

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK
AND THE INTER-AMERICAN INVESTMENT CORPORATION

PARAGUAY
IDB GROUP COUNTRY STRATEGY 2019-2023

MARCH 2019

This document was prepared by Florencia Attademo-Hirt (CSC/CPR), Project Team Leader, Pablo Tabilo (CSC/CPR) and Alejandro Quijada (CSC/CPR), with contributions from Gabriela Bonzi (CSC/CPR), Eduardo Feliciangeli (CSC/CPR), Ricardo Quiroga (CSC/CSC), Fabiano Bastos (CSC/CSC), Francesca Castellani (VPC/VPC), María Cecilia Acevedo (DSP/DCO), Joaquín Lennon Sabatini (DSP/DCO), Cristina Paredes (INO/FLI), Natalia Laguyas (MIF/OPU) and Luis Fernández (LEU/CPR), under the direction of José Luis Lupo (CSC/CSC).

This document is being released to the public and distributed to the Bank's Board of Executive Directors simultaneously. This document has not been approved by the Board. Should the Board approve the document with amendments, a revised version will be made available to the public, thus superseding and replacing the original version.

CONTENTS

| | | |
|------|---|----|
| I. | SOCIOECONOMIC CONTEXT | 1 |
| II. | PRESENCE OF THE INTER-AMERICAN DEVELOPMENT BANK GROUP IN PARAGUAY | 4 |
| III. | STRATEGIC AREAS | 11 |
| IV. | INDICATIVE FINANCING SCENARIO | 26 |
| V. | IMPLEMENTATION OF THE STRATEGY | 26 |
| VI. | RISKS..... | 28 |

ANNEXES

| | |
|-----------|--|
| Annex I | Results Matrix |
| Annex II | Indicative Lending Framework |
| Annex III | Economic and Social Indicators |
| Annex IV | Management Comments on the Country Program Evaluation: Paraguay 2014-2018 |
| Annex V | Development Effectiveness Matrix |

LINKS

[Paraguay's Development Challenges
Portfolio Report](#)
[Coordination with Other Donors](#)
[Consultation with Civil Society](#)
[The Government's Development Plan](#)
[Fiduciary Technical Note](#)

ABBREVIATIONS

| | |
|----------|---|
| AECID | Spanish Agency for International Development Cooperation |
| AFD | Development Finance Agency |
| ANDE | National Electricity Administration |
| BCP | Central Bank of Paraguay |
| CAF | Development Bank of Latin America |
| DAPSAN | Bureau of Drinking Water and Sanitation |
| DGEEC | General Bureau of Statistics, Surveys, and Census |
| DNCP | National Bureau of Public Procurement |
| EIB | European Investment Bank |
| EU | European Union |
| FONACIDE | National Public Investment and Development Fund |
| GDP | Gross domestic product |
| GEF | World Economic Forum |
| GIZ | Deutsche Gesellschaft für Internationale Zusammenarbeit [German Agency for International Cooperation] |
| JICA | Japan International Cooperation Agency |
| KOICA | Korean International Cooperation Agency |
| LRF | Fiscal Responsibility Law |
| MAPS | Methodology for Assessing Procurement Systems |
| MOPC | Ministry of Public Works and Communications |
| NSG | Non-sovereign guaranteed |
| OECD | Organization for Economic Cooperation and Development |
| OVE | Office of Evaluation and Oversight (IDB) |
| PEFA | Public Expenditure and Financial Accountability Report |
| PND | National Development Plan of Paraguay 2030 |
| PPP | Public-private partnerships |
| SG | Sovereign guaranteed |
| SIARE | Integrated State Resource Administration System |
| SMEs | Small and medium-sized firms |
| WEO | World Economic Outlook (published by the IMF) |

EXECUTIVE SUMMARY

Socioeconomic context. Paraguay has been one of the fastest-growing economies in Latin America and the Caribbean over the last 15 years, with growth driven by domestic factors and a solid framework of macroeconomic policies. As a result, the country has succeeded in reducing various socioeconomic gaps. Nonetheless, these development achievements have not translated into significant gains in productivity and are framed in a context of institutional weakness. Addressing these challenges will be a determining factor for ensuring the continuity and sustainability of the development achieved in recent years.

The IDB Group in Paraguay. The IDB Country Strategy with Paraguay (2014-2018) prioritized the following areas: (i) transportation and connectivity; (ii) water and sanitation; (iii) energy; (iv) productive development; (v) the financial sector; and (vi) public management. In addition, the country strategy focused on two crosscutting areas: (a) support for the use of National Public Investment and Development Fund (FONACIDE) resources, and (b) promoting the inclusion of gender considerations and indigenous communities in IDB Group programs. During the 2014-2018 strategy period, 27 sovereign guaranteed (SG) loan operations were approved in the amount of US\$2.007 billion, along with 26 non-sovereign guaranteed (NSG) operations in the amount of US\$353.4 million. IDB Lab approved 14 operations for US\$8.0 million.

Strategic areas. The Country Strategy 2019-2023 seeks to support the institutional and productive transformation of Paraguay, under criteria of sustainability, equity, and economic and social inclusion. The new country strategy prioritizes four areas of collaboration and support: (i) public management and institutions; (ii) integration and diversification; (iii) productive and resilient infrastructure; and (iv) human capital and living conditions. The actions planned are aligned with the 2030 National Development Plan of Paraguay, which prioritizes areas including the country's adequate global integration inclusive economic growth, poverty reduction and social development, as well as efficient and transparent public management.

Lending framework. Sovereign guaranteed loan approvals are estimated at US\$1 billion during the period 2019-2023. Sovereign guaranteed disbursements are projected at US\$1.4 billion. This financing will be augmented by technical cooperation and non-sovereign guaranteed resources for the private sector, which will be channeled through IDB Invest and IDB Lab.

Risks. The principal risks to implementation of the Country Strategy have to do with (i) the institutional weakness of executing agencies and the complexity of processes for executing projects, and (ii) the country's vulnerability to natural disasters and external macroeconomic shocks.

Validity of the strategy. The IDB Group Strategy with Paraguay 2019-2023 will be valid as of its approval until 31 December 2023.

I. SOCIOECONOMIC CONTEXT¹

- 1.1 **Paraguay has been one of the fastest-growing economies in Latin America and the Caribbean during the last 15 years.** Since 2004, real gross domestic product (GDP) has expanded on average by 4.5% a year, higher than the 3.0% observed in the rest of the region, and this has translated into per capita GDP growth (in constant U.S. dollars at purchasing power parity) of 46.4%, compared to an increase of 21.3% for Latin America and the Caribbean as a whole.²
- 1.2 **Growth has been driven primarily by domestic factors.** On the supply side, the services sector accounted for 49.7% of GDP growth during 2004-2017 (followed by industry and agriculture), while on the demand side, private consumption represented 62.6% of observed growth (followed by gross investment and public consumption).
- 1.3 **The Paraguayan economy remains vulnerable to external shocks.** The volatility of real GDP during 2004-2017, measured by the standard deviation, is the second-highest recorded in Latin America and the Caribbean, among countries with growth rates higher than 4% annually (3.2%).³ GDP volatility is associated with the vulnerability of exports to price fluctuations for raw materials, adverse climatic phenomena,⁴ and the concentration of the country's trading partners.⁵
- 1.4 **The strengthening of macroeconomic policies has helped to counter the effects of external volatility.** In recent years, the country has strengthened its monetary and fiscal policy frameworks through the adoption of a system of inflation targets in 2011, and enactment of the Fiscal Responsibility Law in 2013.⁶ These reforms have contributed to price stability and fiscal consolidation with relatively low levels of debt.⁷

¹ Bibliographic citations and data sources not indicated in the strategy document are referenced in the document Development Challenges of Paraguay (see electronic link).

² GDP data for Paraguay correspond to the new series, with base year 2014, published by the Central Bank of Paraguay (BCP) since 2018. Data for Latin America and the Caribbean come from the IMF, World Economic Outlook (October 2018).

³ Various studies corroborate the existence of an inverse relationship between macroeconomic volatility and long-term growth. According to Dabusinskas et al. (2012), a 50% increase in volatility implies a reduction of long-term per capita GDP of 0.4 percentage points.

⁴ Paraguay ranks 46th out of 180 in the Germanwatch climate risk index (1997-2016), making it the second-most vulnerable country in South America after Bolivia. According to the CAF's "Index of Vulnerability and Adaptation to Climate Change in the Latin America and the Caribbean Region", Paraguay ranks 8th out of 33.

⁵ Since 2004, the country's main export markets have been Brazil (30%) and Argentina (10%).

⁶ The inflation target is 4.0%. The Fiscal Responsibility Law (LRF) establishes a ceiling of 1.5% of GDP on the central government debt.

⁷ During 2013-2017, inflation averaged 3.7% (4.9% in Latin America and the Caribbean), the average fiscal balance of the central government stood at -0.9% of GDP (-5.5% of GDP in Latin America and the Caribbean), and the average gross general government debt was 16.9% of GDP (54.5% of GDP in Latin America and the Caribbean). IMF data (WEO, October 2018).

- 1.5 **Macroeconomic stability and the strength of labor-intensive sectors have served to reduce poverty and inequality.**⁸ Since 2004, total and extreme poverty have declined by 45.9% and 51.3% respectively.⁹ In turn, income inequality, as measured by the Gini coefficient, has declined by 5.8%.¹⁰
- 1.6 **Nevertheless, progress on the economic and social fronts has not translated into significant productivity gains.** Since 2004, total factor productivity (TFP) has contributed around 25% of observed growth.¹¹ This relatively small share of TFP is explained in part by the low levels of labor productivity, which represents around 60% of average productivity in Latin America and the Caribbean, one of the regions with the lowest productivity levels worldwide.
- 1.7 **Low levels of productivity¹² are associated with structural development challenges in the areas of: (i) public management and institutions; (ii) economic integration and productive diversification; (iii) infrastructure; and (iv) human capital and living conditions.** These challenges, which are analyzed in detail in section III, result in high levels of informality in the labor market (80% of the economically active population), low-quality jobs and persistent welfare gaps¹³ that primarily impact women¹⁴ and indigenous groups:¹⁵

⁸ According to data from the General Bureau of Statistics, Surveys, and Census (DGEEC), employment in the services sector has risen by more than 10 percentage points since 2004, standing currently at 60% of the total employed workforce.

⁹ In rural areas, the decline in poverty between 2004 and 2017 was less pronounced (-34.9% for total poverty and -39.2% for extreme poverty). According to data from the latest indigenous population census of 2012, 91.3% of the country's indigenous population (approximately 2.0% of the total population) lives in rural areas. Data from the DGEEC, 2018.

¹⁰ In 2004, according to DGEEC data (2018), 48.8% of the population was living in poverty, and 9.1% in extreme poverty. In 2017 these indicators stood at 26.4% and 4.4%, respectively. Between 2004 and 2017 the Gini index declined from 0.52 to 0.49.

¹¹ Results from a growth accounting exercise conducted for the period 2004-2014, using data from the BCP, DGEEC, and Feenstra et al. (2015). The share of the labor factor is 0.56. The preponderance of the labor factor is explained in part by rapid growth in the young population (15-19 years), compared to the dependent population (under 15 and over 60), or the "demographic dividend." Estimates from the United Nations Population Fund (UNFPA) suggest that Paraguay's demographic dividend will last until 2050, making it one of the most enduring in Latin America and the Caribbean.

¹² The IDB's 2010 publication, "[The Age of Productivity: Transforming Economies from the Bottom Up](#)" suggests that the problem of low productivity in Latin America and the Caribbean is associated with: (i) high levels of informality, (ii) certain social policies that steer workers into low productivity activities, (iii) high costs of transportation, energy, and logistics services; (iv) limited access to credit; (v) macroeconomic volatility; (vi) discriminatory tax regimes; (vii) low innovation and the absence of efficient productive development policies; and (viii) scant productive diversification.

¹³ The informality figure is for 2015 and comes from the IDB harmonized database of household surveys of Latin America and the Caribbean. Social progress has been uneven, both at the territorial level and among population groups, affecting in particular women and indigenous groups. In urban areas, poverty fell by 53.2% between 2004 and 2017, while in rural areas the decline was only 34.9%. In turn, during the same period, extreme urban poverty declined by 65.6%, and extreme rural poverty by 39.2%. Income inequality has followed the same territorial pattern, with relatively more significant reductions in urban areas (-6.5%) than in the countryside (-4.8%). According to DGEEC data, in 2017 total rural poverty was 1.8 times greater than total urban poverty, and extreme rural poverty was 5.8 times greater than in the cities.

¹⁴ The WEF Global Gender Gap Index (2018) places Paraguay in position 104/149, ranking it last among South American countries. In the areas where the gap is relatively more severe, the most relevant sub-indices are those relating to political empowerment, economic opportunities and participation in the labor market, health, and survival.

- (i) There are weaknesses in the institutional frameworks. The Corruption Perceptions Index prepared by Transparency International places Paraguay among the countries with the highest perception of corruption in Latin America and the Caribbean and the world (132/180).
- (ii) Paraguayan firms rarely participate in global value chains. Data from the World Economic Forum – Global Competitiveness Report – show that the presence of Paraguay firms in value chains is relatively low (ranking 108 out of 138).
- (iii) The supply and quality of infrastructure is among the lowest in the world. According to WEF data, Paraguayan ranks 129/140 in the quality of its roads.
- (iv) Human capital poses challenges in terms of the coverage and quality of social services. The maternal mortality rate is among the highest in the region (132 per 100,000 live births, versus 67 per 100,000 live births for Latin America and the Caribbean).

1.8 **These challenges appear in a context where technology and innovation are in short supply.** On one hand, the sophistication of exports has declined by 2% since 2004 (World Bank-WITTS), a situation that is explained in part by the low levels of innovation (Paraguay stands 89/124 on the Global Innovation Index). In addition, the penetration of broadband is low, ranking the country at 3.7 points out of 8 on the IDB Group's Broadband Development Index, far below the average of countries in the Southern Cone (4.6) and in Latin America and the Caribbean as a whole (4.3). Moreover, the availability of qualified workers in the sciences and engineering is low (1% of total graduates from tertiary education). Lastly, the use of information and communication technologies (ICT) to deliver public services and facilitate citizens' access to information is still in its early stages (the country ranks 95/193 on the United Nations E-Government Development Index, and 72/193 on the E-Participation Index).

1.9 **The environment has also been affected by a marked process of deforestation and the deterioration of water resources, in a context of high vulnerability to adverse climatic phenomena, associated with climate change and rapid urban expansion.** Since 1990 the country has lost approximately 5.5 million hectares of forest land (13.5% of the country's surface area), and this has impacted ecosystems and soil quality (UN-REDD, 2016). Similarly, there has been a degradation in water quality, in the context of overexploitation of rivers and aquifers, and this translates into high levels of pollution in river beds.¹⁶ These factors are compounded by challenges in reducing the risk of disasters and

¹⁵ According to the 2012 Census of Indigenous Peoples' Communities, 64.0% of indigenous communities, villages, or neighborhoods have no family health unit, and 28.1% have no local school. The indigenous population represents approximately 2% of the total population.

¹⁶ According to the National Potable Water and Sanitation Plan 2018, the annual costs associated with treating waterborne diseases, as well as the purchase and/or home purification of water, among other outlays, represent 1.6% of GDP.

- adapting to climate change,¹⁷ as well as in sustainable management of urban areas.¹⁸
- 1.10 **In this institutional, economic, social, and environmental context, Paraguay faces a dual development challenge.** On one hand, it must promote structural changes that generate stronger institutions and productivity gains in all sectors of the economy, under criteria of sustainability. On the other hand, it must ensure that these institutional and productive transformations translate into benefits for the population, particularly the most disadvantaged.
- 1.11 **The challenges identified are consistent with Paraguay's National Development Plan 2030 (PND) and with the priorities set by the government of President Mario Abdo Benítez.** The PND is focused around the three strategic pillars, and four crosscutting lines. The strategic pillars correspond to: (i) poverty reduction and social development, (ii) inclusive economic growth, and (iii) adequate global integration of the country. The crosscutting lines relate to: equality of opportunities, efficient and transparent public management, environmental sustainability, and territorial planning and development.¹⁹ In addition, the government of Mario Abdo Benítez has prioritized 11 strategic areas for the next five years: education, health, social protection, employment, infrastructure, international connectivity, upgrade of urban centers, security, energy, forest production and the environment, and the digital agenda.

II. PRESENCE OF THE INTER-AMERICAN DEVELOPMENT BANK GROUP IN PARAGUAY

A. Analysis and outcomes of the IDB Country Strategy 2014-2018²⁰

- 2.1 **The IDB Group is Paraguay's main multilateral partner.** With its sovereign guaranteed financing, the IDB Group currently represents 48.8% of multilateral financing and 23.3% of external financing. The IDB Country Strategy (2014-2018) set out to promote the country's productive transformation, with a view to achieving sustainable and inclusive economic growth. To this end, support focused on six strategic areas: (i) transportation and connectivity, (ii) water and sanitation, (iii) energy, (iv) productive development, (v) financial sector, and (vi) public management. In addition, the Country Strategy included two crosscutting areas: (a) supporting the use of National Public Investment and Development Fund (FONACIDE) resources, and (b) promoting the inclusion of gender considerations and indigenous communities in IDB Group programs.²¹

¹⁷ Estimates suggest that the country could lose between 0.3% and 1.0% of GDP over the long term through the effects of climate change. ECLAC (2014), "The Economics of Climate Change in Paraguay," LC/W.617, Santiago, Chile.

¹⁸ Approximately 43% of the population lives in the Asunción metropolitan area, in a setting of low population density (30 inhabitants per hectare, well below the theoretical minimum sustainability threshold of 70) and shortcomings in the management of solid waste and untreated wastewater.

¹⁹ Plan approved in December 2014.

²⁰ Includes results achieved during the Country Strategy execution period, regardless of the date of approval of the operations. It also incorporates information on public and private operations in execution, the main results of which will become observable over the medium term.

²¹ The Country Strategy promoted dialogue in the social area: coverage and quality of education and health services, formalization of the labor market, coverage of social security, consolidation of the social safety net, including the provision of comprehensive services to women.

- 2.2 **During the strategy period,²² 27 sovereign guaranteed (SG) operations were approved.** Of the 27 operations approved, 24 involved investment loans totaling US\$1.307 billion, together with three policy-based loans for US\$700 million (for a total of US\$2.007 billion). Close to 80% of approvals were related to public management (33.6%), transportation and connectivity (25.8%), productive development (13.0%), and water and sanitation (7.5%).
- 2.3 **The technical cooperation operations approved, totaling US\$27.1 million, supplemented the SG operations.** Around 60% of the technical cooperation projects approved were focused on the areas of greatest SG financing: public management (24.8%), water and sanitation (19.5%), productive development (8.5%), and transportation and connectivity (7.9%).
- 2.4 **The non-sovereign guaranteed (NSG) operations of IDB Invest and IDB Lab were coordinated with the Bank's efforts in strategic areas.** During the strategy period, IDB Invest approved 26 loan and guarantee operations for US\$353.4 million (US\$230.0 million in loans and US\$123.4 million in guarantees).²³ For its part, IDB Lab approved 13 projects totaling US\$8.0 million (equivalent to 14 technical cooperation operations, two of which were financed with third-party funds, the Nordic Development Fund and the Australian Trust Fund for Poverty). In both cases, NSG support was aimed at developing productive and financial activities in traditional sectors (agriculture) as well as new sectors (telecommunications, the creative economy), with emphasis on the delivery and accessibility of services (transportation, water and sanitation), in particular for vulnerable population groups (women and young people).
- 2.5 **In transportation and connectivity, the IDB Group approved interventions geared to:** improving road infrastructure, promoting logistics development, strengthening road safety, and reinforcing the sector's institutions. In terms of outcomes (2006-2015), the rehabilitation and maintenance of roads has served to reduce transportation costs by 42%, and to cut average travel times for cargo trucks en Route 8 by 63%.²⁴ Within this line, IDB Lab is supporting entrepreneurs in the design and implementation of technological platforms to improve mobility over the public transportation network.²⁵ Moreover, the IDB Group has helped build institutional capacities through technical support for the design of the integrated national road network, the preparation of the road maintenance strategy, and the identification of opportunities for logistics integration and the establishment of productive chains with neighboring countries.²⁶
- 2.6 **In water and sanitation, IDB Group actions have focused on:** strengthening the management and analytic capacities of national counterparts, and at the same time supporting the expansion and improvement of service delivery, including to rural indigenous communities and intermediate cities. The principal outcomes are focused, on one hand, on expanded coverage of drinking water in rural areas (up

²² Between January 2014 and December 2018.

²³ Includes operations approved under the SCF, OMJ, and IIC windows. It does not include TFFP loans for US\$70.5 million or TFFT guarantees for US\$23.1 million.

²⁴ PR-L1007. Paving of Integration Corridors and Road Rehabilitation and Maintenance (Phase I). The outcomes are similar for the rehabilitation of Routes 13 and 10.

²⁵ PR-T1229. TOPA Paraguay: Improving Public Transportation in the Metropolitan Area of Asunción.

²⁶ PR-T1172, PR-T1240, PR-T1183.

from 49.2% in 2008 to 50.5% in 2017) and access to improved water supplies in indigenous communities (1,317 households benefited, 9.8% above the project's expected impact).²⁷ At the same time, institutional capacity was generated with the development of the Lake Ypacaraí sanitation plan, the design of the strategic plan for reducing losses, and the feasibility studies for the potable water and sewage systems in the districts of Alto Paraná, President Franco, and Hernandarias.²⁸ These actions in support of public investment and capacity-building have laid the groundwork to begin execution, during the Country Strategy period, of interventions in the water and sewage systems in Asunción (including clean-up of the Bay), intermediate cities in the Eastern Region and the Chaco, and rural communities.²⁹ Under this approach, IDB Lab and the Bank are coordinating efforts to improve, through social art and the development of innovative financial instruments, the demand for and supply of water and sanitation services.³⁰

- 2.7 **In energy, IDB Group interventions focused on providing support for:** implementing the power sector investment plan and executing investments in energy efficiency.³¹ In terms of outcomes, the expanding transmission capacity of the National Electricity Administration (ANDE) helped to boost the national coverage of power service by 6.5 percentage points between 2005 and 2016 to 99.5%, and to reduce technical and nontechnical losses by five percentage points between 2006 and 2017, to 25.0%.³²
- 2.8 **In productive development, the IDB Group supported actions geared to promoting:** technological innovation by small and medium-sized enterprises (SMEs) and small-scale farm producers; the provision of public agricultural goods and services; the diversification of exports; the promotion of foreign investment; and workforce training.³³ In terms of outcomes, by modernizing the management of agricultural supports, the IDB Group helped provide benefits to more than 22,000 producers (33% above target) in adopting at least one productive technological solution.³⁴ In the tourism sector, the IDB Group supported creation of

²⁷ PR-L1022, Water and Sanitation Program for Rural and Indigenous Communities.

²⁸ PR-T1162, PR-T1199, PR-T1227.

²⁹ PR-L1029, Comprehensive Sanitation Program for the Bay and Metropolitan Area of Asunción. PR-L1060, Water and Sanitation Program for the Chaco Region and Intermediate Cities in the Eastern Region of Paraguay.

³⁰ PR-T1234, Development of a Market for the Water and Sanitation Sector in Paraguay. PR-T1224, Promotion of Behavioral Changes and Strengthening the Water and Sanitation Sector in Paraguay. Operation PR-L1094 (Water and Sanitation System Construction Project for Small Cities) is testing the application of social art strategies for bringing about behavioral changes with respect to connectivity and the use of water and sanitation services in small cities and rural communities. It is also identifying options for financing the services, both for users and for the promotion of small suppliers who constitute a market for services relating to water and sanitation, and an analysis of the viability of establishing guarantee funds to support microfinancing mechanisms for users and small-scale suppliers.

³¹ The following operations were approved in 2018: PR-L1156, Rehabilitation and Modernization Program for the Acaray Hydroelectric Power Plant, and PR-L1146, Promoting Private Sector Investments in Energy Efficiency in the Industrial Sector in Paraguay.

³² PR-L1010, National Electricity Administration Multiphase Power Transmission Program, Phase I. PR-L1058, National Electricity Administration Multiphase Power Transmission Program, Phase II.

³³ The following operations were approved in 2018: PR-L1153, Digital Agenda Support Program; PR-L1155, Project for the Improvement of the National Early Warning System for Hydrometeorological Events; PR-L1148, Project to Improve and Expand Animal Health Services in Paraguay.

³⁴ PR-L1001, Modernization of Agricultural Support Management.

the *Circuito Vivencial del Mundo Guaraní* (roughly “Exploring the Guaraní World”) in Lake Yguazú, and it also provided training for four indigenous communities and 91 local micro- and small-scale entrepreneurs.³⁵ In a crosscutting manner, around 4,000 entrepreneurs were trained in export instruments, preparing 171 export business plans and implementing 90 projects.³⁶ Support was also provided for developing a Paraguay trademark, and carrying out more than 1,500 investment promotion events, both in the country and abroad.³⁷ In parallel, IDB Invest coordinated loan operations to facilitate access to financing for farmers (with a gender approach) and SMEs with export potential.³⁸ At the same time, IDB Lab has supported training and workforce integration for more than 45,000 young people,³⁹ the development of business capabilities for around 2,000 low-income youth,⁴⁰ and the promotion of the creative economy⁴¹ and social innovation.⁴² Institutional support has been geared to promoting the national system of tourism statistics, preparing development plans for river-based tourism, supporting the animal health service, and strengthening the agency that promotes foreign investment and exports.⁴³

- 2.9 When it comes to the financial sector, IDB Group support has focused on:** providing market liquidity to promote long-term financing; deepening financial inclusion; generating financing opportunities for excluded sectors; and cooperating in the preparation of the regulatory framework for pension funds. In terms of achievements, support to Agencia Financiera de Desarrollo (AFD) helped to increase bank loan maturities during 2012-2016 (increasing them by 62%, to an average term of 13 years).⁴⁴ IDB Invest also helped to channel long-term financial resources, particularly in local currency, through guarantee operations for the banking and telecommunications sectors and the first bond issue for SME development on the Asunción Securities and Products Exchange.⁴⁵ In the context of this last operation, in parallel, the IDB Group supported strengthening of the country’s regulatory framework to enable a greater offering of financial instruments of this kind, also helping to address the challenges related to the absence of a liquid currency swaps market in guaraníes, and to diversify risk on the part of financial institutions, pension funds, insurance companies, and mutual funds. IDB Lab supported the creation of parametric microinsurance for small-scale producers.⁴⁶ At the same time, in the SME financing framework, 107 enterprises received technical assistance in 2017 to improve their business capabilities (43%

³⁵ PR-L1050, National Tourism Program.

³⁶ PR-L1018, Program to Support Paraguayan Exports.

³⁷ PR-L1069, Investment Promotion Program.

³⁸ PR-L1053, PR-L1071, PR-L1079, PR-L1078, PR-L1087, among others.

³⁹ PR-M1031, New Employment Opportunities for Youth in Paraguay.

⁴⁰ PR-M1035, Program to Scale Youth Entrepreneurship in Paraguay.

⁴¹ PR-T1232, Promotion of the Creative Economy in Paraguay.

⁴² PR-M1038, Consolidation of a Social Innovation Laboratory Model: Koga Impact Lab.

⁴³ PR-T1222 and PR-T1203.

⁴⁴ PR-L1062, Third Individual Operation under the CCLIP to Provide Financing to Agencia Financiera de Desarrollo (AFD).

⁴⁵ 11611-01, 11803-04, PR-L1053, PR-L1078, PR-L1087, 12266-01. The IDB Group is the first multilateral institution to issue bonds on the Asunción exchange, and to do so in local currency.

⁴⁶ PR-M1026, Parametric Agricultural Microinsurance for Small Farmers in Paraguay.

above the established target), 43 of which were headed by women.⁴⁷ Similarly, the IDB Group helped to strengthen the institutional framework of the AFD by evaluating its organizational and regulatory structure, and it provided technical support for strengthening the financial sustainability and the supervision of the pensions system.⁴⁸

- 2.10 **With respect to public management, IDB Group interventions sought to generate:** economic and fiscal stability, professionalism in the civil service, a stronger public investment system, better financial administration of the State, and the prevention of violence and support for the justice system.⁴⁹ In terms of achievements, support for policy reforms in the management of public investment helped to strengthen the strategic, legal, and institutional framework of the National Public Investment System (SNIP) (during 2015-2018 the number of projects with preinvestment studies rose by 168%) and to improve capacities to manage public investment programs (in 2015-2018 the number of persons trained in project management by SNIP rose by 300%).⁵⁰ In addition, some 5,000 career civil servants were trained in administrative management and modernization.⁵¹ At the same time, the information systems generated served to boost the use of statistical data in these public entities (with a 200% increase in the number of information requests during 2010-2016) and among private agents (with a 3,500% increase in the number of information requests during 2010-2016).⁵² In parallel, the IDB Group helped to strengthen capacities through technical support targeted at reinforcing functions at the Center of Government, facilitating access to the vital records office, digitizing the management of intellectual property, and introducing a system of georeferencing for public investment projects (MapalInversiones).⁵³ With regard to the prevention of violence, more than 1,500 persons (including 588 young people between 15 and 29 years of age) benefited from a pilot project for at-risk youth in the San Carlos neighborhood, in the Municipality of Luque.⁵⁴ On the justice front, a penitentiary information system was developed, and an information system was implemented for selecting judges, prosecutors, and public defenders in the Council of Magistrates.⁵⁵
- 2.11 **Bank Group support also sought to promote regional integration and to encourage Paraguayan public officials to share experience with their peers in other countries.** In terms of regional public goods, Paraguay has benefited from initiatives to design and implement a regional information system on droughts;⁵⁶ improvements in the role of the public banks in developing financial

⁴⁷ PR-L1081, Financing Program for Paraguayan Small and Medium-sized Enterprises.

⁴⁸ PR-T1194, PR-T1173.

⁴⁹ The following operations were approved in 2018: PR-L1150, Investments in Public Finance for Sustainable Development; PR-L1151, Public Finance for Sustainable Development; PR-L1152, Housing and Rehabilitation Program for Bañado Sur in Asunción.

⁵⁰ PR-L1101, Public Investment Management Program.

⁵¹ PR-L1008, Program of Support for the Civil Service, and PR-T1186.

⁵² PR-L1049, Program to Develop the National Statistical System through the 2012 Population and Housing Census.

⁵³ PR-T1157, PR-T1187, PR-T1169, PR-T1260, PR-T1198.

⁵⁴ PR-T1218; PR-L1077. Integrated Citizen Security Management Program.

⁵⁵ PR-T1219; PR-0146. Strengthening the Justice System.

⁵⁶ RG-T3308.

infrastructure assets; regulatory and legal convergence for the regional Fintech ecosystem; and the identification of opportunities for digital commerce.⁵⁷ When it comes to sharing experience, the IDB Group has fostered knowledge transfer in urban transportation projects, as well as knowledge sharing in financial products for developing infrastructure projects with Colombia and Mexico.⁵⁸ Similarly, the IDB Group has supported the exchange of experience in agrifood health with Mexico; e-government and digital identity with Estonia; and disruptive technologies for development with the United States.⁵⁹

- 2.12 **In the crosscutting areas, the IDB Group used loans and technical assistance to support:** extension of the school day and development of 21st century skills through pedagogical innovations that include the “Scholas” methodology;⁶⁰ development of an artificial intelligence platform that will help to match labor supply and demand;⁶¹ integration of health service networks with emphasis on obstetric care and early childhood development;⁶² creation of the first Ciudad Mujer program in the country, and the first pilot project for including women in nontraditional jobs in local road works;⁶³ evaluation of climatic vulnerability and the risks of pollution in the Patiño aquifer; and design and implementation of priority measures to improve the national system of early climatological alerts.⁶⁴
- 2.13 **The IDB Group’s outstanding portfolio exceeds US\$2.5 billion and represents an important asset for financing the country’s development.**⁶⁵ The IDB (SG) portfolio comprises 36 loan operations totaling US\$2,259,900,000, of which US\$1,762,600,000 is pending disbursement. This portfolio is equivalent to around three years of public investment by the central government (on average US\$800 million per year since 2014). The amount pending disbursement is concentrated in the following sectors: transportation (33.6%), fiscal management and institutions (27.1%), capital markets (10.4%), social investment and urban development (9.3%), energy (7.8%), and water and sanitation (7.6%). In addition, the technical cooperation portfolio consists of 35 operations totaling

⁵⁷ RG-T3308, RG-T3273, RG-T3309, Technical Note IDB-TN-01549.

⁵⁸ PR-T1263, PR-T1262.

⁵⁹ PR-T1203, PR-T1255, PR-T1198, PR-T1261, as well as a visit to the MIT Media Lab in Cambridge, Massachusetts.

⁶⁰ PR-L1097, Project to Support Extended School Days and Improved Transportation Conditions for Students Attending Rural Official Schools. In 2015, the IDB Group and the Scholas Foundation signed a mutual cooperation agreement. The Scholas method seeks to generate a paradigm shift in education by integrating educational communities, with a focus on those with fewer resources. The methodology gives priority to technology, art, and sports for promoting an integrated, peaceful society.

⁶¹ PR-L1066, Program to Support Job Placement.

⁶² PR-L1051, Early Childhood Development Program. Operation PR-T1158 created instruments for implementing the Comprehensive and Integrated Obstetrical and Neonatal Care Services Networks with a georeferenced information system that coordinates the demand for and supply of health services for pregnant mothers and children under five years of age, implementation of which was expanded to six of the country’s health regions by the Ministry of Health, with funding from operation PR-L1051.

⁶³ This support, provided through operation PR-L1084, offered training for 61 women and paid fellowships for another 24, 14 of whom subsequently received formal job offers.

⁶⁴ PR-T1158, PR-T1196, PR-T1207, PR-T1216, and PR-L1155. Project for the Improvement of the National Early Warning System for Hydrometeorological Events.

⁶⁵ Outstanding portfolio as of 1 January 2019. Includes operations approved during previous country strategy periods.

US\$18.7 million.⁶⁶ The IDB Invest portfolio (NSG) consists of 22 loan operations, with a level of exposure of US\$301.8 million and US\$16.9 million pending disbursement, as well as five guarantee operations for US\$98.9 million. The IDB Invest portfolio is concentrated in financial markets, agriculture, and technology. The IDB Lab portfolio (NSG) comprises 10 operations amounting to US\$6.3 million, of which US\$3.3 million is pending disbursement, in the areas of agriculture, water and sanitation, urban development, and the creative economy. In terms of strategic alignment, NSG support is currently concentrated in water and sanitation, productive development, and the financial sector.

- 2.14 **The IDB Group portfolio constitutes a strong base for strategic positioning, consistent with the priorities expressed by the government and aligned with the strategic objectives of the new Country Strategy.** Of particular note are the reforms and investments that it supports in the areas of the digital agenda, fiscal reforms, and productive infrastructure, as key strategic elements for the country's development over the coming years.

B. Lessons learned

- 2.15 **The lessons learned are supported by the Bank's cumulative experience in the country, dialogue with various public, private, and civil-society actors, and the findings and recommendations of the Office of Evaluation and Oversight (OVE) (see Annex IV).**

- 2.16 **Strategic lessons.** At the strategic level, it is important to highlight measures to: (i) reinforce the public capacity to manage development in a comprehensive manner, with the emphasis on transparency and audit systems, through innovative processes and solutions and technological tools; (ii) channel interventions into areas of high development impact and with high added value, where the IDB Group has comparative advantages and, moreover, can leverage and/or coordinate regional integration processes;⁶⁷ (iii) use loan instruments that are mutually reinforcing and complementary, such as policy-based loans and investment loans; (iv) promote the strategic programming and prioritization of technical assistance in order to achieve greater targeting and impact in terms of generating knowledge, strengthening institutions, and raising awareness of partners on development issues; (v) promote territorial and multisector approaches to development that integrate social, environmental, and productive considerations; (vi) deepen synergies and coordination of interventions between the public and private sector windows of the IDB Group.

- 2.17 **Operational lessons.** To achieve satisfactory execution of projects, it is essential to: (i) reinforce the comprehensive vision of the project cycle with the authorities, particularly as it relates to the design of operations and support during budget formulation, which will allow for real-time monitoring of execution and the timely adoption of mitigation measures; (ii) generate and/or consolidate project management capabilities, stressing fiduciary and procurement considerations,

⁶⁶ Paraguay also received two investment grants from the Spanish Fund for Water and Sanitation, totaling US\$100 million, under which disbursements stand at US\$62.4 million.

⁶⁷ For example, through the integration of transportation and logistics corridors, or the productive development of border zones, especially with partners from the Southern Common Market (MERCOSUR) (Alto Paraná – Northeast Paraná, multi-destination Jesuit route in Paraguay, Argentina, Brazil, Bolivia, and Uruguay).

particularly in infrastructure, so as to improve transparency, encourage project ownership by the authorities, and facilitate project execution;⁶⁸ (iii) provide technical support to the authorities in identifying mechanisms to speed the ratification of SG loan operations in the executive and legislative branches, and to minimize problems relating to outdated designs and/or cost overruns;⁶⁹ (iv) in preparing complex interventions that entail high risks, particularly those pursued in urban settings, it is essential to provide value added and to make environmental, social, and communication management (environmental and social safeguards) more efficient and effective; (v) with respect to IDB Invest, apply unconventional credit rating models for the design of operations that will benefit the base of the pyramid, and ensure that the senior management of beneficiary firms is committed to adopting environmental and social safeguards, as well as incorporating seasonal factors and volatility into the sensitivity analysis of agricultural projects and in the definition of project targets; (vi) with respect to IDB Lab, identify new institutions and partners that can pursue innovative initiatives with high potential impact, and venture gradually into contingent operations and other reimbursable instruments.

III. STRATEGIC AREAS

- 3.1 **The new Country Strategy (2019-2023) is designed to support Paraguay's institutional and productive transformation, under criteria of sustainability, equity, and economic and social inclusion.** Based on the IDB Group's experience and its current portfolio in the country, the lessons learned from the previous Country Strategy, the findings of the Country Development Challenges (CDC) document, the OVE recommendations, discussions with the private sector, civil society, and academia, the support provided by other cooperation partners, the National Development Plan (PND), and the priorities of the current government,⁷⁰ the new Country Strategy will prioritize four areas of cooperation and support: (i) public management and institutions; (ii) integration and diversification; (iii) productive and resilient infrastructure; and (iv) human capital and living conditions. The Country Strategy will provide crosscutting support for the challenges relating to (a) gender, diversity, and indigenous populations, (b) sustainability of natural capital, (c) urban development, and (d) innovation and technology. The Country Strategy 2019-2023 is aligned with the IDB's Update to

⁶⁸ For example, by strengthening and/or creating executing units. See PR-T1163 (Program to Improve Project Execution). To ensure that the units are effective in executing projects, they must meet the following conditions: (i) they must be established by presidential decree, (ii) they must be staffed by suitable, competent professionals, (iii) there must be a clear delegation of functions, including the capacity to make administrative decisions, (iv) they must have a multiyear budget and sufficient budgetary room, and (v) they must have operational contracting units and financial administration subunits to facilitate procurement and financial processes. In this context, since 2016 the Bank has been supporting the project execution unit of the Ministry of Public Works and Communications, which is responsible for executing the majority of IDB-financed infrastructure projects, among others. In terms of outcomes, in 2017 the unit fulfilled 72% of planned procurement processes (up by 39% over 2016), the volume of procurement represented 96% of that planned (up by 16% over 2016), and at the 2017 pace of execution the portfolio will be implemented in 8 years (versus 21 years at the 2015 pace of execution).

⁶⁹ On average, 700 days elapse from project approval until the first disbursement.

⁷⁰ See section I.

the Institutional Strategy 2010-2020,⁷¹ the IDB Invest 2017-2019 Business Plan, and the IDB Lab Business Plan 2019-2021.⁷²

A. Public management and institutions

3.2 In order effectively to address the country's institutional and productive transformation, and to achieve greater levels of efficiency and transparency, it will be necessary to strengthen public management capabilities and augment the mobilization of public and private resources for development.

3.3 The institutional and policy frameworks present weaknesses, which have to do with shortcomings in management systems and capacities, and difficulties in effectively mobilizing private and public resources for development. On one hand, the quality of public policies is relatively low, as illustrated by various international governance indicators, which point to challenges in controlling corruption, complying with the law, and ensuring effective government interventions.⁷³ These deficiencies are linked to shortcomings in national information systems, transparency and audit systems, and the capacity of the civil service. On the other hand, there are significant gaps in the country's physical and human capital, which will require copious financial resources to be addressed.⁷⁴ However, the mobilization of resources for development still falls short, reflecting the scant effectiveness of the regulatory framework for private participation in public investment projects, as well as in the management of public resources.

3.4 National information systems. According to the 2018 assessment using the Tool for Assessing Statistical Capacities (TASC), Paraguay falls short of the regional average in aspects related to data processing and dissemination, field operations, sampling and planning activities, and census and survey management.⁷⁵ These weaknesses are also reflected in the relatively low coverage of the personal vital records office, where 85% of children under five years of age are registered, while the regional average is 93%.⁷⁶ In this respect, 76% of the Paraguayan population is registered before reaching one year of age, which means that Paraguay, together with Bolivia, has the highest under-registration rates in Latin America and the Caribbean. In addition, the proportion of the population registered in rural areas (69%) is lower than in urban zones (82%), and the registration rate for the lowest income quintile stands at 67%.

⁷¹ Document AB-3008. Aspects relating to possible synergies between IDB, IDB Invest and IDB Lab will be addressed in the annual programming exercises.

⁷² The IDB Lab Business Plan gives priority to three areas: climate-smart agriculture, inclusive cities, and the knowledge economy.

⁷³ The World Bank's governance indicators and Transparency International's Corruption Perceptions Index (123/176) place Paraguay among the countries with the highest perception of corruption in Latin America and the Caribbean and the world.

⁷⁴ See infrastructure and human capital pillars. For example, to reduce these deficits by 50% will require additional annual investments in the order of 1.5% of GDP over approximately 20 years.

⁷⁵ The World Bank's statistical capacity index accorded Paraguay a rating of 67.8/100 in 2017, below the average value for Latin America and the Caribbean (75.8/100).

⁷⁶ UNICEF Birth Registration Report 2013.

- 3.5 **Transparency and audit systems.** According to the 2016 AmericasBarometer survey, 28.1% of Paraguayan respondents say they have been victims of corruption (bribery), a proportion higher than that recorded in Chile, the country with the lowest proportion of victims (5.3%), and higher than the average for Latin America and the Caribbean (20.2%). In terms of controls and audits, according to the WEF institutions pillar, Paraguay ranks 112 out of 140. Moreover, the latest Public Expenditure and Financial Accountability Report (PEFA) of 2016 awards the country a D+ rating in internal and external audit, and a D rating with respect to legislative scrutiny of audit reports.⁷⁷ Again, according to the Basel Anti-Money-Laundering (AML) Index 2017, Paraguay ranks 16/146, giving it the highest risk score in Latin America. These challenges are explained in part by the lack of coordination among the many agencies involved in the area of transparency and combating corruption and asset laundering,⁷⁸ together with institutional weaknesses in regulating and implementing legal and legislative frameworks.⁷⁹
- 3.6 **Civil service.** Paraguay's Civil Service Development Index has shown a positive trend since 2004, with improvements in the subsystems of planning, work organization, employment management, and compensation.⁸⁰ Nevertheless, there are persistent challenges relating to human resource management, in particular with respect to performance evaluation, professional development (administrative career), and the management of human and social relations (communication with employees, unions, and other relevant actors in society).
- 3.7 **Regulatory framework for private participation.** According to data from the 2018 Infrascopio, Paraguay ranks 12th among 19 countries in Latin America and the Caribbean in terms of a climate conducive to carrying out projects under the public-private partnership (PPP) modality. As that assessment shows, the greatest challenges have to do with improving the operational maturity of projects, enhancing the investment climate facing private companies, and ensuring adequate financial facilities for supporting this mechanism.⁸¹ In addition, there are weaknesses of coordination among the entities responsible (Ministry of Finance, Technical Secretariat of Planning, and line ministries) and with respect to the

⁷⁷ The D and D+ ratings show that there are still significant gaps in managing controls and audits in the country, vis-à-vis accepted international standards. In addition, sworn statements by public officials are not made available or published.

⁷⁸ Office of the Comptroller General, National Anticorruption Secretariat, Secretariat to Prevent the Laundering of Money and Goods, Office of the Attorney General, Central Bank, Supreme Court of Justice.

⁷⁹ There is no law in place to regulate the actions of the National Anticorruption Secretariat. Moreover, there is significant room for improvement in the update to the National Corruption Prevention Plan, in light of the recommendations arising out of the international conventions that Paraguay has ratified, as well as the international financial integrity standards (Financial Action Task Force) that it has adopted, and the voluntary commitments it has assumed, including those relating to data transparency in public infrastructure works. It must also be noted that little information is available to the public on government procurement and expenditure, and this limits efforts at citizen oversight.

⁸⁰ In 2017, the IDB conducted an institutional assessment of the Paraguayan civil service, using a methodology based on the Ibero-American Charter of the Public Service. That assessment awarded the country a score of 40/100, placing it near the regional average.

⁸¹ Paraguay has little experience in financing infrastructure through PPPs. The legal framework for PPPs is set by Law 5102 of 2013, on promoting investment in public infrastructure and expanding and improving goods and services provided by the State, and its regulatory decree 1350 of 12 March 2014. Under that framework interventions in transportation infrastructure are planned.

technical capacities for structuring contracts. These challenges also have an impact on the applicability of alternative financing schemes such as “turnkey” arrangements.⁸²

- 3.8 **Management of public resources.** The quality and efficiency of public expenditure is low.⁸³ The latest PEFA highlights the following among the main weaknesses, (i) the lack of fiscal risk oversight, (ii) poor management of physical and financial assets, (iii) incipient introduction of multiyear budgeting, (iv) low budgetary reliability, and (v) weaknesses in the provision of information on budget execution. At the same time, the tax ratio (10% of GDP) is among the lowest in the region: the country collects only 40% of maximum potential revenues, and the rates applied to the value added tax (VAT) and the corporate income tax (10%) are the lowest in the region.⁸⁴ These factors are compounded by the risks of sustainability⁸⁵ in the pension system, which presents coverage gaps⁸⁶ and institutional fragility, associated with the lack of a uniform regulatory framework for the system.⁸⁷
- 3.9 **The IDB Group will help to reduce shortcomings in public management systems and capacities, drawing on the opportunities offered by digital government, and eliminating barriers that impede the channeling of private and public resources for development, through actions aimed at:** (i) strengthening public capabilities for data processing, sampling, and census and survey management, as well as expanding coverage of the single vital records office; (ii) promoting the institutionalization of external and internal audits, with the emphasis on strengthening mechanisms for coordination among the entities responsible for the transparency and audit system, and their respective legal frameworks; (iii) strengthening the management of public-sector human resources, with a focus on implementing performance measurement systems; (iv) strengthening the public-private financing framework, improving public capacities to identify, design, structure, and supervise contracts; (v) improving the

⁸² Law 5074 for financing infrastructure under the “Public Works with Financing” modality provides for the contractor to finance 100% of the works with its own funds and those drawn from the financial system, with the State covering the investment costs and financial costs once the works are completed. The low degree of maturity of the projects proposed for financing under this framework, and the financing risk which is assumed entirely by the private sector, have meant that the projects proposed are unattractive to the private sector and/or presuppose high costs for the State.

⁸³ Paraguay is the lowest-ranking country (16/16) on the public investment efficiency Index prepared by the IDB. The public investment system has a limited capacity to centralize, manage, and analyze information. The country is in the 19th percentile on the World Bank’s government effectiveness index (2017).

⁸⁴ Based on data from the Ministry of Finance and the Inter-American Center of Tax Administrations. The tax structure relies primarily on indirect taxes (65%), which makes the system highly regressive. The fossil energy subsidy represents 0.75% of GDP, and it too tends to be regressive.

⁸⁵ According to IMF estimates, the present value of the *Caja Fiscal* implicit debt will reach 28% of GDP in 50 years, and 110% over a period of 85 years. IDB studies show that with population aging, and depending on changes in coverage, the public budget earmarked to cover citizens without pensions could increase over the next 30 years, reaching up to 5% of GDP. Over the next 50 years, the present discounted value of the deficits stands at 28% of current GDP, rising to 76% of current GDP over a horizon of 85 years (IMF, Country Report 17/234).

⁸⁶ Around 11% of persons over 65 years receive a contributory pension (38% in Latin America). Only about one-quarter of the employed population contributes to some pension fund (44% in Latin America).

⁸⁷ Each pension fund is regulated by its own charter, which does not allow for the imposition of penalties.

management of public resources⁸⁸ with an emphasis on the quality and efficiency of expenditure,⁸⁹ by implementing results-based budget management systems;⁹⁰ constructing a more effective and equitable tax system, by rationalizing deductions and exemptions and strengthening the tax administration; and (vi) supporting the strengthening of the retirement and pension system, with the emphasis on designing management and governance approaches that will ensure the system's financial sustainability.

The actions indicated are linked to the strategic objectives of the IDB Group.⁹¹ The interventions are aligned with the following targets of the Update to the Institutional Strategy: inclusive development (a redistributive fiscal policy for a more equitable society) and sustainable productivity and innovation (institutions for productivity and innovation).

B. Integration and diversification

- 3.10 In order to foster productive structural changes and to facilitate the country's integration into the world economy, it is necessary to encourage Paraguayan firms to pursue an international presence and to promote long-term financing for private investment.**
- 3.11 Paraguay's exports are highly concentrated, in terms of both markets and products, and this generates vulnerabilities to external shocks.** Since 2004, total exports have represented an average of 39.6% of GDP, and they are characterized by high levels of concentration. The four main export destinations (Brazil, Argentina, Russia, and Chile) account for 60% of exports, and five tariff lines associated with electricity, soybeans, and meat represent 68% of total exports, some of which are growing at rates below their potential.⁹²
- 3.12 The main barriers to productive integration and diversification are associated with the lack of an international commercial presence by Paraguayan firms, and limited access to long-term financing for investment.**⁹³

⁸⁸ Including resources channeled through FONACIDE.

⁸⁹ One of the recommendations from a report analyzing Paraguay's agricultural policies over the period 2009-2016 is that there is room to reallocate more public resources to the agriculture sector without increasing total public expenditure, since evidence shows that Paraguay is among those countries that devote the least budgetary funding to the agriculture sector, despite its importance to the country's economy.

⁹⁰ Including the use of georeferencing tools for investments (for example, *MapaInversiones*), which also help to make public management more transparent.

⁹¹ The portfolio in execution is helping to address some of the challenges identified. For example, operations PR-L1027 (Fiscal Management Strengthening and Modernization Program II), PR-L1150 (Investments in Public Finance for Sustainable Development), and PR-L1151, Public Finance for Sustainable Development.

⁹² Based on data from the Central Bank and the World Bank-WITTS. Over the last five years, soybean exports have grown less quickly than demand for this product from the major importing countries, and 25% of meat exports go to Russia, where demand has fallen by 27% over the same period.

⁹³ These factors are compounded by infrastructure shortages that increase marketing costs (see strategic area iii). The lack of direct access to the sea constitutes a commercial disadvantage. According to Arvis et al. (2010), landlocked countries will typically (i) sell 30% less than countries with a shoreline, (ii) face higher import costs and lower export revenues, and (iii) grow on average 1.5% more slowly than countries with access to the sea.

- 3.13 **International commercial integration of firms.** Productive linkages to the rest of the world are weak,⁹⁴ and are concentrated in the agriculture sector, where exports typically have low levels of sophistication,⁹⁵ due to limited levels of innovation (the country ranks 89th out of 124 on the 2018 Global Innovation Index). As a result, external value added as a proportion of the country's total exports (participation in global value chains through the transformation of inputs) represents 17.2%, below the average figure for Latin America and the Caribbean (22.9%), which in turn is lower than for countries of Asia and Europe (Blyde, 2014). In addition, exports of services represent a small proportion of total exports.⁹⁶
- 3.14 **Long-term financing for investment.** The supply of financing (domestic savings) is trending downward, and credit to the private sector is relatively scarce (31.6% of GDP versus 49.2% for Latin America and the Caribbean). This has caused investment to stagnate at around 17% of GDP (20% in Latin America and the Caribbean). In addition to the deficits in domestic credit penetration vis-à-vis GDP, less than half of the population reports having access to bank accounts (49%), below the median of developing economies (63%).⁹⁷ Restrictions on access to productive financing are explained, on one hand, by inefficient and shallow banking intermediation, related to information asymmetries,⁹⁸ as well as the use of credit scoring models that penalize the relatively smaller firms and those in nontraditional sectors (technology, services). Limitations to access are also associated with the limited development of the capital market, which poses restrictions on both the supply side (few institutional investors, including the pension system) and the demand side (large number of family firms, disinformation on issuance costs).⁹⁹
- 3.15 **The IDB Group will give priority to international commercial integration and productive diversification, through activities geared to:** (i) on one hand, promoting greater economic complexity in the export basket by supporting firms with sustainable business practices through IDB Invest, while on the other hand encouraging the development of new export sectors, for example, in services,¹⁰⁰ thereby ensuring small-scale producers' access to local and international markets through anchor companies; (ii) enhancing the efficiency and scope of banking intermediation, of capital markets and of nonbank financial institutions (through such instruments as leasing and factoring), as well as promoting financial innovation for addressing nontraditional sectors (angel investors, crowdfunding, fintech), with a focus on access to long-term financing.

⁹⁴ WEF data suggest that the presence of firms in value chains is relatively low (rank 117/137).

⁹⁵ In Paraguay's case, both the World Bank's export sophistication index and the Hausmann economic complexity index have shown downward trends since the end of the 1990s. See paragraph 1.8.

⁹⁶ Paraguay's services exports quadrupled over the period 2004-2017, and now represent on average 5.8% of total exports of goods and services. Services exports are concentrated in transportation and travel, which together account for nearly 40% of total services exports (BCP).

⁹⁷ Global Findex, 2017.

⁹⁸ The coverage of private information agencies (credit bureaus) is 45% in Paraguay (79% in Brazil, 89% in Colombia, and 100% in Argentina and Uruguay).

⁹⁹ As a result, according to data from the Asunción securities exchange, total market transactions amounted to US\$669 million in 2018, equivalent to 2% of GDP.

¹⁰⁰ One of the service sectors with the greatest growth potential is tourism. Paraguay Tourism Market Study, 2017.

- 3.16 **The proposed activities are aligned with the institutional and business objectives of the IDB Group.**¹⁰¹ Interventions will help to address the objectives of inclusive development (financial inclusion for the poor), sustainable productivity and innovation (sustainable technology transfer), as well as integration and cooperation within a comprehensive framework (drawing on cooperation within the region and with other regions), as set forth in the Update to the Institutional Strategy. These initiatives will also serve the strategic priorities of the National Development Plan to strengthen capacities in the corporate sector and to generate partnerships with the financial sector to address priority areas of action such as support for SMEs.¹⁰² The proposed activities are also aligned with IDB Lab's focus on climate-smart agriculture and the knowledge economy.

C. Productive and resilient infrastructure

- 3.17 **To enhance international integration as well as productive diversification will require more and better infrastructure that is resilient to adverse climatic phenomena and that in turn will lower production and marketing costs and at the same time improve people's quality of life, all of which are fundamental for promoting inclusive economic growth.**
- 3.18 **There are deficiencies in the provision and quality of infrastructure for transportation and logistics, energy, connectivity and telecommunications, and water and sanitation.** To begin with, Paraguay ranks among the worst countries worldwide in terms of the quality of its roads, ports, and airports.¹⁰³ According to WEF data, Paraguay ranks 129/140 in the quality of its roads, and 118/140 in the quality of its airport infrastructure. Moreover, coverage of the road network is low, with a density seven times lower than the average for Latin America and the Caribbean (0.55 km/km²).¹⁰⁴ The energy sector has shortfalls in power transmission (electric lines) and distribution (transformer stations), which translate into interruptions in electricity service (quality and reliability).¹⁰⁵ These shortcomings constrain business competitiveness, as the costs associated with power outages are estimated at 2.5% of sales in Paraguay, significantly above the average for all Latin American and Caribbean countries (1.4%).¹⁰⁶ In fact, more than 80% of Paraguayan firms report experiencing power outages, while the average for Latin America and the Caribbean is 57%. With respect to connectivity and telecommunications, the per capita capacity for international connectivity to broadband Internet is low (21 Kpbs per user, below the

¹⁰¹ The portfolio in execution is helping address some of the challenges identified. For example, operations PR-L1081 (Financing Program for Paraguayan Small and Medium-sized Enterprises), PR-L1050 (National Tourism Program), and PR-L1069 (Investment Promotion Program).

¹⁰² These proposed activities are also aligned with the Business Plan Update approved in 2018 (document CII/GA-77-8).

¹⁰³ Nearly 58% of the road network is in fair to poor condition. In logistics, the lack of dredging and signaling on waterways (Paraguay-Paraná) affects the transportation of goods. The low degree of intermodal integration (road network with ports) undermines the efficiency of the productive chains and increases export costs (US\$1,850 per container versus US\$1,287 in Latin America and the Caribbean).

¹⁰⁴ With respect to the density of the paved road network (km/km²), Paraguay, at 0.02, ranks below Uruguay (0.05) and Argentina (0.03). Data from the International Road Federation (2015).

¹⁰⁵ In 2017, the total average duration of power outages per customer was 31.6 hours, while the average number of service interruptions per customer was 27.6. As a result, Paraguay ranks 101/190 (25/32 in Latin America and the Caribbean) on the World Bank's index of ease of access to electricity.

¹⁰⁶ Figures taken from the World Bank Enterprise Survey, 2017.

average for countries of the Southern Cone—80 Kbps—and Latin America and the Caribbean—72 Kbps). In addition, 2017 data from the International Telecommunications Union point to low broadband coverage (4.1% of the population versus 12.1% in Latin America and the Caribbean), implying low use of the Internet for productive activities¹⁰⁷ or as a tool for financial inclusion: the percentage of the over-15 population using cellular or Internet in general to access a bank account is 9.9% in Paraguay, versus 17% for the rest of Latin America and the Caribbean.¹⁰⁸ Lastly, in the water and sanitation sector, 78% of households have access to piped drinking water, while 11% have access to sanitary sewers. In addition, only 2% of collected wastewater is treated before being dumped into receiving bodies of water.¹⁰⁹ Deficits of water and sanitation infrastructure also mean productivity losses for companies: 11.4% of Paraguayan firms (in particular the smaller firms) say they have suffered water supply cuts, affecting their normal functioning and operations.¹¹⁰

- 3.19 **These challenges are related to both investment gaps and institutional weaknesses that restrict the effective channeling of public resources and private sector participation in infrastructure.** On one hand, investment needs in physical infrastructure exceed 70% of 2017 GDP, and on the other, public agencies responsible for executing infrastructure projects face institutional and governance challenges that result in low levels of efficiency in public spending in the sector.¹¹¹ These challenges to the sector's governance with respect to the capacity for planning, management, and execution also limit opportunities for the private sector to help close the country's significant physical infrastructure deficit.
- 3.20 **Transportation and logistics.** The update to Paraguay's Master Plan for Transportation Infrastructure and Services (2018-2028) identifies investment needs for the construction and improvement of road, river, air, and rail transportation, amounting to 40.6% of 2017 GDP.¹¹² Investment priorities include asphalt paving, rehabilitation, and maintenance of the national, departmental, and local road networks, construction of international bridges with Brazil and Argentina, modernization of the airport system in Asunción, and improved navigability on the Paraguay River.¹¹³ These investment requirements are compounded by the challenges associated with the project planning, management, and execution capacities of the Ministry of Public Works and Communications (MOPC), which have a negative impact on timely maintenance of the transportation and logistics network, as well as on new project development. In particular, there are challenges in terms of interagency coordination and implementation of alternative financing

¹⁰⁷ Paraguay is the second (fifth) country of the region in terms of companies making the least use of the Internet to relate with other firms (customers).

¹⁰⁸ According to the Global Findex Database, 2017.

¹⁰⁹ Data from the Sanitation Services Regulatory Entity (ERSSAN 2017). Rainwater drainage infrastructure in the national capital currently has a coverage of 17%.

¹¹⁰ Twenty percent of small enterprises report shortcomings in water service in Paraguay, while the average for Latin America and the Caribbean is 16.1%. Figure from the World Bank Enterprise Survey, 2017.

¹¹¹ According to IMF estimates, Paraguay is 40% below the efficiency threshold in terms of its capacity to convert public investment spending into concrete infrastructure.

¹¹² Road network investments represent approximately 50% of the total required, followed by rail transportation (46%) and river and air transportation (4%).

¹¹³ Investments include the paving of routes 1 and 9. In integration and logistics, bridges will be built over the Paraguay River (Carmelo Peralta-Puerto Murtinho) and the Apa River (San Lázaro-Puerto Murtinho).

- structures for works maintenance and construction (road maintenance fund, public-private partnerships, concessions).
- 3.21 **Energy.** The 2018-2025 Master Plan of the National Electricity Administration (ANDE) for Generation, Transmission, and Distribution establishes investment requirements in generation, transmission, and distribution amounting to 15.8% of 2017 GDP.¹¹⁴ Priority investments include those for rehabilitating and constructing new hydroelectric power plants, the construction of solar photovoltaic parks, and the strengthening and construction of transmission and distribution systems.¹¹⁵ The main institutional challenges have to do with weaknesses in planning and coordination, due to the existence of multiple institutional actors operating in the sector without a shared strategic vision for the medium term (regulatory capacity).¹¹⁶ These challenges are compounded by the financial deterioration of ANDE, associated with outdated electricity rates and losses in the service supply chain.¹¹⁷
- 3.22 **Connectivity and telecommunications.** The National Telecommunications Plan (2016-2020) gives priority to measures to improve broadband connectivity for firms, educational institutions, health institutions, and government, and it also proposes the deployment of “last mile” and radiofrequency networks.¹¹⁸ The institutional challenges have to do with the obsolescence of the sector’s regulatory framework,¹¹⁹ which is not adapted to new digital technologies, as well as the

¹¹⁴ Investments in power generation account for 36% of the total, followed by distribution (33%) and transmission (31%). Climate change is projected to result in changes in the annual and seasonal water flows in the Itaipu watershed. In the area of that watershed, the short-term change in annual flow (2010-2040) is projected at between +5% and +15%, and over the long-term (2070-2100) it would be between -5% and -15%. See Rivarola Sosa, et al. (2011). “Climate change impact on the hydrological balance of the Itaipu Basin.” *Meteorological Applications* 18(2): 163-170. DOI:10.1002/met.213.

¹¹⁵ Generation projects include refurbishing of the Acaray hydropower plant. There is also interest in developing the potential of mini-hydro plants. Transmission projects planned include construction of 548 km of transmission line for the Metropolitan system, and 199 km for the central system. Distribution projects proposed include construction, expansion, and replacement of conductors in the medium- and low-voltage grids, as well as boosting the power with installation of new distribution points and improvements in the public lighting service.

¹¹⁶ The many actors involved in the sector include: (i) the Office of the Deputy Minister of Energy and Mines, the agency that issues sector policies and that is included within the MOPC structure; (ii) ANDE, which operates within the orbit of the MOPC, and which has the monopoly on power generation, transmission, and distribution; (iii) PETROPAR, the State oil company which is a key actor in fuel imports and distribution; (iv) Itaipu, a binational entity with Brazil; (v) Yacyreta, a binational entity with Argentina; (vi) the Mixed Argentine-Paraguayan Commission for the Paraná River (COMIP), which is responsible for developing the major hydropower projects at Corpus and Itati-Itacorá; and (vii) the Ministry of Industry and Trade, which is the authority encompassing PETROPAR.

¹¹⁷ In 2016, ANDE posted losses on the order of US\$13 million. In 2017, adjustments were implemented for large-scale consumers, but the remaining power rates were kept at values similar to those of 2002. Technical and nontechnical losses represent 25% of generation, above the regional average of 17%.

¹¹⁸ Estimates from the Ministry of Information and Communication Technologies say that investments on the order of US\$100 million are needed to increase the connectivity of institutions (health, security, and public spaces) and to improve international connectivity. Investments in the sector have traditionally relied on private sources. Between 2008 and 2013, private investment in connectivity amounted to US\$990 million.

¹¹⁹ According to the 2016 Networked Readiness Index, the country ranks 105/139 in terms of its legislative and institutional environment, with a poor performance (133/139) on the pillar relating to the political and regulatory environment.

- limited coordination among regulatory bodies and investment promoters in the sector,¹²⁰ which restricts the potential offering of services, especially in rural areas.
- 3.23 **Water and sanitation.** The National Drinking Water and Sanitation Plan (2018-2030) identifies investment requirements equivalent to 15.3% of GDP.¹²¹ Major investments include the provision of drinking water and sanitary sewer systems in districts of the department of Alto Paraná and in the metropolitan area of Asunción, as well as a comprehensive cleanup of the Ypacaraí lake watershed. The institutional challenges center on the low capacity of the sector's lead agency and regulatory entity for planning and coordination, as well as the great fragmentation of service providers, high levels of arrears, and outdated power rates (partial adjustment of the water and sewer rates in 2018), which in turn hamper the efficient management of water resources, financial sustainability, and the quality of services provided.¹²²
- 3.24 **The IDB Group will support the country's efforts to continue closing the infrastructure gap and strengthen the governance of the sector's institutions, through interventions aimed at:** (i) improving the quality and coverage of the road network (primary and secondary) and making it more resilient to adverse climatic phenomena, while promoting regional integration and market access, as well as improving the quality of river freight transportation services; (ii) addressing shortcomings in power transmission and distribution and promoting investment in nonconventional renewable energy sources, and adopting technologies that replace the use of fossil fuels and promote energy efficiency; (iii) promoting international broadband connectivity, as well as national interconnection and access for public entities, seeking to increase equity in access to the service and enhance digital literacy; (iv) improving and expanding the supply of drinking water and sanitation services (rainwater drainage, solid waste) in rural and urban areas, including interventions by IDB Invest to support private initiatives that will enhance the coverage and quality of these services; and (v) in a crosscutting manner, fostering sector-specific regulatory frameworks and the design, execution, monitoring, and evaluation capabilities of the institutions responsible for executing infrastructure projects, in particular the MOPC, with the emphasis on: strengthening governance and regulatory roles and interagency coordination mechanisms, ensuring financial sustainability of entities and interventions, and making progressive use of public-private financing instruments.

¹²⁰ The Universal Service Fund (FSU), which is financed by tax contributions from telecommunications operators, equivalent to 1% of their gross revenues, is executed primarily by CONATEL and the National Secretariat of Information and Communications Technologies (SENATICS), which poses coordination challenges.

¹²¹ Investments in sanitation amount to approximately 60% of the total required.

¹²² The Bureau of Drinking Water and Sanitation (DAPSAN) of the MOPC is responsible for designing policies for the development of drinking water and sanitation systems. Regulation of the sector (provision of services, quality, application of rules and penalties) is the responsibility of ERSSAN. There are 4,400 providers of water and sanitation services, and they are identified as: Empresa de Servicios Sanitarios de Paraguay (ESSAP), which provides service to the main localities of the country; Juntas de Saneamiento ("sanitation boards"), which provide service to localities with fewer than 10,000 people (2,500 providers); private undertakings that serve zones not covered by ESSAP and the boards.

3.25 **The actions enumerated here are coordinated with the strategic priorities of the IDB Group.**¹²³ The interventions are aligned with the following objectives of the Update to the Institutional Strategy: inclusive development (inclusive infrastructure in urban areas and for the poor in rural areas), integration and cooperation within a comprehensive framework (expansion of integration through investments in infrastructure), climate change and environmental sustainability. These initiatives will also contribute to the strategic priorities of the IDB Invest Business Plan for supporting the development of infrastructure,¹²⁴ and they respond to the issues involved with inclusive cities and the knowledge economy that are priorities for IDB Lab.

D. Human capital and living conditions

3.26 **Just as improving productive and resilient infrastructure is essential for boosting the country's productivity and external competitiveness, developing and enriching its human capital, by improving the coverage and quality of social services, is indispensable for ensuring the sustainability of the productive transformation process and building a more just society.**

3.27 **The supply and quality of education and health services have shortcomings over the course of people's life cycles.** In education, there are persistent challenges of late entry into the system, where, for example, nearly 40% of children aged 5 do not attend preschool (90% of children from the lowest income quintile). This has an impact on academic performance during the first cycle of basic education, and it exacerbates repetition rates. Currently, fewer than half of young people between 15 and 17 are enrolled in secondary education, meaning that the education system is losing approximately one out of every two students.¹²⁵ Moreover, students are not acquiring skills relevant for the 21st century, and their scores on learning tests from the last PISA-2018 study place Paraguay in last position in Latin America and the Caribbean.¹²⁶ In addition, highly skilled labor is relatively scarce. According to the Business Innovation Survey 2016, the shortage or lack of suitably qualified personnel is the leading internal obstacle to innovation (47.2%), and the second external obstacle (36%). According to the WEF, the country ranks 131/137 in the availability of scientists and engineers. In health care, the main indicators of maternal-child mortality and adolescent pregnancy have

¹²³ The portfolio in execution is helping to address some of the challenges identified. For example, operations PR-L1084 (Rural Road Improvement Program), PR-L1058 (National Electricity Administration Multiphase Power Transmission Program, Phase II), PR-L1153 (Digital Agenda Support Program), and PR-L1060 (Water and Sanitation Program for the Chaco Region and Intermediate Cities on the Eastern Region of Paraguay).

¹²⁴ These proposed actions are also aligned with the Business Plan Update approved in 2018 (document CII/GA-77-8).

¹²⁵ Data from the Secretariat for Youth (Paraguay Joven 2030) indicate that 18% of young people between the ages of 15 and 29 are neither studying or working. Of this group, 73% are females.

¹²⁶ The 2018 OECD PISA for Development results show that 8.3% of 15-year-old students have achieved a minimum command of mathematics. According to WEF data, Paraguay ranks among the lowest, globally, in the quality of primary education, the quality of the education system, and the quality of education in mathematics and sciences.

shown a downward trend over the last 15 years,¹²⁷ but the values observed continue to be relatively high: neonatal mortality represents 11.1 for every 1,000 live births (9.6 in Latin America and the Caribbean), child mortality stands at 17.9 for every 1,000 live births (14.9 in Latin America and the Caribbean), mortality among children under five years is 21.0 for every 1,000 live births (17.7 in Latin America and the Caribbean), and maternal mortality is estimated at 132 per 100,000 live births (67 in Latin America and the Caribbean). Moreover, nearly 15% of adolescents between 15 and 19 have reported at least one pregnancy, a proportion that reaches 46% among young women aged 20 to 24. At the same time, the country is passing through an epidemiological transition, with chronic and degenerative (noncommunicable) diseases growing in importance.¹²⁸

- 3.28 **These challenges are associated both with investment needs and with institutional weaknesses that undermine the effectiveness of public spending in the sector.** On one hand, capital outlays on education represent nearly 5% of total sector spending, below the values posted in OECD countries (7%).¹²⁹ In health, capital spending also amounts to 5% of total sector spending, above the value posted in Uruguay (4%), but below the proportion allocated in Peru (15%).¹³⁰ The State is channeling significant funds to address needs in both sectors, with little effect. In 2015, public spending on education as a proportion of GDP amounted to 4.3%, above the average for Latin America (3.9%).¹³¹ Since 2004, public spending on health has doubled from 2.4% to 4.5% of GDP, although this falls short of private spending (5.3% of GDP), which is among the highest in the region.¹³² In this context of relatively high spending and persistent development gaps, improving the effectiveness of public expenditure, in particular by strengthening institutions and governance, could generate savings on the order of 4% of GDP.¹³³
- 3.29 **Education and skills.** With respect to infrastructure, recent analyses of water and sanitation conditions, service connections, educational facilities, office space, multiple use and equipment spaces, indicate that around 50% of Paraguayan students attend schools in which only two of these dimensions meet the necessary

¹²⁷ Since 2004, according to World Bank data, mortality rates among newborns, infants, and children under five years have declined on average by 32%, similar to the average reduction for Latin America and the Caribbean. At the same time, the maternal mortality rate has dropped 27% since 2004 (26% in Latin America and the Caribbean). During that same time, the fertility rate for women aged 15-19 declined by 23%, faster than in Latin America and the Caribbean as a whole (17%). In 2016, women aged 15 to 19 accounted for 56.6 of every 1,000 births (62.5 in Latin America and the Caribbean).

¹²⁸ These diseases account for 70% of deaths, led by diseases of the circulatory system (18.9%), followed by cancer (14.6%) and diseases of the respiratory system (9.3%). (MSPBS data, 2017).

¹²⁹ Paraguay, *Invertir en Capital Humano* [Investing in Human Capital] (World Bank, 2018).

¹³⁰ Paraguay, *Invertir en Capital Humano* (World Bank, 2018).

¹³¹ According to recent estimates, the country allocates around 21% of the public sector budget to the education sector, above the rate for OECD countries (19%). Nevertheless, the country generates only 52% of the learning that it could generate if it had efficiency levels comparable to those of the most efficient countries in the region. Paraguay, *Invertir en Capital Humano* (World Bank, 2018).

¹³² The bulk of private health spending involves out-of-pocket expenditure, which represents a higher burden on the poor compared to the rest of the population (10% versus 4% of income). See Benítez, Gerardo 2017. *Paraguay: Distribución del Gasto en Salud y Gastos de Bolsillo, Principales Resultados. Centro de Análisis y Difusión de la Economía Paraguaya*. Asunción, Paraguay.

¹³³ Includes leakage during transfer, inefficiencies in public procurement and in the remuneration to employees. Better Spending for Better Lives (IDB, 2018).

standards, and nearly a quarter of students attend institutions that comply with only one of the established requirements, or none at all.¹³⁴ At the preschool level, public care centers vary in terms of the model of care and the quality of services. According to an assessment of child care services, nearly 131 public care centers for children up to age five are serving approximately 4,600 children, or 1% of the total population. The vast majority of these facilities (80%) require interventions to improve infrastructure and to provide them with equipment, furniture, and teaching materials.¹³⁵ On the institutional front, there is room to strengthen the governance and capacity of administrative and teaching management, particularly in the area of monitoring, evaluation, and accountability, as well as the capacity to execute investment programs. Moreover, the education sector's alignment with the needs of the productive sector is limited, and this restricts the supply of trained human capital, while exacerbating the high levels of informality and the low levels of productivity in the Paraguayan economy.

3.30 Health. With respect to infrastructure, family health units (the gateway to the health system) cover 37% of the target population, and present physical investment needs.¹³⁶ It is estimated that 35% of hospitals are in need of major repairs, and half of them lack basic equipment. In institutional terms, the fragmentation of programs, budgets, and information systems impedes strategic planning and the effective execution of investment projects.¹³⁷ At the same time, weaknesses in the planning, procurement, and supply of inputs and the extreme centralization of management processes undermine the quality of service and impede the effective functioning of the network. In addition, human resource management lacks mechanisms for evaluating, monitoring, and allocating personnel efficiently.¹³⁸ These challenges result in low execution levels of public investment spending (execution rate of 66% in investment versus 88% in remuneration), as well as shortcomings in biomedical equipment and human resources.¹³⁹

3.31 The IDB Group will work with the country in its efforts to continue to address the needs of social investment and strengthen institutional and governance capacities, through support targeted at: (i) enhancing the coverage and quality

¹³⁴ Sufficiency, equity, and effectiveness of school infrastructure in Latin America according to TERCE [Third Regional Comparative and Explanatory Study of Learning Achievements] (IDB, 2017).

¹³⁵ Peralta, G., 2016, study of current gaps in public, private, and mixed services offering childcare to children under five years, mimeo.

¹³⁶ Regional outlook: health systems in Latin America and the current status of the RISS model (Ministry of Public Health and Social Welfare, 2017).

¹³⁷ Institutional Strategic Plan (Ministry of Public Health and Social Welfare, 2013).

¹³⁸ Factors that impede the management of human resources include excessive centralization; a lack of incentives for staff to move outside the country's capital; the variety of contracts with varying work schedules, low salaries, and multiple jobs; unaccredited training institutions; and training biased toward hospital specialties. Health Systems in South America: Challenges for Integrity and Equity (Ministry of Public Health and Social Welfare, 2011).

¹³⁹ The need for health professionals is evident at various levels. According to data from the World Health Organization, Paraguay has significant gaps with respect to the rest of Latin America and the Caribbean in various indicators of the specialized health workforce (c. 2012): the gap is 50% in the number of doctors for every 1,000 inhabitants (1.3 versus 1.9 in Latin America and the Caribbean), and 120% in nursing personnel and midwives for every 1,000 inhabitants (1.0 versus 2.3 in Latin America and the Caribbean). The density of health workers averages 23.3 for every 10,000 inhabitants, well below the regional figure (84.6), and lower than the threshold of 25 established by the World Health Organization (WHO, 2017).

of education and job training, with emphasis on early childhood (including preschool) and job training (highly skilled technical and vocational training); (ii) strengthening the coverage and quality of health services, in particular through comprehensive networks of health services based on primary care, prioritizing obstetric and neonatal care, early childhood development, and chronic noncommunicable diseases; (iii) as a crosscutting effort, building institutional capacities in education, health, and job training, prioritizing the development and coordination of information systems, the implementation of effective training processes, personnel recruitment and appraisal, as well as improvements in the design, execution, monitoring, and evaluation of interventions and programs. In a complementary way, IDB Invest will aim to finance investments in hospital and education projects that will improve health and education infrastructure in the country and enhance the accumulation of human capital, with a focus on equity.

- 3.32 **The proposed actions are consistent with the institutional and operational targets of the IDB Group.**¹⁴⁰ The interventions are aligned with the following objectives of the Update to the Institutional Strategy: sustainable productivity and innovation (investment in human capital, training, and health for workers). They also contribute to the IDB Invest Business Plan in the area of supporting the development of infrastructure, including social infrastructure,¹⁴¹ and they are coordinated with the priorities of IDB Lab with respect to the knowledge economy and inclusive cities.

E. Crosscutting issues

- 3.33 **The new Country Strategy with Paraguay takes a crosscutting approach to the challenges related to vulnerable populations, environmental sustainability, urban development, and innovation and technology.** The mechanisms for implementing these crosscutting issues will be defined during execution of the Country Strategy, and in the design of the respective programs.

- (i) There is limited access to services and a decent quality of life for women, indigenous populations, and young people. On one hand, the femicide rate in Paraguay in 2016 was 1.2 for every 100,000 women, below the average of 2.6 for Latin America and the Caribbean. Nevertheless, this means that a woman is murdered every nine days. In addition, around 15% of adolescents between 15 and 19 years have experienced early maternity: this figure doubles and quadruples among the poorest population (28.7%) and indigenous people (69.1%). On the other hand, approximately 40% of the indigenous population is illiterate, in comparison to 5.4% of the nonindigenous population.¹⁴² In response, the IDB Group intends to support comprehensive measures, in both urban and rural areas, that will

¹⁴⁰ The portfolio in execution is helping to address some of the challenges identified, for example, operations PR-L1097 (Project to Support Extended School Days and Improved Transportation Conditions for Students Attending Rural Official Schools), and PR-L1051 (Early Childhood Development Program).

¹⁴¹ These proposed actions are also aligned with the Business Plan Update approved in 2018 (document CII/GA-77-8).

¹⁴² Female heads of households have fewer years of schooling than the average (8.3 years), a situation that affects rural women in particular (5.3 years). Around two thirds of indigenous communities, villages, and barrios have no family health unit, and 28.1% have no local school.

encourage the social, economic, and productive empowerment of women, indigenous populations, and young people.

- (ii) Natural capital has been significantly impacted by the rapid expansion of the agricultural frontier, urban development, pollution of water courses, and vulnerability to climate change. On one hand, the area planted in soybeans has tripled since the year 2000. On the other, Paraguay is highly vulnerable to adverse climatic phenomena.¹⁴³ Consequently, the IDB Group plans to support measures to preserve and expand natural capital, with emphasis on public and private efforts to reverse deforestation and promote the preservation of water courses and management of crossborder watersheds, as well as in adaptation to climate change and managing natural disaster risks.
- (iii) When it comes to urban development,¹⁴⁴ the IDB Group expects to help improve habitat and housing conditions in the Asunción metropolitan area (AMA) and other cities in the country, through measures designed to reduce urban sprawl, remedy the qualitative housing shortage, and improve the delivery of services.¹⁴⁵ IDB Group interventions in the AMA will provide continuity to the specific and integrated urban development approach pursued in recent operations.¹⁴⁶
- (iv) In innovation and technology, the IDB Group plans to support development of the digital economy and to adapt the country to new technologies, particularly in the productive sectors,¹⁴⁷ the delivery of public services (education, health, justice, and security), the promotion of highly skilled human capital, and formalization of the labor market.¹⁴⁸

¹⁴³ See footnote 4 in section I. With respect to droughts, losses equivalent to US\$500 million were reported during the 2004-2005 harvest (figures from the Ministry of Agriculture and Livestock). According to a World Bank study on risks to the agricultural sector in Paraguay, the country loses around US\$237 million a year on average, due to production risks that could be manageable in the principal agricultural chains.

¹⁴⁴ The urban population represents nearly 62% of the total. It is estimated that by 2025 this proportion could reach 65%, in line with regional trends.

¹⁴⁵ The urban footprint has expanded rapidly (43% of the country's population lives in the Asunción metropolitan area (AMA), in a context of low population density (30 inhabitants per hectare, below the theoretical minimum for sustainability of 70). Paraguay has the second-highest qualitative shortage in Latin America and the Caribbean (125 requirements for every 1,000 inhabitants). Coverage of the sanitary sewer system amounts to 11% at the national level. Solid waste collection stands at 69% in urban areas. Urban public transit presents challenges of quality (frequency, cleanliness, and safety) and this encourages greater use of private vehicles (96% of trips).

¹⁴⁶ PR-L1082, Improvement of Housing and Habitat; PR-L1152, Housing and Rehabilitation Program for Bañado Sur in Asunción (Barrio Tacumbú).

¹⁴⁷ This framework includes improving the provision of agricultural public goods.

¹⁴⁸ See challenges in paragraphs 1.7, 1.8, and 3.18. When it comes to justice and security, the Global Impunity Index 2017 ranks Paraguay 11th among the countries that have the highest impunity rates worldwide. This indicator measures impunity from two angles: the functioning of the security, justice, and human rights protection systems, and the structural or installed capacity available to countries.

IV. INDICATIVE FINANCING SCENARIO

- 4.1 **Financing needs will remain stable over the coming years.** During 2019-2023, gross financing needs are projected to average US\$1.1 billion per year (2.2% of GDP).¹⁴⁹ It is expected that financing needs will be covered through debt issues on international markets, domestic debt issues, and borrowings from bilateral and multilateral lenders. Since 2015, sovereign bonds have represented the main source of external financing for the central government.
- 4.2 **The IDB projects sovereign guaranteed loan approvals for US\$1 billion.** This amount, subject to the availability of the Bank's Ordinary Capital, is similar to the amount stipulated for the previous strategy period (2014-2018). The financing scenario anticipates average annual approvals of US\$200 million, with average disbursements of US\$280 million.¹⁵⁰ As a result, the country's debt with the IDB is expected to increase from 3.5% of GDP in 2018 to 4.1% of GDP in 2023. Thus, the debt with the IDB, as a proportion of the external public debt, would go from 22.8% in 2018 to 28.8% by the end of the strategy. In this context, net loan flows are expected to be positive during the strategy period.

V. IMPLEMENTATION OF THE STRATEGY

- 5.1 **Execution of the portfolio.** The IDB Group and the government have coordinated their efforts to achieve: (i) a historical record of sovereign guaranteed disbursements in 2018, amounting to US\$245 million (versus US\$222 million in 2017), and (ii) approvals in 2018 for US\$725 million, which includes seven investment operations and one budgetary support operation. Nevertheless, portfolio execution is and will remain a great challenge for the operational work of the IDB Group. Therefore, the IDB Group will prioritize, on the basis of the operational lessons identified earlier, the execution of investment operations, which will incorporate institutional strengthening, as appropriate.¹⁵¹
- 5.2 **Strengthening country systems.** The Bank is currently making full use of the budget, cash management, and procurement information subsystems. It is making partial use of the "shopping" and partial national competitive bidding subsystems. Based on existing fiduciary assessments and government objectives, the Bank will support the following actions during the strategy period: (i) make the management

¹⁴⁹ On the basis of the maximum central government deficit established in the Fiscal Responsibility Law, and central government debt amortization planned for the period 2019-2023.

¹⁵⁰ There is expected to be some "frontloading" of approvals of Country Strategy resources in order to coordinate Bank disbursements with the government's development plans. In this context, the financing scenario assumes investment disbursements of US\$100 million on average per year (comparable to the historical average), and budgetary support disbursements of US\$180 million on average per year. To ensure effective disbursements of approvals, steps will be taken to: (i) improve public project management capacities and integrity, with emphasis on fiduciary and procurement considerations; (ii) promote alternative execution structures; and (iii) strengthen environmental, social, and communication management of projects (see paragraphs 2.17, operational lessons learned, and 6.1, execution risk).

¹⁵¹ In this context, it is essential to program technical cooperation support strategically at the three levels of technical assistance offered by the Bank: (i) operational support, (ii) client support, and (iii) knowledge generation and dissemination. To these ends, it is proposed: (i) to establish a mechanism to track and monitor outcomes and effectiveness in the use of technical cooperation; and (ii) to promote an agenda of knowledge, lessons learned, and good practices with a focus on complex operations and issues.

of public expenditure more efficient and transparent by modernizing the Integrated System of State Resource Administration (SIARE);¹⁵² (ii) continue to monitor use of the electronic reverse auction and competitive bidding subsystems for Bank-financed projects; (iii) coordinate with the government in conducting a new diagnostic assessment of the country system of public procurement, using the Methodology for Assessing Procurement Systems (MAPS); (iv) monitor the implementation of future IDB operations that call for normative adjustments for the development and implementation of new framework agreements; modernize the transactional procurement platform; strengthen the market analysis unit; and strengthen the public procurement capabilities of the responsible officials, both in the National Bureau of Public Procurement (DNCP) and in the agencies and entities of the State; (v) support access for the DNCP and key government entities to advisory services and the sharing of successful experience in the region for strengthening country systems, and encourage them to participate in regional cooperation mechanisms involving financial management and public procurement issues.

Country Systems Usage Matrix

| Use of Country Systems | Baseline 2018 | Estimated use 2023 | Planned actions during the Country Strategy |
|--------------------------|---------------|--------------------|---|
| Budget | 100% | 100% | Work with the government to identify and implement SIAF system improvements |
| Cash management | 100% | 100% | Work with the government to identify and implement SIAF system improvements |
| Accounting and reporting | 0% | 20% | Support for improving accounting records and reports |
| Internal audit | 0% | 0% | Support for improving supervision |
| External control | 0% | 0% | Support for improving external control |
| Information system | 100% | 100% | Support for and monitoring of progress |
| Shopping | 60% | 70% | Support for the DNCP to launch the use of electronic reverse auctions (ERA) |
| Individual consultants | 0% | 0% | Support for reviewing and approving pertinent legislation |
| Partial NCB | 50% | 50% | Support for the DNCP to launch the use of competitive bidding (LCO) |
| Advanced NCB | 0% | 0% | Support for and monitoring of progress |

5.3 Coordination with other donors. The IDB Group will continue its dialogue and operational coordination with the donor community, in the areas of: (i) institutions and public management, with the Deutsche Gesellschaft für Internationale Zusammenarbeit [German Agency for International Cooperation] (GIZ), the Korean International Cooperation Agency (KOICA), the OECD, the European Union (EU), the United States Agency for International Development (USAID), and the World Bank; (ii) integration and productive diversification with the Spanish Agency for International Cooperation and Development (AECID), Cooperazione Internazionale (COOPI), the *Fondo Financiero para el Desarrollo de la Cuenca del Plata* [Financial Fund for Development of the Plata Basin] (FONPLATA), the Inter-American Institute for Cooperation in Agriculture (IICA), the Japan

¹⁵² The Bank is supporting modernization of the SIARE through operation PR-L1150, with a focus on expanding the system to the municipios.

International Cooperation Agency (JICA), KOICA, EU; (iii) infrastructure with AECID, the European Investment Bank (EIB), the Development Bank of Latin America (CAF), JICA, KOICA, the OPEC Fund for International Development (OFID), and the EU; (iv) human capital with JICA, the EU, and the World Bank. It should be noted that the CAF is a development partner with a growing presence in the country, and one with which the IDB Group maintains an ongoing dialogue and cofinances investment projects,¹⁵³ thus allowing it effectively to address the country's development finance needs.

- 5.4 **Coordination within the IDB Group.** Coordination among the IDB, IDB Invest, and IDB Lab will be based on the following parameters: (i) joint implementation of this Country Strategy; (ii) joint planning missions for engagement with the authorities, particularly in areas that require policy reforms and/or where there are synergies for working in a complementary manner; (iii) organization of joint dissemination activities; and (iv) maximization of operational synergies.

VI. RISKS

- 6.1 **Execution risk.** Execution of the portfolio is the main risk to the operational work of the IDB in the country: on average, 700 days elapse from approval of a project until the first disbursement, and this has an impact on the conceptual validity and the cost of operations, posing challenges of integrity and communication. A number of factors underlie this risk, including limitations on project management capacities, and the length of time needed to ratify loan operations (see operational lessons in section II). To mitigate this risk and ensure satisfactory execution, the 2019-2023 Country Strategy proposes to continue working with the authorities, through technical assistance, to improve execution,¹⁵⁴ giving priority to: (i) improving public capacities in project management and integrity, with emphasis on the fiduciary and procurement considerations; (ii) promoting alternative execution structures; and (iii) strengthening the environmental, social, and communication management of projects. Non-sovereign guaranteed operations aimed at improving access to business financing, both directly and through financial intermediaries, face additional risks: (i) market fluctuations associated with the demand for financing business investment projects; and (ii) the concurrence of market failures that reinforce a cycle of low productivity and low investment. These risks mean that there may be various obstacles to originating and executing private sector operations, and these can impede the IDB Group's support for businesses. To mitigate the execution risks of NSG operations, IDB Invest will strive to strengthen the management capacities of its direct customers, and those of the customers of the financial institutions it supports. IDB Invest will also focus on those opportunities that appear to be most "bankable" and that in turn will serve to close priority development gaps, in order better to address the needs and expectations of customers in Paraguay. Meanwhile, NSG operations with objectives focused on closing infrastructure gaps may face additional challenges,

¹⁵³ PR-L1145, Upgrade and Maintenance Project for National Route 9 and Access Roads.

¹⁵⁴ The 2014-2018 Country Strategy included a plan to improve execution, aimed specifically at: (i) shortening project ratification times with the executive and legislative branches; (ii) improving budgetary processes; (iii) enhancing execution through training and process automation; (iv) coordinating alternative execution structures, (v) optimizing bidding procedures to attract international bidders, and (vi) supporting the Government Center.

given the shortcomings in existing capacities in the country for identifying, structuring, tendering, and monitoring contracts with private sector participation. To mitigate these risks, the 2019-2023 Country Strategy proposes to continue working with the authorities to improve those capabilities, particularly under public-private partnership (PPP) structures.

- 6.2 **Risk of natural disasters.** Paraguay is among the region's countries that are most vulnerable to adverse climatic phenomena, which can generate losses of between 0.3% and 1.0% of GDP over the long-term (see sections I and III). To mitigate this risk, the 2019-2023 Country Strategy proposes: (i) to continue to incorporate measures for disaster risk reduction and adaptation to climate change into investment operations, either across the board or in individual operations, as applicable; and (ii) to deepen cooperation with the authorities in strengthening institutional capacities so as to improve performance in disaster risk management and climate change adaptation.
- 6.3 **Macroeconomic risk.** Paraguay has been one of the fastest-growing economies in Latin America and the Caribbean over the last 15 years, thanks in part to prudent macroeconomic management (see section I). Nevertheless, there are risk factors associated with external shocks that could affect the continuity and sustainability of the growth observed. The volatility of commodity prices, the economic uncertainty prevailing among regional trading partners, and the more protectionist global trade environment could all have a negative impact on the country's competitiveness and on trade flows of goods and services. Similarly, uncertainty in international financial markets could have a negative impact on capital flows and could raise the cost of external financing, both public and private. In response to these risks, the 2019-2023 Country Strategy proposes: (i) to promote domestic growth factors and facilitate penetration for Paraguayan exports into new markets, through support for productive diversification, financing for private investment, and the supply of infrastructure; (ii) to expand the room for a countercyclical fiscal response, through actions designed to strengthen public management capacities, particularly in terms of the efficiency of expenditure and of tax collection.

ANNEX I. RESULTS MATRIX

| Government priority | Strategic area | Strategic objective | Expected outcome | Indicator | Baseline (source and year) |
|---|---|--|---|---|---|
| Efficient and transparent public management | Public management and institutions | Strengthen public management capabilities | Improve the capacities for gathering and processing statistical information | Statistical capacity index (score out of 100) | 67.8 (World Bank, 2017) |
| | | | Strengthen the transparency and audit systems | Corruption control index (percentile range) | 9 (World Bank, 2017) |
| | | | Improve the quality of the civil service | Civil service development index (score out of 100) | 40 (IDB, 2017) |
| | | Boost the mobilization of public and private resources for development | Strengthen the Public-Private Partnership framework | Infrascopio index of ease of carrying out PPP projects (relative position) | 20/40 (Economist Intelligence Unit, 2018) |
| | | | Improve the efficiency of public expenditure | Government effectiveness index (percentile range) | 19 (World Bank, 2017) |
| | | | Improve the efficiency of tax administration | Tax collection as a percentage of GDP | 9.6% (Ministry of Finance, 2017) |
| Effective global integration of the country | Integration and diversification | Encourage firms to pursue international trade integration | Increase the share of Paraguayan firms in international markets | Presence of Paraguayan firms in global value chains (relative position) | 117/137 (WEF, 2017) |
| | | | Increase exports of services | Share of services in total exports (percentage) | 6.5% (BCP, 2017) |
| | | Promote financing for development | Expand credit to the private sector | Credit to the private sector as a percentage of GDP | 31.6% (BCP, 2017) |
| Inclusive economic growth | Productive and resilient infrastructure | Improve the coverage and quality of infrastructure | Improve the coverage of the road network | Kilometers of paved road network per thousand square kilometers of the country's surface area | 16.2 (MOPC, 2018) |
| | | | Improve the quality of electricity service and expand the use of nonconventional renewable energies | Total average duration of electricity outages per customer | 30.8 hours (World Bank, 2017) |
| | | | | Percentage of nonconventional renewables in final energy consumption | 44.2% (MOPC, 2018) |

| Government priority | Strategic area | Strategic objective | Expected outcome | Indicator | Baseline (source and year) |
|--|-------------------------------------|---|---|---|--|
| | | | Increase Internet connectivity | Broadband coverage as a percentage of the population | 4.1% (World Bank, 2017) |
| | | | Increase access to water and sanitation services | Percentage of households with access to sanitary sewers | 11.0% (DAPSAN, 2016) |
| | | | | Percentage of households with access to piped drinking water | 78.0% (DAPSAN, 2016) |
| | | | Improve the public capacity to execute infrastructure investment projects | Public investment management efficiency index (relative position) | 16/16 (IDB, 2016) |
| Poverty reduction and social development | Human capital and living conditions | Improve the coverage and quality of social services | Improve student learning and promote high-level professionalization. | Percentage of 15-year-old students who achieve minimum command in mathematics | 8.3% (OECD, 2018) |
| | | | | Availability of scientists and engineers (relative position) | 131/137 (WEF, 2017) |
| | | | Improve the health of the population | Neonatal mortality rate | 11.1 per 1,000 live births (World Bank, 2017) |
| | | | | Maternal mortality rate | 132 per 100,000 live births (World Bank, 2015) |

MATRIX OF COUNTRY SYSTEMS

| Strategic objective | Expected outcome | Indicator | Unit of measure | Baseline | Base year | Indicative target | Timing |
|--|--|--|-------------------------------------|----------|-----------|-------------------|---|
| Use of country systems | Increased use of the accounting and reporting subsystem | Outstanding portfolio using the accounting and reporting subsystem | Percentage of outstanding portfolio | 0% | 2018 | 20% | At the end of the Country Strategy period |
| | Increased use of the procurement subsystem | Outstanding portfolio using the shopping subsystem | Percentage of outstanding portfolio | 60% | 2018 | 70% | At the end of the Country Strategy period |
| | | Outstanding portfolio using the partial NCB subsystem | Percentage of outstanding portfolio | 50% | 2018 | 50% | At the end of the Country Strategy period |
| Strengthening of country systems or subsystems | Challenges and opportunities identified for improving SNCP | Assessment of the SNCP using the MAPS methodology | Assessment performed | 0 | 2018 | 1 | At the end of the Country Strategy period |
| | New municipal SIARE developed | Computerized municipal SIARE system developed | Computerized system developed | 0 | 2018 | 1 | At the end of the Country Strategy period |

Note: The objectives are aligned with the crosscutting challenge of Institutions and the Rule of Law in the Corporate Results Framework (CRF).

ANNEX II. INDICATIVE LENDING FRAMEWORK

Net flow of sovereign guaranteed loan operations (US\$ millions)

| | 2014 | 2015 | 2016 | 2017 | 2018e | 2019 | 2020 | 2021 | 2022 | 2023 | Promedio 2019-23 | Total 2019-23 |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------------|------------------|
| Aprobaciones | 365.0 | 392.0 | 150.0 | 375.0 | 725.0 | 350.0 | 350.0 | 150.0 | 75.0 | 75.0 | 200.0 | 1,000.0 |
| a. Desembolsos | 86.5 | 46.7 | 168.8 | 221.9 | 244.8 | 350.0 | 337.5 | 275.0 | 262.5 | 175.0 | 280.0 | 1,400.0 |
| b. Repagos | 94.7 | 92.7 | 87.8 | 84.8 | 84.0 | 87.3 | 95.7 | 97.5 | 99.4 | 89.0 | 93.8 | 468.9 |
| c. Flujo neto de préstamos (a-b) | -8.2 | -46.0 | 80.9 | 137.0 | 160.8 | 262.7 | 241.8 | 177.5 | 163.1 | 86.0 | 186.2 | 931.1 |
| d. Suscripciones y contribuciones | 3.9 | 1.9 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| e. Intereses y comisiones | 32.3 | 30.0 | 35.6 | 36.3 | 43.8 | 50.2 | 52.9 | 53.1 | 51.6 | 49.6 | 51.5 | 257.4 |
| f. Flujo neto de caja (c-d-e) | -44.3 | -78.0 | 43.6 | 100.8 | 117.0 | 212.5 | 188.9 | 124.4 | 111.5 | 36.4 | 134.7 | 673.7 |
| Deuda BID | 1,132.6 | 1,086.6 | 1,167.5 | 1,304.5 | 1,465.3 | 1,728.0 | 1,969.8 | 2,147.3 | 2,310.4 | 2,396.4 | | |
| Deuda BID/Deuda Multilaterales y Bilaterales | 54.8% | 51.5% | 49.1% | 48.8% | 47.7% | 53.9% | 58.5% | 60.4% | 61.6% | 60.3% | | |
| Deuda BID/Deuda Externa Pública | 30.8% | 27.2% | 24.2% | 23.3% | 22.8% | 25.7% | 27.9% | 28.9% | 29.4% | 28.8% | | |
| Deuda BID/PIB | 2.8% | 3.0% | 3.2% | 3.4% | 3.5% | 3.8% | 4.1% | 4.2% | 4.2% | 4.1% | | |

Notes: amount subject to the availability of the Bank's Ordinary Capital. Scenario based on projections to 1 January 2019. Based on data from IDB, BCP, Ministry of Finance, and the IMF (WEO, October 2018). The indebtedness assumptions are derived from the macrofiscal consistency model developed for Paraguay, which assumes compliance with the central government's ceilings on the deficit and expenditure growth as established in the Fiscal Responsibility Law.

ANNEX III. ECONOMIC AND SOCIAL INDICATORS

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|--|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Indicadores sociales | | | | | | | | | | | |
| Población (millones de habitantes) | 6,0 | 6,1 | 6,2 | 6,3 | 6,4 | 6,5 | 6,6 | 6,7 | 6,8 | 6,9 | 7,0 |
| Expectativa de vida al nacer (años) | 71,7 | 71,9 | 72,1 | 72,3 | 72,5 | 72,6 | 72,8 | 72,9 | 73,0 | 73,1 | |
| Alfabetismo en población de 15 años y más (%) | 93,4 | 93,5 | 94,1 | 94,2 | 94,9 | 94,2 | 95,1 | 95,0 | 95,6 | 94,7 | 94,2 |
| Tasa de desempleo abierto (%) | 5,5 | 5,7 | 6,3 | 5,7 | 5,6 | 4,6 | 5,0 | 6,0 | 5,4 | 6,0 | 5,2 |
| Población con subocupación visible(%)* | 4,7 | 6,9 | 8,1 | 5,9 | 5,1 | 7,1 | 5,8 | 6,0 | 6,1 | 6,3 | 5,4 |
| Tasa de pobreza total (%) | 45,3 | 43,2 | 41,6 | 39,0 | 37,0 | 31,4 | 28,0 | 27,2 | 26,6 | 28,9 | 26,4 |
| Tasa de pobreza extrema (%) | 13,9 | 10,5 | 11,3 | 11,8 | 11,8 | 7,4 | 5,7 | 5,5 | 5,4 | 5,7 | 4,4 |
| Coefficiente de Gini | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 |
| <i>Porcentaje de cambio, a menos que se indique lo contrario</i> | | | | | | | | | | | |
| Producción y precios | | | | | | | | | | | |
| PIB nominal (millones de US\$) | 17.911 | 24.579 | 22.377 | 27.213 | 33.782 | 33.412 | 38.517 | 39.984 | 36.285 | 36.345 | 39.667 |
| PIB per cápita (US\$) | 2.998 | 4.048 | 3.627 | 4.343 | 5.309 | 5.171 | 5.872 | 6.006 | 5.371 | 5.302 | 5.705 |
| PIB real | 5,4 | 6,4 | -0,3 | 11,1 | 4,2 | -0,5 | 8,4 | 4,9 | 3,1 | 4,3 | 5,2 |
| IPC (Promedio) | 8,1 | 10,2 | 2,6 | 4,6 | 8,2 | 3,7 | 2,7 | 5,0 | 3,1 | 4,1 | 3,6 |
| IPC (Final del periodo) | 6,1 | 7,4 | 1,9 | 7,2 | 4,9 | 4,0 | 3,8 | 4,2 | 3,1 | 3,9 | 4,5 |
| Sector externo | | | | | | | | | | | |
| Exportaciones de bienes, servicios y renta | 24,7 | 27,9 | -18,4 | 32,9 | 19,8 | -7,1 | 16,4 | -3,2 | -14,5 | 7,8 | 12,8 |
| Importaciones de bienes, servicios y renta | 13,8 | 37,5 | -20,9 | 40,3 | 19,0 | -3,0 | 8,1 | 0,7 | -12,7 | -2,9 | 13,0 |
| Balance cuenta corriente (%PIB) | 4,3 | 0,8 | 2,7 | 0,2 | 0,6 | -0,9 | 1,6 | -0,1 | -0,4 | 3,5 | 3,4 |
| Reservas internacionales (en millones de US\$) | 2.461,8 | 2.864,1 | 3.860,7 | 4.168,2 | 4.983,9 | 4.994,3 | 5.871,2 | 6.891,0 | 6.200,1 | 7.143,9 | 8.145,7 |
| Sector monetario | | | | | | | | | | | |
| Liquidez monetaria (M2) | 39,4 | 19,1 | 28,8 | 15,7 | 17,5 | 12,6 | 17,5 | 7,8 | 5,8 | 8,1 | 16,4 |
| Créditos del sector bancario al sector privado | 42,7 | 48,6 | 22,4 | 42,5 | 24,8 | 12,6 | 23,9 | 21,1 | 22,9 | 0,5 | 4,3 |
| <i>Porcentaje del PIB</i> | | | | | | | | | | | |
| Cuentas fiscales de la Administración Central | | | | | | | | | | | |
| Ingresos totales | 12,0 | 11,9 | 12,5 | 12,6 | 13,4 | 14,0 | 12,9 | 13,7 | 14,1 | 13,9 | 14,1 |
| Ingresos tributarios | 7,8 | 8,1 | 8,3 | 8,8 | 9,3 | 9,4 | 8,9 | 9,7 | 9,6 | 9,5 | 9,8 |
| Gasto total | 9,6 | 9,0 | 10,6 | 9,9 | 10,9 | 13,3 | 12,4 | 12,8 | 13,5 | 12,8 | 12,8 |
| Balance primario | 1,3 | 2,1 | 0,5 | 1,2 | 0,9 | -1,1 | -1,0 | -0,6 | -0,9 | -0,5 | -0,5 |
| Balance global | 0,8 | 1,7 | 0,1 | 1,0 | 0,7 | -1,2 | -1,3 | -0,9 | -1,3 | -1,1 | -1,1 |
| Deuda | | | | | | | | | | | |
| Deuda externa total (pública y privada) | 86,9 | 63,9 | 68,5 | 56,3 | 44,2 | 45,5 | 39,4 | 39,8 | 42,9 | 42,0 | 38,8 |
| Deuda pública agregada ¹ | 14,0 | 13,7 | 13,0 | 11,5 | 9,7 | 11,9 | 12,8 | 15,1 | 18,1 | 18,9 | 19,3 |
| Deuda pública en moneda nacional ² | 1,9 | 1,7 | 2,1 | 1,8 | 1,4 | 3,9 | 4,1 | 4,4 | 4,5 | 4,1 | 4,0 |
| Deuda pública en moneda extranjera ³ | 12,1 | 11,9 | 11,0 | 9,7 | 8,2 | 8,0 | 8,7 | 10,7 | 13,6 | 14,9 | 15,3 |

Notes: 1, 2, and 3 general government debt data.

Source: BCP, World Bank, General Bureau of Statistics, Surveys, and Census, International Monetary Fund, and Ministry of Finance.

**ANNEX IV. MANAGEMENT’S RESPONSES TO THE COUNTRY PROGRAM EVALUATION:
PARAGUAY 2014-2018**

| OVE’s recommendation | Management’s response |
|---|---|
| Recommendation 1: | Agreed. |
| <p>Redefine the Bank’s model of intervention in Paraguay, placing emphasis on a more comprehensive vision of institutional development and targeting sectors where the Bank has a comparative advantage. The Bank should continue its proactive dialogue with the client to identify emerging needs in this new stage of Paraguay’s development. The Bank’s institutional support should be more comprehensive and cohesive, preventing a piecemeal approach in institutional strengthening components. In the past, these components have often been difficult to implement. Moreover, as opportunities arise, a strategic vision of the country’s institutions will be particularly important for framing the new issues and agendas for the Bank’s work (e.g. the Digital Agenda). Independent of these considerations, the Bank should be prepared to reduce fragmentation in its portfolio.</p> | <p>Actions proposed by Management:</p> <p>Management agrees with the importance of emphasizing comprehensive institutional strengthening and targeting efforts to areas where the Bank has a comparative advantage.</p> <p>We wish to note that the Bank’s effective participation in this strengthening agenda is contingent upon an agreement in place with the authorities to advance certain key reforms for comprehensive and sustainable institutional development. The main actions proposed by Management in regard to this recommendation are as follows:</p> <ul style="list-style-type: none"> • Strengthen technical and strategic dialogue, underpinned by innovative discussion forums and knowledge products, with authorities from the public sector, private sector, and civil society. • Identify, within the framework of the new country strategy, crosscutting priority areas of development that help target Bank interventions, through critical areas of activity such as: (i) strengthening the governance and policy frameworks; (ii) promoting crosscutting themes in innovation and the digital agenda; and (iii) investing in human capital. • Propose reform programs to the government that offer a cohesive vision of institutional development and that incorporate transparency and integrity objectives, among others. |

| | |
|---|--|
| <p>Recommendation 2:</p> | <p>Agreed.</p> |
| <p>Be more strategic in the use of technical cooperation, in order to support this new model of investment at the Bank, which will include more complex operations requiring greater knowledge and expertise. At the moment, a large contingent of technical cooperation operations are used to implement Bank projects. Although this adds value by expediting the execution of projects, it limits the pool of resources available for investing in the knowledge and expertise needed to support the new types of demand coming from the country. Accordingly, Management should continue to identify instruments that are easier to implement and that free up resources so the Bank can also support more complex operations.</p> | <p>Actions proposed by Management:</p> <p>Management will continue to promote the strategic use of technical cooperation operations both to support the new requests for knowledge coming from the country and to facilitate project design and execution. Addressing the challenges involved in executing a growing and increasingly complex portfolio will remain a core priority. The main actions proposed by Management in regard to this recommendation are as follows:</p> <ul style="list-style-type: none"> • Program technical cooperation strategically, setting priorities with the country for the three levels of technical assistance offered by the Bank: (i) operational support; (ii) client support; and (iii) knowledge generation and dissemination. • Establish a mechanism for monitoring results and effectiveness in the use of technical cooperation. • Advance an agenda of knowledge, lessons learned, and good practices with a focus on complex issues and operations, based on the diverse instruments that KIC is able to provide. |
| <p>Recommendation 3:</p> | <p>Agreed.</p> |
| <p>Continue working with the country to simplify the ratification and budget process. This is the fourth CPE to identify legislative ratification as a bottleneck for the Bank's work in Paraguay. In contrast to previous CPEs, the country has made use in this evaluation period of international bond issues, which are handled differently from multilateral loans. This introduces the possibility of resuming work with the country to simplify legislative ratification processes, integrating the requirements for Bank loans with those of other comparable external borrowing instruments (e.g. international bonds).</p> | <p>Actions proposed by Management:</p> <p>Management believes that ongoing support for the country's efforts to streamline legislative ratification and budget processes is a matter of priority. The Bank will continue to work proactively to shorten ratification times and manage the budgetary challenges associated with IDB-financed projects. However, a wholesale effort to streamline the country's ratification and budget processes will require a political consensus that transcends the Bank's role as a multilateral development partner.</p> |

ANNEX V. DEVELOPMENT EFFECTIVENESS MATRIX

| COUNTRY STRATEGY: DEVELOPMENT EFFECTIVENESS MATRIX | |
|---|--------|
| <p>In August 2008, the Board of Directors approved the Development Effectiveness Framework (GN-2489) to increase the evaluability of all Bank development products.</p> <p>The Development Effectiveness Matrix for Country Strategies (DEM-CS) is a checklist of the elements that are necessary to evaluate a country strategy. It is based on the evaluation criteria developed by the Evaluation Cooperation Group of the Multilateral Development Banks in the "Good Practice Standards for Country Strategy and Program Evaluation."</p> | |
| COUNTRY STRATEGY | |
| STRATEGIC ALIGNMENT | |
| Refers to the degree to which the design and objectives of the CS are consistent with the country development challenges and with the government's development plans and priorities. | |
| EFFECTIVENESS | |
| This measures whether the country strategy is likely to achieve its intended objectives, through an examination of three dimensions: (i) the quality of the diagnostics on which Bank action is based in each area of work; (ii) the quality of the results matrix for the strategy; (iii) the use and build up of country systems. | |
| Effectiveness dimensions | |
| I. Country Diagnosis - Country Development Challenges (CDC) | Yes/No |
| - The CDC clearly identifies the main development challenges prioritized by the EBP | Yes |
| - The CDC's main development challenges are based on empirical evidence | Yes |
| II. CS Priority Areas Diagnostics** | % |
| - identify the priority area's main constraints and challenges | 100% |
| - identify the main factors /causes contributing to the specific constraints and challenges | 100% |
| III. Results matrix* | % |
| - The strategic objectives are clearly defined | 100% |
| - The expected outcomes are clearly defined | 100% |
| - The strategic objectives and expected results are directly related to the main constraints identified in the Diagnosis | 100% |
| - The indicators are outcome indicators and are SMART | 100% |
| - The indicators have baselines | 100% |
| IV. Vertical logic | |
| - The CS** has vertical logic | Yes |
| * The Results Matrix is composed by indicators that are meaningful to, and capture progress towards, the expected results. The expected results stem from the strategic objectives. | |
| ** CS includes the CDC | |
| <p>CS Diagnostic:</p> <p>As part of the country strategy a country development challenges diagnostic was presented (see CDC annex). The CDC diagnostic is comprehensive and based on empirical evidence. The CDC diagnostic identifies 4 priority areas for the Bank's intervention integration and diversification; infrastructure; human capital; policy frameworks and institutions</p> <p>-The diagnostic clearly identifies and dimensions, based on empirical evidence, priority area's specific constrains and challenges.</p> <p>-The diagnostic clearly identifies and dimensions, based on empirical evidence, the main factors or causes contributing to the specific constrains and challenges for the priority areas.</p> <p>-The diagnostic provides policy recommendations for Bank actions, that are based in empirical evidence.</p> <p>Results matrix: The section of the results matrix corresponding to the new strategic area includes 6 strategic objectives for Bank action, 16 expected results and 19 indicators to measure progress.</p> <p>100% of the Strategic Objective(s) are clearly specified.</p> <p>100% of the expected result(s) are clearly specified.</p> <p>100% CS Objectives are directly related to the main constraints identified in the Diagnosis.</p> <p>100% of the indicators used are SMART.</p> <p>100% of the indicators have baselines.</p> <p>Country Systems: Diagnostics are available for all financial management sub-systems. We will continue to use 100% of the sub-systems of budget and treasury, partly the sub-system of accounting and reports. In terms of procurement, there is a diagnosis of the information system available; We are expected to work on strengthening procurement sub-systems.</p> <p>The CS has vertical logic.</p> | |
| <p>RISKS. The main risks facing the implementation of the EBP are related to: (i) institutional weaknesses of executing agencies and complexity of project execution processes; (ii) Vulnerability to natural disasters and external shocks. The CS identifies specific mitigation and monitoring measures for each risks.</p> | |