

# Mobilizing Private Finance for Development in Latin America and the Caribbean



**Mobilizing Private Finance  
for Development in Latin America  
and the Caribbean**

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# Mobilizing Private Finance for Development in Latin America and the Caribbean

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Editors

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# Foreword

The Latin America and the Caribbean (LAC) region is growing again. This is very good news after a two-year recession, something last experienced over three decades ago. The challenge is now to accelerate and sustain growth to continue making progress on the social front as in the first decade and a half of the new century: between 2000 and 2014 the region managed to reduce poverty (US\$4 a day poverty line) from 42.9% to 23.3%, cutting the number of poor people by 80 million at a time when the Latin American population increased by 100 million.

A renewed emphasis on productivity comes quickly to one's mind during any discussion of LAC's growth agenda. After all, labor productivity in the region has stalled at around 30% of that of the U.S. Moreover, improvements on the productivity front would result not only in faster growth but also, as basic economic theory suggests, in better salaries for the workforce, therefore further contributing to poverty reduction and shared prosperity.

But why is there such a gap in LAC's productivity with respect to the developed countries? One factor is the large infrastructure investment and service gaps. Indeed, infrastructure investments can be a powerful engine for reviving and sustaining growth. A recent regional study on

the determinants of growth in LAC indicates that infrastructure has been the main structural driver of growth in the region.

Yet, LAC governments are well aware that public resources are not enough to satisfy infrastructure needs, especially in the context of on-going fiscal adjustments across the region and the enormous need for infrastructure investment: an estimated \$180 billion per year investment gap. And LAC governments are also well aware that the private sector can play a central role to finance the existing gap.

Not surprisingly then, LAC has made considerable strides in attracting private sector investments in infrastructure: the region has the largest stock of active Public-Private Partnerships (PPP) investments and the largest pipeline of infrastructure projects by volume globally, reflecting the central role of the private sector in the regional development agenda.

But more work is needed to reach new heights. Going forward, LAC countries will benefit from an improved environment for private investments, as well as for further developing a robust pipeline of bankable projects.

This report showcases the different ways the World Bank Group (WBG) has been part of these efforts to support the mobilization of private financing for infrastructure in the region, following what we call the Cascade approach. These encompass everything from policy and regulatory advice to structuring support, guarantees schemes and financing. Country-specific examples presented in this report illustrate how private financing mobilization in LAC has been supported by the WBG. While not exhaustive, these examples are representative of the different strategies and instruments used by governments at the central and subnational levels to help leverage private sector participation in infrastructure.

The WBG stands ready to continue to assist the region in that endeavor with financial support, as well as knowledge and convening services.

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# Mobilizing Private Finance for Development in Latin America and the Caribbean

The Latin America and the Caribbean Region (LAC) has the largest stock of active PPP investments and the largest pipeline of infrastructure projects by volume globally, reflecting the central role of the private sector in the regional development agenda. Looking ahead, the region is making efforts to close the estimated US\$180 billion per year investment gap with further private sector resources by: (i) improving the enabling environment for private investments to take place; and (ii) developing a robust pipeline of bankable projects. The WBG is well-placed to assist the region with financial support and knowledge services, as illustrated by the examples selected for part three of this report.





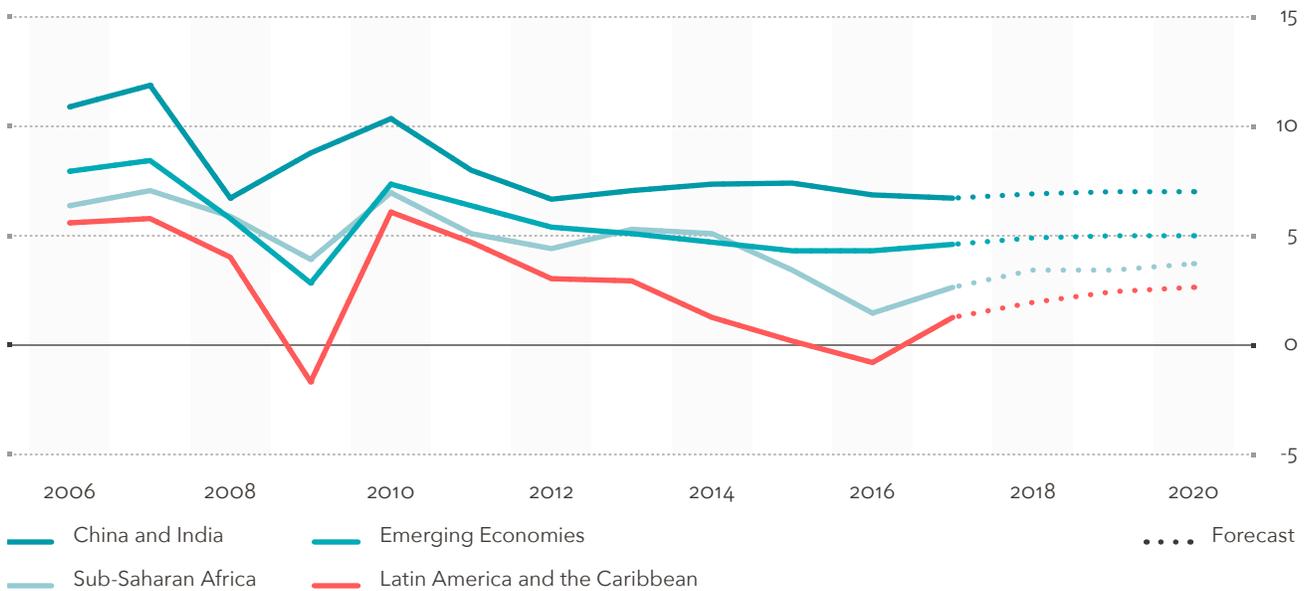
## Introduction and Context

Propelled by an extended commodity boom and benefitting from previous reforms, the Latin America and the Caribbean (LAC) region experienced a deep social transformation during the Golden Decade (2003-2013). Extreme poverty (US\$2.50 a day) was halved to 11.2% by 2013 and overall poverty (less than US\$4 a day) decreased dramatically from 42% in 2003 to 24.1% in 2013. The middle class became larger than the poor and incomes of the vulnerable approached middle class levels. The Gini Index of income inequality dropped more than 7% between 2003 and 2011. The income of the poorest grew at 7% per year, while the income of the richest grew at 3.2%.

After a long deceleration that could have put those social gains at risk, LAC has started growing again, albeit at a fragile pace and with considerable cross-country variation. LAC was the hardest hit among emerging regions by the global deceleration that took hold in 2010 and by falling commodity prices. Average growth in the region was negative in 2015 and 2016, the first back-to-back years of recession in more than 30 years. After two consecutive years of recession, the Latin American and Caribbean regional economy appears to be experiencing a subdued and fragile recovery in 2017. LAC is now projected to grow in 2017 at 1.1% and in 2018 at 2%.

**Figure 1. LAC: The Beginnings of a Growth Recovery**

**GDP, % CHANGE FROM PREVIOUS YEAR**



Growth resumption gives the region the opportunity to consolidate and deepen these hard-won gains, but LAC needs to grow faster and in a more sustained manner. LAC’s growth performance continues to be hampered by a host of structural weaknesses. Social and economic recovery will require addressing LAC’s chronically low productivity growth: Labor productivity in LAC has stalled at around 30% of that of the US. Such dismal long-term performance is the result of several structural barriers, including major infrastructure service gaps perpetuated by inefficient public spending, slow convergence to OECD educational achievement levels, weak corruption controls, and flawed competition policies that have failed to foster innovation and efficient resource allocation. Difficult reforms are underway in several LAC countries – including Argentina and Brazil – propelled by the need to reestablish fiscal sustainability.

**A key challenge for growth in the region is the lack of long-term finance, particularly in local currency, which is essential for financing business investments, infrastructure, and housing.** The banking sectors have generally high liquidity, but mostly lend to highly creditworthy clients and at shorter terms. Most financial institutions have excessively

relied on short-term funding for long-term assets. Long-term finance is especially sensitive to macroeconomic stability and a sound institutional framework, such as adequate creditor rights and an efficient judicial system. Periods of macroeconomic instability in several LAC countries have led to a prevalence of short-term and foreign currency lending, as well as limited capital market development. Lack of long term finance negatively impacts small and medium enterprises (SMEs) most notably. SMEs contribute significantly to the economy and jobs, but are often limited in their ability to expand their operations. It is also a challenge to find funding for infrastructure projects, given the high financial needs and longtime horizons. Finally, weak financing also adversely affects households, thus hampering consumption from smoothing over the lifecycle and larger investments such as in housing.

**The World Bank Group (WBG) has supported the region in its efforts to revive long-term growth while consolidating and advancing social gains.** Through its institutions, the WBG<sup>1</sup> provides a combination of financing, knowledge and convening products and services supporting LAC countries in three key priority areas:

- *Setting the stage for economic recovery* by addressing fiscal and external imbalances and fostering private sector development and jobs;
- *Strengthening infrastructure services* by supporting investments in infrastructure; and
- *Investing in human capital and protecting the poor* by improving the quality of education and health services and modernizing social protection systems.

In parallel, the WBG's work in the region is permeated by three cross-cutting themes: (i) sustainability and resilience (both environmental and social); (ii) transparency and accountability; and (iii) economic integration.

**Infrastructure investments are a powerful engine for reviving and sustaining growth.** Empirical research has on balance shown that infrastructure development positively contributes to aggregate income

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<sup>1</sup> In this context, the WBG consists of the International Bank for Reconstruction and Development (IBRD), the International Development Association (IDA), the International Finance Corporation (IFC) and the Multilateral Investment Guarantee Agency (MIGA).

and economic growth.<sup>2</sup> A recent regional study on the determinants of growth in Latin America and the Caribbean indicates that infrastructure has been the main structural driver of growth in the region.<sup>3</sup> Some empirical studies suggest that the positive impact of infrastructure on growth is channeled through rising productivity: Public infrastructure capital has been found to be an important determinant of Total Factor Productivity (TFP).

**However, the public sector cannot do it alone.** LAC's infrastructure investment needs are enormous: the region has an estimated US\$180 billion per year investment gap. It also invests little. On average, the region invests less than 3% of GDP on infrastructure per year, while East Asia and the Pacific (EAP) invests 7.7% of GDP. Public resources are not enough to satisfy public infrastructure needs, especially in the context of ongoing fiscal adjustments across the region. Private sector financing will be essential to fill the gap. In addition, policymakers should focus not only on the "investment gap," but also on the "service gap" through improving public investment efficiency. Spending efficiently and on the right things can also help narrow the infrastructure service gap in the region. This is particularly the case in sanitation and transport, where LAC lags other regions.

**LAC has been the most active region in attracting private sector investments in infrastructure, suggesting a welcome trend of catching up is at work.** Catching up through infrastructure investment is critical: overall, LAC countries have been characterized by lower aggregate investment ratios than their counterparts in East Asia and the Pacific, and public investment in infrastructure is a critical part of the effort to narrow this gap. The region is moving in the right direction: it has the largest stock of active PPP investments globally, both in US dollar terms and as a share of countries' GDP. The fact that trends are positive for LAC is reinforced by progress made by some LAC countries on the reform front, including most recently in Argentina and Peru. However, most of the

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2 A useful survey of the empirical literature on the infrastructure-growth relationship can be found in Calderón, C. and L. Servén (2014). "Infrastructure and Growth". In S.N. Durlauf and L.E. Blume (eds.). *The New Palgrave Dictionary of Economics*, Online Edition.

3 Araujo, J.T. et al (2016). *Beyond Commodities: The Growth Challenge of Latin America and the Caribbean*. The World Bank Group: Latin America Development Forum Series.

action has so far taken place in four countries – Brazil, Mexico, Chile and Colombia – with Brazil representing almost two-thirds of all PPPs in LAC in US dollar terms, as shown in Figure 2. On the other hand, countries like Bolivia and Ecuador have continued to rely heavily on the public sector to cover their infrastructure investment needs.

**Attracting private finance for infrastructure in a sustained way requires additional reforms that improve the enabling environment for private investments to take place.** The main task of governments is to create the enabling environment that would reduce certain types of risk, such as political, contractual, legal, and regulatory, so that private financiers and operators can assume the financial and commercial risk. Creating an adequate framework upstream would require reforms and institutional capacity to be able to manage the participation of private operators in development. These frameworks exist in several countries – 19 LAC countries have PPP legislation, and 17 of them have PPP units. However, they might need enhancements or creation in other countries.

**Furthermore, several countries in the region are complementing these reforms by further developing a robust pipeline of bankable projects.** A dataset recently put together by the WBG<sup>4</sup> reveals a pipeline of about 1,700 projects in emerging markets and developing economies (EMDEs), 495 of which are in LAC. The LAC pipeline value identified in this dataset is estimated at \$250 billion, by far the largest across EMDEs in total project value (Figure 3A), but close to the global average as a share of regional GDP (Figure 3B). However, the quality and bankability of projects can vary significantly across countries and sectors. The WBG and other development finance institutions are well-placed to assist in improving bankability with both financial support and knowledge services.

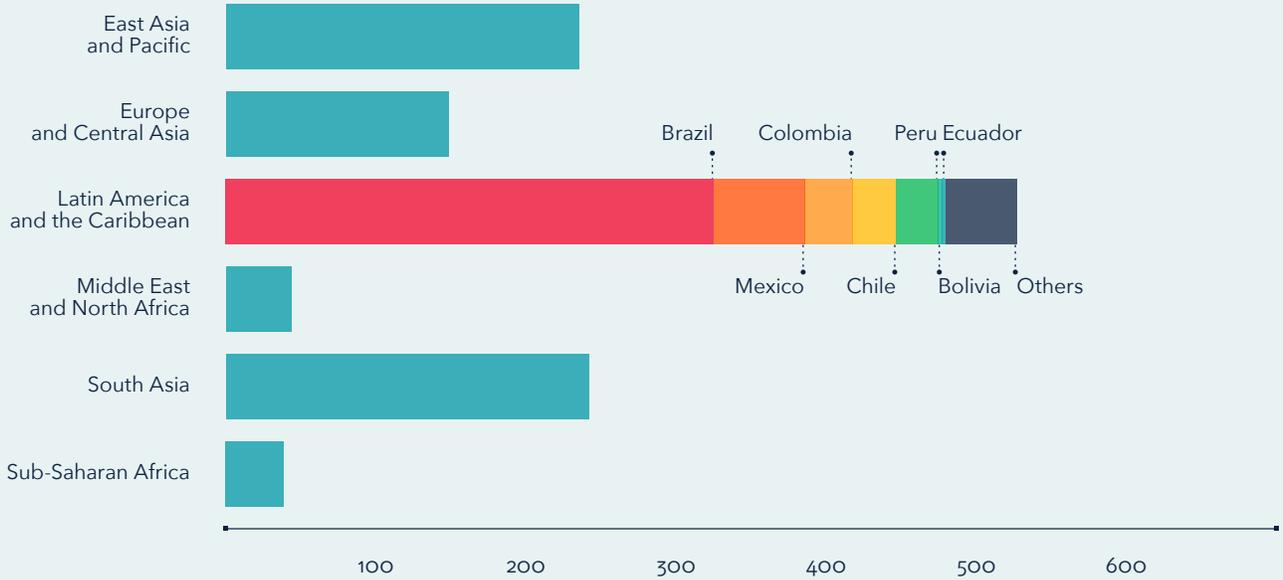
**The WBG has helped LAC countries mobilize private financing through multiple instruments, customized to country needs and to the features of each transaction.** WBG support has played a key complementary role in technology transfer for the enabling environment and as a catalyst to channel local and international financing for the projects. Support from the WBG has taken multiple forms: (i) provision of

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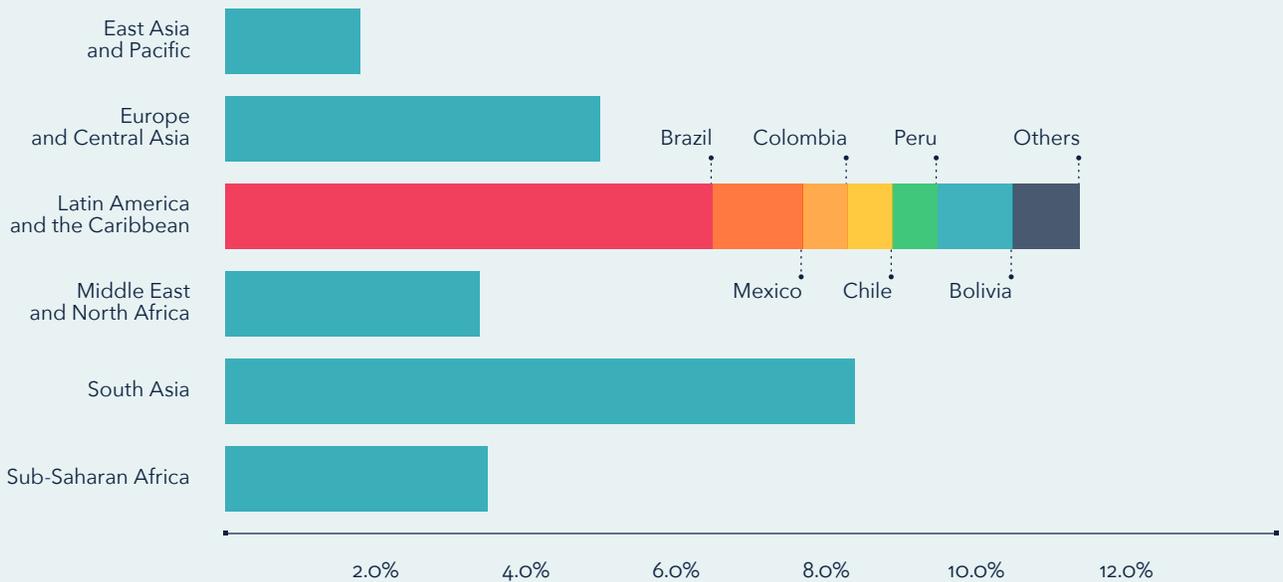
4 World Bank (2017). “The Infrastructure Investment Pipeline in Emerging Markets. Size, Scope, and Opportunities”. Office of the CFO, Working Paper, April.

**Figure 2. LAC: Largest Stock of Active PPP Investments Globally (US\$ billions and % of GDP)**

**STOCK OF ACTIVE INVESTMENTS IN PPPS BY REGIONS, 2016**



**COMPOSITION OF THE STOCK OF ACTIVE INVESTMENTS IN PPPS BY REGIONS (AS % OF GDP)**



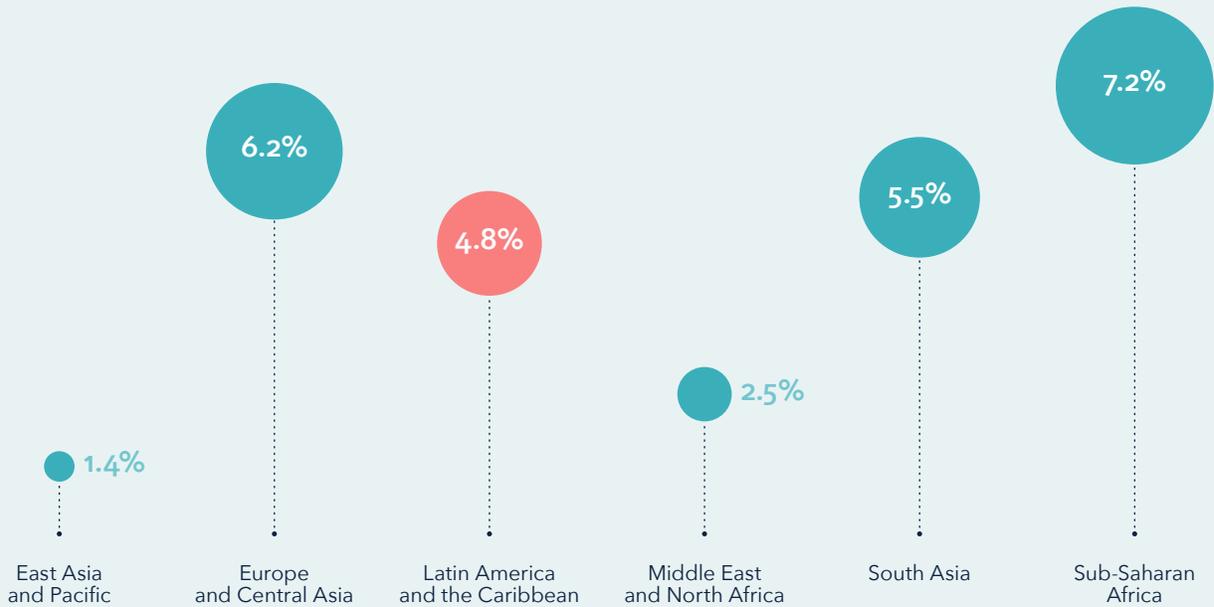
Source: Private participation in infrastructure database, the World Bank.

Figure 3. Infrastructure Pipeline in EMDEs

BY TOTAL PROJECT VALUE



IN PERCENTAGE OF GDP



Source: World Bank (2017)

financing and project guarantees; (ii) analytical work at the regional and country levels; and (iii) technical assistance.

**The “Cascade Approach” is a concept to guide the WBG’s efforts to leverage the private sector for growth and sustainable development.**

This approach asks the WBG to help countries maximize their development resources by drawing on private financing and sustainable private sector solutions to provide value for money and meet the highest environmental, social, and fiscal responsibility standards, and reserve scarce public financing for those areas where private sector engagement is not optimal or available. This means teams consistently testing—and advising clients on—whether a project is best delivered through sustainable private sector solutions (private finance and/or private delivery) while limiting public liabilities, and if not, whether WBG support for an improved investment environment or risk mitigation could help achieve such solutions (Box 1). It also means sustained support at the sector and country level to strengthen the enabling environment for private sector solutions—including in developing domestic capital and financial markets to expand the supply of local currency financing available for development. This complements efforts to bolster domestic resource mobilization and

### **Box 1. Cascade Objective and Algorithm**

Maximize financing for development by leveraging the private sector and optimizing the use of scarce public resources. WBG support will continue to promote good governance and ensure environmental and social sustainability.

When a project is presented, ask – *“Is there a sustainable private sector solution that limits public debt and contingent liabilities?”*

- If the answer is “Yes” – promote such private solutions.
- If the answer is “No” – ask whether it is because of:
  - Policy or regulatory gaps or weaknesses? If so, provide WBG support for policy and regulatory reforms.
  - Risks? If so, assess the risks and see whether WBG instruments can address them.

If you conclude that the project requires public funding, pursue that option.

improve the efficiency and effectiveness of public financing where this is the optimal solution, and to reduce illicit financial flows.

**The remainder of this paper showcases the different ways the WBG has supported the mobilization of private financing for infrastructure in the region.** Section II presents the main findings of recent regional analytical work conducted by the WBG on infrastructure provision and financing. In Section III, a few country-specific examples at the project and program levels illustrate different ways in which private financing mobilization in LAC has been supported by the WBG. While the examples following section III are not exhaustive, they are representative of the different strategies and instruments used by governments at the central and subnational levels to help private sector participation in infrastructure. The selected examples are: (i) Argentina's Renewable Energy Fund; (ii) Brazil: Mobilizing Private Funding for São Paulo Roads; (iii) Colombia's 4th Generation Concession Program; (iv) Growth and Job Creation through Private Solutions in Jamaica; (v) Panama: Leveraging WBG Complementarity; and (vi) Peru: Mobilizing Private Sector Financing for Infrastructure.





## Key Messages from Regional Knowledge Work

The World Bank has recently launched three regional reports<sup>5</sup> on the challenges and opportunities for the Latin America and the Caribbean (LAC) region to expand its infrastructure base. The first report, “Rethinking Infrastructure in Latin America and the Caribbean”, makes an in-depth analysis of the region’s challenges in coordinating fiscal sustainability and infrastructure planning, investment and regulation. The second report, “Private Financing of Public Infrastructure through PPPs in Latin America and the Caribbean”, looks at concrete options to bridge the financing gap, most importantly the leveraging of private sector participation. The third report, “The Seven Sins of Flawed Public-Private Partnerships”, spells out how a well-designed PPP framework aligns with

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<sup>5</sup> See Fay et al. (2016). *Rethinking Infrastructure in Latin America and the Caribbean. Spending Better to Achieve More*. The World Bank Group, Latin America and the Caribbean Region; Garcia-Kilroy and Rudolph (2016). *Private Financing of Public Infrastructure through PPPs in Latin America and the Caribbean*. The World Bank Group, Latin America and the Caribbean Region; and de la Torre, A. and H. Rudolph (2015). *The Seven Sins of Flawed Public-Private Partnerships*. The World Bank Group.

the interests of final beneficiaries. Taken together, these reports provide a three-pronged approach to ensuring appropriate infrastructure financing in the region by: (i) improving the efficiency of public spending in infrastructure; (ii) attracting private financing for public infrastructure; and (iii) ensuring that PPP frameworks adequately represent the interests of final beneficiaries.

## Improving the Efficiency of Public Spending in Infrastructure

**The infrastructure service gap can be narrowed by ensuring that public investment in infrastructure is well targeted and that it is efficient.** Spending better on the right things can contribute to closing the investment gap in the region. This includes improving the creditworthiness of public utilities and the balance between user fees and taxpayer financing of infrastructure.

**Spending better on well-identified priorities is key.** Much hinges on sector reforms, with the traditional recommendations regarding independent, well-performing regulators and better corporate governance. It is also critically important to foster cost recovery where feasible and desirable, since user fees are the basis for commercial finance. In this regard, it is important to reduce costs, either through efficiency or adoption of alternative business models, such as those that are emerging for water treatment plants.

**Spending more efficiently would have large and tangible benefits.** This can be clearly seen, for instance, in the power sector. Because of high transmission and distribution losses, LAC would need \$23 billion per year if it were to follow the current power investment path. Costs would at least halve under an approach that favors efficiency, climate resiliency and renewable energy solutions.

**Improving public spending efficiency requires reforms well beyond the infrastructure sector.** Much of what is needed lies outside the infrastructure sector and has to do with broader structural and fiscal management issues – from competition policy to budgeting rules that no longer solely focus on controlling cash expenditures. Specific bottlenecks to be addressed include planning capacity, regulatory uncertainty, and outdated budgeting practices. Inefficient procurement process-

es also contribute significantly to costs. Trade facilitation reforms are also crucial to enhance public spending efficiency: building a port is not in itself sufficient to boost trade if the average logistics costs are 3 to 4 times higher than in OECD countries.

## Attracting Private Financing for Public Infrastructure

**With limited fiscal space, involving the private sector is imperative.** Public and concessional funding should only be mobilized when commercial financing is not an option, especially in a situation of constrained resources.

**Governments in the LAC region have relied on PPPs since the late 1980s, but with a great deal of cross-country variation in the evolution and level of sophistication.** Chile and Mexico have the most successful programs in the region, especially in the transport sector. Brazil, Colombia, and Peru also have extensive track records on PPP projects. However, these markets have faced obstacles in creating a competitive bidding environment and in using project finance more widely. Argentina has seen renewed interest in PPPs, but successful projects have not yet been awarded. The Dominican Republic and Jamaica are the leading markets in the Caribbean and are in the process of revising their PPP frameworks. Bolivia, Ecuador, Nicaragua, and Venezuela, among others, have yet to develop viable PPP initiatives.

**Over the past two decades, most countries in the LAC region have improved their PPP frameworks.** Nineteen countries have enacted PPP legislation, and their PPP frameworks have consistently been revised and improved. For example, Brazil, Chile, Colombia, Mexico, and Peru have continually revised their strategies for financial guarantees, unsolicited proposals, risk allocation, governance and project selection, accounting and management of contingent liabilities, conflict resolution, and contract renegotiation.

**While 17 LAC countries have in place some form of PPP unit, significant challenges remain to address the high potential demand for PPP projects:**

- **Infrastructure planning and project preparation remain underdeveloped, compromising the ability of countries to develop**

a robust pipeline of bankable projects. Only a few countries in the region have developed project pipelines based on socio-economic cost-benefit assessments reflecting political priorities before a decision is made on whether to procure through public works or through PPPs.

- **Only a few countries in the region have sufficiently mature financial sectors and capital markets to support the financing of PPP programs.** Only large- and medium-sized countries with a minimum level of financial development are currently able to afford PPP programs that are both broad in scope and in local currency. This contrasts with other, smaller countries in the region, where the capacity of the financial sector and capital markets is limited to financing individual flagship infrastructure projects. It is not only the size of the local financial markets that matter, but also their level of sophistication and the accompanying incentive structure for investment in long-term assets.



Photo by Rafael Matsunaga licensed under CC BY 2.0

**In this context, development finance institutions (DFIs) may play an important role in countries with smaller financial sectors and/or unsophisticated capital markets.** The main role of DFIs should be to help address market failures and provide a catalytic role for domestic and international financing of domestic public infrastructure, rather than becoming the sole lender for PPP projects.

## **Ensuring that PPP Frameworks Adequately Represent the Interests of Final Beneficiaries**

**PPPs add value to society only if they are successful, but success requires the interests of final beneficiaries to be well-represented in the PPP framework.** The core objectives of a PPP include the crowding-in of private investments into activities which would not normally be undertaken by the private sector, risk and cost sharing between governments and private investors, and social welfare improvement through greater efficiency and quality. If final beneficiaries are in any way shortchanged, the societal benefits of PPPs will not fully materialize. This may occur when the interests of final beneficiaries are not fully internalized in the PPP framework and thus conflict with the immediate interests of the other two sets of PPP stakeholders (i.e., private investors and governments). A successful PPP framework addresses such potential welfare-reducing misalignment by discouraging governments from over-guaranteeing and by curbing private investors' incentives to shift risks and costs back to governments.

**Seven key pitfalls - or "sins" - need to be avoided by any successful PPP framework.** These sins undermine societal gains from PPPs either by generating overall inefficiency or by shortchanging final beneficiaries - or both. Poorly designed PPPs tend to fall prey to the following "seven deadly sins":

- *Providing excessive government guarantees*, leading to distorted project selection, resource misallocation, creating larger-than-necessary fiscal obligations for governments, and potentially increasing costs to beneficiaries;
- *Missing opportunities for market tests*, causing private investors to have less skin-in-the-game than they should, and increasing the scope for lower-return projects;

- *Awarding concessions on the basis of wrong bidding parameters, thus encouraging excessive ex-post renegotiation of contracts and potentially reducing the share of the consumer surplus appropriated by the final beneficiaries;*
- *Maintaining multiple PPP agencies within the government, creating wastefulness and inefficiency through fragmentation of PPP capacity;*
- *Failing to properly address disputes and conflicts of interest by keeping the awarding and supervising functions within the same agency;*
- *Excessively relying on defined-contribution pension funds as they tend to behave as mutual funds with short investment horizons and a preference for liquid assets, while infrastructure-related assets are normally illiquid;*
- *Treating construction and concessionary companies as close substitutes, when in fact the former companies have a shorter-run horizon while the latter have a longer-run orientation and a greater focus on the financial viability of projects.*

After two consecutive years of recession, the Latin American and Caribbean regional economy appears to be experiencing a subdued and fragile recovery in 2017.





## Mobilizing Private Financing in Practice: Country Illustrations

As there are many ways to mobilize private sector resources, the examples that follow are not exhaustive. They are representative of the different strategies and instruments used by governments at the central and subnational levels to help private sector participation close the service gap, and spur economic and job growth. The selected examples are: (i) Argentina's Renewable Energy Fund; (ii) Brazil: Mobilizing Private Funding for São Paulo Roads; (iii) Colombia's 4th Generation Concession Program; (iv) Growth and Job Creation through Private Solutions in Jamaica; (v) Panama: Leveraging WBG Complementarity; and (vi) Peru: Mobilizing Private Sector Financing for Infrastructure.

## Argentina's Renewable Energy Fund: A Programmatic Guarantee Scheme

There are substantial gaps in long-term finance for firms, infrastructure, and housing to support economic growth in Argentina. This is evident in the short-term nature of bank loans, which is also amplified by the low depth of capital markets and the small size of institutional investors. Argentina has one of the lowest investment-to-GDP ratios in LAC (less than 15% of GDP in 2015).<sup>6</sup> There is also a large infrastructure gap with investment needs amounting to US\$15 billion in the short to medium term and over US\$150 billion in the long term. Over the last few years, the Government of Argentina (GoA) has made important steps to address key macroeconomic imbalances and create a growth enabling environment. Many reform initiatives were launched to establish the macro and micro foundations for expanding the financial sector and its support for economic development, which has historically been small. Given fiscal constraints, leveraging domestic and international private sector finance is critical for Argentina's successful transition. For infrastructure, the authorities have promoted market policies towards attracting both domestic and private investors. A new PPP law was approved, while several policy distortions were removed. The Government has also been putting efforts into developing a pipeline of bankable infrastructure projects. The Government has also presented a new capital markets law to Congress. In the energy sector, the GoA is making an effort to increase electricity generation capacity from renewable sources through private investment in the energy sector. Previous attempts by the GoA to increase renewable energy generation through private investment produced limited results. In 2016, only 1.8% of generation was from renewable sources.

### CHALLENGE

Most renewable projects encountered difficulties raising financing due to the limited funding capacity of local sources and the lack of access to external financing. International financiers were reluctant to

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<sup>6</sup> According to recent research, the annual average rate of capital accumulation in Argentina is 2.3%, almost half the rate of 4.2% in other peer countries. ("Argentina: Notas de política pública para el desarrollo", World Bank, 2015).

provide long term financing due to unfavorable macroeconomic conditions. Financiers expressed cautious interest in undertaking renewable projects given: (i) their concerns with Argentina's track record in the last 15 years of significant policy reversal and non-compliance with contractual undertakings (i.e. political risk), and (ii) their lack of recent experience financing renewable energy projects in Argentina.

## **APPROACH**

In September 2015, Argentina's parliament approved a new renewable energy law, which calls for increasing the share of renewable energy consumption from 1.8% to 8% in 2017 and to 20% in 2025, meaning the addition of at least 6.8 gigawatts in installed renewable power capacity. To achieve the GoA's clean energy goals, the Ministry of Energy and Mining (MEM) established the RenovAr Program. The program seeks to increase the amount of renewable generation capacity developed by private investment through auctions to purchase renewable energy generation from private sector-led independent power producers (IPPs). Under the RenovAr Program, CAMMESA, Argentina's wholesale energy market administrator, will be the off-taker and signatory of the corresponding power purchase agreements (PPAs) when awarded to the proposed IPPs.

## **ENABLING ENVIRONMENT**

The GoA has taken several decisions to improve the enabling environment for the energy sector. In January 2016, the GoA updated pass-through increased wholesale electricity prices, putting tariffs on the path to reflect actual costs. To offset the impacts of such measures on the poor, the GoA also created a new, reduced "social tariff" for roughly 2 million of the poorest citizens of Argentina, and launched new energy efficiency incentives for residential customers, aiming to induce energy saving. The GoA also required an integrated rate review for transmission concessionaires by December 2017. In addition, the GoA has restarted efforts to promote renewable energy by: (i) strengthening the legal framework; (ii) creating special funding mechanisms for renewable energy projects; and (iii) establishing dedicated governing and administration arrangements. The renewable energy law enacted in 2015 overhauls the previous regulatory framework and seeks to: (a) create competitive and transparent market rules and contract mechanisms; (b)

diversify the energy matrix by requiring the use of different clean energy technologies; (c) incentivize local and regional development; (d) establish mandatory pass-through of PPA costs to consumers; and (e) create fiscal incentives for IPPs and local supply chains, among others. Furthermore, the law created the Fund for the Development of Renewable Energy (*Fondo para el Desarrollo de Energías Renovables*) to facilitate financing for renewable energy projects, and thus mitigate liquidity and country risks, and to overcome a major shortcoming of previous programs. The Fund is already set up to provide liquidity and early termination guarantees as well as direct financing (debt or equity) and other financial instruments as required. In August 2017, the Ministry of Energy and Mining published a resolution that enables Argentinean large end-users, such as industrials, to enter into bilateral agreements with generation companies to meet their renewable power procurement requirements (up to now all power was procured through CAMMESA).

## **PROJECT STRUCTURING**

To alleviate the worries of private investors, IBRD structured a programmatic payment guarantee in support of the Renewable Energy Fund in the amount of US\$480 million, which benefits projects that elected to receive this coverage in the RenovAr Programs Rounds 1.0 and 1.5. The guarantee backstops the GoA's obligation to pay a pre-determinable price to eligible renewable energy investors when they have the right to sell the project to the Fund if specific macroeconomic, sector or other government-related risks materialize. Through the guarantee project, the World Bank supports the GoA in the implementation of its RenovAr Program, Rounds 1 and 1.5, which has awarded renewable energy generation capacity for more than 2.4GW (7% of the current installed capacity) from private investors at competitive prices (Round 1 and 1.5 energy prices were 13 and 22% lower than the average generation price in 2015). The allocated long-term contracts represent a significant shift in the country's electricity sector, which has historically largely operated under short-term arrangements with CAMMESA for conventional thermal generation.

## **MOBILIZATION OF PRIVATE SECTOR FINANCING**

The WBG support in the design of the RenovAr Program and auction, as well as the IBRD programmatic payment guarantee arrangement

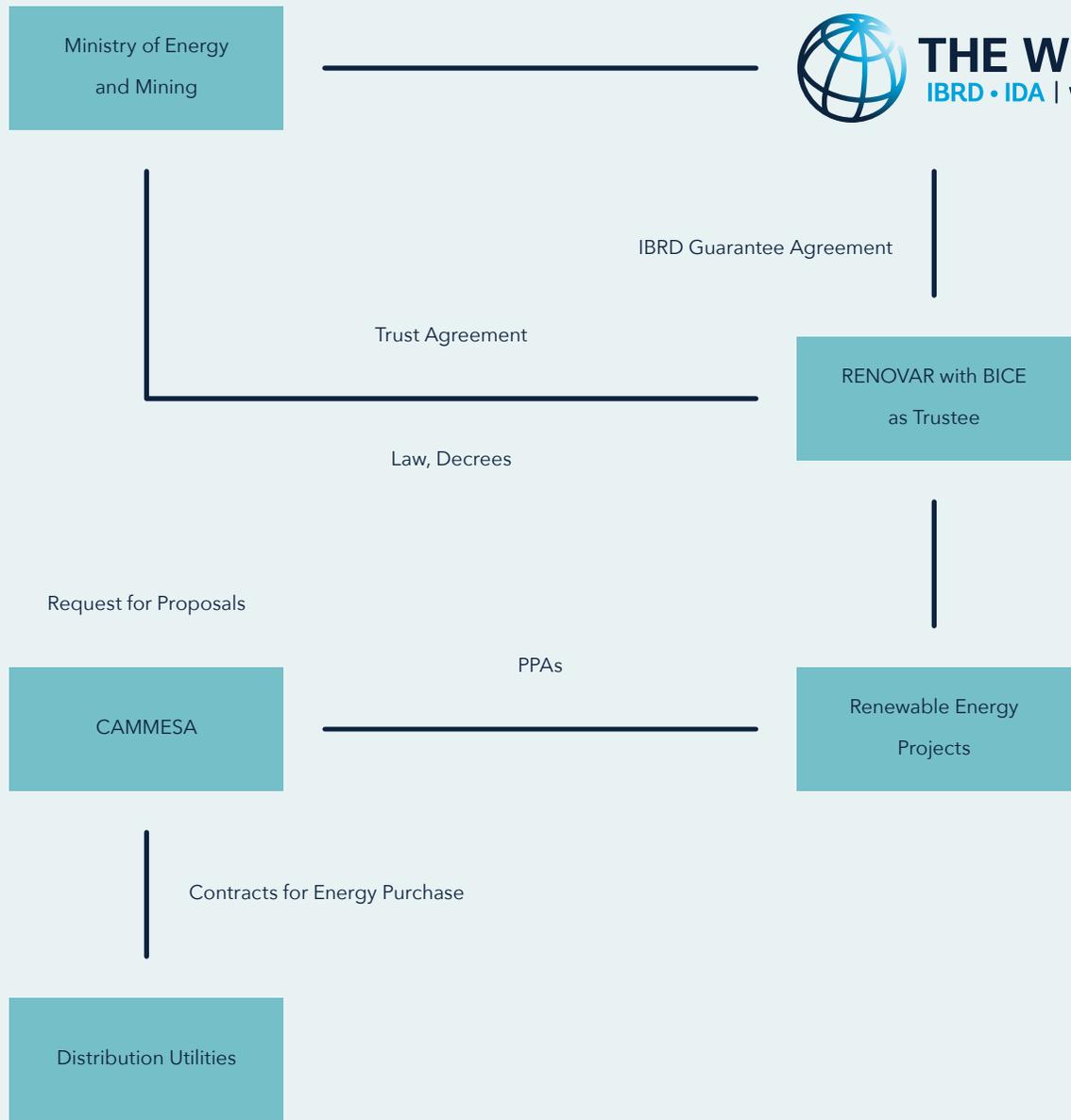
have had a multiplier effect, contributing to the mobilization of US\$3.2 billion worth of investment into the Argentine renewable energy sector. This amount represents about 6.7 times the amount of the IBRD US\$480 million guarantee, with US\$2.5 billion from commercial sources. The IBRD guarantee project is one of the first payment guarantee operations undertaken by the Bank at a program level. On August 11, 2017, the GoA formally requested that IBRD scale up the activities currently being implemented under the Fund by supporting the implementation of RenovAr Round 2.

### **WBG CONTRIBUTION**

The Government was keen to get timely world class input on the structure and design of the RenovAr program. They approached the IFC team to get a private sector transactional perspective on the design. IFC directly, and with the help of an IFC funded and contracted outside counsel, provided cutting edge expertise that allowed the RenovAr program to be launched within the 60-day target set by the GoA. IFC also brought in IBRD and together provided specific advice to the GoA



**Figure 4. RenovAr Program Design**



Source: WBG Staff

on bid design and PPA documentation based on international experience in similar programs, with a particular focus on ensuring a fair and balanced project risk allocation between the private and public sectors. The WBG also supported the GoA to size the RenovAr Program, based on estimated needs and financing available, and to develop standardized legal documents for the successful RenovAr Program Rounds 1.0 and 1.5 auctions. The IBRD and IFC teams provided advice to the GoA

Ministry of Finance

Loan Agreements

Commercial Lenders

ECAs, DFIs, etc.

Shareholder Agreements

Equity Providers

based on international experience in similar programs, with a particular focus on ensuring a fair and balanced project risk allocation between the private and public sector. The WBG team also supported the GoA, as needed, in expanding its reach to the global private sector investor base. Finally, the IFC, working with other multilaterals, is also providing debt financing to some of the IPPs awarded under the RenovAr Program Rounds 1.0 and 1.5, and mobilizing other funds as part of this effort.

## RESULTS

Current and future grid-connected customers will benefit from cleaner and enhanced electricity provision. Through Renovar Rounds 1 and 1.5, the program increases the renewable energy share in Argentina's energy matrix, delivering grid-connected consumers with cleaner electricity. The program has awarded renewable energy generation capacity for more than 2.4 GW (7% of the current installed capacity) from private investors at competitive prices -- Round 1.0 and 1.5 energy prices were 13 and 22% lower than the average generation price in 2015. The auctions called for 1,000 MW of renewable energy bids expecting to displace USD 300 million of fossil fuel subsidies. Six times that amount was received in bids from private investors accepting 2,400 MW (7% of current installed capacity) that are now expected to displace close to USD 700 million in fossil fuel imports and mobilize USD 3.5 billion in renewable energy investments. Close to 50% of the awarded projects requested the structured IBRD PRG for a total take-up of about US\$495 million. The IBRD guarantee, along with IFC financing, represents a transformative opportunity to link Argentina's renewable energy potential to private investments, promote competitive electricity prices, and create innovative financial schemes that could be replicated and scaled-up to other regions and sectors. It creates a new market through leveraging private investment, which is of particular importance for Argentina at a time when international investors are interested in returning to the country after years of absence. This WBG support has ultimately helped Argentina to diversify its energy matrix, attract private investors, and meet its commitment on GHG emission reduction as defined in its Nationally Determined Contribution (NDC) goals.

## **Brazil: Mobilizing Private Funding for São Paulo Roads**

The State of Sao Paulo (SoSP) is the most developed state in Brazil and accounts for 34% of the total GDP of the nation. Yet, the SoSP still faces a number of challenges to its development agenda, some of which are inherited from its past development patterns: service and industrial growth has mostly relied on a limited number of economic poles resulting in an excessive concentration of activities and populations around the major urban centers. The State relies heavily on roads to transport goods and people. The road network has been concentrated on a limited number of radial road corridors that connect its capital, São Paulo, with the largest economic centers in the interior. Many roads are reaching capacity and safety is a problem due to intense traffic of both trucks and vehicles. In addition, the State's transport system is vulnerable to disruptions due to natural disasters with potential impacts on the economy. Extensive urbanization and widespread development of agriculture have substantially altered the natural environment, making rehabilitation of ecosystems a high priority in the state. The combination of high density urbanization, informal peri-urban development, a mountainous topography and high intensity rainfalls makes the State of Sao Paulo vulnerable to natural disasters, most notably flash floods and landslides.

### **CHALLENGE**

The SoSP was facing a tough fiscal situation. This would make the financing a large-scale road investment program a challenge. However, this program would be needed to enhance competitiveness by improving transport efficiency and safety, to foster better quality service in transport, and improve mobility of people and goods. The improved connectivity should help foster regional and national economic development, while promoting sustainable development through better environmental management. The program is also laying a multi-sectoral foundation for resilience to natural hazard risks in response to increasing damages and costs resulting from natural disasters.

### **APPROACH**

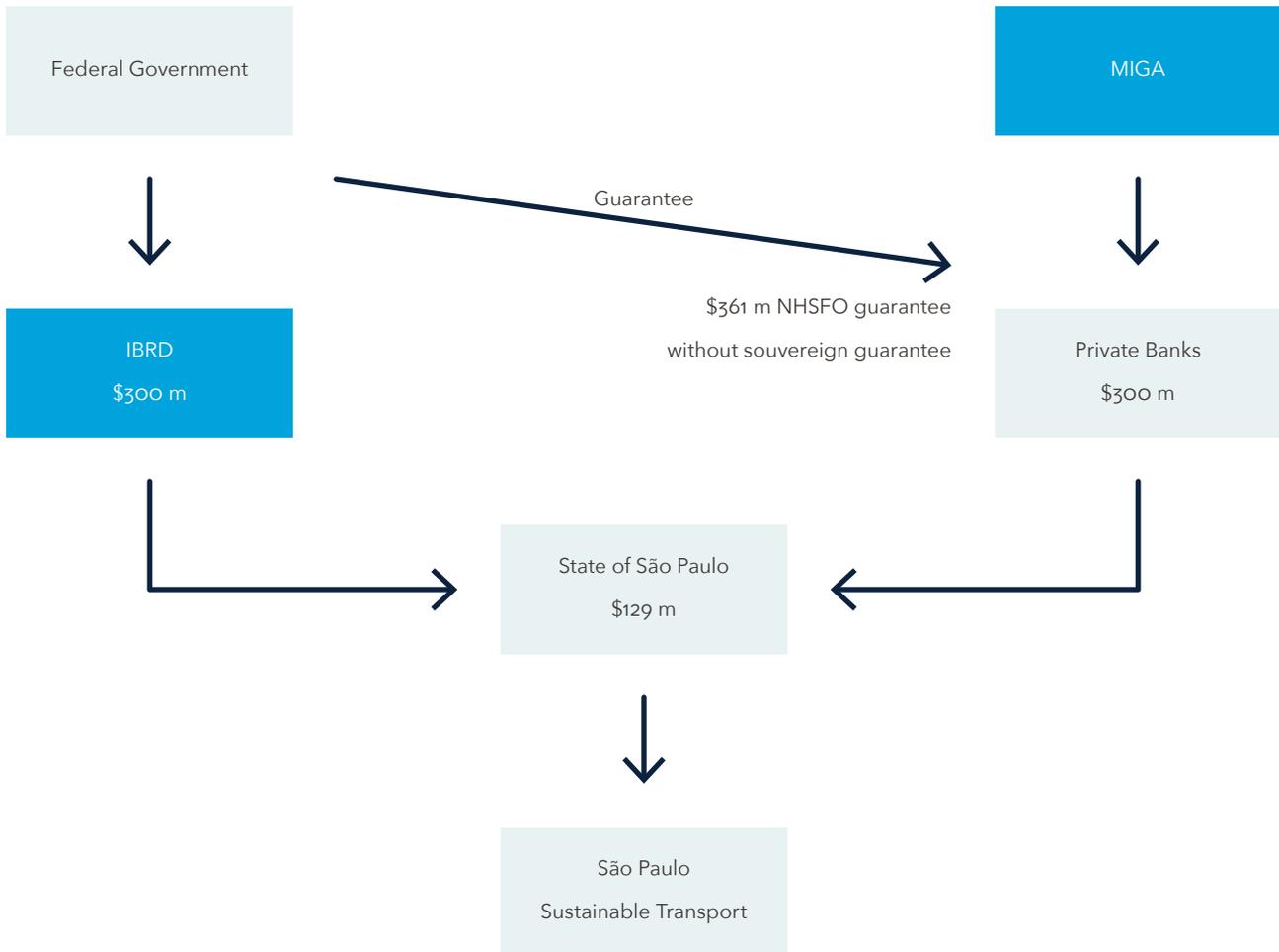
The SoSP sought external support for its large investment programs in transport and to introduce innovative practices within the transport

sector. Given the size of the investment program and resulting financing needs, the SoSP has proactively looked for ways to increase the participation of the private sector, including through concessions and PPPs, as well as through financing from international private lenders. The project includes about 750 km of road rehabilitation and upgrading along the main logistics corridors, and the reconstruction of a bridge over the Tietê River. This project was followed by the SoSP tendering 4 concessions under the PPP scheme for toll roads.

### MOBILIZING NEW SOURCES OF FINANCE

In that context, the SoSP and the WBG worked on a short and long-term plan. The WB and the Multilateral Investment Guarantee Agency

**Figure 5. São Paulo Roads Program Design**



Source: WBG Staff

(MIGA) worked to introduce a guarantee, known as the Non-Honoring of Sovereign Financial Obligations (NHSFO), a credit enhancement instrument to leverage additional private funding at longer tenors and lower pricing together with IBRD and state government financing. For the first time the IBRD worked together with MIGA to scale up private financing to support the implementation of a road program in the SoSP. The NHSFO mitigates the credit risk of a government or sub-sovereign entity, minimizing cost and creating the opportunity to establish new lending relationships. It offers lenders an instrument to protect against losses resulting from the possible failure of a borrower to make a payment when due, and therefore helps boost market confidence. The additional private financing leveraged through the NHSFO guarantee has allowed the project to expand the scope of activities and increase road investments.

For the long term, the SoSP realized that to continue expanding economic and social growth, during a period of severe economic crisis, it needed to be more ambitious to attract the necessary financing to expand transport infrastructure. The government did not have the fiscal space, and Brazil's bidding rules and lack of transparency prevented international investors from competing for contracts, which were strongly controlled by traditional local construction companies. The WB and the IFC have been working together to help improve the government's capacity for strategic planning and project appraisal and evaluation. A review and market survey of a federal road concession was done in 2016 that provided recommendations to improve the bidding process and contracts in the future. IFC was able to integrate some of these recommendations in its advisory services for the new highway concession model launched by the São Paulo State Government.

## **PROJECT STRUCTURING**

The total financing required for the project was \$729 million, of which the State could only finance \$129 million. The SoSP approached the World Bank to cover the remaining gap of \$600 million, but given its high exposure to Brazil, the Bank could only provide an IBRD loan to cover part of the financing needs. As a result, the Bank team worked with the State on the preparation and appraisal of road investments and partnered with the MIGA to introduce the NHSFO to attract additional

private investments, improve the financing terms for the SoSP and close the financing gap.

Following the public investment project, the IFC helped to structure and tender four roads under the PPP scheme totaling over 1,500 km with expected private investments around \$4 billion. IFC's mandate was to attract world class investors to develop the high-quality, sustainable transport infrastructure the state needed to support its economic development. This meant eliminating the barriers to international investors that had been central to Brazil's infrastructure procurement policies for decades, and bring the state's procurement practices in line with global standards.

### **WBG CONTRIBUTION**

IBRD worked with the SoSP to design a project that would both improve transport efficiency and safety, and enhance the State's capacity to manage environmental and disaster risk through better planning, policies and enforcement. The challenge for the Bank was to mobilize the required resources to finance this significant project in a way that would not impact the Bank's lending portfolio for Brazil, while keeping the cost of the package within suitable limits. IBRD and MIGA worked closely with SoSP to structure the financing with the market and supported, among others, the drafting of the Request for Proposals for the co-financing, the market sounding, and helped with negotiating the final terms of the funding with Banco Santander.

### **RESULTS**

In 2013, the \$300 million IBRD loan for the São Paulo State Road Program was approved and project implementation started. In November 2014, the Banco Santander loan was signed, with MIGA's NHFSO guarantee in place, providing an integrated financial package for the project, and enhancing IBRD credit and synergies within the WBG and the SoSP. Compared to a traditional commercial loan, this structuring is estimated to have saved the SoSP 2% on the cost, while extending the maturity of the loan by 4 years to 12 years. The guarantee protects Santander's loan against losses resulting from the borrower's failure to make a payment when due. By combining technical expertise from the World Bank Group, an IBRD loan and the MIGA guarantee, the project was able to develop a solution that leveraged private investments, diversified and optimized funding sources, and helped the State secure

the entire financing required for the program. The MIGA guarantee allowed Santander to extend credit to Brazil. The participation of IBRD and MIGA also allowed the banks to benefit from the improved risk profile of the project. Thus, the borrower received better terms, a longer tenor and more competitive pricing than it could have attained without the World Bank Group's support. Today, about two-thirds of both loans have been disbursed and about 500 km of Sao Paulo State highways have been upgraded.

The new highway concession model launched in early 2017 by the São Paulo State Government, with support from IFC and the WB, has also produced very good results and introduced contractual innovations that have been a national benchmark in bidding processes. Among others, a liquidity guarantee mechanism was developed, exchange rate protection and step-in-rights rules were introduced, and technical qualification requirements were lowered with the possibility of qualified subcontracting to allow investment funds like *Pátria Investimentos* (representing the American fund Blackstone in Brazil) to enter the bidding process. The new concession program has already raised US\$ 54 billion to operate 7,900 km of highways managed by concessionaires in São Paulo.

## The 4<sup>th</sup> Generation Road Concession Program in Colombia

Colombia's economic performance has been impressive in recent years, yet the country suffers from severe connectivity challenges that drag down its growth and competitiveness. The availability and quality of infrastructure affect the competitiveness of an economy and hence are key determinants of long-run growth. Improving the provision of infrastructure will be a determining factor in Colombia's ability to cash in on a potential growth dividend. In particular, the lack of an adequate highway network is affecting the competitiveness and the connectivity of the country.

Investment in transport infrastructure averaged 0.8% of GDP from 2001 to 2009, rising to 1.3% of GDP in 2010-2011. However, investment should rise to at least 3 to 4% of GDP to close the country's infrastructure gap and meet projected demand. Colombia's infrastructure gap is particularly acute in road transport, contributing to extremely high logistics costs relative to similar economies around the world.

A host of studies and benchmarks highlight Colombia's underdeveloped transport infrastructure. For instance, Colombia ranks 69th among 144 countries in the World Economic Forum's competitiveness ranking (2012-2013 and 2013-2014 reports), mainly as a result of the quality of its combined transport, electricity supply and telecommunications infrastructure (ranked 92nd), and the quality of its institutions (ranked 110th). In the World Bank's 2014 Logistics Performance Index, Colombia ranks 97th among 160 countries, making it one of the worst performers relative to regional peers. The country ranks 93rd among 185 economies in the World Bank's 2013 Doing Business indicator related to *Ease of Cross Border Trade*, which predominantly highlights the country's high inland transportation costs, and the time taken to perform foreign trade transactions. In particular, more than 65% of exporting/importing costs in Colombia are associated with inland transport, and these costs are more than double the LAC and OECD averages. Furthermore, an analysis of Colombia's infrastructure gap by transport mode finds the largest deficiency in road infrastructure, where Colombia ranks 130 out of 148 in the 2013-2014 World Economic Forum's Global Competitiveness Report.

On the other hand, Colombia has had a long history of private sector participation in transport infrastructure, beginning in the early 1990s

LAC has been the most active region in attracting private sector investments in infrastructure, suggesting a welcome trend of catching up is at work.

with a first generation of road concessions, which evolved into second and third generations that progressively sought to improve the model and yield better results. However, in 2010, it became clear that a major shift was needed to translate private participation into a high volume of investments and a significant improvement in service quality for users.

### **CHALLENGE**

Up until that point, road concessions had been structured in a way that did not provide for optimal risk transfer to the private sector and resulted in successive renegotiations. These concessions did not deliver value for money, suffering from cost overruns and construction delays. As mentioned above, investment in road infrastructure had stagnated at around one percent of GDP, a third of what was needed to meet demand. In addition, Colombia's position in the infrastructure rankings continued to lag its peers and the shortfall was affecting the nation's competitiveness. Finally, the fiscal situation of the government did not provide sufficient space for needed investments.

### **APPROACH**

In 2013, the Government of Colombia launched the 4th Generation Road Concession Program (4G Program), involving estimated potential investments of US\$26 billion in 40 toll road PPP projects and representing the construction of over 8,100 km of national roadways in a period of 8 years. This represented a very comprehensive and concerted effort by the national government to completely shift the paradigm of private investment in road infrastructure in order to accelerate implementation, broaden financing sources and attract foreign and local investors.

### **ENABLING ENVIRONMENT**

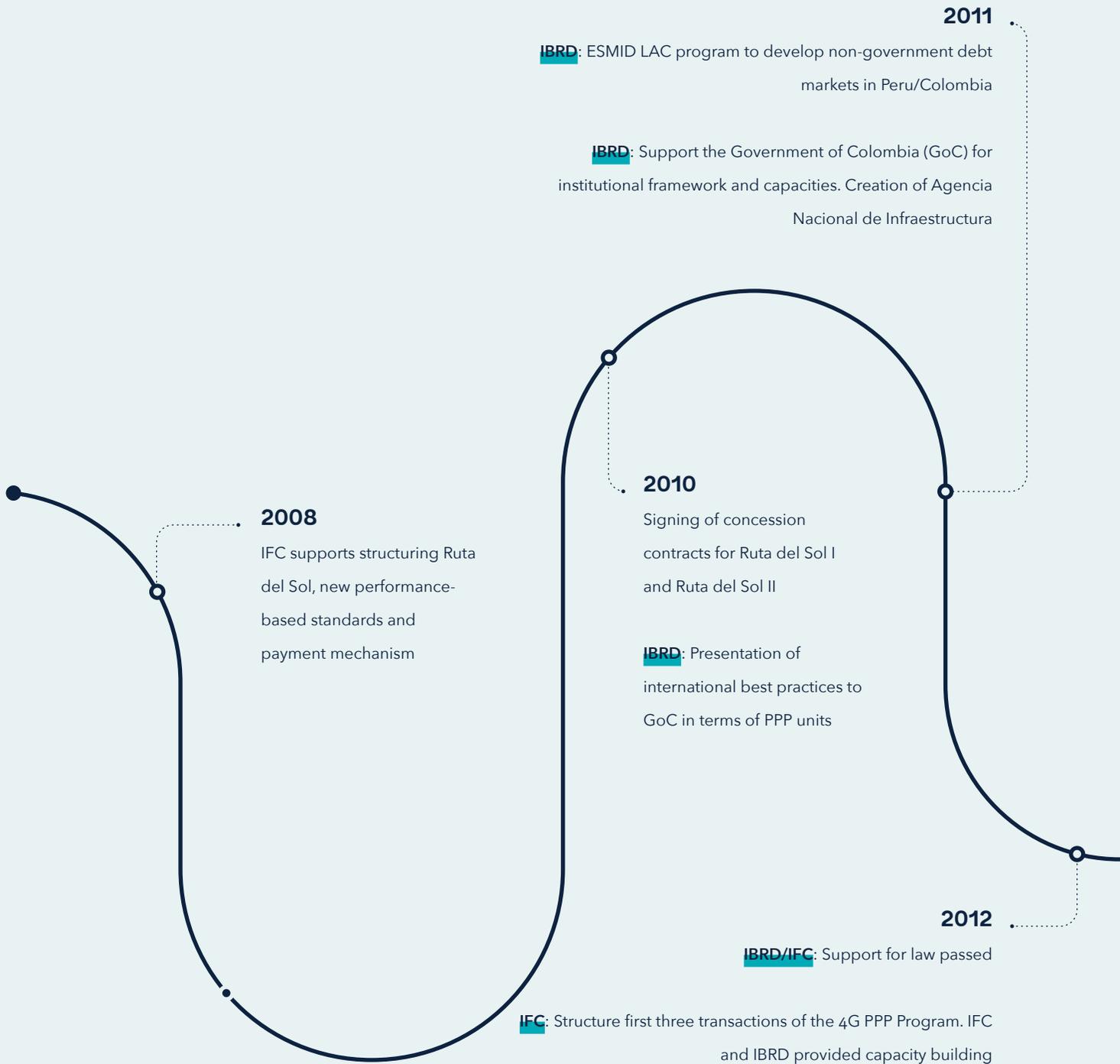
To be able to implement such a large pipeline of road projects, with the support of the WBG, the government undertook various reforms to address key issues such as project preparation, contract management, financing, licensing and right of way. The WBG provided key support to the creation of the enabling environment required to implement the 4G program. The major support from the WBG started in 2011 when the IBRD provided support in the strengthening of the institutional framework and technical capacities for the preparation and implementation of PPPs. The IBRD first provided technical support for the reform of the

National Concessions Institute (INCO), which had demonstrated important weaknesses, that resulted in the creation of the new National Infrastructure Agency (ANI). The design of ANI reflects lessons learned from previous experiences in the country and sought to establish an agency with the sufficient technical and managerial capacity to adequately structure transport PPPs. The IBRD and IFC also provided inputs to the new PPP law, a key enabler of the 4G program, which was passed in January 2012. And in 2013, the IBRD supported the passing of the Infrastructure Law, which addressed key barriers to the implementation of projects. The latter was included as an action in one of IBRD development policy loans. The WBG also worked with the government on reforms in the financial sector and the creation of new instruments to allow local and foreign institutions and investors to finance the ambitious program. This was achieved by strengthening financial regulations and local bond markets to support infrastructure financing through improved pricing benchmarks in government bonds. The reforms also included new issuance regulations targeting institutional investors, regulations for infrastructure debt funds, pension fund regulations to allow investments in infrastructure bonds and debt funds as an investment category, and a review of banks' prudential regulations to increase their ability to lend in the 4G program (single obligor and concentration limits and provisioning for guaranteed projects). On the infrastructure agenda, the IFC provided technical assistance and financing to the newly created *Financiera de Desarrollo Nacional* (FDN – Colombia's Infrastructure Development Bank) to develop the capacity for structuring quality PPPs following international standards. Furthermore, the World Bank supported FDN with the design of guarantees for the 4G program based on international practices, and in the design of a standard project bond for the refinancing phase.

## **PROJECT STRUCTURING**

Between 2011 and 2014, the IFC's PPP Advisory arm acted as advisor of advisors for the government, putting in place standardized processes and contracts, and supporting the structuring of the pilot transactions for the 4G. Previously, in 2007, the IFC had supported the implementation of the "Ruta del Sol," an award-winning PPP project that closed in 2010. The project introduced new performance-based standards and payment mechanisms that were later incorporated in the 4G Concessions.

**Figure 6. Programmatic WBG Approach for 4G in Colombia**



Source: WBG Staff



**2013**

**IBRD/IFC:** Support for law passed

**IFC:** Joint venture agreement with FDN to jointly work in structuring PPPs in innovative sectors

**IBRD/IFC/MIGA:** Colombia deep dive to support the development of capital market structures

**2016**

**IFC:** Infrastructure Debt Fund for \$378 million mobilizing local pension funds to finance critical road infrastructure under the 4G Program

**IBRD/IFC:** Umbrella trust fund Capital Markets strengthening facility for infrastructure financing 2016

**2015**

Signing of concession contracts for Puerto Salgar-Girardot and Perimetral de Cundinamarca

Signing of concession contracts for Mulalo-Loboguerrero

**IFC:** \$71M investment in Financiera de Desarrollo Nacional

**IFC:** Partial divestment in Financiera de Desarrollo Nacional to crowd-in other relevant infrastructure investors (Sumitomo Mitsui Banking Corporation)

## **MOBILIZATION OF NEW SOURCES OF FINANCING**

Starting in 2013, IBRD, IFC, and MIGA jointly developed the Colombia Capital Market Deep Dive (DD) to create the conditions needed to mobilize financing from institutional investors. IBRD, IFC, Development Bank of Latin America (CAF), and Inter-American Development Bank (IDB) supported the creation of new regulations for issuing and investing in infrastructure bonds, including creation of debt funds to facilitate pension investments and training for pension funds on the infrastructure asset class. IFC and IBRD supported the FDN to strengthen its ability to address gaps in financing available from the domestic financial markets. The IFC made a \$70 million equity investment in FDN and a \$50 million investment in a local infrastructure debt fund intended to mobilize over \$400 million in debt financing, mainly from pension funds, to support 5 toll-road projects under the 4G Program. The IFC, in addition, is considering providing long-term debt for specific 4G projects.

## **WBG CONTRIBUTION**

Mobilizing various parts of the World Bank Group has been crucial to support implementation of an ambitious sector program. The WBG support to the multifaceted efforts of the Colombian Government is an example of how different WBG entities, each leveraging their capabilities, can work together in a sequenced and parallel manner to support large infrastructure investments under the principles of the Maximizing Finance for Development Approach: judiciously using scarce public resources with a focus on de-risking projects and addressing market gaps, prioritizing commercial finance, and tapping into new sources of capital such as the institutional investor base.

## **RESULTS**

As of March 2017, ANI had approved 33 projects (US\$14 billion), awarded 32, and achieved financial closing for 8 projects, representing US\$4.6 billion. Out of the US\$4.6 billion in firm financing, around US\$1 billion is coming from international financiers and US\$850 million from institutional investors. The projected investments are expected to add 0.3-0.4% to the rate of GDP growth through 2022 and generate more than 800,000 direct and indirect jobs. Construction is already underway on 6 of the projects.

## Growth and Job Creation through Private Solutions in Jamaica

Jamaica has experienced low economic growth and high fiscal deficits that have stymied development. Real per capita GDP increased at an average annual rate of 0.5% between 1990 and 2016. Natural disasters and financial shocks in this low-growth environment, coupled with large public expenditures, resulted in persistent fiscal deficits. Unemployment has also been a major concern (around 12.2% in April 2017), especially among youth (at 28.9%). Jamaica is showing a strong political commitment to break with the past, having launched an impressive macro and microeconomic reform program that has bipartisan political support to reignite growth, with a strong commitment to enabling private sector solutions. The reform program, backed by the International Financial Institutions (IFIs) through a tripartite package from the IMF-WBG-IDB, has been anchored on fiscal consolidation and on the enabling environment for private sector-led growth.

### CHALLENGE

Jamaican public debt is around 120% of GDP and has been among the highest in the world for years. High debt service costs have limited the government's capacity to invest in infrastructure, public safety, education and skills. Government borrowing has crowded out private investment. Credit to the private sector by commercial banks remains limited, at an estimated 27% of GDP in 2016, well-below the regional average of 45%. Access to finance is a significant constraint for firms, particularly for micro, small, and medium enterprises (SMEs), which play a significant role in growth and employment, but are limited in their ability to expand and contribute to economic growth. The 2011 Country Economic Memorandum found that most private investment had not contributed to expanding the productive capital stock, but instead concentrated on the replacement of existing capital, private security, or construction. Consequently, low-productivity allocation of public investment resources, together with missing incentives for productivity-enhancing investments by the private sector and flexible adjustments in response to changing global market demands, have impeded growth.

## **APPROACH**

In 2013, the government launched an ambitious reform program, looking to reduce debt and bring public finances to a more sustainable path, to attract investments in key growth sectors, and to implement significant reforms to unlock private sector opportunities. As Jamaica looked to become more competitive, the IFC, MIGA and the Bank supported private sector-led growth in various ways. The Bank has supported the government in implementing key business environment reforms, helped create links between large Jamaican anchor firms and small local farmers, extended business development services through matching grants to SMEs, and incentivized commercial bank financing to SMEs both through credit lines and support for a partial credit guarantee fund.

## **ENABLING ENVIRONMENT**

A range of interlinked constraints inhibiting private sector growth are being collectively addressed, and other critical reforms are underway, such as support to the new special economic zones regime (inclusive of new policy, law, regulations and institutional arrangements), reform of the development approvals process, and trade and customs reforms. Key regulatory barriers are being removed and competition introduced to facilitate new productivity enhancing investments. Large strategic investments (PPPs, divestments, others) are being prepared to inject capital, new technologies, and to increase supply chain opportunities into the economy. SMEs are being supported to upgrade capabilities, while financial intermediaries will have access to an enhanced partial credit guarantee scheme that will enable them to extend more SME loans. A new Special Economic Zone regime has been developed and a pre-feasibility study for one such zone, the Caymanas SEZ, has been concluded.

## **WBG CONTRIBUTION**

The Bank, through the IBRD, provided a US\$50 million loan to the Government of Jamaica to support the Foundations for Competitiveness and Growth Project. The project is designed to enable private sector-led growth in the Jamaican economy in an inclusive and sustainable way. Three Development Policy Loans (totalling US\$275 million) supported critical legislation and policies, and were further supported by IFC investments and technical assistance in key sectors. For example, the

PPPs add value to society only if they are successful – yet success requires the interests of final beneficiaries to be well-represented in the PPP framework.

WBG supported Jamaica in revamping the regulatory framework of the energy sector and opening it up for private sector (including IFC supported) investments in renewables, independent power producers, and power distribution. In the last three years, the IFC has committed US\$20 million to a renewable energy generation project that will contribute to the diversification of the Jamaican electricity generation sector, US\$20 million to the Telecoms project that is supporting a local group to expand regionally, and US\$81 million under the Global Trade Finance Program, which extended lending to market segments where trade lines were constrained. Additionally, the IFC is currently managing more than US\$8 million for five active advisory services projects in Jamaica (the Norman Manley International Airport, Jamaica Tax Reform, Jamaica Crop Index Insurance, Jamaica Coffee, Jamaica Sauces & Spices SMEs). The IFC is also supporting SME linkages across select value chains (coffee, and sauces and spices sectors), while the Bank is facilitating lending to SMEs through the financial sector. The Bank and the IFC are also supporting improvements to the secured transactions framework, which could contribute to increasing the appetite of lenders for accepting movable assets as collateral from SMEs. MIGA has a US\$33 million guarantee which supports on-lending by a financial services company to an infrastructure project.

## RESULTS

This private sector led growth is multifaceted and is expected to indirectly benefit all Jamaicans (2.8 million). The results of the interventions are wide ranging both in terms of job creation as well as through improved quality of products and services across industries, serving local markets and abroad. Over 300 enterprises will directly benefit from enhanced capacity through training and financing. Private sector investments are also set to contribute to stronger growth outcomes in an equitable manner, improving livelihoods and the overall standard of living across Jamaica. To date, Jamaica has seen considerable improvements in several fronts. Substantial effort toward improving the business environment, access to credit, skills and capacity development, and new niche markets for SMEs is starting to yield results. Jamaica was among the top 10 economies showing the most notable improvement in performance on the Doing Business indicators for 2014 and 2015, and in 2017 Jamaica continued to lead in the ease of doing business among Carib-

bean countries. In the agriculture sector, SME producers were trained and accredited on food safety compliance, which facilitated a broadened access to export markets and more developed agribusiness channels. Major investment opportunities, such as the logistics hub initiative, and divestments of key state-owned enterprises, are ongoing. The modernization and expansion of the state-owned Norman Manley International Airport has also been launched through a public-private partnership.

## Panama: Leveraging WBG Complementarities for Large Infrastructure Financing

Panama's economic growth has been at the top of the Latin American and Caribbean region in recent years. Real GDP growth averaged over 7% annually since 2001, more than double the LAC average, and the country was an outlier in terms of post-crisis recovery with higher growth after the crisis than before. This exceptional growth performance stems from a number of factors including the transfer of the Panama Canal in 1999, and high rates of public and private investment, including foreign direct investment (FDI). The WBG's current Country Partnership Framework (CPF) seeks to support Panama's continued high growth, while ensuring inclusion and opportunities for vulnerable groups, as well as bolstering resilience and sustainability. Combined IBRD, IFC and MIGA resources are contributing to this agenda and to Panama's deeper integration in the global economy and asserted position as a trade and logistics hub.

### CHALLENGE

While the recent opening of the expanded Panama Canal is expected to further stimulate growth through increased exports and a surge in the activity of related services, Panama is unlikely to have abundant investment opportunities with similar rates of return as the Canal expansion. Thus, it will be important to further invest in the foundations of a growth model that relies on productivity increases. In this context, it becomes even more important to address skill mismatches, challenges in the energy sector, and challenges in the institutional environment that may become a constraint on its prospects. At the same time, considering that Panama City is home to more than 40% of the country's population and over half of its GDP, its fast urbanization and role as a regional hub is not being matched by adequate planning and management capacity to respond to the growing demand for high-level services and accessibility linked to its economic activities. To be able to continue being an engine of growth for the country, it is imperative to continue modernizing the city and updating its transport, connectivity and urban infrastructure. The Government has implemented several large-scale infrastructure projects to address these challenges. However, targeted institutional, policy and regulatory changes are required to support

enhanced planning and management of these infrastructure investments and harness the full benefits from these projects. Complementary investments in urban planning, upgrading, and transit-oriented development are further facilitating more sustainable mobility patterns and enhancing the social returns of mass transit investments. As for ensuring that growth becomes even more inclusive, existing policies and social programs can become more effective in reaching rural and Indigenous Peoples, Afro-descendants and other poorer segments, while at the same time promoting productive inclusion and the employability of the poorest groups so that all Panamanians can benefit from and contribute to an equitable growth process. This will include careful management of fiscal and environmental risks, including the effects of climate change.

## **APPROACH**

Panama seeks to sustain its successful model of rapid growth and significant poverty reduction through high levels of investments and increased economic productivity. To deepen its position as a regional and international logistics hub and build on its port and airport network,



Panama continues to invest in large public infrastructure and logistics projects, such as the Panama Canal expansion, upgrades to highways, infrastructure upgrades in six airports, enlargement and upgrades of roads in Panama City, extension of the Metro transport system in Panama City and the creation of a metro bus system, among others. In the energy sector, Panama's private sector firms are investing in renewable energy infrastructure and gas-to-power, while public funding is financing a comprehensive policy reform and a national energy efficiency strategy.

### **MOBILIZATION OF NEW SOURCES OF FINANCE**

By prioritizing cost-effective, non-government guaranteed commercial financing, IFC's investment operations, together with MIGA guarantees, are playing a central role in mobilizing private sector commercial financing for infrastructure investments. The IFC has supported the expansion of the Panama Canal through a US\$300 million loan. The IFC is also involved in addressing urban issues through the Green City initiative, helping Panama develop regulations and voluntary certifications (EDGE) on sustainable construction. In reducing political risk to investors and lenders, MIGA has contributed to urban mobility through two guarantees totaling US\$623 million issued to commercial banks in 2012 and 2013 for the construction of Metro Line 1 (a US\$1.88 billion project) and similar support is being considered for Metro Line 2. In parallel, IBRD is contributing to much needed policy reforms, regulations and better performing public institutions by supporting Panama's Transit and Ground Transportation Authority (ATTT) in improving urban design, infrastructure and public transit service provision. The goal is to complement investment in the mass transit and integrated transport systems and redress the increasing congestion that acts as an impediment to efficient logistics and sustainable mobility patterns for over 1.5 million inhabitants in Panama City. This combined approach is maximizing development finance and creating a pipeline of bankable projects to attract additional foreign direct investment.

The WB is also supporting the modernization of the energy sector, catalyzing commercial financing for investments in renewable energy, and freeing up fiscal space for new investments. With support from IBRD's US\$300 million Development Policy Loan (DPL), Panama is addressing sector reforms needed to help improve public service delivery of energy, enhance the regulatory framework, better target subsidies,

and help provide financial sustainability for service providers. In parallel, IFC has invested US\$300 million in a 200MW wind farm that helps diversify energy generation, as well as US\$150 million in Central America's first clean liquefied natural gas (LNG)-to-power 380MW project facility on the Atlantic mouth of the Panama Canal. This Maximizing Finance for Development Approach seeks to contribute to improving the fiscal sustainability and diversification of the energy sector, which is fundamental for providing reliable, affordable and continuous access to electricity. Looking forward, it should facilitate increased investments in environmentally sustainable power generation to improve service delivery. In addition, IBRD is supporting Panama to address key upstream financial barriers to unlock private sector investments in energy efficient (EE) infrastructure. This is being done by financing prefeasibility studies and helping to set-up an EE-dedicated fund, which will stimulate public-private collaboration, namely through: (i) blending of public and private financial resources to optimize the use of limited public resources and leverage private financing, (ii) supporting private sector EE initiatives through public resources; and (iii) stimulating a nascent market for energy service companies. Capacity building in the financial sector through fostering better understanding of EE operations will ultimately promote progressive investments in EE infrastructure. Similarly, in line with strategic support to improve the reliability and diversification of Panama's energy supply, the WBG is also advising the Government of Panama on a PPP approach for the national transmission company's fourth transmission line, which could maximize private sector participation in infrastructure, and in deploying a PPP model that can be replicated in other infrastructure subsectors.

## **WBG CONTRIBUTION**

Mobilizing various parts of the World Bank Group has been crucial to support implementation of an ambitious government program. To do so, the WBG has provided IBRD Technical Assistance (bringing in experience and expertise from across the LAC region), IFC investments and MIGA guarantees. The WBG support to the multifaceted efforts of the Panamanian Government is an example of how different WBG entities, leveraging their capabilities, can work together in a sequenced and parallel manner to support large government investments and attract private sector investment: judiciously using scarce public resources with

a focus on de-risking projects and addressing market gaps, prioritizing commercial finance and tapping into new sources of capital, such as the institutional investor base.

## **RESULTS**

This approach has contributed to fostering high levels of investment and is helping Panama increase connectivity and accessibility through better mobility, urban planning, energy and stronger local institutions. The benefits extend to all residents of Panama, especially the ones using public transportation in Panama City. The approach is helping to diversify energy generation with a new wind farm. The expansion of the canal also has benefits for international trade that go beyond Panama.

# Peru: Mobilizing Private Sector Financing for Infrastructure

Peru has a significant gap in infrastructure financing, estimated at around US\$160 billion for the 2016-2025 period, which is holding back the country's growth potential. Inadequate investment planning and implementation have been the main bottlenecks to improving key infrastructure assets, and the quality and delivery of essential public services. Public infrastructure provision via PPP mechanisms expanded rapidly in Peru between 2006 and 2014, but at the expense of the Government of Peru (GoP) taking most of the risk in projects through explicit and contingent guarantees.

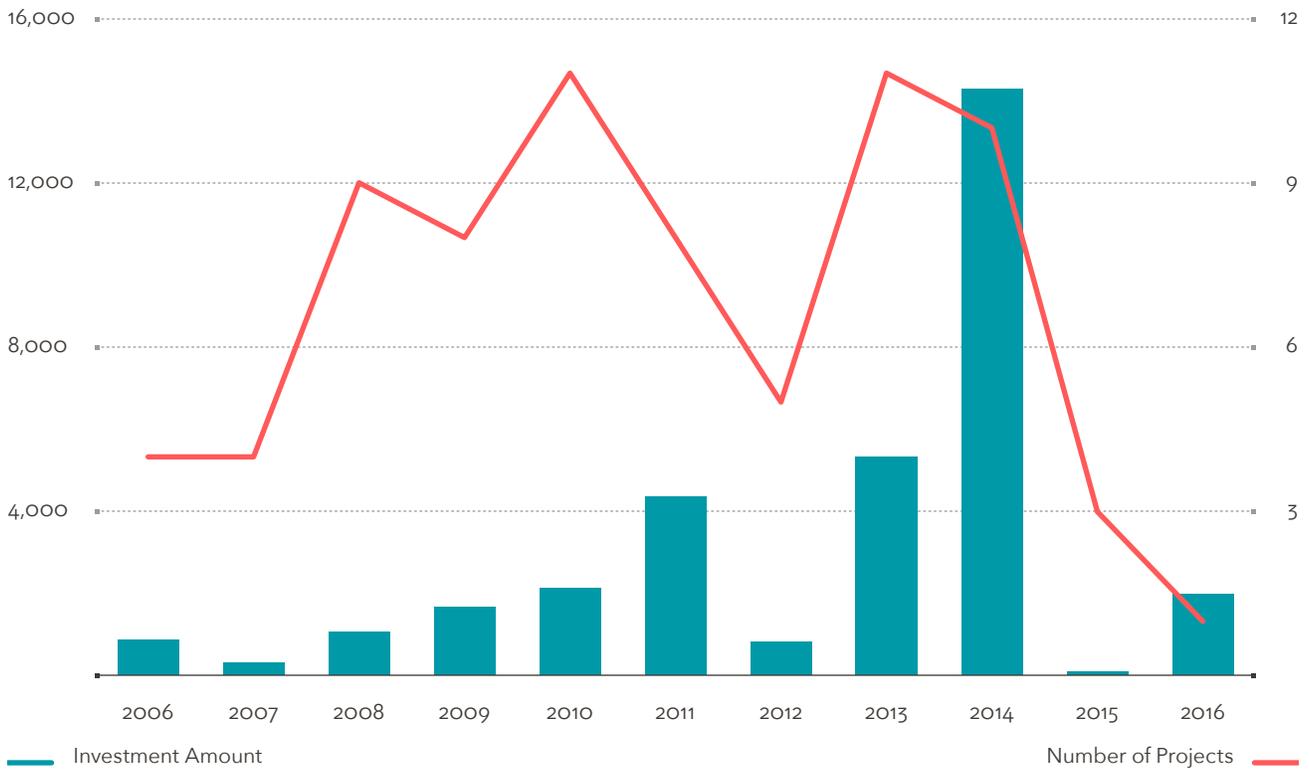
## CHALLENGE

Most of these guarantees were needed to compensate for a weak PPP framework characterized by poorly designed projects that prevented the private sector from taking standard risks and which limited the amount of private sector capital mobilized for infrastructure. This policy has been detrimental to the country on two fronts: (i) a higher than expected fiscal burden that limited the headroom to continue supporting PPPs and all types of public investments, even before the downturn in commodity prices; and (ii) misaligned incentives for the private sector that prevented full mobilization of private capital and undermined the quality of PPP projects.

## APPROACH

The GoP is following a comprehensive approach to the reform of the PPP framework with a consistent sequencing for the reforms. The government approach relies on mobilizing long term financing from local and international private and commercial capital to help bridge the gap. The approach seeks to maintain fiscal discipline - new PPPs are prepared with a view to alleviate rather than exacerbate the "hump" in capital spending the country already faces. It also aims to increase the use of project finance and capital markets to lengthen tenor, while establishing a new risk allocation model between public and private sectors to assign and manage risks to the appropriate parties, and to thus reduce the cost of finance for infrastructure. The government also seeks to improve project preparation, initially with good pre-feasibility studies

**Figure 7a. Peru: Evolution of Investments in PPPs, 2006-2016 (US\$ millions and No. of Projects)**



Source: MEF and PROINVERSION. Note: Data as of mid 2017. All amounts include Value Added Tax.

**Figure 7b. New Strategy to Unlock Infrastructure Investments in Peru**

**THE THREE PILLARS STRATEGY**



The GoP considers the coordination of actions between pillars as critical. Because of its experience on these areas, the GoP has forged a strategic partnership with the World Bank Group.

by line ministries, and by ensuring that bankability is taken into account upfront during a project structuring phase. This includes streamlined preparation with a focus on bankability and implementation of prioritized infrastructure, including potential use of partial credit guarantees and financial backstop mechanisms.

## **ENABLING ENVIRONMENT**

To address these issues of infrastructure finance, the GoP launched in 2015, with the support of WBG, a program to improve its entire PPP project preparation and implementation cycle to ensure fiscal sustainability and to maximize the mobilization of private sector financing. The guiding principle of the program has been to develop a new risk allocation model between the public and the private sectors, together with a clear allocation of roles and responsibilities across key government institutions over the PPP project cycle (e.g., line ministries and local governments, Proinversion, the government's PPP structuring agency, and the Ministry of Economy and Finance). In September of 2015, a new PPP framework law was adopted, followed by the issuance in December of its key by-laws, all of which support a new risk allocation model following best international practices. The preparation of a Standard Contract, improved medium-term plans for infrastructure and the integration of unsolicited proposal are all part of the new framework. These milestones also helped Peru subscribe to the key principles for PPPs of the Organization for Economic Co-operation and Development (OECD) in early 2016.

An early IBRD engagement (the co-financing of GoP's commitment towards the construction of the second phase of the Lima metro – where IBRD provided US\$300 million) provided a lot of the knowledge the Bank needed to help undertake reforms. The Lima Metro project itself was successful in enabling private sector financing of US\$1.6 billion and co-financing from the Inter-American Investment Corporation (IIC), the Inter-American Development Bank (IDB), the Development Bank of Latin America (CAF), the German Development Bank (KfW), the French Development Agency (AFD), and the China Co-Financing Fund for Latin America.

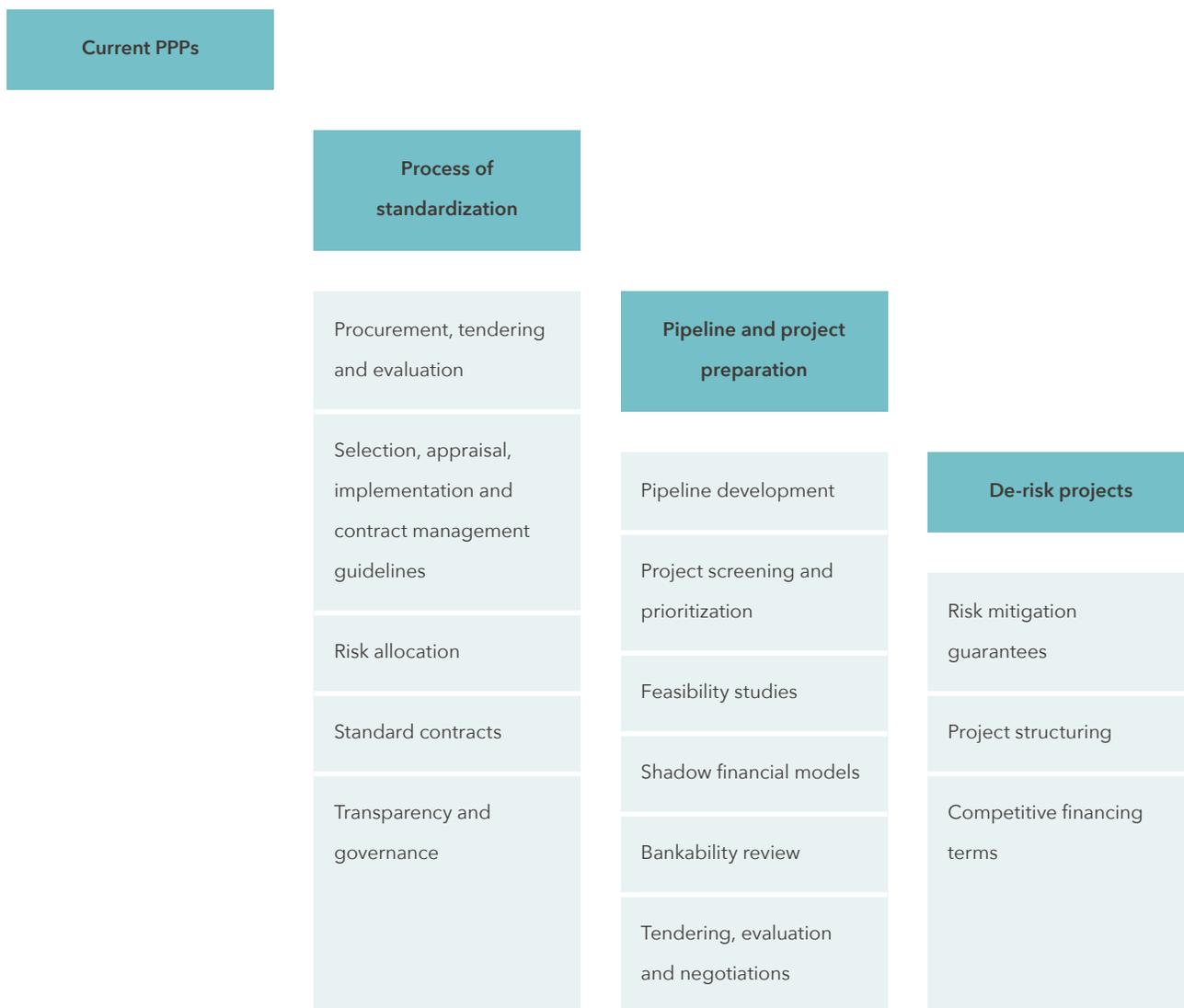
In parallel, the GoP has been implementing an action plan for the further development of Peru's capital markets, with World Bank support, to ensure the grounds are well laid out for a strong and early uptake of the new instruments. A strong focus is being put on strengthening the

foundations of local currency capital markets: moving from private to public transactions, developing new instruments, and promoting issuers and investors. The ongoing action plan is structured along three areas of work: (i) increasing the liquidity and efficiency of a domestic government bond market so it can serve as a pricing reference for long term private financing; (ii) reviewing investment regulations of pension funds and insurance companies so they can contribute to long term finance, within prudent limits and matching their liabilities; and (iii) addressing the capital markets regulatory bottlenecks for innovative long-term financial vehicles, e.g. infrastructure debt funds and long-term mutual funds. As part of the Disaster-Risk Management support the Bank offers to the authorities, an improved framework for the insurance of public assets built under the PPP modality has been prepared. These actions are all expected to contribute to increasing the participation of the private sector in infrastructure projects, with welfare improvement results, such as the lengthening of maturities, and an improved framework to manage and address risks by both the public and the private sector. Ultimately, there should also be an increase in the number of participating financiers, and reduced risks and financial costs.

### **WBG CONTRIBUTION**

In its initial phase, these reforms were supported by a US\$1.25 billion IBRD Development Policy Financing with a Deferred Drawdown Option approved by the Board of Executive Directors of the World Bank on February 11, 2016. Continued support to this agenda has been provided by a Technical Assistance Program for infrastructure finance funded by the Swiss Government. Enhancing the sustainability of private sector investments in infrastructure became a full-fledged objective in the WBG's Country Partnership Framework for 2017-21, which highlights ongoing work in areas such as the possibility of providing IBRD guarantees to back-stop residual risk taken by the government in key projects. A strong upstream dialogue has also been launched with two sectors, water and sanitation, and transport, to ensure ministries carefully prioritize and design potential projects to be developed via PPP mechanisms. The WBG is also supporting the GoP in developing a road map for the better-managed state-owned enterprises in the water sector to access capital markets. The IFC is also exploring potential advisory support to

**Figure 8. Peru’s Building Blocks for a Progression Towards Full Market-Based PPPs**



Source: WBG Staff

the process of structuring PPP projects in a manner that is consistent with international project finance blueprints.

For the financial sector, the WBG is providing technical assistance on hybrid issuance regimes as well as on clearing and settlement, and on oversight of secondary markets. Further priorities are being defined in the context of the FY18 Financial Sector Assessment Program (FSAP) and the WBG’s Joint Capital Markets Initiative (JCAP). The latter includes selecting a pipeline of demonstration PPP transactions jointly with the

IFC to test the new PPP model and start creating standard capital market vehicles engaging local pension funds, as well as co-investing with domestic and international banks, and with international institutional investors. These hybrid financing options have already been tested in other emerging market economies as the most effective way of increasing the share of local currency financing in long-term and complex infrastructure projects.

The WBG has become the partner of choice for supporting the design of a new PPP project pipeline that follows a market-based risk-sharing model, and is also supporting the development of financial instruments aimed at “de-risking” projects, and transition to the newly established market-based risk allocation system.

## **RESULTS**

The new regulatory framework for PPPs is mainly completed. Ongoing implementation support continues to finalize the contingency liability framework and improve standard clauses (for a model contract). The Government, with the support of the World Bank Group, is currently in the process of identifying a few projects under the new PPP legal framework that allows the GoP to transfer construction and financial risks to the private sector and to phase out payment certificates (i.e., the pseudo-collateral used in Peru to cover the risk that government agencies face in fulfilling their contractual obligations).



