUADOR 58% COLOMBIA 55% 54% HONDURAS 54% EL SALVADOR 53% COSTA RICA DOMINICAN REP. 52% PANAMA 50% PARAGUAY 50% PERU 48% 43% BOLIVIA 42% GUATEMALA MEXICO 39% URUGUAY 38% BRAZIL 36% CHILE 25% 19% ARGENTINA

63%

## DOMINICAN REP. PARAGUAY NICARAGUA MEXICO CHILE BRAZIL PERU HONDURAS BOLIVIA ARGENTINA

**ENERGY AND** WATER SERVICES 45% DOMINICAN REP. 40% GUATEMALA 39% NICARAGUA 38% EL SALVADOR PANAMA 38% 37% VENEZUELA ECUADOR 35% 35% COSTA RICA 31% COLOMBIA 31% PARAGUAY 31% HONDURAS 30% MEXICO 27% URUGUAY 26% PERU 22% BRAZIL BOLIVIA 21% 17% ARGENTINA 15% CHII F

#### **AUTOMOTIVE INDUSTRY**

#### VENEZUELA 45% URUGUAY 41% ECUADOR 38% BRAZIL 37% COSTA RICA 36% CHILE 35% ARGENTINA 31% EL SALVADOR 30% PARAGUAY 30% MEXICO 28% COLOMBIA 27% DOMINICAN REP. 27% NICARAGUA 24% PANAMA 21% PERU 20% BOLIVIA 20% HONDURAS 19%

#### MINING

PERU

VENEZUELA

NICARAGUA

ECUADOR

URUGUAY

MEXICO

PANAMA

COLOMBIA

EL SALVADOR

COSTA RICA

GUATEMALA

PARAGUAY

ARGENTINA

BRAZIL

HONDURAS

BOLIVIA

CHILE

DOMINICAN REP.

## **ELECTRONICS INDUSTRY**

42%	COSTA RICA	39%
41%	VENEZUELA	32%
36%	DOMINICAN REP.	32%
35%	ECUADOR	31%
35%	EL SALVADOR	30%
33%	ARGENTINA	30%
31%	URUGUAY	29%
28%	NICARAGUA	29%
28%	CHILE	27%
27%	PANAMA	25%
26%	BRAZIL	25%
26%	COLOMBIA	21%
23%	HONDURAS	21%
22%	MEXICO	20%
21%	GUATEMALA	20%
20%	PARAGUAY	19%
18%	PERU	19%
13%	BOLIVIA	16%

17%

GUATEMALA

TELECOMMUNICA SERVICES	TIONS	ELECTRICAL APPL	IANCES	FINANCIAL SERVICES (BANKS)			
VENEZUELA	40%	VENEZUELA	42%	COSTA RICA	36%		
COSTA RICA	39%	COSTA RICA	30%	EL SALVADOR	33%		
URUGUAY	29%	ECUADOR	30%	URUGUAY	29%		
ECUADOR	29%	CHILE	29%	GUATEMALA	26%		
EL SALVADOR	28%	DOMINICAN REP.	27%	VENEZUELA	26%		
PARAGUAY	27%	EL SALVADOR	25%	NICARAGUA	26%		
COLOMBIA	26%	ARGENTINA	24%	ECUADOR	26%		
NICARAGUA	25%	COLOMBIA	24%	PANAMA	25%		
PANAMA	25%	NICARAGUA	24%	BRAZIL	24%		
MEXICO	23%	URUGUAY	24%	COLOMBIA	24%		
BRAZIL	23%	PANAMA	23%	HONDURAS	24%		
PERU	21%	MEXICO	23%	PARAGUAY	23%		
CHILE	21%	PARAGUAY	20%	PERU	23%		
GUATEMALA	20%	PERU	18%	CHILE	18%		
BOLIVIA	18%	BRAZIL	17%	MEXICO	17%		
ARGENTINA	18%	GUATEMALA	17%	DOMINICAN REP.	16%		
DOMINICAN REP.	17%	HONDURAS	16%	BOLIVIA	15%		
HONDURAS	17%	BOLIVIA	16%	ARGENTINA	13%		

Source: Compiled by the authors using data from Latinobarómetro 2016.

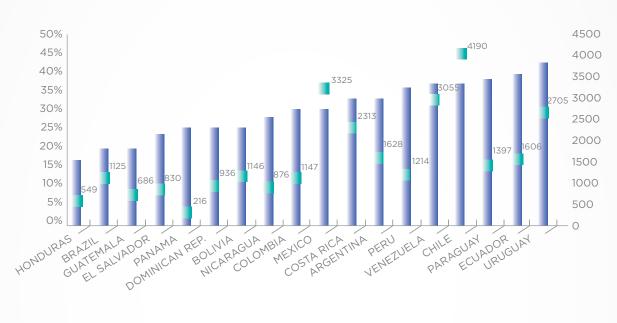
#### THE ECONOMIES THAT ARE MOST OPEN TO RECEIVING CAPITAL

Featuring in 32% of responses at the regional level, the promotion of domestic and foreign investment was one of the issues that respondents most connected with integration (after free trade, political dialogue, and the movement of people). Which economies rate investment promotion most highly? Ecuador, Uruguay, Paraguay, and Chile, where more than 35% of citizens made a connection between integration and the promotion of domestic and foreign investment.

Cross-referencing objective and subjective indicators reveals that these economies are also the ones with the highest levels of exports per inhabitant as there is an empirical correlation of 0.63 between mentions of investment promotion as a distinctive feature of integration and export capacity. Figure 20.

#### IMPORTANCE PLACED ON INVESTMENT PROMOTION AS A FEATURE OF INTEGRATION AND EXPORTS PER CAPITA

Question: Which of the following factors do you think play a part in integration in Latin America? Responses for investment promotion.

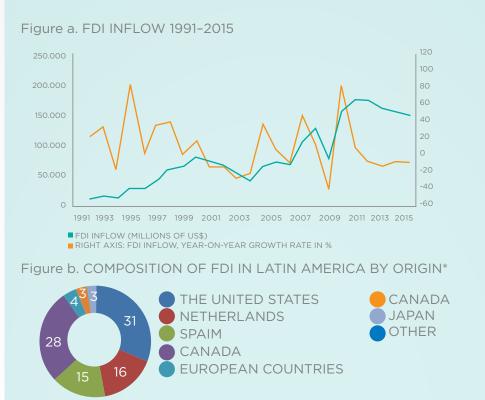


PERCENTAGE OF THE POPULATION THAT ASSOCIATES INTEGRATION IN LATIN AMERICA WITH THE PROMOTION OF NATIONAL AND FOREIGN INVESTMENT
 RIGHT AXIS: EXPORTS PER CAPITAL (THOUSANDS OF US\$)

Source: Compiled by the authors using data from Latinobarómetro 2016.

# FOREIGN DIRECT INVESTMENT IN LATIN AMERICA: EVOLUTION AND ORIGINS

In a context in which international investment flows grew by 36%, in 2015, Latin America and the Caribbean's attractiveness as recipients of FDI dropped by 9%, with total inflow reaching around US\$168 billion. This performance was the outcome of reduced investment in natural resource-related sectors, mainly mining anda hydrocarbons, and the downturn in the region's economic growth, particularly that of Brazil.



<sup>\*</sup> Note: calculation based on the total countries for which information was available in 2014, which accounts for 73% of FDI. Source: UNCTAD.

FDI inflows in Brazil dropped 23% in 2015 due to the country's economic recession, however, it is still the main recipient of FDI in the region and accounts for almost 40% of total investment (equivalent to US\$65 billion). In contrast, the region's second largest economy, Mexico, saw an 18% increase in FDI inflows, fundamentally in the automotive industry and the telecommunication sector. The slump in mineral prices affected FDI inflows in Chile and Colombia, which dropped by 8% and 26%, respectively, in 2015.

In Argentina, there was a notable increase (130%) in FDI due to the inclusion of flows related to the nationalization of the petroleum firm YPF in 2012. Leaving out this particular operation, the levels would be similar to those of 2014. In Central America, Panama continues to be the main recipient of FDI, accounting for over 40% of the subregion's inflows. Other major recipients are Costa Rica (26%), Honduras (10%), and Guatemala (10%). FDI in the Caribbean dropped by 17%.

Looking at inflows by sector, while FDI in natural resources became less significant, the importance of the service sector grew, fundamentally in telecommunications, renewable energies, and the retail trade. In Chile and Central America, increased investment in renewable energies is prompting a change in their energy mixes.

The United States continues to be the main source of investment in the region (around 30%); however, it plays a greater role in Mexico, Central America, and the Caribbean, where it accounts for more than half of all foreign investment. Other major sources of FDI include the Netherlands (16%)—although this is largely accounted for by multinational firms that are based there to take advantage of tax benefits—and Spain (15%).

The agricultural industry was the sector in which respondents indicated FDI to be most welcome. Is there greater support for FDI in economies that specialize in the production of primary goods? Indeed, economies where the share of agriculture is greatest are also those that consider foreign investment to be beneficial, with a positive correlation of 0.44. This is the case for Paraguay, where 87% of respondents said that FDI was beneficial and where the share of the agricultural and fishery sector is highest in the region, accounting for 21% of GDP.

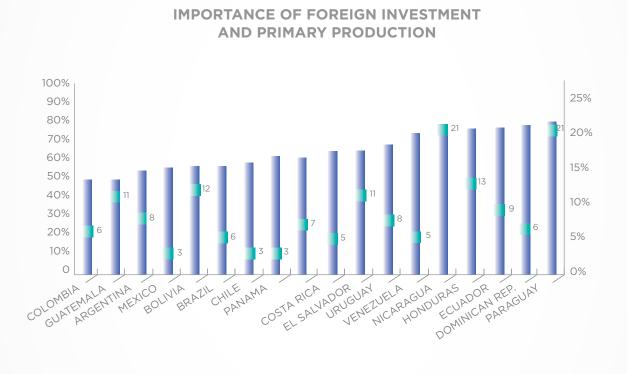


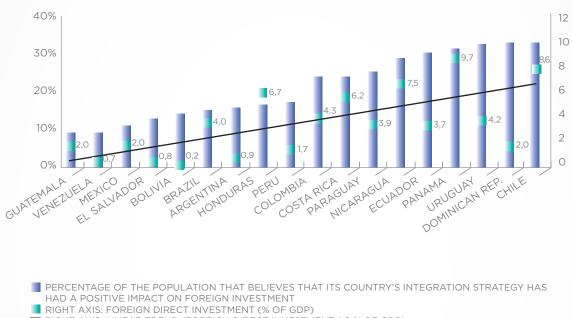
Figure 21.

PERCENTAGE OF THE POPULATION THAT BELIEVES THAT FOREIGN INVESTMENT IS BENEFICIAL FOR THEIR COUNTRY
 RIGHT AXIS: AGRICULTURE AND FISHERIES AS A PERCENTAGE OF GDP

Source: Compiled by the authors using data from Latinobarómetro 2016. <sup>21</sup>

Another way of identifying how the population perceives the effect of investments is by comparing actual foreign investments with perceptions of the impact of integration strategies on amounts of capital received. The correlation is also positive in this instance and stands at 0.64. The countries that most perceive the impact of integration on investment are also those attracted the greatest capital inflows. Figure 22.





RIGHT AXIS: LINEAR TREND (FOREIGN DIRECT INVESTMENT AS % OF GDP)

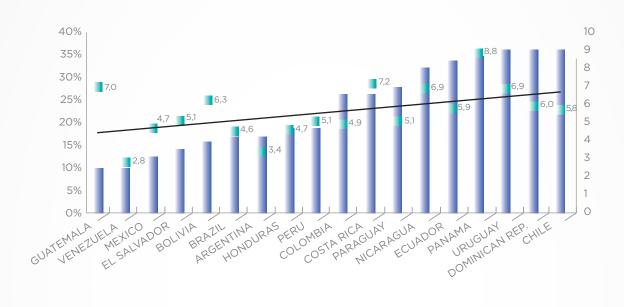
Source: Compiled by the authors using data from Latinobarómetro 2016

Two paradigmatic examples of this are Chile and Panama, the countries that received most foreign investment in relation to their GDP and where perceptions of the impact of integration on investment also outstripped the regional average. At the other extreme, the levels of perception of the impact of integration on foreign investment were lower in countries that received little foreign capital, such as Guatemala, Venezuela, Mexico, and El Salvador.

In line with these results, respondents in countries with fewer restrictions on capital flows and the movement of people believed that their country's integration strategy had a positive impact on investment, with a correlation of 0.54.

Figure 23.





 PERCENTAGE OF THE POPULATION THAT BELIEVES THAT ITS COUNTRY'S INTEGRATION STRATEGY HAS HAD A POSITIVE IMPACT ON FOREIGN INVESTMENT
 RIGHT AXIS: INDEX OF RESTRICTIONS ON THE MOVEMENT OF PEOPLE AND CAPITAL

RIGHT AXIS: LINEAR TREND (INDEX OF RESTRICTIONS ON THE MOVEMENT OF PEOPLE AND CAPITAL)

Source: Compiled by the authors using data from Latinobarómetro 2016.

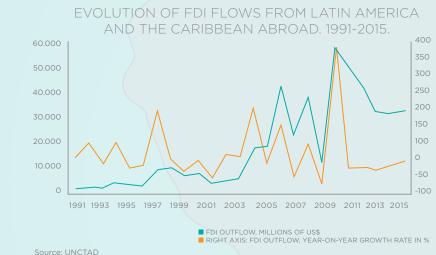
#### MULTILATINAS. LATIN AMERICAN COMPANIES THAT INVEST

The presence of Multilatinas within the global economy has grown considerably. Against the backdrop of globalization and structural reforms, many large firms that originated in Argentina, Brazil, Chile, and Mexico adopted more aggressive internationalization strategies during the 1990s. The new global context has increased the need for internationalization among firms in a growing number of sectors if they are to survive and expand. Investing abroad has also become inevitable if firms are to improve their competitive positions, as this process allows them to reach new markets and improve their technological, productive, and commercial knowledge.

The globalization of the Multilatinas continued to expand during the 2000s, when companies from Colombia and Peru gave new impetus to this trend. The process implied these firms developing new management capacities around production processes, technology, quality control, organization, and commercial and financial aspects.

However, after suffering the effects of the global financial crisis of 2008-2009 and managing to bounce back over the next two years, from 2012 onwards, flows of FDI began to slow due to the downturn in regional growth and changes to the international commodity markets in which most Multilatinas were operating.





Although problems in how these processes were recorded mean that official figures do not always reflect their true scale, they nonetheless shed some light on how these processes evolved. At the start of the 1990s, outgoing FDI from all of Latin America stood at a little over US\$1.3 billion. In 2010, this figure reached a record high of US\$57 billion. This upward trend was interrupted, and in 2015, the region invested around US\$33 billion abroad.

That same year, the slump in the prices of the commodities that many countries in the region exported deepened, and economic circumstances worsened, driving Latin American FDI abroad to its lowest levels since 2010. However, Latin American firms currently operate in every continent, and although they do most of their business within the region, they have made investments in Europe, North America, Asia, Africa, and Oceania.

Despite the promise of this progress, only a handful of Multilatinas are truly global players, which is due to both their limitations in terms of size and their as-yet insufficient accumulation of internal capacities through which to compete at the cutting edges of their respective industries. This is exacerbated by the absence of explicit policies to support such companies in the region, except in Brazil. Furthermore, very few Multilatinas operate in knowledge-intensive activities, which reflects the main pattern of productive specialization in the Latin America. Finally, the internationalization of Multilatinas does not always lead to spillovers and productive linkages within these companies' countries of origin, such as by developing supply chains. Looking to the future, this points to the need for an agenda to consolidate the global presence of these firms and improve their impacts on their respective countries.

Source: INTAL Interactive: The Global Driving Force / Up and Down / Emerging Funds / Exporting Multilatinas / Multilatinas in the Natural Resource Sector.n.

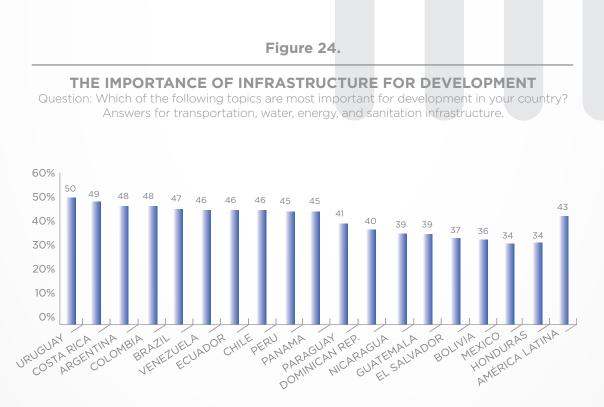
# INFRASTRUCTURE AND DEVELOPMENT

#### EFFICIENCY AND PRODUCTIVITY

The infrastructure gap is one of the largest obstacles preventing Latin America from increasing its productivity. The region invests just 3% of its GDP in areas that are fundamental for efficiency and external competitiveness, such as transportation, energy, and communications. This is half as much as OECD countries invest.<sup>22</sup>

Logistics costs represent 8% of the cost of a final product for a European SME, while in Latin America these could amount to 40% or more. Each additional day of delay for perishable products reduces exports by 7%.<sup>23</sup>

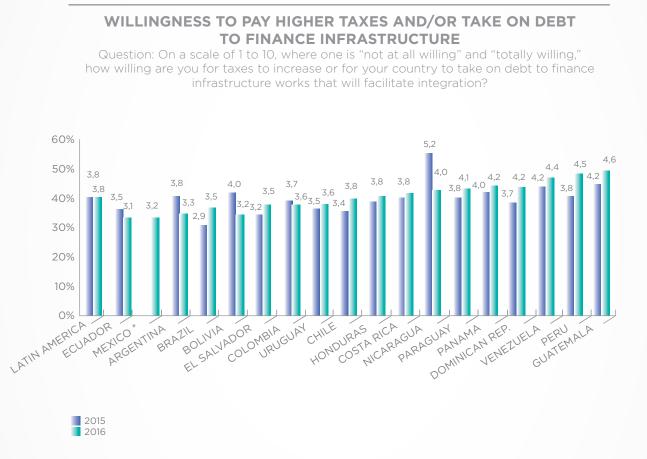
Are Latin Americans aware of the role that infrastructure plays in economic development? Some 43% of the population acknowledges it to be an important issue. This awareness is highest in Uruguay (50%), Costa Rica (49%), and Argentina (48%).



Source: Compiled by the authors using data from Latinobarómetro 2016.

Acknowledging the importance of a problem does not necessarily imply a willingness to take on the cost of tackling it. Willingness to pay to improve infrastructure in Latin America remains low, and the regional average of 3.8 points on a scale of 1 to 10 has not changed since 2015. With an average of 2.9, Brazil was the country that showed the least willingness to do so, while Nicaragua, with 5.2, was the most willing.

Figure 25.



Source: Compiled by the authors using data from Latinobarómetro 2016. \* Note: no data for Mexico 2015.

As we mentioned in INTAL (2016), limited willingness to pay for infrastructure does not imply that people do not acknowledge the importance of this for development. Other factors could also explain this lack of willingness, such as a deteriorating social situation or the belief that "someone else" (usually the state) should pay for infrastructure without this implying higher taxes in the present or the future.

# COSIPLAN-IIRSA. THE STATE OF INTEGRATION INFRASTRUCTURE

Highways, railroads, ports, and airports are the networks through which the more than 400 million people living in South America travel, do trade, and communicate within the region and abroad. Infrastructure has become a key tool for development, especially for regional integration and cooperation, one of the primary objectives of the South American Infrastructure and Planning Council (COSIPLAN), which the Institute for the Integration of Latin America and the Caribbean (INTAL) acts as the technical secretariat for.

The COSIPLAN Project Portfolio currently includes 593 transportation, energy, and communications projects throughout South America totaling an estimated investment of US\$182.44 billion.

Some 17% of the projects and 12% of the total estimated investment for the portfolio make up the Integration Priority Project Agenda (API). The API ranks infrastructure as the top territorial planning tool for South America. It is made up of 31 structured projects which break down into 103 individual projects. These seek to consolidate regional physical connectivity networks to leverage existing synergies and fill in gaps in existing infrastructure.

One selection criterion for a project to form part of the API is for the relevant government to establish it as a priority and commit to building it, which is why 31% of the total structured projects are at the implementation stage, 26% at the pre-implementation stage, 22% have been concluded, and only 21% are at the profiling stage.

Of the total individual projects, the majority are in the road, river, and rails subsector, proof that transportation works are top of the priorities list.



#### INFRASTRUCTURE FOR COMPETITIVENESS

Comparing willingness to pay for infrastructure with competitiveness ranking reveals a negative correlation of -0.35. In other words, the least competitive countries are the most willing to pay for improving competitiveness-related infrastructure. This result is significant as demand for more infrastructure is also greatest in these countries. Chile and Panama, where infrastructure is a fundamental part of the economy due to the openness of their markets, are exceptions to this rule, in that inhabitants are highly willing to pay for improvements even though they already have high-quality infrastructure. If these two countries are taken out of the equation, the negative correlation among the remaining 16 goes from -0.35 to -0.52.

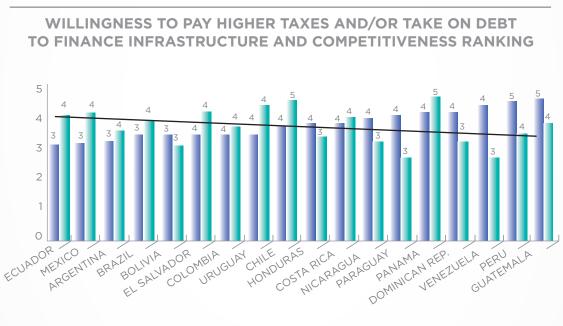


Figure 26.

 WILLINGNESS TO PAY HIGHER TAXES AND/OR TAKE ON DEBT TO FINANCE INFRASTRUCTURE THAT BENEFITS INTEGRATION (1-10)
 INFRASTRUCTURE COMPETITIVENESS RANKING (1-7)

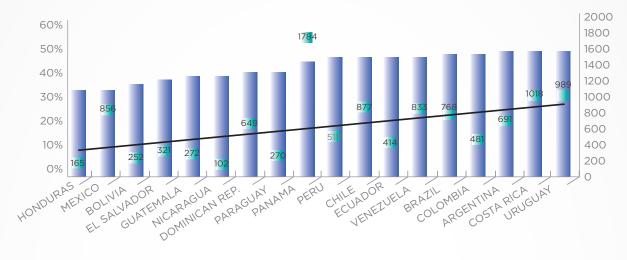
LINEAR TREND (INFRASTRUCTURE COMPETITIVENESS RANKING)

Source: Compiled by the authors using data from Latinobarómetro 2016.

In addition to improving external competitiveness, transportation and communications infrastructure is a major source of revenue for national economies. A comparison of the importance people place on infrastructure with the revenue this brings in per inhabitant reveals a positive correlation of 0.49.







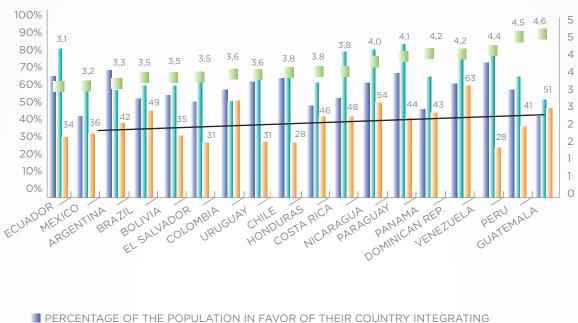
- PERCENTAGE OF THE POPULATION THAT BELIEVES THAT TRANSPORTATION, WATER, ENERGY, AND SANITATION INFRASTRUCTURE IS IMPORTANT FOR THEIR COUNTRY'S DEVELOPMENT
   RIGHT AXIS: REVENUE FROM TRANSPORTATION, WAREHOUSING, AND COMMUNICATION (US\$ PER CAPITA)
- LINEAR TREND (REVENUE FROM TRANSPORTATION, WAREHOUSING, AND COMMUNICATION)

Source: Compiled by the authors using data from Latinobarómetro 2016.

Countries that place greater importance on infrastructure also tend to receive higher revenues from the sector in question. This is the case in Uruguay, where 50% of the population said they acknowledge the importance of infrastructure for development and where the development sector reports receiving almost US\$1,000 per inhabitant. At the other extreme, Honduras is the country that places the least importance on infrastructure and is where development revenue per inhabitant is as low as US\$165. In other words, internal and external factors converged to determine the importance people place on infrastructure and their willingness to pay to improve this.

Comparing these opinions with national statistics from earlier chapters reveals that although there is a positive correlation how people rate integration and actual foreign investment (0.53), there is no clear relationship between these two factors and willingness to pay higher taxes or take on debt to finance infrastructure. This may be due to the fact that infrastructure is still partly perceived as being connected to domestic markets, and willingness to finance it through taxes credit depends on other factors, such as optimism around the respondent's own economic situation in the future, for which there is a positive correlation of 0.28 that would go up to 0.44 if Venezuela was taken out of the equation (Venezuela functions as an outlier here because despite respondents' considerable willingness to finance infrastructure, the country's residents express the least optimism in the region, along with Chile). Figure 28.

#### IMPORTANCE PLACED ON INTEGRATION, FDI, OPTIMISM REGARDING PERSONAL FINANCIAL CIRCUMSTANCES, AND WILLINGNESS TO FINANCE INFRASTRUCTURE



- PERCENTAGE OF THE POPULATION IN FAVOR OF THEIR COUNTRY INTEGRATING ECONOMICALLY WITH OTHER COUNTRIES IN THE REGION
- PERCENTAGE OF THE POPULATION THAT BELIEVES THAT FOREIGN INVESTMENT IS BENEFICIAL FOR THEIR COUNTRY
- OPTIMISM REGARDING PERSONAL FINANCIAL CIRCUMSTANCES IN THE NEXT 12 MONTHS
   RIGHT AXIS: WILLINGNESS TO PAY HIGHER TAXES AND/OR TAKE ON DEBT TO FINANCE INFRASTRUCTURE THAT BENEFITS INTEGRATION (1-10)
- LINEAR TREND (OPTIMISM REGARDING PERSONAL FINANCIAL CIRCUMSTANCES IN THE NEXT 12 MONTHS)

Source: Compiled by the authors using data from Latinobarómetro 2016.

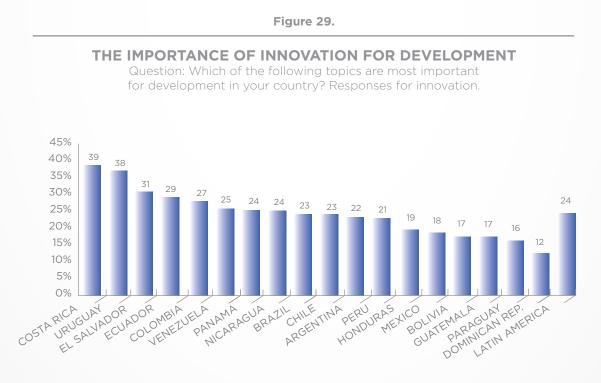
# INNOVATION AND NEW TECHNOLOGIES

#### **INDUSTRY 4.0**

Scientific and technical progress is changing the way we produce goods and services and do trade, along with the mechanisms for integration between people and countries.<sup>24</sup>The boundary between goods and services is being blurred by the expansion of the digital economy, in which creativity is the main driver for growth.<sup>25</sup>

The globalization of large transnational companies is giving way to a new global market in which exponential technologies are playing an increasingly important role and where garage entrepreneurs have started to impact the world of economics in highly varied areas, such as trade, information and communication technologies, digital manufacturing, the bioeconomy, big data applications, or nanotechnology, thanks to their imaginations and online sales platforms.<sup>26</sup> Are we prepared for a future that is already upon us?

Some 24% of Latin Americans believe that infrastructure is important for development. These rates climbed to 39% in Costa Rica, 38% in Uruguay, and 31% in El Salvador, while they dropped to 12% in the Dominican Republic, 16% in Paraguay, and 17% in Bolivia.



Source: Compiled by the authors using data from Latinobarómetro 2016.

Although Latin Americans believe that other issues are more of a priority for economic development than innovation, they place particular importance on encouraging creativity among children, putting forward new ideas in the workplace, and innovating for success. These are areas where innovation plays a key role: in educating future generations to stimulate creativity, in their personal and professional daily lives, and as a public policy at the national level. On a scale of 1 to 10, encouraging creativity among children received the highest score of all three options, with an average 9.4 points in the region as a

whole. Following close behind was innovating for success, with an average 9.2 points, while putting forward new ideas in the workplace garnered 9.1. In most countries, encouraging creativity among children outranked the other forms of innovation except in the Dominican Republic, Honduras, and Nicaragua.

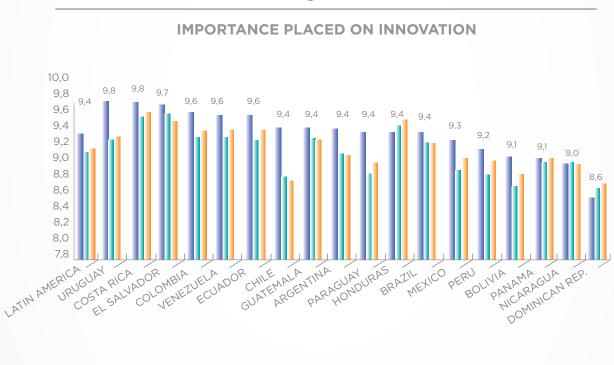


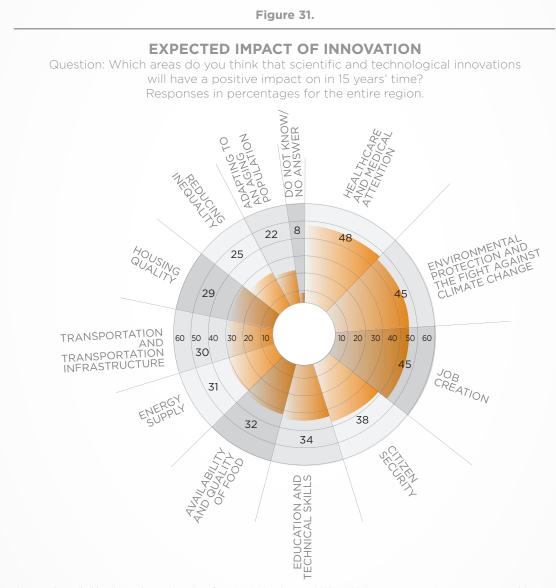
Figure 30.

Source: Compiled by the authors using data from Latinobarómetro 2016.

ENCOURAGING CREATIVITY AMONG CHILDREN
 INNOVATING FOR SUCCESS IN THE COUNTRY
 PUTTING FORWARD NEW IDEAS IN THE WORKPLACE

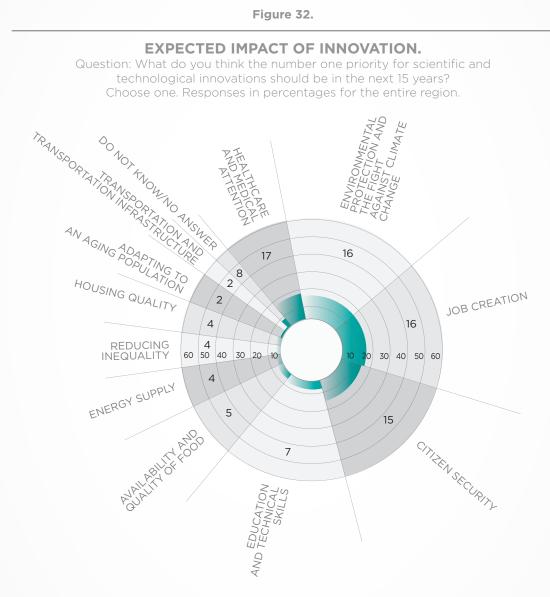
#### EXPECTATIONS REGARDING INNOVATION

What do Latin Americans expect from new technologies? First, they expect them to have a positive impact on healthcare, which 48% of respondents said would be positively affected over the next 15 years. This was followed by climate change and job creation, both with 45% of mentions.



Source: Compiled by the authors using data from Latinobarómetro 2016. Multiple answer question: percentages add up to more than 100.

What should applications of new techniques and scientific knowledge prioritize? Responses are consistent: at the top of the list, once again, are healthcare (17%) and climate change (16%). Transportation and transportation infrastructure did not feature as priorities—only 2% mentioned the latter option.



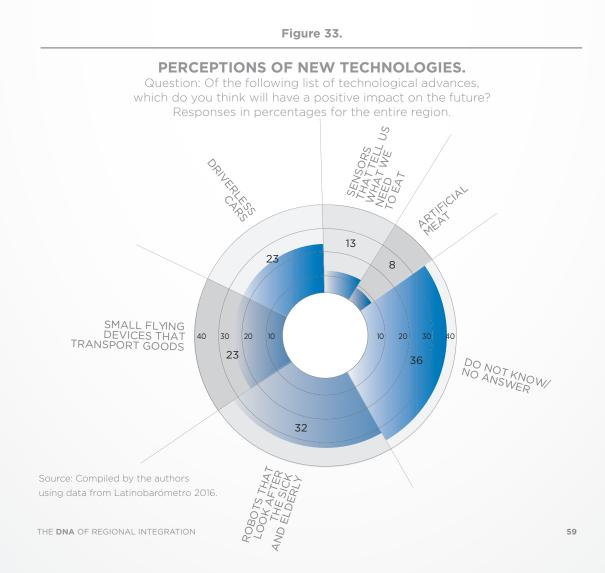
Source: Compiled by the authors using data from Latinobarómetro 2016.

#### A WINDOW ON THE FUTURE

cientific breakthroughs that seemed like something out of sci-fi films until recently, such as drones, robots, or driverless cars, are about to become commonplace, enabling countries to make exponential leaps in productivity. What do Latin Americans think of these cutting-edge advances?

When asked about robots, drones, self-driving cars, body sensors, and artificial meat, a high proportion of Latin Americans (36%) opted not to answer the question. The most highly rated option was robots to look after children and old people, which received 32% of positive mentions, in keeping with Latin Americans' overriding concern for social issues. Applications of technology to improve social issues seem to be much better received than technology for production or transportation.

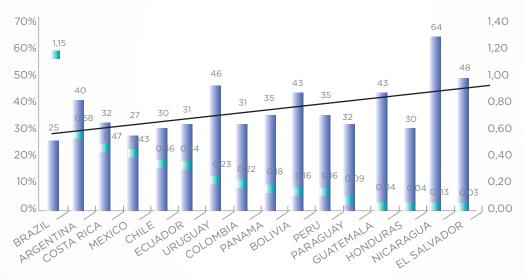
Artificial or lab-grown meat (which is still only a fledgling innovation) represents competition for livestock production in the region and received only 8% of mentions. Nor was cutting-edge food technology particularly well received, with only 13% of mentions. These low percentages may be due to a lack of knowledge or fear of the changes these technological advances could bring about in Latin Americans' lives. Drones to transport merchandise and driverless cars were viewed in a better light, with 23% of positive mentions.



No other question on the survey prompted such a high proportion of responses indicating that respondents did not know or preferred not to answer the question—indeed, this response outranked the most frequently chosen option, robots. Might this result be linked to fears around new technologies or a lack of knowledge of them? It is impossible to know for sure but it is interesting to note that countries that pursue innovation by assigning research and development resources to it are also those where fewer people refused to give opinions of new technologies, with a negative correlation of -0.48 between the two variables.



Figure 34.



SHARE OF RESPONDENTS WHO SAID THEY DID NOT KNOW OR CHOSE NOT TO ANSWER QUESTIONS ON CUTTING-EDGE TECHNOLOGY

RIGHT AXIS: EXPENDITURE ON RESEARCH AND DEVELOPMENT (AS A% OF GDP)

LINEAR TREND (SHARE OF RESPONDENTS WHO SAID THEY DID NOT KNOW OR CHOSE NOT TO ANSWER QUESTIONS ON CUTTING-EDGE TECHNOLOGY)

Source: Compiled by the authors using data from Latinobarómetro 2016. Note: When this report went to press, there was no data on R&D for Venezuela and the Dominican Republic, for which the share of respondents who said that they did not know or chose not to answer questions on technology was 33% and 18%, respectively.

#### AN INTERCONNECTED ECONOMY

The internet has made enormous changes to the way we communicate. The expansion of knowledge through the web has opened up countless opportunities for cultural and commercial exchange. Today, there are more than 18 billion online devices, and this interconnectivity underpins trade in goods and services based on new information and communication technologies (ICTs).<sup>27</sup>

We wondered if there was a relationship between how people rated creativity in children's education, the most frequently chosen of the three innovation options, and internet access. The positive correlation of 0.43 between these two factors suggest that people value innovation more highly as their access to new technologies and knowledge increases. This is true for Uruguay, which has the highest number of broadband internet subscribers in the region and which is also the country that places the most importance on encouraging creativity early in life. At the other end of the spectrum are countries like Nicaragua or Bolivia, which have low rates of internet use and place less value on creativity among children. Facilitating internet access through technological democratization programs could thus contribute to raising awareness in society around the importance of innovation.

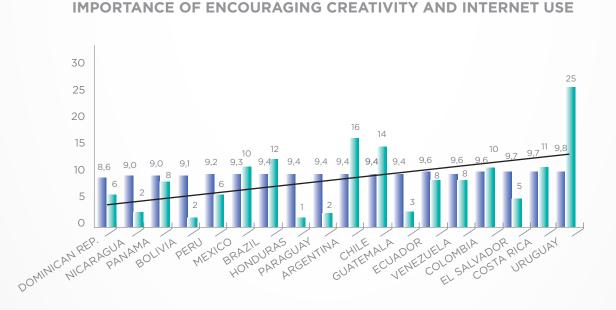


Figure 35.

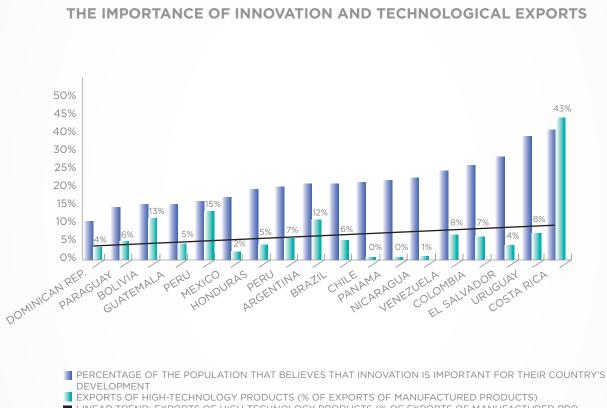
IMPORTANCE OF ENCOURAGING CREATIVITY AMONG CHILDREN (AGED 1 TO 10)
 FIXED BROADBAND INTERNET SUBSCRIBERS (PER HUNDRED PEOPLE)
 LINEAR TREND (FIXED BROADBAND INTERNET SUBSCRIBERS PER HUNDRED PEOPLE)

Source: Compiled by the authors using data from Latinobarómetro 2016.

#### EXPORTS WITH TECHNOLOGY CONTENT

The above point is particularly relevant in relation to trade, as it is the countries that show the most support for innovation that make exports with greater technology content. The correlation between the two variables is positive and stands at 0.46. If this cross-referencing only includes the countries in the region that make above-average numbers of exports with technology content, the correlation increases to 0.74

Figure 36.



EXPORTS OF HIGH-TECHNOLOGY PRODUCTS (% OF EXPORTS OF MANUFACTURED PRODUCTS)
 LINEAR TREND: EXPORTS OF HIGH-TECHNOLOGY PRODUCTS (% OF EXPORTS OF MANUFACTURED PRODUCTS)

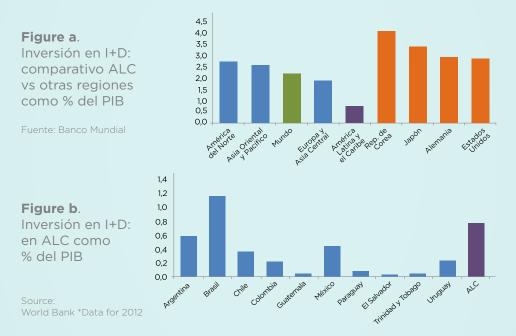
Source: Compiled by the authors using data from Latinobarómetro 2016.

Costa Rica is paradigmatic of this, as it shows the region's highest levels support for innovation as a driver for development, with 39% of responses, and it is also the country with the highest share of technology exports, which account for 43% of its total foreign sales.

# **INVESTMENT IN R&D IN LATIN AMERICA**

Investment in research and development (R&D) in relation to GDP indicates the share of income that each society spends on innovation, science, and technology policies. At the global level, investment in R&D stands at 2.1% of GDP. However, these levels vary greatly from one region to another. North America and East Asia and the Pacific spend more than this average (2.7% and 2.6% of GDP, respectively), while Europe and Central Asia spend around 2% of GDP. In contrast, in Latin America and the Caribbean, this figure is just 0.8%.

Some of the countries that spend the most in this sense are Japan, the Republic of Korea, Germany, and the United States, all of which invest more in R&D than the global average.



Although levels of investment are low compared to other regions, in Latin America and the Caribbean, FDI has played a key role in supporting countries' international integration patterns through investment in natural resources, exports, and modern services. However, the impact of investment on technology content, innovation, and R&D has been moderate and not widespread.

The country in Latin America that invests most in R&D in relation to its GDP is Brazil, with 1.2%, although this is still much less than spending in more advanced economies. Next on the list are Argentina (0.6%), Mexico (0.4%), and Chile (0.4%).

Latin America must not be left behind. The major world powers are pursuing R&D as a driver for development. Indeed, in 2020, China hopes to outstrip OECD countries' spending on R&D by investing 2.5% of its GDP in this (see "Made in CHI-LAT," issue no. 40 of INTAL's Integration & Trade Journal).

# NATION BRANDING. WHAT DO WE THINK OF OURSELVES?

#### THE ADVANTAGES OF A GOOD REPUTATION

In recent years, there has been a proliferation of state agencies whose aim is to establish a nation brand and win market shares for specific products by building their reputation. This is how different countries in Latin America have become world famous as producers of wine, tobacco, or beef, or hubs for tourism, food, medical services, or clothing design. Building a reputation in a given market is one of the keys to placing Latin American products in the rest of the world. Customers and suppliers getting to know one another is the starting point on the road to new business opportunities, and nation branding is a competitive advantage within this process.<sup>28</sup>

What makes Latin America special? For 57% of Latin Americans, the main feature that defines their country is its national sport. This is followed by scenic beauty and tourism (53%), food and drink (38%), carnivals, festivals, and religious festivities (31%), violence and drug trafficking (31%), human capital (22%), being a supplier of raw materials (18%), creativity (14%), and openness to the world (12%).

<b>NATION BRANDING</b> Question: Which of the following features do you think your country is well known for? (In %)												
QUESTION	STROOP	TOURISM	FOOD CULTURE	FESTIVALS	VIOLENCE	HUMAN CAPITAL	RAW MATERIALS	NOITENONN	OPENNESS TO THE OUTSIDE WORLD	DO NOT KNOW/ NO ANSWER	OTHER	0)
	$\bigcirc$			60	F					6		
LATIN AMERICA	57	53	38	31	31	22	18	14	12	4	2	
ARGENTINA	80	41	33	10	18	20	26	11	6	3	2	
BOLIVIA	18	52	35	57	28	9	20	6	6	7	3	
BRASIL	<b>0</b> 84	31	22	61	46	12	13	8	6	4	1	
COLOMBIA	79	54	36	48	60	27	20	17	12	1	3	
CHILE	65	60	31	11	13	18	27	9	13	6	3	
ECUADOR	62	75	40	32	15	24	21	18	16	1	2	

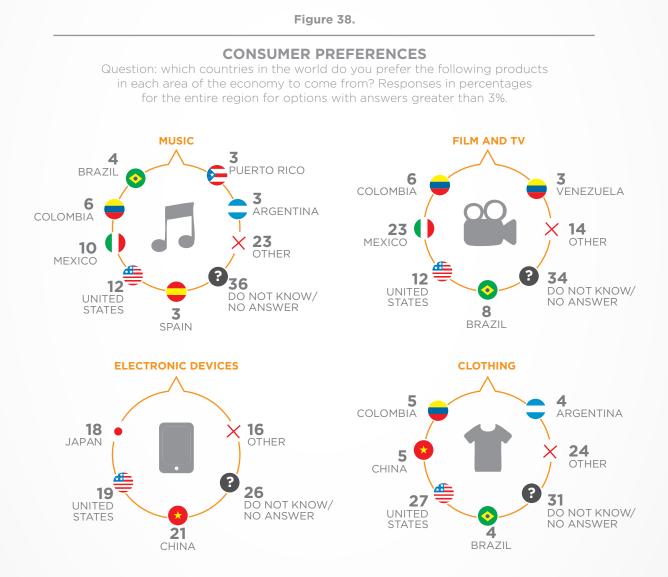
Figure 37.

		SPORTS			FESTIVALS	VIOLENCE	HUMAN CAPITAL	RAW MATERIALS	INNOVATION	OPENNESS TO THE OUTSIDE WORLD	DO NOT KNOW/ NO ANSWER	OTHER
MEXICO	$(\cdot)$	53	47	57	32	51	20	13	13	12	3	4
PARAGUAY		55	34	35	16	27	26	15	11	10	6	4
PERU	0	24	63	79	28	26	14	19	14	10	5	2
URUGUAY	*	93	57	23	41	7	28	23	10	16	0	1
VENEZUELA	****	59	42	38	18	37	25	18	13	12	2	2
COSTA RICA		67	79	33	22	24	41	19	23	20	2	1
EL SALVADOR		28	36	35	31	57	26	16	19	14	7	1
GUATEMALA		39	58	37	35	34	18	13	13	9	10	1
HONDURAS	:•:	46	36	24	17	52	16	12	10	10	6	0
NICARAGUA	•	51	59	42	27	8	25	18	20	19	9	1
PANAMA		48	62	33	42	19	20	12	17	16	4	2
DOMINICAN REPUBLIC	<b>+</b>	74	62	52	29	33	35	15	21	11	1	0
					8	F					6	

As was to be expected, the main feature chosen for each country varied throughout the region. In Central America, tourism proved to be more important than sports. In Bolivia, carnivals stood out, with 56% of mentions; raw materials received more mentions in Chile than any other country in the region, with 27% of mentions; while Peruvians chose food and cuisine as their nation brand, with 75% of mentions. This diversity reflects the variety and richness of our region and each country's productive or cultural specialization.

#### WHERE DO WE LIKE TO GO SHOPPING?

Do we see our countries the way that others see them? The United States is undoubtedly Latin Americans' favorite supplier of consumer goods and experiences, topping the list for five of the seven areas included in the questions and ranking second and third for the other two. Latin Americans rate Peru and Mexico highly for their food culture, just as their own citizens do. The same is true for Brazil and sports.





# HOW THE REST OF THE WORLD SEES LATIN AMERICA

The Country Brand Index (CBI), which has been published since 2005 by the consulting firm FutureBrand, measures people's perceptions of nation branding through the associations that frequent visitors from other parts of the world make in relation to a country's products, tourism, heritage and culture, quality of life, business climate, and value system.

The 2015/2016 report for LAC ranked Brazil, Argentina, Mexico, Chile, and Peru highest in the region. The more than 2,000 people who were surveyed were also asked to say what each of them associated with the countries in the region. For example, the words that came up in relation to Argentina were Buenos Aires, soccer, Messi, nature, Iguazú Falls, beauty, tango, cuisine, culture, and beef. In Brazil, the most common words were the Amazon, Pelé, Lula, and carnival.

The countries that moved most up the list in comparison with the last survey include Mexico and Paraguay. One of the distinguishing features of nation branding is its comprehensiveness. Nation branding includes a range of subproducts related to tourism, culture, industry, and politics. A nation brand that depends exclusively on how a single sector of the economy is seen points to the need to expand on that image to minimize risk and vulnerability.

#### A REFLECTION OF REALITY

The main features of a country's economy are not just something that is perceived by its own citizens and people from other countries. They also correlate with a concrete, objective dimension. These sorts of links are essential when a country seeks to improve its market reputation or establish itself as a supplier in strategic sectors for its development. Indicators of public perception and national statistics need to be closely monitored to identify whether improvements to them translate into changes in public perception both within the country and abroad. This is valid as a strategy both for highlighting the positive aspects of the country and attempting to modify perceptions of any negative aspects.

One example of this type of relationship is revenue from tourism, which is higher in countries where there is a strong sense that tourism is the defining feature of their nation brand. The correlation between these two variables is positive and stands at 0.35. This is true for Panama, the Dominican Republic, and Costa Rica, which are part of the group of countries where the majority of the population believes that tourism is their nation brand and which also receive a major percentage of their revenue from this sector.

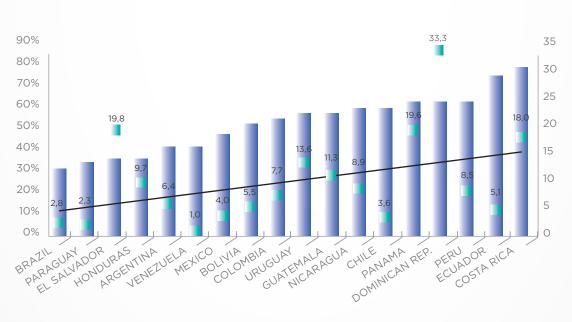


Figure 39.



PERCENTAGE OF THE POPULATION THAT SEES TOURISM AS THEIR COUNTRY'S NATION BRAND
 REVENUE FROM INTERNATIONAL TOURISM (% OF TOTAL EXPORTS)

RIGHT AXIS: LINEAR TREND (REVENUE FROM INTERNATIONAL TOURISM AS A % OF TOTAL EXPORTS

Source: Compiled by the authors using data from Latinobarómetro 2016.

Regarding a country's negative features, public perceptions also align with the reality reflected in national statistics. This is true for public opinion on violence as a distinguishing feature, which has a positive correlation of 0.67 with the homicide rate per 100,000 inhabitants. Colombia, El Salvador, and Honduras are among the countries in the region with the highest homicide rates and are also places where citizens point to violence as being one of the country's distinguishing features.

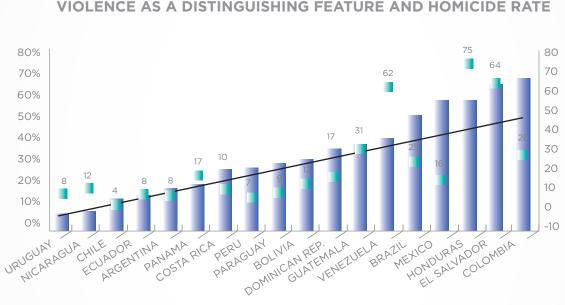


Figure 40.

VIOLENCE AS A DISTINGUISHING FEATURE AND HOMICIDE RATE

PERCENTAGE OF THE POPULATION THAT BELIEVES VIOLENCE AND/OR DRUG TRAFFICKING TO BE A DISTIN-GUISHING FEATURE FOR THEIR COUNTRY

RIGHT AXIS: HOMICIDE RATE PER 100,000 INHABITANTS

RIGHT AXIS: LINEAR TREND (HOMICIDE RATE PER 100,000 INHABITANTS)

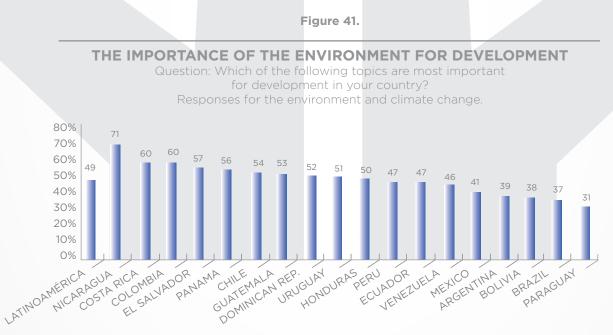
Source: Compiled by the authors using data from Latinobarómetro 2016.

# CLIMATE CHANGE AND ENVIRONMENTAL AWARENESS

# WILLINGNESS TO PROTECT THE ENVIRONMENT

The challenge of protecting the environment cuts through different public policy areas, from production techniques to recycling, and from energy production to logistics and transportation. Technology transfer is also fundamental to bringing production techniques in line with new standards. Growing awareness of environmental issues and workers' rights among consumers within value chains is giving rise to an expanding market for sustainable products and services. It is estimated that the global market for environmental products and services has reached the US\$866 billion mark and will increase to US\$1.9 trillion in 2020.<sup>29</sup>

Are Latin Americans willing to protect the environment? Care for the environment received 49% of mentions among the key development topics included in the survey, second only to social policies and inclusion. Looking at these answers by country, Nicaragua is by far the country that ranks the environment highest on its list of priorities, with 71% of positive mentions, followed by Costa Rica and Colombia (both with 60%) and El Salvador (57%). Paraguay, at the other end of the spectrum, was the country that placed least important on environmental matters, where they received only 31% of mentions. Next were Brazil (37%) and Bolivia (38%).



#### Source: Compiled by the authors using data from Latinobarómetro 2016.

It is worth noting that a low percentage of mentions of the importance of care for the environment does not necessarily imply a lack of interest in the issue. It may be the case that citizens simply believe there are other more pressing issues that need to be focused on first. This may explain why Paraguay moved up the ranking from last place to first when respondents were asked about their willingness to pay to protect the environment. Some 72% of Paraguayans said they would be willing to pay up to 20% more for sustainable products. This share is much higher than the regional average of 49% and far outstrips Paraguay's 2015 results, which stood at 45%. Second and third in this ranking were Nicaragua (65%) and Venezuela (62%).



Source: Compiled by the authors using data from Latinobarómetro 2016.

#### SUPPORT FOR RENEWABLE ENERGY

How important is environmental awareness? What distinguishes the energy mix in countries where there is greater concern for the environment? A comparison of how important people say the environment is with indicators on the use of clean energy reveals a trend toward new forms of energy production playing a greater role in countries where levels of concern for the environment are higher.

This is true for Nicaragua, Costa Rica, and El Salvador, which are part of a group of countries which produce relatively larger quantities of energy from alternative sources and where people rank care for the environment high among their concerns. Both variables show a positive correlation of 0.52.

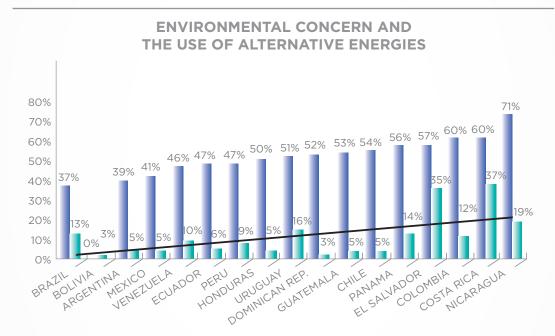


Figure 43.

PERCENTAGE OF THE POPULATION THAT BELIEVES THE ENVIRONMENT AND CLIMATE CHANGE TO BE IM-PORTANT FOR DEVELOPMENT

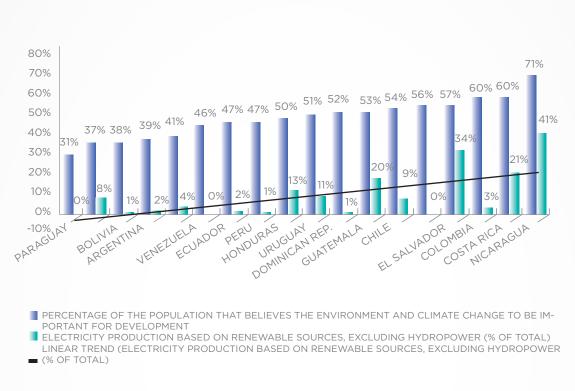
USE OF ALTERNATIVE AND NUCLEAR ENERGY (% OF TOTAL ENERGY USE)

LINEAR TREND (USE OF ALTERNATIVE AND NUCLEAR ENERGY AS A % OF TOTAL ENERGY USE)

Source: Compiled by the authors using data from Latinobarómetro 2016. \* Note: No data was available for Paraguay at the time of print.

This correlation increases to 0.66 if the exclusive use of electricity produced from renewable energy sources is taken into account. Once again, the countries of Central America are part of the group that makes greatest use of this, while Paraguay, Brazil, and Bolivia, which make limited use of renewable energy, place less importance on the environment for development.

Figure 44.	
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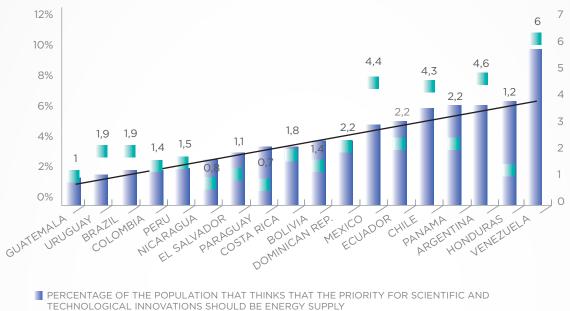
### ENVIRONMENTAL CONCERN AND ELECTRICITY PRODUCTION FROM RENEWABLE SOURCES

Source: Compiled by the authors using data from Latinobarómetro 2016.

Renewable energy is more associated with technological innovation than any other sector. From electric driverless cars to low-cost solar energy panels and wind turbines, innovation is a fundamental part of any change to a country's energy mix. There was a correlation of 0.74 between the numbers of respondents who agreed that science policies should focus on energy and each country's carbon dioxide emissions per inhabitant. Venezuela tops the list for both these aspects, followed by Honduras and Argentina.<sup>30</sup> In Guatemala, Uruguay, and Brazil, however, respondents did not prioritize energy-related innovation so much, although these are some of the countries that pollute the least.



#### **ENERGY-RELATED INNOVATION AND POLLUTION PRIORITIES**



RIGHT AXIS: CO2 EMISSIONS PER CAPITA (TONS PER INHABITANT)

RIGHT AXIS: LINEAR TREND (CO2 EMISSIONS PER CAPITA, TONS PER INHABITANT)

Source: Compiled by the authors using data from Latinobarómetro 2016.<sup>31</sup>

# SUSTAINABLE DEVELOPMENT

The main features of sustainable development are as follows: 1) greater efficiency in the use of natural resources and thus greater care for the environment; 2) the emergence of coproduction models, especially in the software industry, based on collaborative mechanisms and facilitated by lower access costs for ICTs; 3) the emergence of hitherto unimagined new markets for goods and services on the basis of greater and better connectivity between sources of supply and demand, which are framed within the sharing economy; 4) overcoming different market failures; 5) greater citizen involvement in government decisions; etc.

The regressive impact these technologies may have on labor markets and income distribution is one of the greatest challenges of our time. Low-skilled and low-paid jobs are at great risk of being replaced by robots or artificial intelligence. This risk is somewhat counterbalanced by the increase in productivity resulting from automation, which offers new opportunities in highly skilled sectors of the labor market where salaries are highest. It will thus be necessary to monitor and respond to the potential difficulties that may hamper the transfer of resources from one sector to another.

Source: INTAL Interactive Do It Yourself / Open Source / Technofarming / Eco-Factories / Replaced by Robots / Driving toward the Future

## ENVIRONMENTAL ASPECTS WITHIN LATIN AMERICAN COUNTRIES' TRADE AGREEMENTS

According to the Legal Instruments of Integration (IJI) database, there are currently more than 250 multilateral environmental agreements (MEAs) in force, approximately 20 of which include provisions that could affect trade. This has led to a growing need to regulate the relationship between the environment and trade in both the multilateral and regional agendas. In fact, the protection and preservation of the environment were included in the Marrakesh Agreement, which established the World Trade Organization (WTO), and they are increasingly included in economic integration agreements: of the total 282 agreements recorded to date at the WTO, 72 (that is, 25%) include provisions on the environment.

Latin America is no exception to this rule. Of a total of 109 economic integration agreements recorded in the IJI database, 39 include environmental regulations of some sort. This group of agreements includes three main categories: (a) agreements that include a clause, chapter, or annex protocol with a detailed description of environmental obligations (20 agreements); (b) agreements that only include references to environmental cooperation commitments (six agreements); and (c) agreements that make a brief reference to parties committing to not reducing their respective environmental standards to attract investment (13 agreements).

In general terms, agreements in the first category above are based on the NAFTA model (and on more recent developments of this model used by the United States and Canada in their respective agreements with other countries) and include some or all of the following obligations:

• Level of protection: the obligation to anticipate "high levels" of environmental protection and to continue increasing these progressively. The obligation to comply with the commitments adopted by parties in MEAs.

• Transparency: a commitment to publishing all environmental regulations the parties may adopt.

• Antiprotectionism: the obligation to not use environmental measures for protectionist ends.

• Not lowering standards: a commitment to not lower environmental standards to attract trade or investment.

• Implementation: the obligation to adopt measures to ensure effective compliance with environmental standards.

• Legal resources: access to administrative and legal resources to assert environmental rights.

• Institutionalization: the creation of mixed committees or focal points to follow up on the obligations set out in the agreement.

• Dispute settlement mechanism.

Chile, Peru, and Colombia stand out among countries in the region that have signed trade agreements of this type. The vast majority of these agreements are with developed countries outside the region (particularly with the United States and Canada).

The agreements containing commitments on environmental cooperation include those that only mention the issue tangentially within clauses or chapters on cooperation in a broader sense (for example, article 18 of the Australia/Chile Free Trade Agreement) and those that contain a clause or section that specifically focuses on cooperation toward protecting the environment (for example, the EU/Mexico Agreement). The latter set includes joint activities in areas such as exchanges of information and experiences relating to environmental legislation; training human resources; environmental education; and implementation of joint research projects, among others.

Finally, it is worth underlining that only one of the 43 agreements signed within the ALADI framework and recorded in the IJI database—Economic Complementarity Agreements (ECAs) and Agreements with Other Latin American Countries (AAP.25TM)—includes environmental provisions, the agreement between Ecuador and Guatemala.

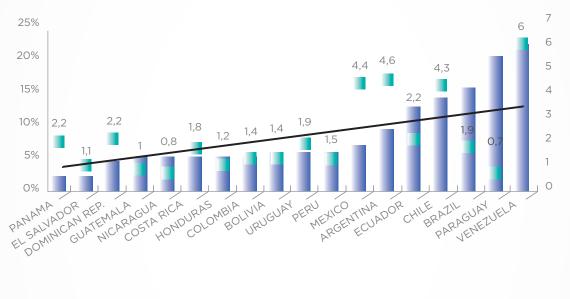
Sources: Legal Instruments of Integration (IJI) database, available at INTRADEBID.

#### Figure 46.

#### STRONG AGREEMENT WITH PAYING MORE FOR SUSTAINABLE PRODUCTS AND POLLUTING

#### POLLUTION AND CARBON FOOTPRINTS

In relation to willingness to pay more for environmentally friendly products, we wondered if there was also a relationship with environmental pollution. The correlation between  $CO_2$  emissions and the percentage of people who claim to "strongly agree" with paying more for environmentally friendly products stands at 0.46%, a figure which goes up to 0.70% if Paraguay, the main outlier, is not taken into account.



PERCENTAGE OF THE POPULATION THAT THINKS THAT SCIENTIFIC AND TECHNOLOGICAL INNOVATIONS

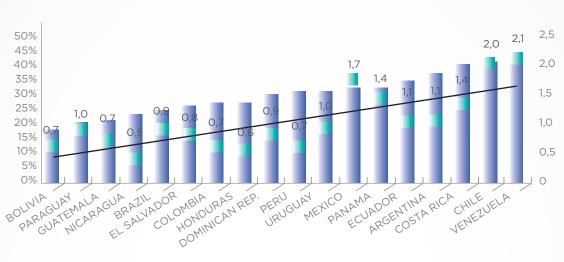
Source: Compiled by the authors using data from Latinobarómetro 2016.

Another measure of environmental damage, carbon footprints, estimates the amount of greenhouse gases that a country emits and their impact on climate change due to pollution from manufacturing activities or transportation. A comparison between countries with the largest carbon footprints and the importance people place on energy-related innovation reveals a correlation of 0.78. In other words, countries where production and manufacturing lead to a larger carbon footprint are also those that are demanding answers and where energy is an innovation priority.

WILL HAVE A POSITIVE INFLUENCE ON ENERGY SUPPLY RIGHT AXIS: CARBON FOOTPRINT (HECTARES PER PERSON)

RIGHT AXIS: CARBON FOOTPRINT (RECTARES PER PERSON)
 RIGHT AXIS: LINEAR TREND (CARBON FOOTPRINT, HECTARES PER PERSON)





### IMPORTANCE OF ENERGY-RELATED INNOVATION AND CARBON FOOTPRINTS

PERCENTAGE OF THE POPULATION THAT THINKS THAT SCIENTIFIC AND TECHNOLOGICAL INNOVATIONS WILL HAVE A POSITIVE INFLUENCE ON ENERGY SUPPLY

RIGHT AXIS: CARBON FOOTPRINT (HECTARES PER PERSON)

- RIGHT AXIS: LINEAR TREND (CARBON FOOTPRINT, HECTARES PER PERSON)

Source: Compiled by the authors using data from Latinobarómetro 2016.

# **GREEN TECHNOLOGY**

Our ways of thinking about civil society in relation to care for the environment are evolving as we move from a Fordist production model characterized by mass production based on cheap energy and materials toward a new paradigm based on exponential technologies. The old dilemma of having to choose between growth and social wellbeing has collapsed. As economies grow, civil societies gradually demand that greater care is taken of environmental resources. Economic development is understood as going hand-in-hand with improvements to social wellbeing and thus necessarily entails greater environmental protection on the part of all economic agents. The productive specializations of Latin American countries are largely based on the exploitation of their natural resources, so they will need to redouble their efforts to reduce the environmental costs of economic growth.

Markets are already starting to pay a premium for products and services created using processes that involve environmental targets, so there are already incentives for the productive sector to explore production mechanisms that include environmental objectives. By signing international agreements that include environmental commitments, governments are helping to raise the profile of these incentives and respond to this growing social demand. New technologies are fundamental allies for maximizing productive efficiency, reducing energy consumption, the use of materials, and emissions of pollutants.

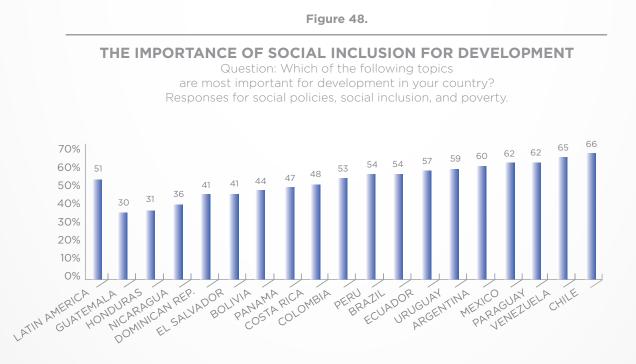
Source: INTAL Interactive Eco-Factories / Environmental Goods / Unoiled / Environmental Costs / Cooling the Fever / Eco-Policies

# SOCIAL INCLUSION AND EQUALITY

#### WORKERS' RIGHTS

Despite the progress that countries in Latin America and the Caribbean have made toward greater equality, the region is still one of the most unequal on earth. The last decade has seen social aid programs proliferate, the middle class multiply and access to basic education and health services expand. However, 175 million people are still living in poverty and inequalities of both income and opportunities persist. Informal employment remains one of the region's defining features: some 55% of employment is informal or precarious and this figure is higher than 60% in some countries. The income gap between formal and informal workers increases at retirement ages and the lack of incentives around formal employment leads to low saving rates: only half of the active population saves for retirement.<sup>32</sup>

This is perhaps why social policies are Latin Americans' number one priority. The struggle against poverty and improvements in equality and social inclusion are what Latin Americans state as their top demand and the most important issue for development: 51% of respondents argued that social issues are their main priority. This figure is as high as 66% in Chile, 65% in Venezuela, and 62% in Paraguay. Meanwhile, in five Central American countries (Guatemala, Honduras, Nicaragua, the Dominican Republic, and El Salvador), these values are well below average, ranging from 30% to 41%.



Source: Compiled by the authors using data from Latinobarómetro 2016.

Informal employment is a serious problem in Latin America, given its low rates of active saving for retirement.<sup>33</sup> When asked about their willingness to pay more for products that respect workers' rights, 46% of Latin Americans said they agreed, an increase on the 41% from 2015. The countries that are most willing to pay more for products that are manufactured in compliance with labor laws are Paraguay (71%), Venezuela (63%), and Nicaragua (62%)



Source: Compiled by the authors using data from Latinobarómetro 2016.

Once again, the countries of Central America are among the least willing to pay to respect rules of trade that include workers' rights during the production phase. In comparison with the 2015 survey, there was a significant increase in Brazil, where the willingness to pay more for products that respect workers' rights on the basis of integration agreements went from 24% to 42% (a 75% increase).

#### NODO I+I. SOCIAL INCLUSION PLUS REGIONAL INTEGRATION

Social inequality creates conflict and fragmentation among citizens, limits social cohesion, and increases the propensity for social instability, while social inclusion is a sign of a democracy that is going from strength to strength.

At the IDB's Institute for the Integration of Latin America and the Caribbean (IN-TAL), the Integration and Trade Sector, and the Social Sector, we contribute to the quest for creative responses to inequality through research and a series of activities that aim to bolster regional integration and enhance social inclusion.

In this context, an initiative led by professors Luis Bértola (Universidad de la República, Uruguay) and Jeffrey Williamson (Harvard University, USA) brought together global experts to identify the historical origins of inequality and prevent it from being one of the defining features of Latin America and the Caribbean. The book La Fractura. Pasado y presente de la búsqueda de equidad social en América Latina [The Fracture. The Quest for Social Equality in Latin America, Past and Present] takes a long-term view of the structural phenomena behind transient situations and takes an original look at the issue through an interdisciplinary and scientifically rigorous approach.

The joint work between INTAL and the IDB's Social Sector is continuing through Node i+i (Regional Integration + Social Inclusion), a project launched as a strategic alliance with Columbia University in New York (www.iadb.org/intal/nodoi [link in Spanish])

Regional and global integration are key to reversing this trend toward inequality as it is the societies that are most integrated with the region and the world that manage to grow most harmoniously, and reduce the inequality gap between people. Integration and inclusion are two sides of the same coin.

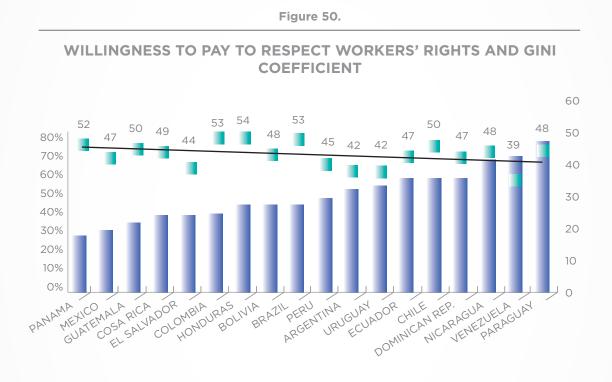
This is why there is shared interest among the countries of Latin America to move forward with second-generation reforms that ignore bogus shortcuts and instead lay the foundations for nations that are simultaneously more equal and more integrated with the world.

Country	Program	Coverage as a % of the population	Budget as a % of GDP
Bolivia	Juancito Pinto Program		
Ecuador	Human Development Program	46,6	0,23
Guatemala	Mi Familia Progresa	38,3	0,71
Dominican Rep.	Solidaridad	32,6	0,24
Argentina	Asignación Universal por Hijo	32,2	0,24
Brazil	Bolsa Familia	29,1	0,49
Uruguay	Plan Equidad	28,1	0,41
Honduras	Programa de Asignación Familiar	26,4	0,48
Colombia	Familias en Acción	25,6	0,32
Mexico	Oportunidades	23,8	0,22
Costa Rica	Avancemos	23,2	0,46
Panama	Red de Oportunidades	15	0,23
Peru	Juntos	10	0,15
El Salvador	Comunidades Solidarias Rurales	8,6	0,13
Paraguay	Tekoporã	7,5	0,15
Chile	Chile Solidario	7,5	0,13
Latin America		6,4	0,13
		25	0,37

#### TABLE A. CONDITIONAL CASH TRANSFER PROGRAMS

Source: Integration & Trade Journal 39 (The Great Leap Forward), compiled by the authors, 2015.

As in INTAL (2016), there was a negative correlation between income distribution as measured by the Gini coefficient and willingness to pay more for products that respect workers' rights. This year, the relationship grew even stronger as the correlation between the two variables went from -0.20 in 2015 to -0.36. In other words, the most unequal countries are the least willing to pay more to improve equality. This negative relationship therefore implies that social inequality comes hand-in-hand with a lack of demand for labor rights, which makes reducing this inequality even harder.



PERCENTAGE OF THE POPULATION THAT AGREES WITH THE NEED TO INCLUDE COMMITMENTS RELATING TO THE RIGHTS OF LOCAL AND FOREIGN WORKERS, EVEN IF THIS IMPLIES PAYING APPROXIMATELY 20% MORE FOR PRODUCTS

- RIGHT AXIS: GINI COEFFICIENT (WORLD BANK ESTIMATE) (2013)
- RIGHT AXIS: LINEAR TREND, GINI COEFFICIENT (WORLD BANK ESTIMATE) (2013)

Source: Compiled by the authors using data from Latinobarómetro 2016.

#### INTEGRATION AND THE MOVEMENT OF PEOPLE

Chapters on migration and the movement of people are occupying an increasingly prominent role in the integration agenda. Are the countries that send more migrants abroad in favor of paying more for products that defend workers' rights?

With a positive correlation of 0.56, the countries that are most willing to pay more to defend products that respect workers' rights are also those that have sent a higher percentage of migrants to other countries in the region. This is true for Paraguay and Nicaragua. In contrast, countries such as Mexico, Panama, or Guatemala, which express only limited willingness to pay more for products that respect workers' rights, also have smaller migratory flows.

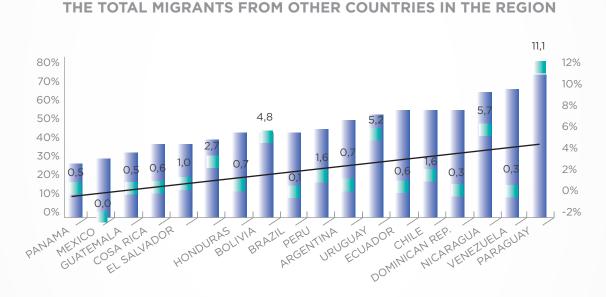


Figure 51.

WILLINGNESS TO PAY TO RESPECT WORKERS' RIGHTS AND

PERCENTAGE OF THE POPULATION THAT AGREES WITH THE NEED TO INCLUDE COMMITMENTS RELATING TO THE RIGHTS OF LOCAL AND FOREIGN WORKERS, EVEN IF THIS IMPLIES PAYING APPROXIMATELY 20% MORE FOR PRODUCTS

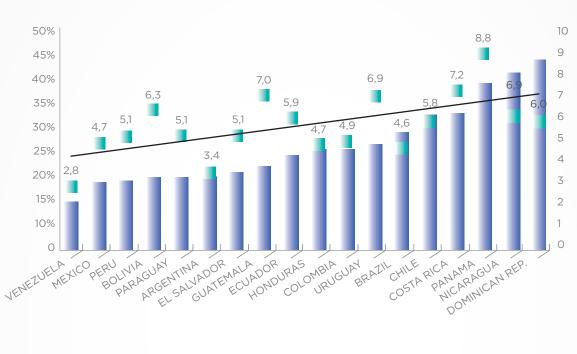
TOTAL IMMIGRANTS FROM OTHER COUNTRIES IN LATIN AMERICA

RIGHT AXIS: LINEAR TREND (TOTAL IMMIGRANTS FROM OTHER COUNTRIES IN LATIN AMERICA)

Source: Compiled by the authors using data from Latinobarómetro 2016.

Another way of observing this phenomenon is analyzing whether there is an empirical relationship between the percentage of the population that claims that integration has had a positive impact on employment in their country and an alternative measure of the movement of people.<sup>34</sup> In this case, the correlation increases to 0.62, and those countries with least restrictions on the movement of capital and people are also those that believe that integration has had a positive impact on employment.

Figure !	52.
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PERCENTAGE OF THE POPULATION WHO BELIEVE THAT INTEGRATION HAS HAD A POSITIVE IMPACT ON EMPLOYMENT

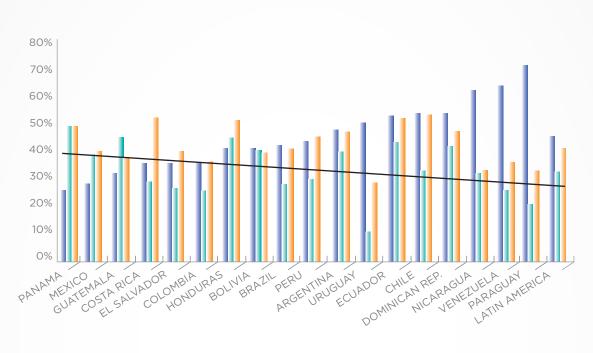
RIGHT AXIS: INDEX OF RESTRICTIONS ON THE MOVEMENT OF PEOPLE AND CAPITAL

RIGHT AXIS: LINEAR TREND (INDEX OF RESTRICTIONS ON THE MOVEMENT OF PEOPLE AND CAPITAL)

Source: Compiled by the authors using data from Latinobarómetro 2016.

This result is particularly significant given that it disproves the idea that openness to immigration translates into fewer jobs for the local population. In contrast, there is a positive correlation between openness to flows of people and capital and the belief that this type of policy has a positive impact on employment.

If willingness to pay more for products that respect labor laws is cross-referenced with tolerance for immigrants, the inverse relationship can be observed: that is, willingness to pay more correlates with less tolerance for immigration. There is a correlation of -0.41 between this and agreement with there being an anti-immigration law, and one of -0.28 with agreement with the idea that foreigners come to compete for local jobs. <sup>35</sup>



WILLINGNESS TO PAY TO RESPECT WORKERS' RIGHTS AND IMMIGRATION-RELATED ISSUES

Figure 53.

 PERCENTAGE OF THE POPULATION THAT AGREES WITH THE NEED TO INCLUDE COMMITMENTS RELATING TO WORKERS' RIGHTS, EVEN IF THIS IMPLIES PAYING APPROXIMATELY 20% MORE FOR PRODUCTS
 THERE SHOULD BE A LAW TO STOP FOREIGNERS FROM ENTERING THE COUNTRY FOREIGNERS ARE
 STARTING TO COMPETE FOR OUR JOBS.

- LINEAR TREND (THERE SHOULD BE A LAW TO STOP FOREIGNERS FROM ENTERING THE COUNTRY)

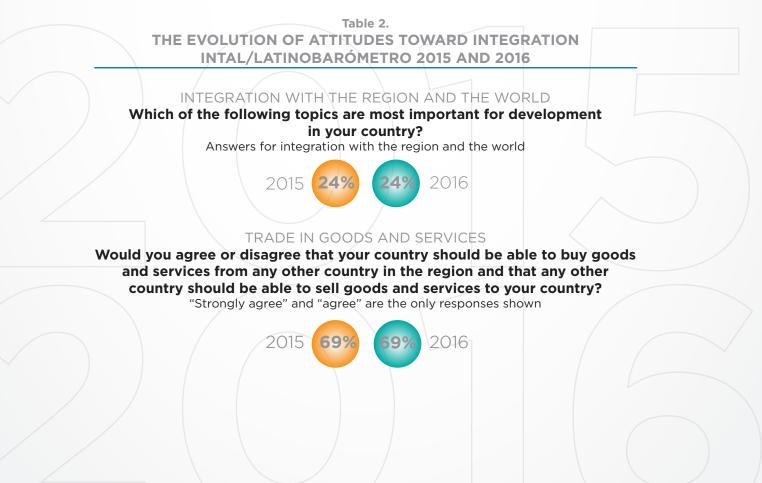
Source: compiled by the authors using data from Latinobarómetro 2015.

# FINAL REFLECTIONS

The value that the Continuous Monitoring System for Integration Processes (SEPI) contributes as an RPG is one of observing and measuring what our societies think about integration processes, which are currently transforming the map of regional trade at full steam.

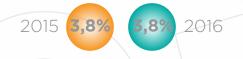
In this second analytical exercise which builds on the work begun in the exploratory study INTAL (2016), we have expanded our examination of different aspects of integration among the countries of Latin America by cross-referencing public opinion and objective integration conditions within the region and with the world.

As was the case in 2015, the 2016 INTAL-Latinobarómetro initiative revealed highly varied results, which makes it difficult to draw general conclusions that are valid for the entire region. However, the regional averages point to a certain stability from one year to the next, except for willingness to pay for sustainable products (which increased from 44% to 49%), and willingness to pay for products that comply with labor regulations (which increased from 41% to 45%).



#### INFRASTRUCTURE

On a scale of 1 to 10, where one is "not at all willing" and "totally willing," how willing are you for taxes to increase or for your country to take on debt to finance infrastructure works that will facilitate integration?



#### ENVIRONMENT

Do you agree on the need to include commitments relating to care for the environment in regional integration agreements, even if this implies paying approximately 20% more for products?

"Strongly agree" and "agree" are the only responses shown



#### SOCIAL INCLUSION

Would you agree or disagree on the need to include commitments relating to the rights of local and foreign workers, even if this implied paying approximately 20% more for products?

"Strongly agree" and "agree" are the only responses shown



We have included new issues in this 2016 study, such as nation branding and the chapter on innovation. This has revealed that innovation and creativity are valued highly in the region and that there is a low dispersion of these results, which is an excellent departure point for human capital to continue being the factor that sets Latin Americans apart. This issue is particularly important for quality of trade, as valuing innovation highly is associated with greater numbers of exports with technology content. Latin Americans' knowledge of how new technologies impact production and employment is still limited, and consensus around building public-private partnerships to leverage the use of cuttingedge technologies cannot be high if people do not yet understand what these technological advances could mean for Latin American economies. Although it does not explore causal relationships, this study lists a series of potentially interesting stylized facts and conclusions:

• Countries which show greater support for integration also show greater support for democracy and higher levels of trust in their government.

• Countries with more concentrated export baskets show greater support for economic integration.

• Countries that prioritize investment tend to receive higher levels of foreign investment.

• Countries with greater infrastructure deficits are more willing to take on credit or pay taxes to finance infrastructure works to facilitate integration.

• Countries that value innovation more highly tend to have larger shares of exports with technology content.

• Countries whose populations prioritize the environment make greater use of alternative energy sources.

• Countries where people are more willing to pay for products that respect workers' rights also have more equal income distributions.

Cross-referencing the two tables—subjective data from surveys, on the one hand, and national statistical data, on the other—also allowed as to outline certain overall trends, such as the fact that countries with the highest exports per capita and the most primarized economies are the ones where there is most demand for foreign investment. Sports, tourism, and food make up "brand Latin America," and are associated with the production of both services (sports and tourism) and goods (food).

Confirming the trends discovered in INTAL (2016), this study found that the most unequal societies are also the least willing to make the extra effort to strengthen workers' rights, thus creating a hard core of inequality that suggests we need to redouble our efforts in this direction. These results point to inequality being the enemy of integration, a hypothesis that we will explore further in future studies.

Social policies and the environment topped the list of Latin Americans' priorities: some 49% of Latin Americans believe that the environment is important for development.

# FUTURE AREAS OF RESEARCH

This study has opened up multiple possibilities for future research in the academic sphere and for the assessment of public policies both before and after their implementation.

One almost automatic outcome that will emerge over time as we accumulate these surveys is the analysis of the effects of specific events. For example, we will be able to see how a given labor or immigration reform, the signing of a trade agreement, or any other major integration event affects public opinion. Continually measuring public opinion before and after this event will allow us to see how it impacts individual perceptions and to establish relationships and make accurate predictions by taking useful precedents into account. Countries that are attempting to make progress in a given direction through their integration policies will be able to use these precedents as valuable raw material for analyzing the potential impact of government decisions on public opinion. Another as-yet unexplored line of research is the examination of quantitative causal effects among the different variables, for which we will need more instances of these measurements and a longer time period that will allow us to use econometric and formalization tools.

Experimentation within predetermined conditions (or survey-experiments) is being increasingly used in the analysis of agents' economic behavior and may well be a useful complement to the conclusions that we have derived from this fieldwork.

Another outstanding task would be to cross-reference these data sets with other trade performance indicators, such as the degree of integration into global value chains, and even with variables that are not directly linked to integration, such as gender equality or different measures of economic wellbeing, which may also give rise to other interesting conclusions.

In future publications, we will build on this study by identifying differences in the opinions of the populations of South American and Caribbean countries, and between members of the MERCOSUR and the Pacific Alliance, to get to know whether public perceptions vary according to the specific features of each country's integration policy.



# KEY DEVELOPMENT

ISSUES

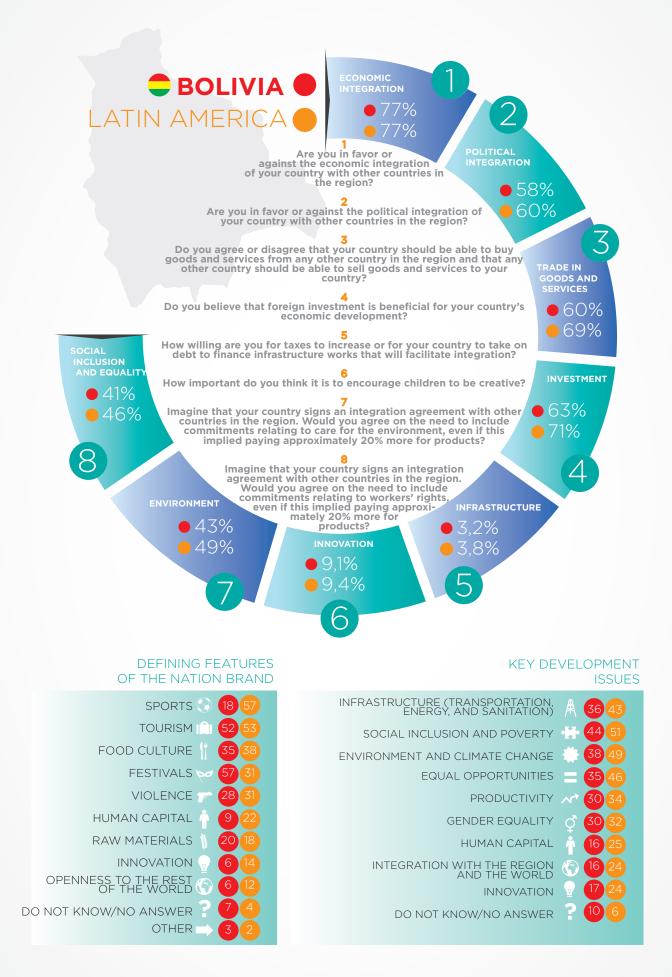
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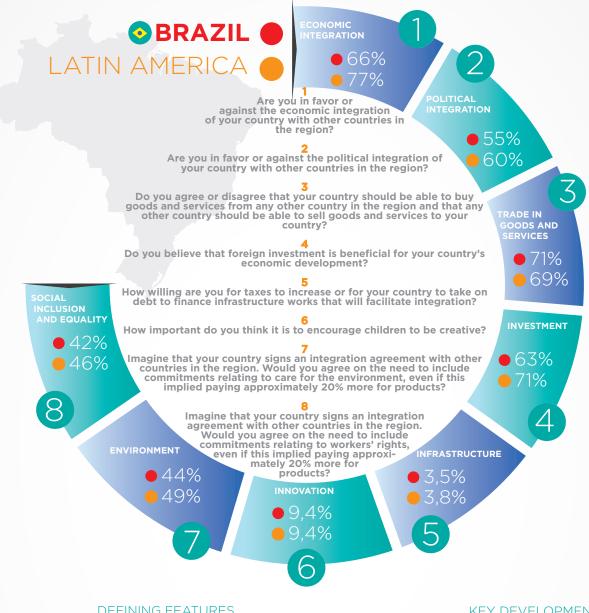
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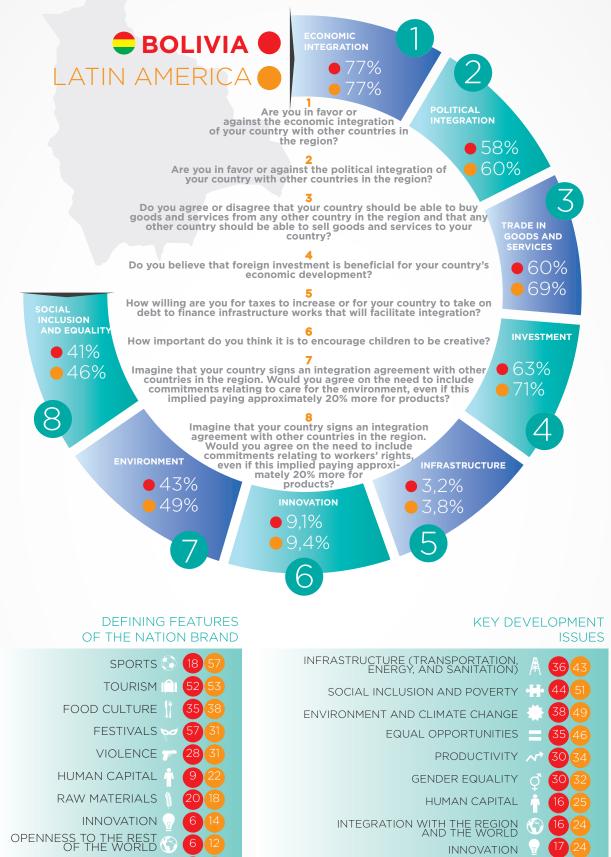
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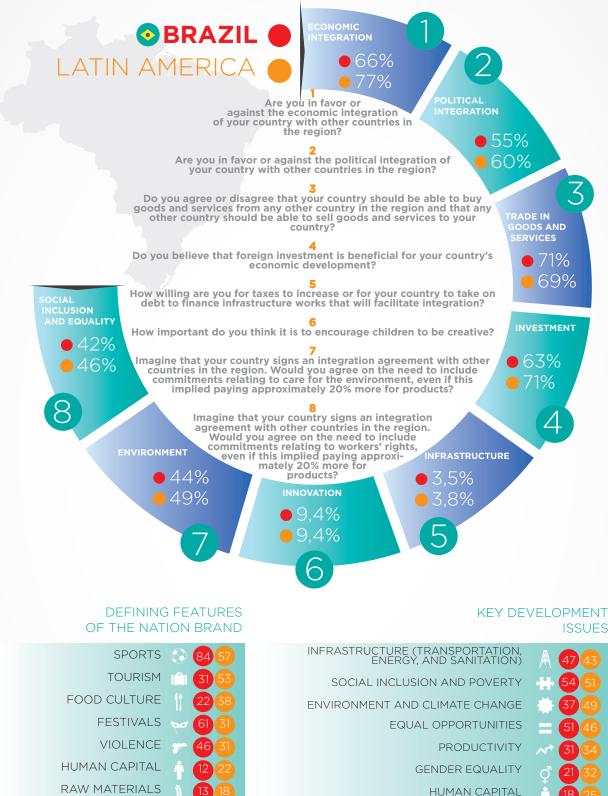




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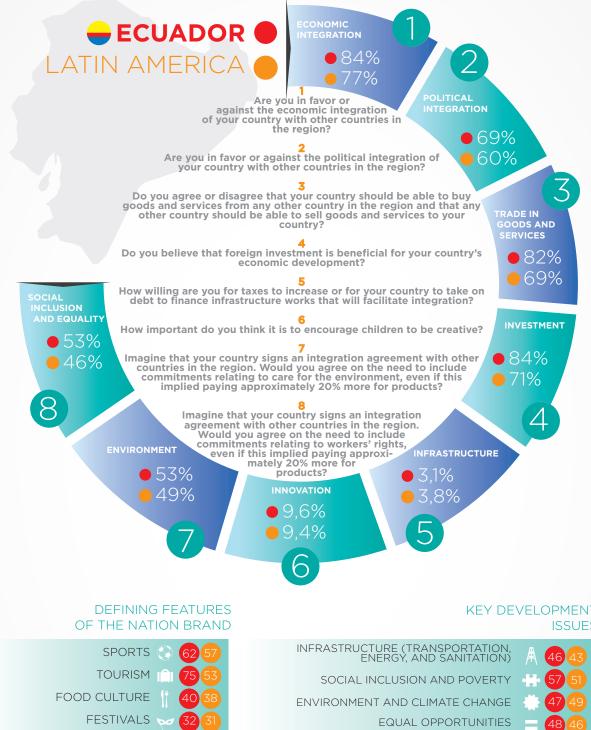
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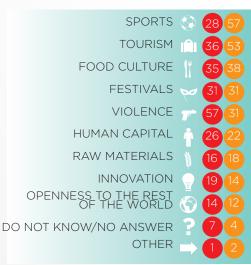


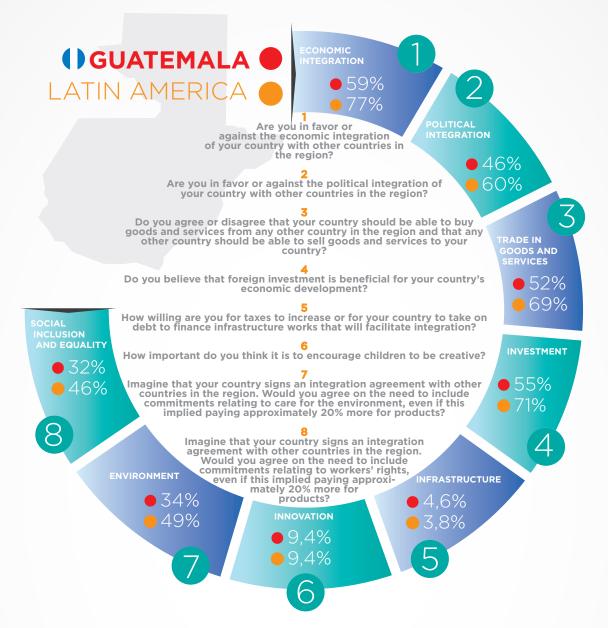






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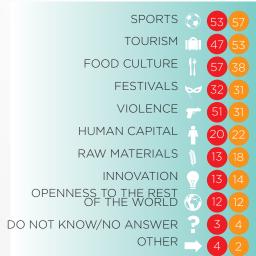
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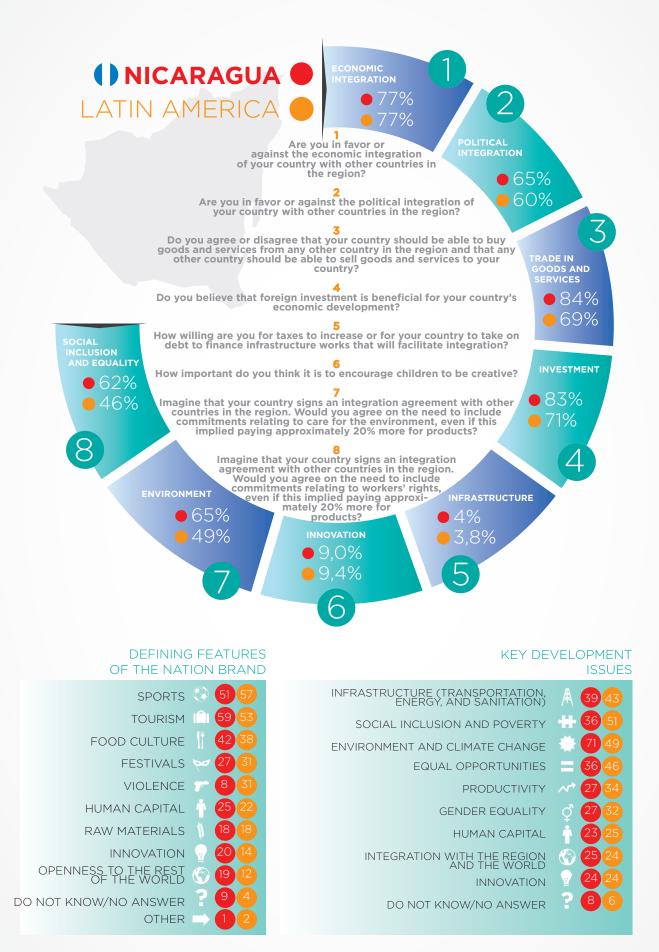
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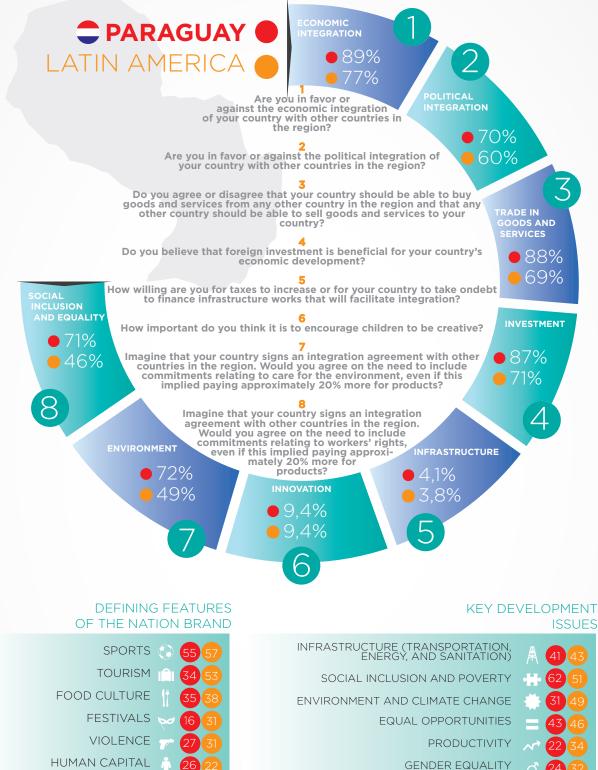


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    - PRODUCTIVITY

56

- GENDER EQUALITY
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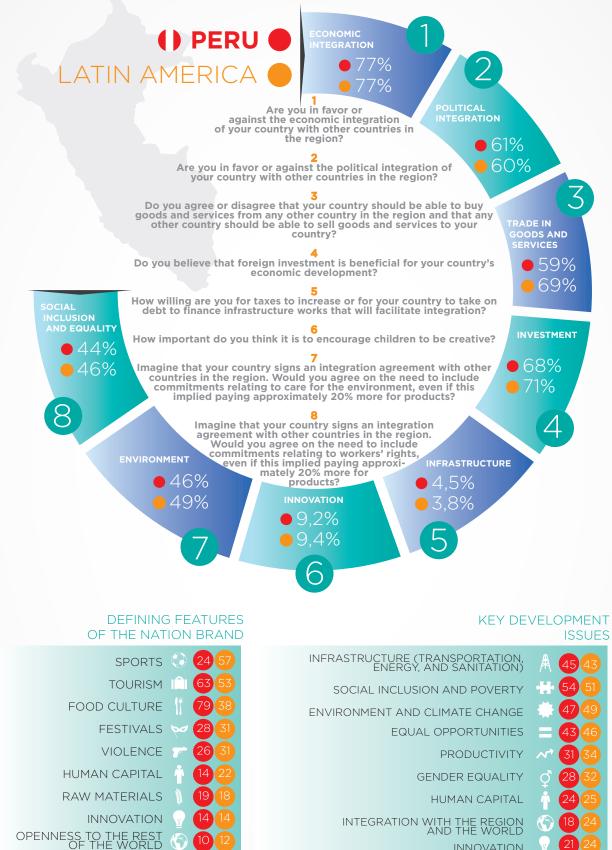




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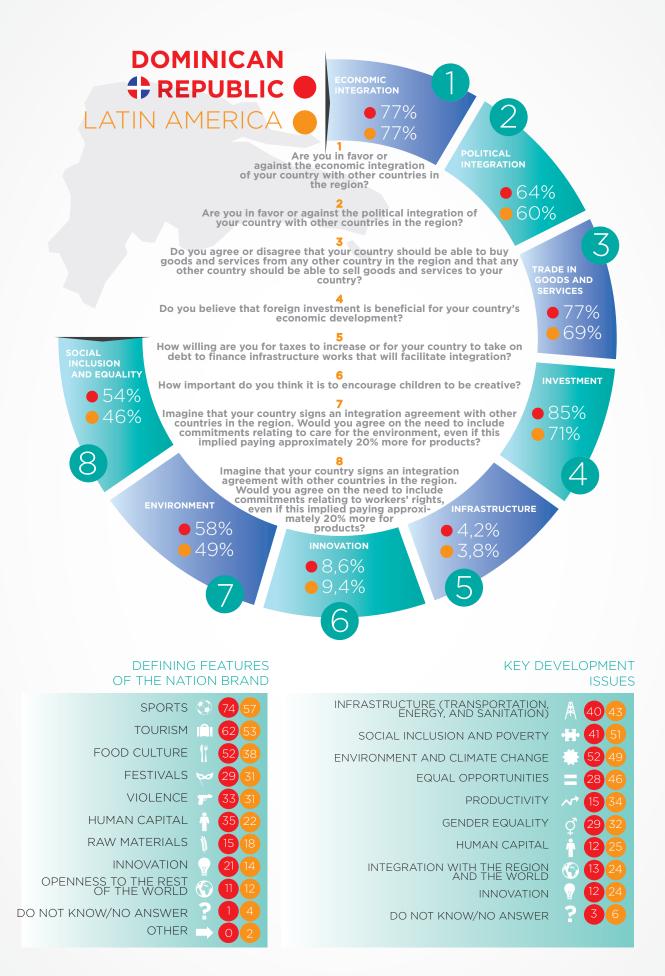
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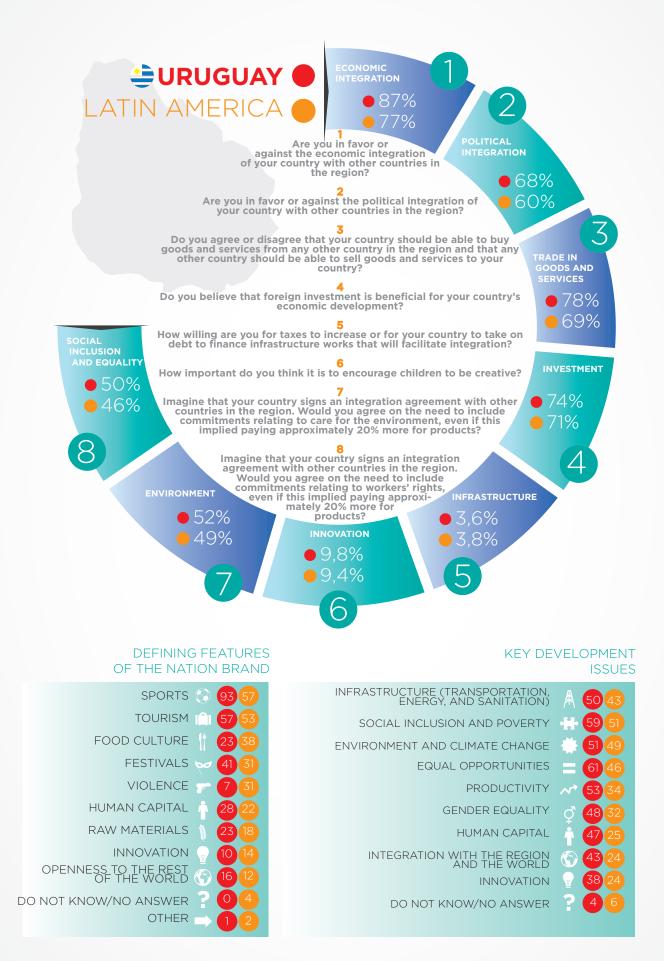


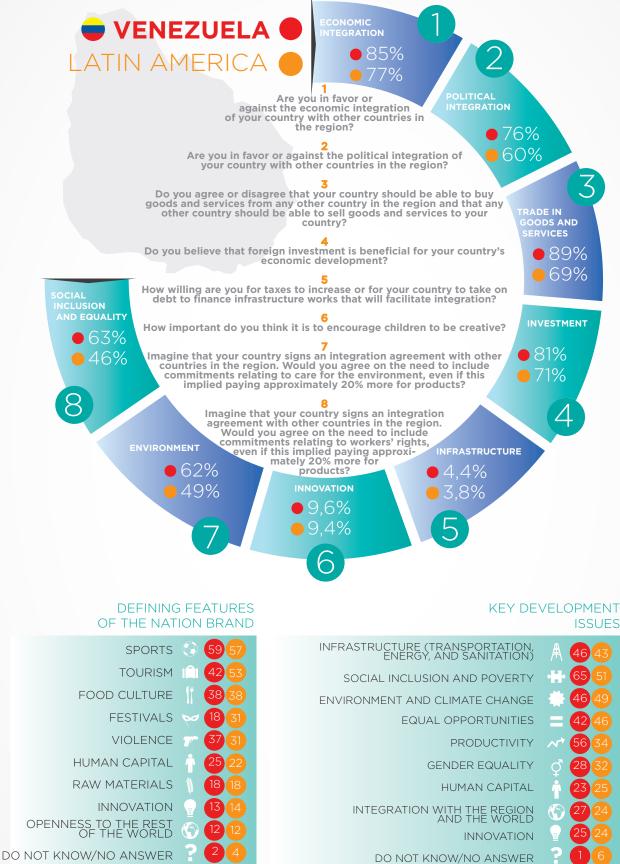
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OTHER

# ANNEX 2 / METODOLOGY

This section goes into more detail over the series of objective indicators that we used throughout this study to contrast them with the results of the INTAL/ Latinobarómetro survey. We used the standard correlation measure in the formula below for this cross-referencing exercise, which, as we mentioned above, does not imply a causal relationship:

(1) 
$$\rho = \frac{\Sigma(x-\bar{x})(y-\bar{y})}{\sqrt{\Sigma(x-\bar{x})^2\Sigma(y-\bar{y})^2}};$$

where p is the correlation coefficient, made up of the covariance of variables x and y in the numerator, and a denominator made up of the standard deviations of these same variables.

The value of the correlation coefficient thus ranged between [-1,1]. If p is equal to 1, it indicates a perfect positive correlation, that is, a total dependence between the two variables, which occurs when one variable increases and the other also does so at exactly the same rate. If p is between 0 and 1, there is a positive correlation, while if it is between 0 and -1, the correlation is negative. A value for p that is close to 0 indicates that there is no linear relationship.

The objective indicators selected for the comparisons were as follows:

• Share of exports covered by the five main products (%): based on INTRADE-BID and including data from the close of this report that was gathered in 2014.

• Number of FTAs signed: based on the 2014 INTRADEBID report. The number of agreements was counted rather than the number of countries with which the agreement was signed—in other words, one treaty may include several countries.

• Average MFN tariff (%): based on INTRADEBID, this is the normal nondiscriminatory tariff applied to imports (it excludes preferential tariffs contemplated in FTAs and other regimes that apply in the context of tariff-rate quotas). The values available for 2014 were used.

• Herfindahl-Hirschman Index of export concentration: based on INTRADE-BID, this is a standard measure of how economically concentrated a market is. It was calculated using export values from the 2014 survey.

• Exports per capita (thousands of US\$): based on INTRADEBID using 2014 data. The number of exports was divided by each country's population.

• FDI (% of GDP): based on the IDB's Numbers for Development database and IMF databases.

• Agriculture, hunting, forestry, and fisheries as a percentage of GDP: based on the latest information available from UNCTADstats for 2015.

• Infrastructure competitiveness ranking: based on World Economic Forum data for 2015. This indicator ranks transportation, energy, and communications on a scale of 1 to 7 by combining public information on miles of road, numbers of flights, telephone customers, and other variables collected through surveys of business owners and technicians from each sector.

• Revenue from transportation, warehousing, and communication (US\$ per capita): based on the latest information available from UNCTADstats for 2015.

• Exports of high-technology products (% of exports of manufactured products): based on INTRADEBID and the World Bank. Data from the 2014 comparison uses the standard classification of goods with high, medium, or low technology content.

• Fixed broadband internet subscribers (per hundred people): based on World Bank data for the 2014 comparison.

• Revenue from international tourism (as a % of total exports): based on 2014 data from the UN World Tourism Organization.

• Homicide rate per 100,000 inhabitants: based on 2014 data from the United Nations Office on Drugs and Crime (UNODC), except for Nicaragua, Panama, and Bolivia, for which the most recent information is from 2012.

• **CO2 emissions per capita (tons per inhabitant):** based on the most recent World Bank data (from 2011). Information provided by the Carbon Dioxide Information Analysis Center, Environmental Sciences Division, Oak Ridge National Laboratory (Tennessee, USA).

• **Carbon footprint (hectares per person):** based on data from the Global Footprint Network, the carbon footprint measures greenhouse gases emitted directly or indirectly due to human activity, thus making it an indicator of sustainable development. Data for 2015, available in the most recent report.

• Use of alternative and nuclear energy (% of total energy use): based on data from the International Energy Agency; this is an indicator of alternative energy use. Data for 2014.

• Electricity production based on renewable sources, excluding hydropower (% of total): based on World Bank data with the most recent information available being for 2013, this indicator measures the relative importance of renewable energies in each country's energy mix. It is also based on statistics and energy balance sheets from different countries.

• **Total immigrants to other countries in Latin America:** data for 2015 provided by the United Nations Department of Economic and Social Affairs, which closely monitors the dynamics of the planet's migration flows.

• Index of controls of the movement of people and capital: based on 2015 data from the Fraser Institute. This indicator has three components: foreign ownership/investment restrictions, capital controls, and the freedom of foreigners to visit the country. This Vancouver-based institute creates this indicator based on parameters such as the difficulty of getting a visa or how easy it is for foreign capital to acquire local properties.

• **Gini coefficient:** based on data from the IDB and the World Bank. This is the standard measure of income distribution, taking a maximum of 1 for societies in which income is highly concentrated and a minimum of 0 in places where income is distributed absolutely equally. Data for 2012 and 2014 based on information provided by the different countries in the region.

<sup>1</sup>Although exports per capita and the importance of agriculture in the economy are indicators that do not directly refer to investment, they point to some specific features of the region's different economies according to their investment preferences.

<sup>2</sup>We refer to these data on each country as "national statistics," although in some cases they come from alternative sources outside the country itself, such as the World Economic Forum. The specific source of each indicator used is detailed in the methodological annex.

<sup>3</sup>The 2016 survey was drafted with the help of those countries that took part in INTAL's Summer Colloquium, which was attended by government officials from Argentina, Uruguay, Brazil, Chile, Colombia, Mexico, Peru, Paraguay, and the Dominican Republic.

<sup>4</sup>Morlino (2011) observes that "cross-referencing the data sets" implies that there is no subordination between the two types of data.

<sup>5</sup>The alliance between INTAL and Latinobarómetro is an RPG that institutions from different countries in the region are involved in. These include: Argentina's House of Representatives; the government of the state of Minas Gerais, the Brazilian Legislative Institute and Brazil's State Secretariat for Social Advocacy; Chile's Ministry of Foreign Affairs; Ecuador's National Secretariat of Planning and Development; the Oaxaca State Institute of Electoral and Citizen Participation and the Center of Social and Public Opinion Studies at Mexico's House of Representatives; Paraguay's Ministry of National Affairs; Peru's Ministry of Foreign Relations; the Dominican Republic's Central Electoral Council; and Uruguay's Ministry of National Affairs.

<sup>6</sup>Latinobarómetro and ECLAC (2010) contained an initial attempt at cross-referencing data sets on well-being and social inequality. We have addressed this matter in detail in INTAL (2016). <sup>7</sup>We have addressed this matter in detail in INTAL (2016).

<sup>8</sup>See the Methodological Annex for more information on the indicators used. We will take these results into account when designing future polls to design questions that correspond more closely to national statistics so as to be able to measure the same phenomenon from two different perspectives more exactly.

<sup>9</sup>Although exports per capita and the importance of agriculture in the economy are indicators that do not directly refer to investment, they point to some specific features of the regions' different economies according to their investment preferences.

<sup>10</sup>It should be noted that the MFN tariff does not take the importance of linkages via preferential agreements into account. A regional bloc may have a relatively high MFN tariff level but a large share of preferential trade with low or zero tariffs. Likewise, tariff levels give no indications of other sorts of measures that may restrict trade, such as nontariff barriers. As we explained in INTAL (2016), the results presented here should be interpreted with the usual caveats for comparisons using these types of indicator.

<sup>11</sup>Not all indicators reflect the specific integration bias of public policies as the only factor at work. For example, medium- and high-technology exports are an indicator of the quality of exported goods which is partly determined by the structure of each country's comparative advantages, which reflect factors that do not depend solely on public decisions.

<sup>12</sup>The detailed methodology of the WEF's Global Competitiveness Index used in the infrastructure chapter is described in http://reports.weforum.org/global-competitiveness-report-20142015/ view/methodology/.

<sup>13</sup>This is an imperfect indicator as it may under- or overestimate the integration of technology products into global value chains and we use it here with the usual caveats.

<sup>14</sup>For more on this, see the conclusions of the experts that took part in Node i+i (Regional Integration + Social Inclusion) on the INTAL website (www.iadb.org/intal/nodoi [link in Spanish]).

<sup>15</sup>Great Britain's decision to leave the European Union (Brexit) is just one example of these trends. <sup>16</sup>Countries are classified based on the criterion used in the IDB Trade and Integration Monitor (2015).

<sup>17</sup>Support for democracy was measured through the following question: "Q. Which of the following phrases do you agree most with? 1) Democracy is preferable to any other form of government; 2) In some circumstances, an authoritarian government may be preferable to a democratic one; 3)For people like me, there's no difference between a democratic regime and a non-democratic one." Answers for the first option are displayed in the figure. Confidence in the government was measured using the following question: "Please look at this card and tell me how much confidence

you have in each of the groups, institutions, or people mentioned on the list: a lot, some, a little, or none at all." "A lot" and "some" are the only responses shown.

<sup>18</sup>The difference between these and the 2015 results is due to a change in the phrasing of the question. While in 2015 all respondents were asked what their perception of the impact of integration was, in 2016 only those that believed the country had attempted to integrate "a lot" or "somewhat" with the world were asked it.

<sup>19</sup>As mentioned above, this indicator ranged from 0 to 1: the higher the number, the greater the concentration of the export basket.

<sup>20</sup>As mentioned above, this trend does not indicate a causal relationship.

<sup>21</sup>The higher the value of the index of restrictions on movement, the fewer the restrictions. See the Methodological Annex for more details.

<sup>22</sup>For more on this topic, see Serebrisky (2014).

<sup>23</sup>See the dynamic infographic "Far Apart" on the INTAL Interactive site (link in Spanish) and Mesquita Moreira (2013).

<sup>24</sup>For more on the impact of new technologies on trade and production, see INTAL (2015b).

<sup>25</sup>One example of goods and services becoming inseparable is 3D printing, in which do-it-yourself philosophy challenges traditional models for the sale, logistics, and transportation of goods. For more on this topic, see INTAL (2015c).

<sup>26</sup>We have examined these topics in detail in different issues of INTAL Connection.

<sup>27</sup>INTAL (2015d) analyzes the ICT revolution and the impact of this on trade.

<sup>28</sup>For more on this topic, see Casilda Béjar and González Silvestre (2002) and Aichner (2014).
 <sup>29</sup>González (2016).

<sup>30</sup>The pursuit of energy-related innovation may not be associated with environmental issues but with the need for alternative sources of energy, as is the case in several Central American countries. None of these correlations indicates a causal relationship.

<sup>31</sup>The sources used for national statistics are listed in detail in the Methodological Annex. <sup>32</sup>INTAL (2015a).

<sup>33</sup>For more on the size of the informal sector and its consequences on equality, see INTAL (2015a). <sup>34</sup>We address the composition of the index of the movement of people and capital in the Methodological Annex.

<sup>35</sup>Data from the chapter on immigration-related matters from the 2015 survey were used. The question was: "What impact do you think citizens of other countries coming to live in your country has? Do you strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with these two statements: 1) Immigrants come to compete for our jobs, and 2) There should be a law to stop immigrants from entering the country? \* "Strongly agree" and "agree" are the only responses shown.

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