

Concept Note for the PPP Talk panels on Driving Inclusion and Measuring Impact

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Vicepresidency for Countries

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**PPP
AMERICAS**
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CONCEPT NOTE

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Driving Inclusion and
Measuring Impact

APRIL 2023

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SECTION 1 INTRODUCTION

The Inter-American Development Bank (IDB) holds the PPP Americas every two years in partnership with a national or subnational government. The regional forum brings together top professionals and public and private-sector representatives from Latin America and the Caribbean (LAC) to discuss groundbreaking topics and exchange ideas on planning, structuring, and managing public-private partnerships (PPPs). For the 2023 conference, the IDB is holding three preparatory events—the PPP Talks—before the main event. During the PPP Talks, experts will lay the groundwork for the discussions to be held during the conference.

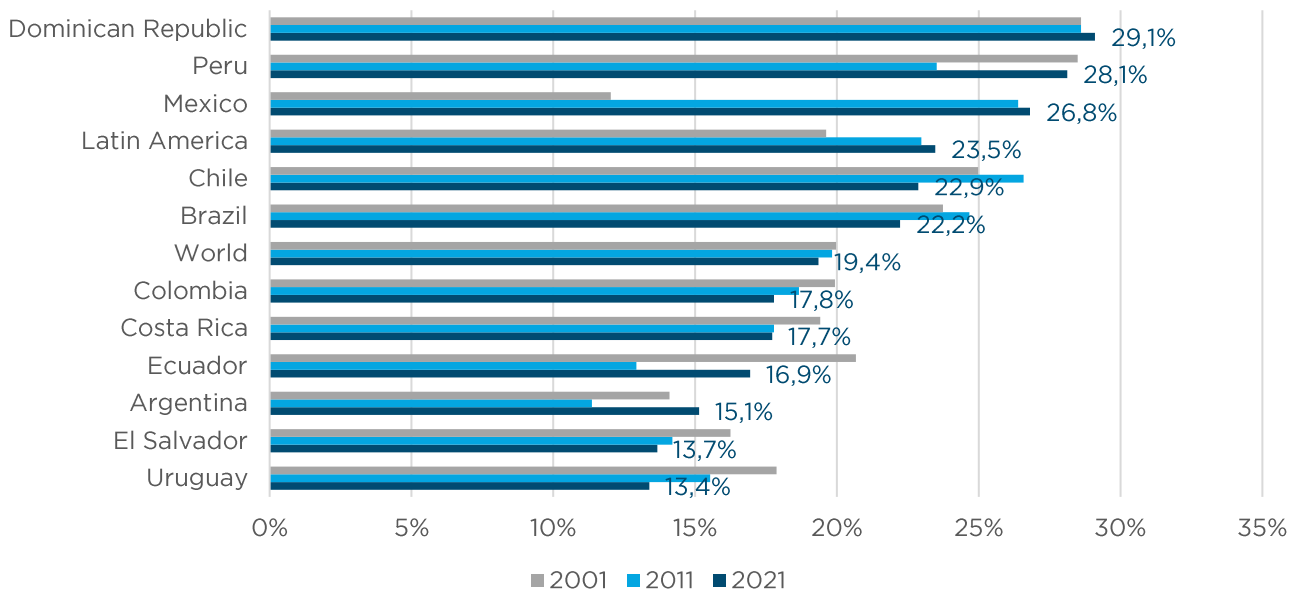
The third PPP Talk will consist of two panels on May 4, 2023: Driving Inclusion and Measuring Impact, which are part of the thematic agenda of PPP Americas 2023. This Concept Note provides the conceptual framework of the two themes discussed during these panels. In addition, this note offers descriptions of key concepts, as well as the main opportunities and challenges that countries in Latin America and the Caribbean face in each area. Section 2 below presents the topic of the first panel (Driving Inclusion), while Section 3 describes the basis for the second panel (Measuring Impact).

SECTION 2 DRIVING INCLUSION

Latin America and the Caribbean (LAC) is one of the most unequal regions in the world. According to World Inequality Database (WID) data,¹ the richest 1 percent earned 23.5 percent of the region's income by 2021, while the poorest 50 percent earned only 7.9 percent. These levels of inequality are worse than world averages, which are 19.4 percent of income earned by the top 1 percent and 8.3 percent earned by the bottom 50 percent.

Income inequality in some countries in the region has improved since the early 2000s thanks to a commodity boom that allowed governments to implement wide-reaching welfare policies. However, this trend has largely reversed in recent years, particularly due to the reduction in commodity prices and the effects of the COVID-19 pandemic. Figure 1 shows the income share of the richest 1 percent for countries with data in WID for 2001, 2011, and 2021. The figure also shows regional and world averages.

Figure 1: Income Share of Richest 1 Percent, 2001, 2011, 2021



Source: Own elaboration based on data from WID. 2023.

Note: Percentages shown refer to data for 2021.

Gender inequality is also highly prevalent in LAC countries, which leads to depressed economic growth and lower social development. A recent study by the IDB found that women hold only 15 percent of management positions in LAC, they are owners of only 14 percent of the region's

¹ WID. 2023. "Data". Accessed on March 6, 2023. <https://wid.world/data/>

companies, and only one in ten companies is run by a woman.² The study also found that most companies do not have systems in place to identify gender salary gaps—only 15 percent of companies in the study’s survey do.³

In LAC, around 12 percent of people live with at least one disability.^{4,5} Moreover, women, indigenous peoples, and low-income groups have a higher prevalence of disability.⁶ Studies have also found that poor people are more at risk of a disability, while people with a disability are more likely to be poor.⁷

It is estimated that the indigenous population in LAC is between 28 and 34 million people, accounting for roughly 10 percent of the region’s total population. Additionally, the Afro-descendant population is estimated to be around 150 million people.⁸ Typically, indigenous and Afro-descendant women work in the informal sector, which is characterized by low human capital and low wages.⁹

Promoting inclusive infrastructure is one toolkit that policymakers have to address inequality and promote social inclusion in LAC. Moreover, public-private partnerships (PPPs) are suitable tools for developing this type of infrastructure. Several studies have found empirical evidence suggesting that more inclusive infrastructure leads to reduced inequality, drives productivity, boosts economic growth, and can help to respond to the climate crisis.^{10,11,12,13} Section 2.1 below introduces the concept of inclusive infrastructure and explains its possible links with Sustainable

² IDB. 2021. “Una olimpiada desigual: la equidad de género en las empresas latinoamericanas y del Caribe.” Accessed on March 13, 2023. <https://publications.iadb.org/es/una-olimpiada-desigual-la-equidad-de-genero-en-las-empresas-latinoamericanas-y-del-caribe>

³ Ibid.

⁴ IDB. 2019. “Goodbye Barriers! A Guide to Design More Accessible Spaces.” Accessed on March 13, 2023. <https://publications.iadb.org/en/goodbye-barriers-guide-design-more-accessible-spaces>

⁵ A disability is an evolving concept that results from the interaction between people with impairments and barriers due to the attitude and environment that prevent their full and effective participation in society on equal terms with others. A disability can be physical, mental, intellectual, or sensory. Source: IDB. 2019. “Goodbye Barriers! A Guide to Design More Accessible Spaces.”

⁶ IDB. 2019. “Goodbye Barriers! A Guide to Design More Accessible Spaces.” Accessed on March 13, 2023. <https://publications.iadb.org/en/goodbye-barriers-guide-design-more-accessible-spaces>

⁷ Ibid.

⁸ IDB. 2021. “Equality needs everyone: The role of men in gender equity, diversity and inclusion.” Accessed on April 25, 2023. <https://www.idbinvest.org/en/publications/equality-needs-everyone-role-men-gender-equity-diversity-and-inclusion>

⁹ Ibid.

¹⁰ Global Infrastructure Hub. 2019. “Inclusive Infrastructure and Social Equity. Practical guidance for increasing the positive social outcomes of large infrastructure projects”. Accessed on March 13, 2023. <https://inclusiveinfra.gihub.org/>

¹¹ UNOPS. 2022. “Inclusive Infrastructure for Climate Action.” Accessed on March 13, 2023. https://content.unops.org/publications/Inclusive-infrastructure_EN.pdf

¹² Ekos. 2022. “Measuring and Valuing the Inclusive Growth Impact from Infrastructure Investment” Accessed on March 13, 2023. <https://www.scottishfuturetrust.org.uk/storage/uploads/ekosinclusivegrowthandinfrastructurereportjune22.pdf>

¹³ Global Infrastructure Hub. 2019. “Inclusive Infrastructure and Social Equity Case Studies. March 13, 2023. <https://inclusiveinfra.gihub.org/case-studies/>

Development Goals (SDGs). Section 2.2 describes methods to develop inclusive infrastructure through PPPs.

2.1 OVERVIEW OF INCLUSIVE INFRASTRUCTURE

Inclusive infrastructure can be understood as the design and implementation of physical and digital infrastructure that promotes positive outcomes in social inclusivity while ensuring that no individual, community, or social group is prevented from benefiting from such infrastructure development.¹⁴ Moreover, the United Nations has recently defined five principles that characterize this type of infrastructure. According to these principles, inclusive infrastructure is equitable, accessible, affordable, do-no-harm, and empowering.¹⁵

To design inclusive infrastructure effectively, it is key to understand which groups are at risk of being excluded. Some of the groups that have historically been at risk of being excluded from infrastructure include:¹⁶

- **Low-income groups and unemployed.** Infrastructure that is not affordable or that does not serve the needs of low-income groups. Non-affordable housing, public transportation, or basic utilities can exclude these groups from essential resources and services.
- **Women and girls.** Infrastructure may not be inclusive if it is not designed to address the specific needs of women, such as safe and accessible public spaces, transportation, and childcare facilities. In addition, the needs of women are often excluded from decision-making processes in infrastructure. Box 1 presents the key findings from a recent survey on these topics.
- **People living with a disability.** Infrastructure that is not designed to accommodate the needs of persons with disabilities—for instance, accessible buildings and transportation systems—can exclude them from essential services and opportunities.

¹⁴ Global Infrastructure Hub. 2019. “*Inclusive Infrastructure and Social Equity. Practical guidance for increasing the positive social outcomes of large infrastructure projects.*” Accessed on March 6, 2023. <https://inclusiveinfra.gihub.org/>

¹⁵ UNOPS. 2022. “*Inclusive Infrastructure for Climate Action.*” Accessed on March 13, 2023. https://content.unops.org/publications/Inclusive-infrastructure_EN.pdf

¹⁶ Global Infrastructure Hub. 2019. “*Inclusive Infrastructure and Social Equity. Practical guidance for increasing the positive social outcomes of large infrastructure projects.*” Accessed on March 13, 2023. <https://inclusiveinfra.gihub.org/>

- **Children, youth, and the elderly.** Children may be excluded from using public spaces, such as parks and playgrounds if they are not designed to be safe and accessible for them. This can prevent them from engaging in physical activity and socializing with peers, leading to social exclusion and health issues. Youth can be excluded from training and employment opportunities. Infrastructure that is not designed to accommodate the needs of elderly persons can exclude them from basic services. Accessible buildings and transportation systems are clear examples of where this can happen.
- **Indigenous and minority groups.** Minority communities may be excluded from infrastructure investments and development projects, which can perpetuate existing disparities and limit their access to basic services and resources. Moreover, minorities may face exclusion from public spaces that are unsafe or unwelcoming, which can limit their ability to socialize and engage in recreational activities.
- **People living in informal settlements, isolated communities, or vulnerable environments.** Infrastructure that is not available or that is insufficient in isolated areas, such as roads, transportation, and broadband internet, can exclude these communities from job opportunities and public services.

Box 1. Findings from a survey of infrastructure private investors regarding gender awareness and gender considerations during decision-making

The Public-Private Infrastructure Facility (PPIAF) and the Global Infrastructure Facility (GIF) recently spearheaded a survey of infrastructure private investors and lenders in emerging markets and developing economies. Investors were surveyed on their level of gender awareness, gender considerations during decision-making processes, and gender integration during the project cycle. These are the key findings from the study:

- *Private investors and lenders' awareness of the linkage between gender and infrastructure is often informed by the role they themselves play in infrastructure projects.*
- *Investors and lenders do not have their own consistent standards to screen for social (and gendered) impact during investment decision making. Instead, they typically rely on national laws and policies to provide the framework for environmental and social compliance. In the absence of these frameworks, they face challenges.*
- *The absence of standards among private investors and lenders for vetting investments for their potential gendered impact is exacerbated by their limited understanding about why and how inclusion of women and girls may affect financial performance and long-term value of investments.*
- *Many respondents had a limited understanding of why and how gender matters to the success of investments in infrastructure and its performance as a social asset.*
- *Limited involvement of investors and lenders in the project cycle, along with constraints imposed by competitive procurement, limit their influence to create and implement plans for inclusion of women and girls. There are, however, opportunities to mitigate these constraints.*
- *While some active investors have social and gender equality plans and on-site capacity to implement them, they have faced cultural challenges in doing so.*

The development of inclusive infrastructure can help to achieve several SDGs, such as reducing poverty and inequality.¹⁷ Inclusive infrastructure can have direct benefits, such as promoting gender equality and enhancing the inclusion of low-income groups in education services.¹⁸ Developing this type of infrastructure can have indirect benefits as well—for example, more inclusive infrastructure can lead to improved health and well-being through greater access to education, healthcare services, and cleaner technologies.¹⁹ By investing in inclusive infrastructure, policymakers can promote sustainable development in their countries and make progress towards multiple SDGs—directly or indirectly—including:

- SDG 1 (No poverty), SDG 8 (Decent work and economic growth), SDG 10 (Reduced inequality)
- SDG 3 (Good health and well-being)
- SDG 4 (Education)
- SDG 5 (Gender equality)
- SDG 6 (Clean water and sanitation), SDG 7 (Affordable and clean energy), SDG 9 (Industries, innovation, and infrastructure), SDG 11 (Sustainable cities and communities)
- SDG 13 (Climate action).

2.2 INCLUSIVE INFRASTRUCTURE THROUGH PPPS

PPPs can be a powerful tool for promoting inclusive infrastructure that accommodates the needs and rights of all groups. There is a growing recognition of the need to ensure that these projects promote social inclusion and benefit all groups, including marginalized communities, low-income groups, women and girls, children and youth, and minorities. PPPs involve collaboration between government entities and private sector organizations to design, finance, and deliver infrastructure, so they can be leveraged to ensure that infrastructure investments and policies promote social inclusion and equity.

To promote inclusive infrastructure through PPPs, it is key to consider the needs and perspectives of all groups, and particularly those that may be at risk of being excluded, throughout the projects' planning, implementation, and evaluation stages. This can involve i) engaging with communities and stakeholders to gather feedback on infrastructure and service necessities, demand patterns, willingness to pay, and potential impacts, ii) incorporating social impact assessments into the project design, and iii) establishing mechanisms for accountability and transparency.

¹⁷ UNOPS. 2022. "Inclusive Infrastructure for Climate Action." Accessed on March 13, 2023. https://content.unops.org/publications/Inclusive-infrastructure_EN.pdf

¹⁸ Global Infrastructure Hub. 2019. "Inclusive Infrastructure and Social Equity. Practical guidance for increasing the positive social outcomes of large infrastructure projects". Accessed on March 13, 2023. <https://inclusiveinfra.gihub.org/>

¹⁹ For example, developing a BRT system with electric buses that replace traditional diesel buses can help improve mobility while also reducing greenhouse gas emissions and health problems related with air pollution.

Incentives and legal and regulatory controls in PPPs are key tools that can be used to promote inclusivity outcomes. However, for these tools to bring about greater inclusivity benefits, they need to be applied at both policy and project levels.²⁰ Clear policy and regulation on inclusion and inclusivity standards can lead to better inclusion outcomes from private-sector participation in infrastructure. Project-level measures such as linking project performance to inclusivity indicators can also lead to enhanced inclusion.

Moreover, tools that can be used in PPPs include measures to improve inclusion outcomes from the demand and supply sides. Demand-side mechanisms include subsidies schemes to improve affordability, while supply-side measures may involve incorporating inclusivity measures in bidding criteria and fostering inclusive environments for the participation of businesses owned by women or other minority groups in PPPs. These and other incentives are explained below:²¹

- **Applying subsidies schemes to increase accessibility and affordability of infrastructure services**— To ensure that infrastructure services remain affordable for all income groups, governments often use subsidy schemes. This is because tariffs determined based on financial viability can make these services unaffordable for some. By providing subsidies, governments can increase the accessibility and affordability of infrastructure services for all. In addition, subsidy schemes can also increase the demand for the infrastructure facilities being developed, thus making PPPs more bankable for the private sector.
- **Incorporating inclusivity measures in bidding criteria**—Governments can use the competitive processes of PPPs to improve inclusivity outcomes. For example, through bidding criteria private providers can be asked to employ a certain percentage of low-income groups during asset constructions or ensure gender-equal management positions. Also, bidding rules can have a weighting incorporated so bidders also compete in inclusivity measures.
- **Building capacity of private sector providers on how to integrate inclusion in infrastructure projects**—Private sector providers can be trained on inclusivity standards to improve inclusion outcomes for groups that at risk of being excluded (as described in Section 2.1). Private providers would be incentivized to receive this training as they would be more likely to comply with standards or score higher if bidding criteria include inclusivity measures (see above).

²⁰ Global Infrastructure Hub. 2019. *Inclusive Infrastructure and Social Equity. Practical guidance for increasing the positive social outcomes of large infrastructure projects.* Accessed on March 13, 2023. <https://inclusiveinfra.gihub.org/>

²¹ Ibid.

- **Fostering a more inclusive environment in PPPs for businesses owned by women or other minority groups**—This can be achieved in multiple ways. Governments can apply minimum targets for incorporating women- and minority-owned enterprises in PPP procurement. Governments can also develop transparency programs to provide information on the level of participation of minority-owned companies in PPPs to identify cases of unequal access and the barriers of entries. This can in turn help develop strategies to address those roadblocks.

Legal and regulatory controls act in a similar way to incentives but by applying payment deductions or penalties to non-compliance. Clear regulatory and legal frameworks, as well as project KPIs incorporating inclusivity measures are key tools to enhance inclusion outcomes when developing infrastructure through PPPs. Examples of these measures are explained below:^{22,23}

- **Clear legal and regulatory framework on inclusivity standards**—Private providers in infrastructure may lack inclusivity standards in the absence of regulation. Governments can enhance inclusion outcomes by providing policy and guidance on the standards they want to achieve. For instance, clear government standards on reasonable accommodation and universal design for infrastructure, such as public transport, schools, and hospitals, can ensure that private providers develop accessible infrastructure for people living with disabilities.
- **Using payment mechanisms to achieve inclusion objectives**—Procuring agencies can incorporate payment mechanisms that incentivize private providers to achieve inclusivity outcomes such as gender equality in their corporate structures or in the provision of their services.

²² PPIAF, GIF. 2022. “Preliminary Findings Report on Gender-Inclusive Approaches in Private Participation in Infrastructure.” Accessed on March 20, 2023. <https://documents1.worldbank.org/curated/en/09952011082218500/pdf/IDU0491c55960383c045880a2440291443992454.pdf>

²³ Global Infrastructure Hub. 2019. “Inclusive Infrastructure and Social Equity. Practical guidance for increasing the positive social outcomes of large infrastructure projects.” Accessed on March 13, 2023. <https://inclusiveinfra.gihub.org/>

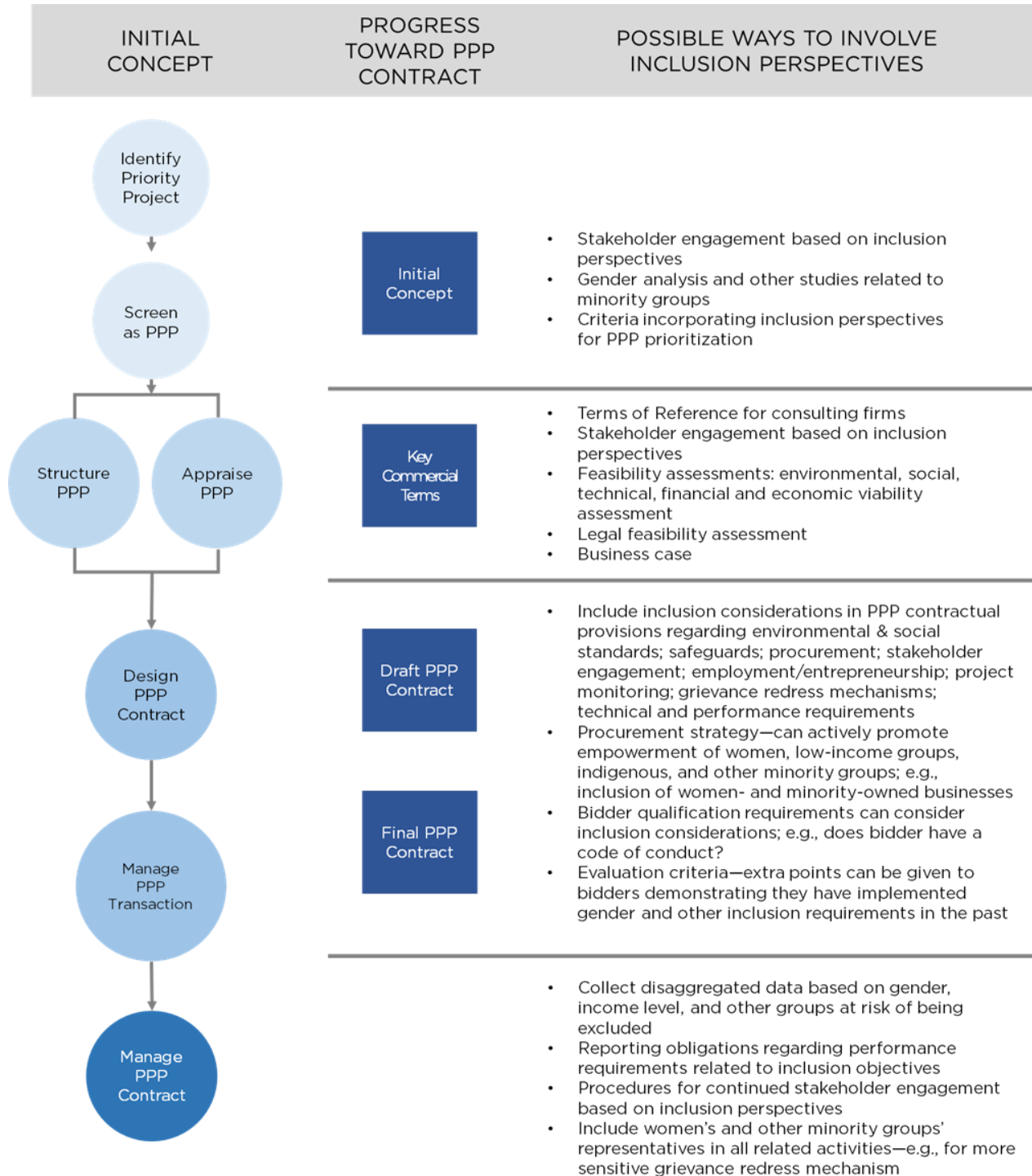
- **Incorporating inclusivity measures in KPIs and other performance standards**—In a similar way to payment mechanisms, including inclusivity measures in the projects’ KPIs can ensure that private providers are penalized when they fail to meet certain inclusivity targets and social outcomes. In addition to penalties, bonus payments can be linked to performance above minimum requirements. Both these tools will help align the private stakeholder’s profit drivers with the Government’s inclusivity objectives. It is key that PPP practitioners do not impose KPIs that unreasonably restrict the ability of the private provider to profit from the project. Otherwise, the private sector will find these projects unfeasible.²⁴
- **Establishing reporting and evaluation mechanisms on the private sector provider’s approach to inclusion**—Requesting that the private sector reports and evaluates its approach to inclusion can improve transparency and allow independent reviewers and customer groups to provide feedback. This higher level of scrutiny can help ensure private stakeholders are applying their approach to inclusion in the design of assets and provision of services.

A key pillar to promote inclusive infrastructure through is incorporating inclusion perspectives into PPP design, construction, and execution. The figure below presents several ways to include inclusion perspectives in the PPP cycle from project inception and screening until contract management.

The discussion during the *Driving Inclusion* panel of the third PPP Talk will address how PPPs can help societies in the region promote the inclusion of all their citizens in infrastructure and public services. This entails ensuring that none of the groups identified earlier in this section are excluded from the benefits of infrastructure development. Panelists will also explore possible barriers that regional context may pose to these objectives and ways to address these challenges.

²⁴ IFC’s Environmental and Social (E&S) Performance Standards are usually regarded as international best practice in E&S safeguards for development projects. However, it should be noted that inclusive infrastructure goes beyond the “do no harm” concept that is inherent to the IFC’s E&S Performance Standards.

Figure 2: Ways to Involve a Gender Perspective in the PPP Cycle



Source: Figure edited based on IFC. 2019. "Gender Equality, Infrastructure and PPPs – A Primer."

SECTION 3 MEASURING IMPACT

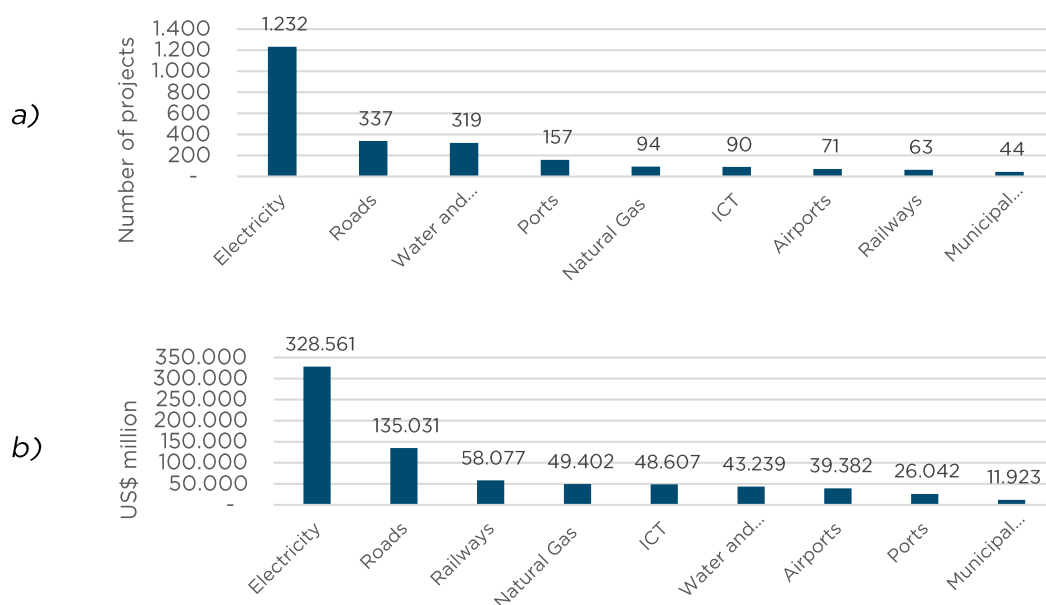
Private-sector participation (PSP) in infrastructure has been increasing over the past few decades in Latin America and the Caribbean (LAC). PSP in infrastructure development can be a way to improve the quality and efficiency of public services while reducing the burden on the government's budget. Therefore, many LAC countries have implemented policies to attract private investment in infrastructure and public services, which has led to sustained growth in the development of PPPs in the region.

According to data from the Private Participation in Infrastructure (PPI) Database, LAC is the region with the largest investment in infrastructure with PSP among emerging markets and developing economies (EMDEs). Between 1990 and the first half of 2022, at least 2,400 projects reached financial close in the region.²⁵ During the same period, the total investment in infrastructure projects with PSP added up to more than US\$740 billion.²⁶ The sectors where PSP has been most prevalent in LAC include energy, transportation, telecommunications, and water and sanitation. Figure 3 below presents the number of projects reaching financial close and the total investment by sector since 1990.

²⁵ World Bank. 2023. "Private Participation in Infrastructure (PPI) Database. Regional Snapshot – Latin America and the Caribbean." Accessed on March 28, 2023. <https://ppi.worldbank.org/en/snapshots/region/latin-america-and-the-caribbean>.

²⁶ Ibid.

Figure 3: a) Number of Infrastructure Projects with PSP Reaching Financial Close by Sector / b) Total Investment in Infrastructure Projects with PSP by Sector, 1990 - H1 2022



Source: Own elaboration based on data from World Bank. 2023. "Private Participation in Infrastructure (PPI) Database. Regional Snapshot – Latin America and the Caribbean."

Despite the high prevalence of PSP in the region, there have been few studies in LAC evaluating the performance and impact of PPPs. Evaluating impact is crucial to estimate the overarching economic and social outcomes of PPPs and to inform policy, regulatory, and institutional decisions. Only through evaluation it is possible to draw lessons to replicate success factors and avoid approaches that have not led to positive outcomes. Moreover, it is essential to develop learning curves from evaluation, which involves applying ex ante, monitoring, and ex post techniques to understand the performance of PPPs before, during, and after their implementation. Therefore, evaluations of PPPs can help governments in the region increase the positive social and economic impact of PPPs in the long term, maximizing the efficiency of resources—private or public—invested in these projects.

When evaluating the pertinence of PPPs, practitioners have usually relied on two methods—cost-benefit analysis (CBA) and value for money (VFM). CBA is a decision-making tool used to evaluate the potential economic and social costs and benefits of a PPP. CBA involves comparing the total expected costs of the project with its expected benefits to determine the net benefit (or net cost).²⁷ VFM is also a decision-making methodology that compares the costs and benefits of a PPP project with those of a traditional public procurement option (public sector

²⁷ Global Evaluation Initiative. 2023. "Cost-benefit analysis." Accessed on March 28, 2023. <https://www.betterevaluation.org/methods-approaches/methods/cost-benefit-analysis>

comparator) to determine whether the PPP provides better value for money.²⁸ These methods are usually used when evaluating the feasibility of PPPs (ex-ante) but are rarely employed in the region after PPPs have been completed (ex-post). Carrying out ex-post CBA and VFM analysis can provide PPP practitioners valuable lessons on whether the benefits of PPP portfolios have outweighed their cost, as well as providing information on whether they have created value for societies.

Moreover, these methods can be used to evaluate the pertinence and usefulness of different types of PPPs, including asset development and service provision. Asset development involves the private sector designing, financing, constructing, and owning a public asset—for example, a road or an airport. The private provider assumes the financial risks associated with the asset and typically recovers its investment through fees charged for the use or functional availability of the asset. In this type of PPP, the private sector is responsible for ensuring the asset is built to meet the required specifications and for maintaining and upgrading the asset over its lifetime. On the other hand, in service provision PPPs the private sector delivers a public service, such as education or health services. The private sector takes on the operational risks associated with providing the service and is typically remunerated through service fees or performance-based payments. PPPs that include both asset development and service provision are also common in LAC in infrastructure such as new hospitals, ports, and wastewater treatment plants.

Monitoring and supervision are also critical components for the appropriate management, performance, and impact evaluation of PPPs. Effective monitoring and supervision ensure that PPP projects are delivered according to the contract terms and objectives and that any issues or risks are identified and addressed in a timely manner. Monitoring involves ongoing tracking and assessment of project progress against agreed targets, timelines, and quality standards.²⁹ Monitoring enables the public partner to identify any issues or delays in project milestones and to take corrective actions if necessary. Supervision involves more active oversight and intervention by public authorities to ensure that the private provider is fulfilling its contractual obligations. This may include reviewing and approving plans, designs, and milestones, conducting audits and inspections, and enforcing compliance with environmental, social, and other standards.

The following sections will lay out the foundations of the discussions of the panel on Measuring Impact to be held during the third PPP Talk. Section 3.1 outlines how PPP practitioners in the region may go about carrying out PPP performance evaluations, while Section 3.2 explains the opportunities and challenges of assessing the impact of PPPs in the region.

²⁸ World Bank. 2023. “Assessing Value for Money of the PPP”. Accessed on March 28, 2023. <https://ppp.worldbank.org/public-private-partnership/assessing-value-money-ppp>

²⁹ European PPP Expertise Centre. 2014. “Managing PPPs during their contract life.” Accessed on March 28, 2023. https://www.eib.org/attachments/epec/epec_managing_ppps_en.pdf

3.1 ASSESSING PERFORMANCE

Assessing performance focuses on how well PPP projects are executed, and whether they meet their objectives, timeline, and budget. Performance assessments usually involve the evaluation of the PPP's financial performance, the efficiency of the project's management, and the quality of the delivered service. This type of assessment is typically conducted during the implementation phase of the PPP and aims to identify any issues or challenges that may arise and recommend solutions to improve the project's implementation. This is usually done through monitoring and supervision, as discussed above.

Effective monitoring and evaluation require clear and transparent contractual arrangements with defined roles and responsibilities for all stakeholders.³⁰ The contract should include specific performance indicators and targets and clear reporting requirements. The public partner should also have adequate resources and capacity to conduct monitoring and supervision activities.³¹ In addition to monitoring and supervision by the public off-taker, independent oversight mechanisms can also play an important role in ensuring accountability and transparency in PPPs. These mechanisms may include external auditors, regulatory bodies, and citizen monitoring groups.

This note presents the case for conducting systematic performance assessments of PPPs after their implementation. Ex-post evaluations can help determine the effectiveness of PPPs in achieving their intended objectives, which can inform the design of future PPPs and pipeline development. For instance, governments in the region could leverage ex-post CBA and VFM studies for this purpose:

- **Ex-post CBA** could help PPP practitioners determine whether the net benefits estimated before the implementation of the PPP did materialize. These studies could also provide information on the appropriateness of the assumptions made to identify and quantify the costs and benefits associated with the PPP. In addition, an ex-post CBA could allow evaluators to include the costs and benefits of both negative and positive unintended effects that the project may have produced.
- **Ex-post VFM** can also provide valuable information on the appropriateness of the PPP model for the project. Officials could reassess the comparison of the PPP against the public sector comparator based on the actual costs and benefits of the project, including any risks that may have materialized during project implementation. However, a clear limitation of this method is that the actual costs and benefits of the traditional public procurement option cannot be known with certainty.

³⁰ Global Infrastructure Hub. 2023. "PPP Contract Management Report." Accessed on March 31, 2023. <https://managingppp.gihub.org/report/overview/>

³¹ Ibid.

The IDB's PPP Network³² has carried out studies on the performance of several PPP projects and programs in the region. For instance, the PPP Network recently evaluated the performance of road concessions in Peru against the scenario in which they would have been procured through a traditional public works scheme. The study used a propensity score matching (PSM) methodology, which guarantees the comparability between concession and non-concession roads.³³ This is how the study describes this methodology:

“This technique seeks to find, for each element of the treatment group, a similar element or elements of the control group, given their pre-observed characteristics. Thus, using the values of these characteristics, the probability of participation in the program is calculated for each treatment and control unit, which is called the propensity score. This probability of participation allows the construction of a dummy control group statistically comparable to the treatment group, with which the respective pairing can be performed. This technique matches the unique characteristics that distinguish the control (to try to make them more alike) and treatment groups. That is, the PSM reduces the bias due to variable confounding that can be found in an estimate of the treatment effect obtained from the simple comparison of the results between units that received the treatment versus those that did not.”³⁴

This study found that concessioned sections present fewer cost overruns and fewer delays than the non-concessioned sections. The impact of these concessions was also assessed in this study and will be presented in Section 3.2. Box 2 presents an example of performance assessment that allowed the IDB to measure the effectiveness of a performance-based contract in the reduction of non-revenue water (NRW) in New Providence, Bahamas.³⁵

³² The PPP Network has its origin in the PPP Risk Management Group, a regional public good available to the governments of the region dedicated to generating a space for exchange and cooperation among public-private financing specialists on the management of associated risks. With this foundation, the PPP Network expands the scope of analysis and best practices for the development of projects, and it counts with the knowledge and expertise of several recognized centers which work in the analysis of infrastructure: from the regulatory, fiscal, and institutional frameworks, to feasibility analysis and structuring of projects, and also covering the most relevant issues of financing and risks for the region. Source: PPP Network. <https://reddeapps.org/en/sobre-la-red/quienes-somos/>

³³ IDB. 2021. “Asociaciones público-privadas versus obra pública: Una comparación para el caso de redes viales en Perú y la región.” Accessed on April 1, 2023 <https://publications.iadb.org/es/asociaciones-publico-privadas-versus-obra-publica-una-comparacion-para-el-caso-de-redes-viales-en>

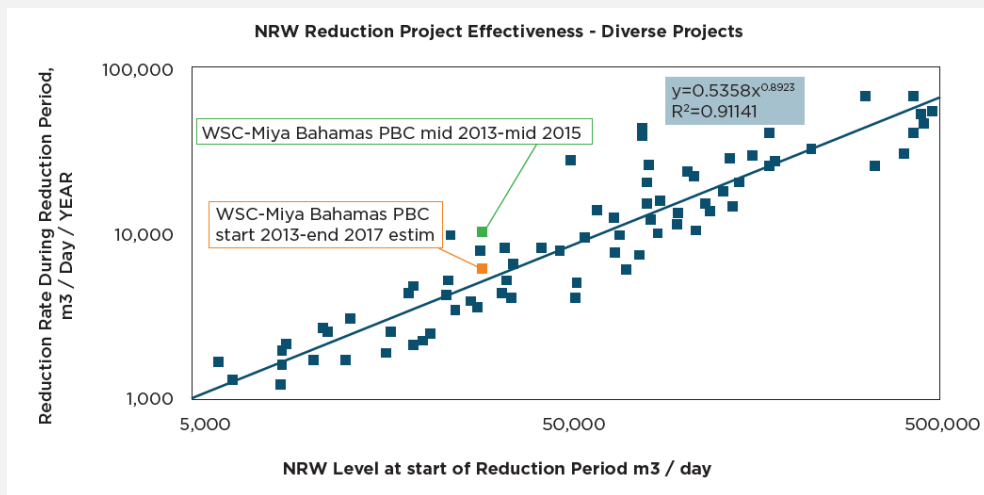
³⁴ Ibid.

³⁵ IDB. 2018. “Case Study: Performance-based Contract for NRW Reduction and Control New Providence, Bahamas”. Accessed on April 1, 2023 <https://publications.iadb.org/en/case-study-performance-based-contract-nrw-reduction-and-control-new-providence-bahamas>

Box 2. Example of Successful Performance of a PPP in the Water Sector: The Case of a Performance-based Contract for NRW Reduction and Control in New Providence Bahamas

In 2018, the IDB prepared a case study that assessed the performance of a non-revenue water (NRW) reduction project carried out through a performance-based contract (PBC) in New Providence, Bahamas. The comprehensive financial assessment carried out in the study demonstrated that the project would be self-sufficient within the PBC period. Furthermore, the analysis revealed that the considerable financial and operational advantages of a swift NRW reduction project outweighed those of a traditional NRW undertaking— even at a lower overall expense. While the Bahamas Water and Sewerage Corporation (WSC) would benefit from reduced NRW and enhanced service quality, a tariff increase is necessary, although it had been delayed for a long time.

In this study, the IDB measured effectiveness as the rate of NRW reduction in the PBC, which as then compared to the author’s database of numerous NRW projects that tackle both actual and apparent losses. Two periods were selected for analysis: the primary reduction phase from mid-2013 to mid-2015 and the period from the beginning of 2013 to the projected end of 2017. The figure below presents the findings, which indicated a substantial decrease in NRW. The study attributed this outcome to precise baseline data, a well-planned approach, and successful implementation of the program.



Source: IDB. 2018. “Case Study: Performance-based Contract for NRW Reduction and Control New Providence, Bahamas”. Accessed on April 1, 2023 <https://publications.iadb.org/en/case-study-performance-based-contract-nrw-reduction-and-control-new-providence-bahamas>

Ex-post performance assessments are usually methodologically complex, costly, and often not regarded as crucial as ex-ante studies. This could undermine the allocation of resources needed to carry out these studies. To address these issues, the IDB is developing a methodology to assess the performance of PPPs in LAC. This methodology aims at being as cost-efficient as possible and reducing the need for other resources, such as the number of evaluators. This tool will be presented at PPP Americas 2023 as part of the panel discussions.

3.2 ASSESSING IMPACT

Assessing impact is key to estimating the overall social and economic effects of PPPs, which can help inform policy, regulatory and institutional decisions. Measuring impact, as opposed to performance, focuses on the broader, longer-term effects of the PPP project on the economy, society, and the environment. Impact assessments are usually conducted after the PPP has been completed, and its results can be observed over time. The impact assessment may include the evaluation of the PPP's contribution to economic growth, job creation, poverty reduction, improved quality of life, enhanced inclusion outcomes, and environmental sustainability.

The results of impact assessment can inform policy and regulatory decisions, such as the design of future PPP pipelines, the establishment of performance targets and indicators, and the development of monitoring and evaluation frameworks. Impact assessment can also help to identify areas where institutional reforms or capacity building may be needed to improve the effectiveness and efficiency of PPPs. By assessing the impact of PPPs, policymakers can make informed decisions about in which sectors to invest in PPPs, and how to design and implement them to maximize social and economic benefits, while minimizing risks and costs. Impact assessment can also help to build public trust and confidence in PPPs, by providing evidence of their effectiveness and accountability.

For instance, the IDB study on road concessions in Peru mentioned above found that the concessioned sections had lower rates of accidents, injuries, and fatalities than those that were not concessioned. The average yearly expense per accident on the concessioned highways between 2015 and 2019 was USD 65.72 million, compared to USD 254 million for non-concessioned highways. This implies that if all highways were under concession, Peru could potentially save around US\$189 million per year due to the reduction in traffic accidents.³⁶ These are clear positive impacts that can be communicated to the broader public and that could not have been elucidated without impact assessments.

Moreover, further IDB studies have shown that PPP projects have positive fiscal impacts. According to these surveys, PPPs can not only eliminate the necessity for the public sector to commit significant resources, but also have the potential to generate revenue for the states.^{37,38} As a result, this can create fiscal room for other public sector projects or current expenditures.

³⁶ IDB. 2021. "Asociaciones público-privadas versus obra pública: Una comparación para el caso de redes viales en Perú y la región." Accessed on April 1, 2023. <https://publications.iadb.org/es/asociaciones-publico-privadas-versus-obra-publica-una-comparacion-para-el-caso-de-redes-viales-en>

³⁷ IDB. 2020. "Public-Private Partnerships in Airports in Latin America and the Caribbean: Main Figures and Trends in the Sector". Accessed on April 1, 2023. <https://publications.iadb.org/en/public-private-partnerships-airports-latin-america-and-caribbean-main-figures-and-trends-sector>

³⁸ IDB. 2020. "Public-Private Partnerships in Ports: Main Figures and Trends in Latin America and the Caribbean". Accessed on April 1, 2023. <https://publications.iadb.org/en/public-private-partnerships-ports-main-figures-and-trends-latin-america-and-caribbean>

Projects such as ports and airports in the region serve as excellent illustrations of such initiatives since they can generate fees, while also enhancing the quality of services provided.^{39,40}

However, impact assessments are currently not being carried out by LAC governments. According to the 2021/22 Infrascope Index, a benchmarking tool commissioned by the IDB that evaluates the readiness and capacity to implement sustainable and efficient PPPs, found that 19 out of 26 countries in the region failed to score on any of the three indicators related to impact evaluations—evaluating PPP performance against climate change goals, evaluating performance against the Sustainable Development Goals (SDGs), and requiring PPPs to actively incorporate elements of “future-proofing” (for example, resilience or adaptability) into their design.⁴¹ Overall, 14 countries have no documented proof of conducting ex-post evaluations of their PPPs.⁴² This shows the low priority that governments in the region are giving to impact evaluations of PPPs, despite their clear benefits.

Evaluating the impact of PPPs and, in general, infrastructure projects is not a straightforward task, particularly due to the difficulty in constructing an appropriate counterfactual. A counterfactual can be understood as what would have happened—what the outcome of a project would have been for the project beneficiaries—in the absence of the project.⁴³ A counterfactual is needed to compare and isolate the impact of development programs and projects, but establishing one for a specific project is difficult given the several factors that are in play in most infrastructure sectors. Therefore, evaluation experts usually rely in a combination of the following approaches to assess the impact of infrastructure projects and, therefore, PPPs:⁴⁴

- **Constructing a counterfactual based on similar countries and time series data.** This approach involves identifying an example of a similar country or region that lacks the infrastructure that is being evaluated. For instance, an evaluator could evaluate the impact of an airport in terms of increased exports or higher tourism revenue in a determined region by comparing it to a region that lacks an airport.

³⁹ IDB. 2020. “Public-Private Partnerships in Airports in Latin America and the Caribbean: Main Figures and Trends in the Sector”. Accessed on April 1, 2023. <https://publications.iadb.org/en/public-private-partnerships-airports-latin-america-and-caribbean-main-figures-and-trends-sector>

⁴⁰ IDB. 2020. “Public-Private Partnerships in Ports: Main Figures and Trends in Latin America and the Caribbean”. Accessed on April 1, 2023. <https://publications.iadb.org/en/public-private-partnerships-ports-main-figures-and-trends-latin-america-and-caribbean>

⁴¹ IDB and Economist Impact. 2022. “The 2021/22 Infrascope. Evaluating the environment for public-private partnerships in Latin America and the Caribbean”. Accessed on April 1, 2023. <https://impact.economist.com/projects/infrascope>.

⁴² Ibid.

⁴³ Gertler, Paul J.; Martinez, Sebastian; Premand, Patrick; Rawlings, Laura B.; et al. “Impact Evaluation in Practice.” Second Edition.

⁴⁴ World Bank. 2011. “Strategies for Evaluating the Impact of Big Infrastructure Projects: How can we tell if one big thing works?”. Accessed April 25, 2023. <https://blogs.worldbank.org/impactevaluations/strategies-for-evaluating-the-impact-of-big-infrastructure-projects-how-can-we-tell-if-one-big-thing>

- **Constructing a counterfactual based on different industries.** This approach consists in evaluating the impact of an infrastructure asset by comparing beneficiary industries to industries that will not likely benefit from the asset. For example, the evaluator could assess the impact of an airport in terms of increased exports for businesses that export their products through air freight, such as flower exporters. The counterfactual could be businesses that do not rely on air freight, instead exporting most of their products through maritime transport, such as food exporters.
- **Working through causal chains.** This approach involves the evaluator to think through the chain of logic needed for a project to have the impact being evaluated. This approach also requires establishing falsifiable predictions along the causal chain. Identifying an appropriate counterfactual and eliminating alternative explanations is also key when using this approach.

The discussion during the panel of this PPP Talk will focus on the most appropriate tools to assess the performance and impact of PPPs during and after their implementation. This evaluation process will help identify lessons learned to inform future designs and management mechanisms. The panelists will also discuss methodologies and ways in which governments in region can incorporate ex-post performance and impact assessments in their PPP cycles. Lastly, the panel will explore the development of incentives to maximize the impact of PPPs beyond the minimum required level. This will help improve the quality and access to infrastructure and services received by citizens in the region.