

Evaluating the environment for public-private partnerships in Latin America and the Caribbean

The 2012 Infrascope

Index guide and methodology



Commissioned by





Contents

Preface	2
Executive summary	3
“PPP-readiness” in Latin America and the Caribbean	5
From greenfields to green: Can PPPs play a role in driving the environmental agenda	8
Regional trends	11
Overall scores	13
Category scores	14
Country comments	21
Appendix 1: Methodology, sources and indicators	34
Appendix 2: Methodological adjustments	43
Bibliography	44

Preface

This document describes the third edition of an informational tool and benchmarking index that assesses the capacity of countries in Latin America and the Caribbean to carry out sustainable public-private partnerships in infrastructure (PPPs). The study is based on a methodology developed in 2009 and revised in 2010. The analysis and content of this index covers the time period from December of 2011 through July of 2012. The index was built by the Economist Intelligence Unit (EIU) and is supported financially by the Multilateral Investment Fund (MIF), a member of the Inter-American Development Bank Group. The views and opinions expressed in this publication are those of the Economist Intelligence Unit and do not necessarily reflect the official position of MIF or the Spanish government.

The Economist Intelligence Unit's editorial team prepared the study and conducted the research. The EIU country research team was led by Manisha Mirchandani and Vanesa Sanchez and supported by Paula Cerutti and Romina Bandura. Nick Wolf was lead author of the report. Eduardo Bitrán Colodro and Marcelo Villena were joint research managers. Magali Solimano, Víctor Sánchez López and Thierry Ogier were country contributors. William Shallcross built the index and layout was designed by Mike Kenny.

February 2013

Acknowledgements

Over 40 in-depth telephone interviews were conducted with policymakers and country infrastructure experts from multilateral, consulting institutions and the private sector. We would like to express our thanks to participants for their insights, and to all of the infrastructure and country experts consulted for their advice and inputs.

For further information, please contact:

Economist Intelligence Unit Custom Research

Vanesa Sanchez, project manager
vanesasanchez@eiu.com / + 44 (0) 20 7576 8301

Romina Bandura, senior analyst
rominabandura@eiu.com / +1 202 650 6732

Multilateral Investment Fund

David Bloomgarden, project specialist
davidb@iadb.org / +1 202 942 8224

For further information, please contact:

Executive summary

Infrastructure needs in Latin America and the Caribbean continue to top the agenda of policymakers—whether driven by external factors like global athletic events on the horizon in Brazil, or internal realities like the infrastructure deficit highlighted by the administration in Costa Rica, infrastructure needs in Latin America and the Caribbean continue to top the agenda of policymakers across the region. Increasingly, there is a consensus that private investment will play an ever-larger role in regional development—from export competitiveness in Ecuador to transport modernisation in the Dominican Republic. An emphasis on fiscal restraint, from Jamaica to Guatemala, has created an environment increasingly favourable to leveraging private capital for public investments with cost recovery schemes.

The reality of continued demand for infrastructure improvements has contributed to the rise of PPP units and specialised agencies across the region over the past two years. Since 2010, three countries have added new PPP units or agencies, while pending legislation and on-going reforms would add four more countries to that list. The prevailing model in the region centralises some level of project planning and supervision expertise—but usually leaves sector-specific contracting agencies to oversee technical matters relating to the specifics of transport, electricity, or water projects. In many cases, sector agencies have accumulated technical expertise over many years, and policymakers are wise to draw on that

experience as they ramp up new infrastructure development models. Similar institutional durability is apparent in the PPP agencies of regional leaders.

Nonetheless, experience in Latin America and the Caribbean has proven that institutional frameworks are not enough on their own. For example, a country like Argentina possesses the institutional and regulatory framework necessary for PPPs, but policymakers lack the political will to pursue the private infrastructure investment model. In contrast, political support for PPPs has survived, and even grown, in Peru after a change of government that initially made investors nervous.

The combination of political will and updates to regulatory and institutional frameworks has driven the biggest advances in the region since 2010. This shift is due in part to the creation of specialised agencies to promote and implement PPP investment models. Prioritising this activity in the development of a PPP infrastructure programme makes sense for countries facing resource and fiscal constraints. However, further improvements will require countries to consolidate technical expertise and demonstrate proof of concept via successful PPPs. This is not only important for capacity-building, but also for maintaining political will and public support. Flagship projects have high visibility in a number of countries with relatively little PPP experience, and their success has some bearing on the outlook for the PPP model. Ports in Honduras, El Salvador, and Ecuador and highways in Costa Rica

and the Dominican Republic are a few of the high profile projects that will serve as barometers for the future of PPPs in the region. Consolidating PPP expertise has proven to be a long-term challenge with regional leaders such as Chile and Mexico—Chile is still dealing with high staff turnover, while Mexico experiments with new offices and technical centres to concentrate experience.

With this panorama in mind, the third edition of the Latin America and Caribbean Infrascopes documents progress across the region since 2010. The benchmark index and informational tool assesses countries' readiness and capacity for sustainable, long-term PPP projects, scoring aspects of the regulatory and institutional frameworks; project experience and success; the investment climate and the financial facilities in 19 countries in Latin America and the Caribbean. The methodology is largely unchanged from previous years, but adjustments to indicator definitions and scoring criteria are outlined in Appendix 1 and 2. The Infrascopes scores aspects of the legal and regulatory framework and the investment environment for PPP infrastructure projects in each country, and involves in-depth industry analysis, interviews with country and regional field experts and secondary research. ■

“PPP-readiness” in Latin America and the Caribbean

The results of the assessment suggest that LAC countries can be grouped into four categories which group the environment for sustainable, long-term PPPs: mature, developed, emerging and nascent. Overall scores and category scores are presented in the interactive Excel tool, that enables users to conduct “what if” analysis, and better understand how a country can improve its enabling environment. A country’s overall score comprises of weighted category scores of its: regulatory and

institutional framework, operational maturity, investment climate, financial facilities, and sub-national adjustment.

No countries in Latin America and the Caribbean can be strictly classified as “mature” in terms of PPP readiness and capacity, though, Chile remains the highest achiever. Nearly half of the countries in the study can be considered to be “emerging” in this respect, showing significant movement in various aspects since the 2010 report.

2012 Latin America and Caribbean Infrascopes and 2011 Asia Infrascopes, overview

	Nascent	Emerging	Developed	Mature
Score range	0-30	30-60	60-80	80-100
Latin America and the Caribbean	Argentina	Colombia	Brazil	
	Dominican Republic	Costa Rica	Chile	
	Ecuador	El Salvador	Mexico	
	Nicaragua	Guatemala	Peru	
	Paraguay	Honduras		
	Venezuela	Jamaica		
		Panama		
		Trinidad & Tobago		
	Uruguay			
Asia-Pacific (and benchmark countries)	Mongolia	Bangladesh	Gujarat state	Australia
	Papua New Guinea	China	India	UK
	Vietnam	Indonesia	Japan	
		Kazakhstan	Korea, Rep.	
		Pakistan		
		Philippines		
		Thailand		

Institutional framework and investment climate: a strength common among top performers

Chile leads Latin America and the Caribbean in the development of its PPP system and has served as an example for many countries in the region. Chile's score of 76.4 points out of 100 has dropped slightly compared to 2010, mainly due to a deterioration of investment prospects in electricity generation, caused by environmental obstacles and political interventionism in the face of improvements by other countries. Financial facilities and the investment climate continue to be strong points for the country, along with its regulatory and institutional frameworks. Strong performances on investment climate, institutional framework, and sub-national adjustment drove **Brazil's** number two rating, while the strength of the country's financial facilities dropped, owing in part to the distortionary effect of the national development bank in financing infrastructure investments. **Peru** followed Brazil, landing at number three with a slightly lower score. The country matched the top-ranked countries' performance on regulatory and institutional framework and showed impressive gains in its investment climate. Peru's score for project award methodology and criteria deteriorated over concerns that the selection of service providers for toll roads could be distorted. The country faced some social opposition that disrupted projects; nevertheless, there has been strong support for PPPs from the government, keeping Peru's score steady. **Mexico** has demonstrated a steady increase in its overall score since 2010. The regulatory framework and operational maturity in the country improved and sub-national activity boosted the country's overall ranking. Mexico's PPP system remains more fragmented than other comparable countries, but efforts to provide technical expertise to agencies across the government should improve planning and implementation.

Emerging countries show improvements in regulatory frameworks

The biggest story is the emerging cluster of previously "nascent" countries that have demonstrated improvements in their capacity and readiness, in large part due to concerted efforts at regulatory change and capacity building. **Colombia** leads this group with a strong investment climate and improving financial facilities. The regulatory framework benefitted from a new PPP law that increases accountability for the government and private partners by improving bidding mechanisms and limiting contract renegotiations. **Uruguay** showed score and ranking improvements along all indicators, boosted by new PPP legislation and political will in support of transport concessions. **Guatemala, Costa Rica, and El Salvador** are clustered (at around 40 out of 100 points), showing mixed results across categories and indicators. Costa Rica's institutional framework showed improvement this year, but comprehensive PPP reform could further boost this score. In El Salvador, a pending PPP overhaul modestly improved the country's regulatory framework ranking. Passing and implementing the proposed legislation could improve both the regulatory and institutional frameworks. Other "emerging" countries have or will soon implement updated regulatory and institutional frameworks, with the exception of **Panama**, where the design of a new National Roads Company threatens to crowd out private investment in transport infrastructure. **Trinidad & Tobago** and **Jamaica**, where reforms are pending, maintained their rankings, while **Honduras'** ranking for regulatory framework improved after a new PPP promotion law was implemented.

The countries at the lower end of the spectrum in terms of PPP readiness and capacity can be classified into two sub-groups: those "nascent" countries making small, but incremental improvements; and "diminished nascent" countries, or those that have turned away from the PPP infrastructure development model altogether.

Paraguay, the Dominican Republic, and Nicaragua have made limited progress, such as the evolution of risk allocation in transport concessions in the Dominican Republic and opportunities for investment in renewable energy in Nicaragua.

Ecuador appears to be straddling these two groups, after strictly limiting private investment in infrastructure in 2007-2008, but more recently providing for executive discretion in interpreting these limits. Political forces in **Argentina** and **Venezuela** have continued to resist private-sector involvement in infrastructure development, while Ecuador has opened limited opportunities for private infrastructure investment via the Port of Manta concession and renewable energy projects. These projects' success or failure will be determined in some part by continued political support, and also on the government's ability to harness the PPP development capacity that remains at some government agencies. Calls have emerged within the government for some consolidation of this base of knowledge and expertise. ■

From greenfields to green: Can PPPs play a role in driving the environmental agenda?

For governments the world over, the promise of the Public-Private Partnership (PPP) model lies in its utility as a mechanism for efficient provision of public-sector infrastructure. PPP arrangements leverage the management and technical skills of the private sector to disperse essential public services more efficiently and effectively, in many cases. Through contracts with proper cost recovery and risk-reward sharing, PPP initiatives have facilitated the development of essential infrastructure—in spite of depleted government budgets and capacity constraints.

The public sector's role in selecting projects for application of the PPP model, and in designing and executing long-term contractual agreements with private-sector partner, present two distinct areas of opportunity for governments beyond the rollout of essential infrastructure and the provision of public services. In their role of assessing and selecting infrastructure projects for application of a PPP model, there is scope to facilitate economic activity into "green" industries which may not otherwise hold immediate appeal to investors. Secondly, there is a chance to design PPP projects in such a way as to promote sustainable practices, and encourage the private sector to innovate in the development of technologies and business models for infrastructure service provision.

Government initiatives to facilitate the development of domestic renewable energy sectors in Latin America and the Caribbean (LAC) are not new. The most prolific of these is Brazil's

Programa Nacional do Alcool (PROALCOOL), which was launched in 1975 in an effort to substitute fossil fuels for renewable bio-fuels. Today, most automobiles in the country run on a fuel-mix. In recent years, other countries in the region have stepped up their efforts to promote the development of their alternative energy sectors, passing legislation and implementing programmes to promote research and development in green technology—with mixed results. Private-sector investment into "green" sectors remains patchy in the region, given the challenges related to new technology uptake and unproven returns. In 2011, the LAC region attracted only 10% of an estimated US\$260bn of global investments flowing into clean energy projects and companies, according to data by Bloomberg.

Investor reticence presents an impediment to growth of sectors such as renewable energy and waste management, which continue to be of strategic importance in the economic development programmes for a number of countries in the region. Since 2010, regulatory reform has taken place in a variety of geographies across the region to better enable the development of PPP infrastructure projects. The PPP framework represents a unique opportunity for governments to facilitate private-sector interest in domestic green industries, and to encourage the development of innovative approaches for mitigating environmental impact.

Environment

Promoting “green” sectors through the private-sector participation

In 2004, Chile established a legal framework to encourage the use of renewable energies. Since then, the country has developed a number of initiatives to promote the development of small-scale renewable energy projects and channel private-sector efforts into the industry, as part of a long-term strategy to achieve energy security and environmental awareness. Recently, the government awarded US\$7.2m to a public-private arrangement between private technology firm Bio Architecture Lab (BAL), the Universidad de Los Lagos and the state-owned energy company, Empresa Nacional del Petroleo (ENAP) to facilitate the generation of low-cost, renewable biofuels from a native strain of seaweed. Though not a PPP in the strictest sense, this initiative is reflective of the potential for government support and direction to encourage public-private collaboration. In this case, the venture is anticipated to bring about significant gains for the country’s bio-fuel sector, eventually producing 165m litres of ethanol per year, amount equivalent to 5% of the country’s gasoline consumption.

In Argentina, the government has been fostering

the development of its renewable sector through a more traditional PPP arrangement. Under the 2009 GENREN programme (Licitación de Generación Eléctrica a partir de Fuentes Renovables), the state utility firm Energía Argentina Sociedad Anónima (ENARSA) is obliged to generate a minimum of 1GW of renewable energy capacity be sold into the grid at fixed rates over 15 years. Under this programme, Genneia, a domestic private energy company, was awarded the right to develop and operate the Rawson Wind Project, comprised of two wind farms, Rawson I and Rawson II, located in the province of Chubut with combined install capacity of 77.4 MW. To finance part of the US\$174m construction and operation costs, Genneia issued a US-dollar denominated bond.

PPP initiatives around renewable energy have also emerged at the sub-national level in recent years, as illustrated by the opening of the Arriaga Wind Farm in the Mexican state of Chiapas. Capital is 100% private, jointly financed by two domestic conglomerates—Grupo Salinas and Grupo Dragon. According to the state’s government, the farm will generate 28.8 MW of energy on an annual basis to supply 40,000 homes in 38 municipalities.

The value chain: green PPPs

PPPs represent a unique **opportunity for governments facilitate the development of “green” industries and innovative business models and solutions** which may not otherwise hold immediate appeal to investors.

- In the **selection** of projects for PPPs, governments have the **opportunity to encourage investment into green industries** such as renewable energy and waste management.
- During the **bidding process**, there is an opportunity for government to reward **technological innovation that promotes environmental objectives and sustainable practices**.
- In the **design** of projects, collaboration with the private-sector can generate **innovative solutions and business models for mitigating environmental impact**.

Green PPPs must also be sustainable PPPs—**standard checks and balances at the project selection, award and implementation stages** are required to ensure viable and sustainable projects. ■

PPPs as means of fostering frugal innovation: waste management

Mexico too has been driving the development of its renewable energy industry in recent years. Under the previous administration, measures were implemented to increase the proliferation of clean energy technologies in the economy. Most interesting among these have been the development of PPP projects in the renewable energy sector, which have designed to also mitigate the environmental impact of rapid urbanisation.

The government of Mexico City has recently tendered a concession contract to create a waste-to-energy facility to process methane gas from its main landfill—almost 79m tonnes of waste have been dumped on the Bordo Poniente site since it began operations in 1994. The project has been designed with dual objectives in terms of service delivery—to capture as much as 1.5m tonnes of methane gas emissions per year to fuel

Environment

a plant that could supply electricity to as many as 35,000 homes. Local authorities estimate that this initiative could cut annual emissions by the equivalent of 2m tonnes of carbon dioxide in the first year. Moreover, the electricity revenues from the power plant will contribute to the cost of shutting down the landfill, which reached capacity in December 2011.

In Argentina, similar PPP initiatives have been developed at the local level, attracting private-sector expertise through national support schemes. The most promising in recent times has been the country's first waste-to-energy power plant developed by Coordinación Ecológica Area Metropolitana Sociedad del Estado (CEAMSE), the state company responsible for transportation, treatment and disposal of solid waste in the Buenos Aires city and provincial areas, and Industrias Juan F. Secco, a domestic power generator. Central San Martin plant commenced operations in May 2012, generating electricity utilizing methane gas emissions from Buenos Aires' largest landfill. Industrias Juan F. Secco constructed the plant and now manages operations, having won a tender issued by Energía Argentina Sociedad Anónima (ENARSA), a state company responsible for generation, transmission and trade of electricity. The concession allows the company to utilise

the gas generated by the landfill for 10 years, instituting a commitment to an innovative—if experimental—project which drives the uptake of renewable energy, while at the same time, going some way towards addressing the city's emissions challenge.

The “green” light for PPPs

Such examples of PPP projects indicate that there is scope for governments in the region to encourage investment and economic activity into sectors such as renewable energy and waste management—where the risks of experimenting with new technologies and unproven returns have deterred investors in the past. In selecting infrastructure projects for PPPs, there is a unique opportunity for governments to direct capital and expertise into these industries, while at the same time, encouraging private players to innovate—in the development of cutting-edge technology or business models, or in tackling pressing issues of environmental sustainability and adaptability.

The challenge for governments lies in encouraging PPPs that are not only green—but good. Projects should follow best practices and stand alone as PPPs that are well-designed and economically viable in their own right, regardless of their green credentials. ■

Regional trends

Incremental improvements by top performers; wholesale reform among less-experienced countries

The regional outlook for PPPs is characterised by incremental steps forward in the most advanced PPP frameworks and wholesale reform at the other end of the spectrum. Changes in Peru and Mexico focused on adjusting incentives and avenues for participation in PPPs, as well as creating new legal tools for infrastructure development. These changes reflect the institutional maturity these countries have achieved, although even these more developed markets have continued to engage in capacity building. Broader reform efforts have been necessary in countries with less-established institutional frameworks. Most countries that have created new PPP systems have concentrated some level of planning and implementation expertise in national agencies or PPP units. Guatemala, Honduras, and Uruguay have followed this model, creating new agencies to promote PPP development, and in El Salvador, Jamaica, and Trinidad & Tobago similar processes are underway. Reforms in Central American neighbours Guatemala and Honduras, and the pending reform in El Salvador offer similar institutional designs, creating new PPP planning and implementation agencies at the national level, accompanied by sister agencies charged with PPP contract supervision. In these countries, reforms have created (or will create in the case of El Salvador) completely

new organisations that will require significant investment in human capital development.

Renewable energies as an entry point for private capital

Investments in renewable energy have gained prominence as an entry point for private capital into regional electricity generation markets (please see special article “From greenfields to green: Can PPPs play a role in driving the environmental agenda”). Countries like Brazil, Nicaragua, and the Dominican Republic, among others have passed laws to give incentives to investors in alternative methods of energy generation, including tax breaks and preferential energy prices. Even in countries with closed electricity markets like Costa Rica and Uruguay, policymakers have opened the door to limited private investment in their markets via renewable energy projects. Costa Rica caps private generation facilities at 50 MW and has set a 30% maximum for private energy generation. Ecuador has shunned most private infrastructure investment in recent years, but has also implemented a renewable energy incentive program that offers 15-year power purchase agreements to private producers. However, proposed reforms to energy pricing in Panama, for example, have raised concerns about how pricing and incentives might distort private investment into energy projects that are not otherwise financially sustainable.

Some resistance to PPPs highlights need for increased co-ordination with stakeholders and rigorous impact studies

Resistance to PPP projects has developed into a limited, but important trend. Beyond countries like Venezuela, Argentina, and Ecuador that have substantially reduced or eliminated altogether private investment in infrastructure, some social resistance to projects has appeared in other countries as well. In Peru, protests related to the social and environmental impacts of natural resources projects and related infrastructure have resulted in new legislation requiring consultation with indigenous populations prior to project implementation. Such actions will require increased co-ordination among stakeholders and call attention to the need for more effective environmental and social impact studies. In Costa Rica, even projects that have remedied important infrastructure deficits have faced stiff opposition from some interest groups. Roadway concessions and right of way issues have presented cases where parties have competing claims of rights, and the judicial system has not been sufficiently equipped to adjudicate these cases. Social resistance highlights the need for political and social will in support of PPPs, and also demonstrates that some areas, like the water sector in most countries in the region, will remain politically sensitive with respect to PPP rollout. ■

Overall scores

The overall results of the 2012 Latin America and Caribbean Infrascopes show country rankings determined by the weighted sum of the six category scores. The index scores countries on a scale of 0 to 100, where 100 represents the ideal environment

for PPP projects. A breakdown of overall rankings by individual indicator can be seen in the following section and further examined in the Excel interactive learning tool, which is available via free download at www.eiu.com/lacinfrascope2013.

Rank		2010	2012	Score change
1	Chile	79.4	76.4	(-3.0)
2	Brazil	71.9	71.3	(-0.6)
3	Peru	68.1	69.6	(+1.5)
4	Mexico	58.1	63.8	(+5.7)
5	Colombia	55.3	59.5	(+4.2)
6	Uruguay	34.8	49.5	(+14.7)
7	Guatemala	40.9	43.2	(+2.3)
8	Costa Rica	32.6	38.8	(+6.2)
9	El Salvador	30.7	38.2	(+7.5)
10	Trinidad & Tobago	32.2	34.3	(+2.1)
11	Panama	36.4	34.0	(-2.4)
12	Honduras	24.2	33.7	(+9.5)
13	Jamaica	26.6	30.2	(+3.6)
14	Paraguay	24.7	28.9	(+4.2)
15	Dominican Republic	24.0	25.7	(+1.7)
16	Nicaragua	17.1	20.4	(+3.3)
17	Ecuador	12.4	19.9	(+7.5)
18	Argentina	30.3	17.5	(-12.8)
19	Venezuela	5.3	5.1	(-0.2)

Category scores

Regulatory framework

Rank			Score	
2012	change		2012	change
=1	-	Chile	75.0	(-9.4)
=1	(+1)	Peru	75.0	-
=3	-	Brazil	65.6	(-6.3)
=3	(+1)	Mexico	65.6	(+9.3)
5	(+1)	Colombia	62.5	(+12.5)
6	(+2)	Uruguay	56.3	(+21.9)
7	(-2)	Guatemala	53.1	-
=8	-	Costa Rica	40.6	(+6.2)
=8	(-1)	Panama	40.6	(+3.1)
10	-	El Salvador	37.5	(+9.4)
11	-	Paraguay	31.3	(+6.3)
=12	(+2)	Dominican Rep.	25.0	(+3.1)
=12	(+5)	Honduras	25.0	(+9.4)
=12	(-1)	Jamaica	25.0	-
=12	(-1)	Trin. & Tobago	25.0	-
=16	(+2)	Ecuador	21.9	(+15.6)
=16	(-2)	Nicaragua	21.9	-
18	(-4)	Argentina	9.4	(-12.5)
19	-	Venezuela	0.0	-

Regulatory refinements tweak existing frameworks, while new frameworks promote private investment

Since 2010, five of the 19 countries in this study have overhauled their regulatory framework for PPPs. Legislation in Colombia and Mexico focused on refining the scope and definition of PPPs, while providing new tools for their implementation and correcting flaws the flaws of previous approaches.

Colombia's PPP law improved contract terms and limited the ability to renegotiate. The new PPP law also establishes obligatory procedures at national, regional and local levels for preparing PPP projects. It is thus expected that the new reforms will improve general coordination and processes for projects at all levels of government. Thanks to these reforms, Colombia not only ranks in the region's top five for its regulatory framework, it is now the highest-scoring country in the "emerging" group. In Mexico, the government created a new type of long-term contract for private development of infrastructure services. Meanwhile, laws in Guatemala, Honduras, and Uruguay sought to establish PPPs as a new avenue for infrastructure development.

These countries have little experience with PPPs, but are seeking to increase their use and promote private infrastructure investment. Guatemala and Honduras created new PPP implementation and oversight agencies to manage the process, while Uruguay created new PPP unit within the Ministry of Economy and Finance and gave new responsibilities to the National Development Corporation. Although Guatemala had already approved a new framework before this study was last published, since then, it has begun to build its new PPP mechanism based on that law.

Changes taking place some countries, but progress stalled in others

A second group of countries is in the process of

proposing new regulatory frameworks for PPPs. In El Salvador, a bill is before the Legislative Assembly that would follow a model similar to that currently being implemented in neighbouring Guatemala and Honduras. Jamaica has new guidelines for privatisation and PPP creation under review at the Cabinet level. Both Paraguay and Trinidad & Tobago are receiving assistance from the Multilateral Investment Fund to create modern PPP frameworks that will foment project development and implementation.

Three countries have attempted to reform their PPP frameworks, but progress has been limited. In Costa Rica the lead PPP agency has called for reform, and a comprehensive PPP bill has been circulated, but it has not emerged as a high political priority. The Dominican Republic has seen several PPP bills presented to Congress since 2009, but none have yet been ratified into law. The government in Panama sent a new PPP law to Congress in 2011, but had to withdraw it after facing opposition from public-sector workers.

Peru has made progress after tweaking its current system to allow greater initiative from the private sector. Brazil's score has dipped after introducing a fast-track programme that speeds through project planning—thereby diluting some of the checks and balances that are built into a more robust PPP planning process. Ecuador's score remained low but improved after the government further defined constitutional limits on private-sector participation in strategic economic sectors. Argentina's framework remains unchanged, but price controls and tariff freezes have made PPPs less attractive to private investors.

Institutional framework

Rank			Score	
2012	change		2012	change
=1	–	Brazil	75.0	–
=1	–	Chile	75.0	–
=1	–	Peru	75.0	–
4	–	Mexico	58.3	–
=5	–	Colombia	50.0	–
=5	–	Guatemala	50.0	–
=5	(+2)	Honduras	50.0	(+16.7)
=5	(+2)	Uruguay	50.0	(+16.7)
=9	(+2)	Costa Rica	33.3	(+8.3)
=9	(-2)	El Salvador	33.3	–
=11	–	Jamaica	25.0	–
=11	–	Nicaragua	25.0	–
=11	–	Paraguay	25.0	–
=11	–	Trin. & Tobago	25.0	–
15	(-8)	Argentina	16.7	(-16.6)
=16	(+1)	Dominican Rep.	8.3	–
=16	(-5)	Panama	8.3	(-16.7)
=18	–	Ecuador	0.0	–
=18	–	Venezuela	0.0	–

The top six performers in this category remained unchanged since 2010, reflecting the durability of a strong institutional setup.

Centralised models have proven to be durable

Top performers Brazil, Chile, and Peru have all centralised expertise and administration of the PPP process, though their systems are far from identical. In Peru, the investment agency supervises the bidding process, while in Brazil sector regulators are charged with that responsibility.

Legislative reforms to the PPP framework have not consolidated Mexico's highly fragmented system, but the government used executive action to strengthen the National Public Works and Services Bank by creating a project pipeline and create pockets of advisory expertise at the National Infrastructure Fund.

Guatemala's new institutional framework should draw on pockets of PPP expertise in the transport sector to concentrate know-how in the new PPP agency. The agency's structure and relationship with the national PPP council will also reduce

politicisation of the PPP selection and award process, despite the continued requirement for congressional approval of all concessions.

Uruguay's score improved as the country put forth a new institutional model that shifts PPP responsibility to the National Development Corporation (CND, Corporación Nacional para el Desarrollo), while moving away from a model that has consolidated service provision and regulatory oversight in institutions like the port authority and National Road Corporation in the transport sector. Nevertheless, while the CND's new function does not mix service provision with regulation, it does maintain its role as a provider of infrastructure—even while it is supposed to facilitate private-sector investment.

Lack of independence and government overreach present institutional challenges

Argentina and Panama were the only countries to experience reductions in their institutional framework scores. In Argentina, a fairly well-defined institutional framework has suffered from a lack of administrative and financial independence. For instance, the electricity sector regulator's autonomy and oversight abilities have been hampered by continuous government interference in the market. Panama created the National Road Company to revive failed highway concessions, but the company's design could crowd out private investment as it initiates concessions itself using financing off the government's balance sheet with an implicit fiscal guarantee.

Operational maturity

Rank		Score	
2012	change	2012	change
1	–	Brazil	78.1 (+3.1)
2	–	Chile	71.9 –
3	(+2)	Mexico	56.3 (+6.3)
=4	–	Colombia	53.1 –
=4	(-1)	Peru	53.1 (-3.2)
6	(+1)	Uruguay	46.9 (+9.4)
7	(-1)	Costa Rica	43.8 (+3.2)
=8	(+2)	Honduras	31.3 (+3.2)
=8	–	Jamaica	31.3 –
10	(+2)	Guatemala	28.1 (+6.2)
=11	(-3)	Argentina	25.0 (-6.3)
=11	(+7)	Dominican Rep.	25.0 (+12.5)
=11	–	El Salvador	25.0 –
=14	–	Nicaragua	21.9 (+3.1)
=14	(-2)	Trin. & Tobago	21.9 –
=16	(-2)	Ecuador	18.8 –
=16	(-2)	Panama	18.8 –
18	(-1)	Paraguay	15.6 –
19	–	Venezuela	6.3 –

Good practices have emerged over time and with experience

The Dominican Republic, Honduras, Uruguay, and Mexico showed improvements in operational maturity since 2010. The Dominican Republic has demonstrated an improved track record in transport PPPs, particularly in road concessions. Successive concessions have shifted more risk to private partners and the model contract for road concessions now includes standard terms regarding common risks and minimum bankability requirements to facilitate private partners' search for financing.

The Puerto Cortes modernisation PPP in Honduras demonstrates an evolution in government policy as previous administrations had conceived of the project as a public investment. Nonetheless, the complete outsourcing of PPP preparation to a local bank represents something of a risk to the public interest, although the new PPP agency is monitoring project developments closely.

Mexico has developed capacity at the National Infrastructure Fund and National Public Works

and Services Bank to offer technical assistance to entities carrying out PPPs. The Ministry of Finance and Public Credit has also increased its advisory offerings to sector ministries in the area of fiscal assessment and cost-benefit analysis around project structuring. In addition, some states have engaged multilateral support to build PPP management capacity at the sub-national level.

Need to increase and consolidate technical expertise still a challenge at both ends of the spectrum

Uruguay too, has sought out multilateral and foreign expertise to bolster its technical expertise with regards to PPPs. These consultations have strengthened public-sector capacity to implement the new PPP law, but continued efforts will be necessary for successful concessions planning, evaluation, and project structuring. A similar situation prevails in most countries in the region—very few have developed all the capabilities necessary to successfully identify, plan, select, and implement PPPs. Even Chile, which has accumulated significant knowledge and expertise at its PPP unit, faces the challenge of high turnover among officials and technical staff.

Investment climate

Rank			Score	
2012	change		2012	change
1	–	Chile	87.6	(+1.4)
2	–	Peru	80.0	(+1.4)
3	–	Colombia	78.1	(+1.2)
4	(+1)	Brazil	76.8	(+14.6)
5	(-1)	Panama	65.0	(+0.5)
6	(+4)	Uruguay	64.1	(+18.3)
7	(+4)	Costa Rica	61.3	(+17.2)
8	(-2)	Mexico	60.0	(-0.4)
9	(+3)	Trin. & Tobago	59.3	(+16.3)
10	(+3)	El Salvador	58.5	(+17.4)
11	(+3)	Jamaica	56.0	(+18.5)
12	(-5)	Guatemala	54.9	(-2.1)
13	(-5)	Dominican Rep.	52.1	(-0.5)
14	(-5)	Honduras	51.7	(+0.3)
15	–	Paraguay	49.8	(+17.5)
16	(+1)	Ecuador	38.3	(+18.1)
17	(+1)	Nicaragua	36.2	(+18.8)
18	(-2)	Argentina	20.8	(-2.2)
19	–	Venezuela	11.0	(-1.5)

Political support for PPPs key to attracting private investment

Beyond comparisons of the business environment and political interference in different countries in the region, political will in support of PPPs plays an important role in determining a country's climate for private infrastructure investment. Regional PPP leaders like Chile, Brazil, and Peru enjoy broad political support for private investment in infrastructure. In Peru, despite initial concerns, a change in government confirmed the high level of support PPPs enjoy as the new administration announced a private infrastructure programme of more than US\$10 billion in 2011.

Countries like Brazil, Costa Rica, El Salvador, Paraguay, and others that have seen increases in their scores in the investment climate category this year have introduced aggressive new PPP initiatives and/or confirmed support for PPPs at the highest levels of government. Brazil outlined a US\$66 billion transport infrastructure program over the next thirty years. In Costa Rica, the “infrastructure deficit” has received attention from the president.

A centre-left president in El Salvador has outlined a pragmatic pro-private investment vision and introduced a new PPP legislation to make it a reality. Paraguay's interim government refocused attention on PPP proposals that had stalled.

Even Ecuador, a country with a constitution that severely limits private-sector participation in the strategic sectors of the economy, has taken steps to better define those limits. The government has identified the Port of Manta as a concession with the potential to improve export competitiveness and has launched a tender. The concession enjoys presidential favour and the results of the tender and award process will help clarify what role private investment will play in Ecuador's strategic economic sectors.

Renewable energy in Nicaragua enjoys political support for private investment as the government works to recalibrate the country's energy mix. Favourable incentives have spurred private investment in the sector. The country's investment promotion agency, ProNicaragua, is working to leverage that interest and political support into other sectors such as transport as well.

Only three countries saw their scores decrease by single digits on the investment climate category since 2010. In Guatemala, an increasing risk of political distortion offset improvements in the business environment and limited political will in support of PPPs. Argentina's business environment continued to decline as expropriations in the energy extraction sector heightened investor caution. Venezuela's decrease resulted from heightened political distortion affecting the private sector.

Financial facilities

Rank		Score	
2012	change	2012	change
1	-	Chile	91.7 (-5.5)
=2	-	Mexico	72.2 -
=2	(+3)	Peru	72.2 (+11.1)
4	-	Panama	63.9 -
=5	(-3)	Brazil	61.1 (-11.1)
=5	(+2)	Colombia	61.1 (+5.5)
7	(-1)	Trin. & Tobago	55.6 (-2.7)
8	-	El Salvador	47.2 -
=9	-	Costa Rica	41.7 -
=9	(+2)	Uruguay	41.7 (+11.1)
11	(+3)	Guatemala	33.3 (+11.1)
=12	(-1)	Dominican Rep.	25.0 (-5.6)
=12	(+1)	Paraguay	25.0 -
=14	(+1)	Ecuador	22.2 (+5.5)
=14	(+1)	Jamaica	22.2 (+5.5)
=16	(-6)	Argentina	16.7 (-16.6)
=16	(+2)	Honduras	16.7 (+5.6)
=16	(-1)	Venezuela	16.7 -
19	-	Nicaragua	8.3 -

Macroeconomic stability and investor interest drive improvements

Three countries improved their scores on this indicator by double digits since 2010: Peru, Uruguay, and Guatemala. In part due to macroeconomic stability of recent years and heightened interest from investors, Peru has experienced deepening capital markets which have increased financing options for private infrastructure projects. More institutional investors are active in secondary markets, increasing liquidity. In addition, development of tools to hedge interest rates and exchange rates offers private investors more options to manage financial risk.

Uruguay has benefitted from prudent fiscal management, and its public debt burden should continue to decline gradually. In Guatemala, strong interest from Chinese, Colombian, Mexican, and Canadian investors has increased financing options for private investment in infrastructure.

Improperly targeted subsidies could limit investment

Subsidies to electricity users continue to be relatively more focused than water subsidies across the region. In at least ten of the countries examined for this study, water providers operate under subsidy schemes that posed a risk to financial sustainability, limiting investment in the sector and acting as a deterrent to private investment. Exceptions include Chile and Peru, which only subsidise minimal consumption, and Trinidad & Tobago, which does not offer water subsidies.

Both Argentina and Brazil experienced a decline in their scores on this category. Argentina's government payment risk has increased as the country's primary surplus has disappeared and new laws have loosened foreign reserve requirements at the central bank to facilitate the government's access to foreign currency held at the bank. The Brazilian Development Bank's role in infrastructure financing has the potential to reduce market discipline when the bank is the primary lender. Interest rate subsidies at the bank could limit the long-term development of corporate and project financing debt markets in the country.

Sub-national adjustment

Rank			Score	
2012	change		2012	change
=1	-	Brazil	75.0	-
=1	(+1)	Mexico	75.0	(+25.0)
=3	(-1)	Chile	50.0	-
=3	(-1)	Colombia	50.0	-
=3	(-1)	Peru	50.0	-
=6	(-4)	Argentina	25.0	(-25.0)
=6	(+1)	Dominican Rep.	25.0	-
=6	(+1)	Ecuador	25.0	-
=6	(+8)	El Salvador	25.0	(+25.0)
=6	(+1)	Guatemala	25.0	-
=6	(+8)	Honduras	25.0	(+25.0)
=6	(+1)	Jamaica	25.0	-
=6	(+1)	Paraguay	25.0	-
=6	(+1)	Trin. & Tobago	25.0	-
=6	(+1)	Uruguay	25.0	-
=16	(-2)	Costa Rica	0.0	-
=16	(-2)	Nicaragua	0.0	-
=16	(-2)	Panama	0.0	-
=16	(-2)	Venezuela	0.0	-

Successful sub-national programmes require financial and technical backing from national governments

While Mexico has strengthened sub-national PPP programmes, in Argentina these continued to rely on the cash-strapped national government for funding. Legal changes, capacity building, and evolving funding mechanisms all contributed to Mexico's higher score this year, but sub-national PPPs still face challenges of limited financial resources at the municipal level and the need for further capacity building and greater transparency. Provinces in Argentina have enjoyed some autonomy, but the federal government has also vetoed some PPP schemes, while failing to provide a facilitating legal framework. In addition, a lack of macroeconomic stability, coupled with a sometimes contentious relationship between national and provincial governments has further limited the development of sub-national PPPs, pushing Argentina's score down. Provinces also face shrinking revenue as a result of economic factors, increasing their reliance on federal government

transfers to maintain fiscal stability.

In 2012 several states and municipalities have reactivated water and sanitation concessions in Brazil, with a focus on integrated management of the systems—federal ministries assist sub-national governments in PPP development and fill a supervisory role in implementation. Colombia's new PPP law enhances a trend toward decentralisation of decision-making, while standardising PPP procedures across levels of government and concentrating expertise in the National Infrastructure Agency. In most cases, department and municipal officials lack the technical skills for independent project preparation. Regions and municipalities in Peru enjoy jurisdiction over most sub-national infrastructure, but so far have only developed water PPPs to date.

In both El Salvador and Honduras, changes to the institutional framework to facilitate sub-national concessions have boosted scores, although the new structures have not yet been put to use. However, government officials in regional neighbours Costa Rica and Nicaragua have commented that sub-national concessions may not be attractive to the private sector given their relatively small size. The majority of countries in this study lack experience with sub-national PPPs, although in most cases, such projects are legally feasible. ■

Country comments

This section spotlights the performance of individual countries in the index. For full, individual country profiles and indicator scores, please refer to the underlying index and “country profile” tab, available at www.eiu.com/lacinfrascope2013.

■ Argentina

Argentina has the “hardware” to implement PPPs, but it risks rusting in place after continuous government intervention has dissuaded investors.

PPP capacity in Argentina has atrophied as government policies have emphasised public instead of private investment in infrastructure. A well-defined legal and institutional framework for PPPs has been in place since the late 1980s and early 1990s, but has not been widely used for PPPs since the 2001-02 economic crisis. Political and social will for PPPs is low largely because of their perceived negative association with the privatisation and deregulation of the 1990s that preceded the economic crisis. Political interference in infrastructure projects has precipitated a deterioration of public capacity for PPP planning and regulatory oversight. Bidding processes are frequently uncompetitive and opaque, while courts have issued contradictory rulings in key areas. Argentina faces over 20 cases pending before the ICSID (International Centre for Settlement of Investment Disputes) as of September 2012, most

of which are related to freezes in service tariffs following the 2001 economic crisis.

Currency exchange and capital flow restrictions, limits on profitability, continuing price and tariff controls, and import barriers have further dissuaded the private sector from infrastructure investment. Price controls have negated the ability to use contracts to set price and service levels for PPPs, and the government has demonstrated reduced respect for private contracts in cases where it deems national interest to be at stake. In addition, segments of the public have resisted price increases after a decade of price controls that have created serious market distortions.

Despite fiscal constraints that could make PPPs more attractive to the government to meet Argentina’s infrastructure needs, political leaders are only seriously considering government-funded projects. Water concessions have been awarded at a sub-national level, but their performance has been mixed. Transport concessions face tariff controls that have led to reduced service levels, despite the existence of subsidies designed to offset these. In the electricity sector, private participants have shied away from making large capital investments because of a negative perception of risk, preferring to take on the operation and maintenance of electricity generation facilities. Argentina’s scores have decreased across all indicators since 2010, signalling a difficult environment for PPPs and a high dependence on public-sector financing for infrastructure investment.

■ Brazil

Infrastructure requirements create a robust, yet challenging, PPP environment in Brazil. A fast-track programme will speed implementation, but could risk project quality.

Latin America's largest economy faces enormous infrastructure requirements, but technical capacity represents the main bottleneck to the growth of PPPs. Projects in the transport and water sectors are more politically viable, while PPPs in the electricity sector remain sensitive. However, oversight capability is relatively more developed for electricity PPPs than for those in the transport sector. Agencies within the Ministry of Transport oversee PPPs for different modes of transport (land, air, sea), but there is no independent regulator for the sector. A national regulator oversees the electricity sector. The water sector is managed at the municipal level, with concession activity increasing in 2012. The National Development Bank (BNDES) has augmented the government's technical capacity as a consultant on project preparation since 2007.

Brazil's role as host to upcoming world sporting events has increased pressure to deliver on infrastructure projects—but delays have persisted. A fast-track bidding programme has been implemented to overcome technical capacity-related bottlenecks in planning, preparation, and oversight, but instead of increasing the capacity in these areas, the programme may lead to reduced rigour of selection, planning, and implementation. The government intends to utilise this process for the main national development programme as well, raising concerns about the effects of reduced preparation and planning on project quality.

The legal framework remains unchanged in Brazil, while the investment climate has improved somewhat since 2010. Capital markets are deep and liquid, but BNDES plays a large role in financing PPPs. BNDES financing could increase value for money when complemented with private financing, but it could also reduce market discipline on projects when BNDES is the primary lender.

Like other countries in the region, Brazil has encouraged the development of renewable energy in the electricity sector with a specialised bidding programme for alternative energy contracts.

■ Chile

Chile continues to lead the region in readiness and capacity of PPP initiatives, but should improve human capital management to maintain its status as regional leader.

Chile leads Latin America and the Caribbean with a long track record of PPP experience and a robust legal framework that has permitted activity across sectors. The vast majority of electricity generation is in private hands, while nearly all water and sanitation services in urban areas have been transferred to the private sector since 2000. PPPs in transportation are also prevalent. Chile has led the region with an updated legal framework, and the 2010 Public Works Concession Law has succeeded in increasing private sector interest in participating in infrastructure projects. The law levelled the playing field for private participation, while establishing more objective criteria to reduce renegotiation rates and limiting the unintended transfer of commercial risk to the government.

The investment evaluation system is well-structured overall, but in recent years the decision-making process for some projects has become more politicised. Pre-investment PPP expenditures were exempted from social cost-benefit analysis in 2011 and 2012, although this has been corrected for 2013 onwards. Sector regulators could benefit from more independence from politically-appointed ministers. High rates of staff turnover in some areas of the public sector, as evidenced by the appointment of four energy ministers in two years, have taken a toll on public-sector PPP planning capacity, resulting in some project implementation delays while engineering and environmental studies are completed. Nonetheless, Chile enjoys a long history of political support for PPPs. Government action towards PPPs has generally been proactive and fostered their development. The

national PPP agency works closely with municipal governments to develop projects.

Financial market conditions are conducive to PPP financing. Bank financing has returned to projects via syndicated credit and medium-term loans. Tenders are transparent and efficient overall, but there are indications that the current electricity bidding mechanism has limited the entry of new players to the market, suggesting the need to better regulate distribution contracts, update rules regarding interconnections to the grid, and assert the independence of the dispatch centre. In the transport sector bid competition has been strong, with significant investments being made to the financing of road projects.

■ Colombia

Colombia's new law is a move in the right direction, but it must tackle high rates of renegotiation and its fiscal consequences.

A new PPP law, approved in January 2012, builds on Colombia's existing track record, encouraging further PPPs at national and sub-national levels. The law increases standardisation of the concession process, limits contract renegotiations, and sets more objective award criteria. The law should increase transport PPPs at the sub-national level by establishing a standardized set of procedures and increasing coordination between the National Infrastructure Agency and departmental and municipal governments. The law's approval demonstrates the continuity of political will in support of PPPs from one administration to the next.

Despite Colombia's growing experience with PPPs, there remain areas in which the country could improve its technical capacity, especially in terms of risk allocation. The previous administration renegotiated multiple PPPs, transferring payments to future governments and accumulating an implicit debt of deferred concession payments equivalent to 5% of GDP in 2010. The new PPP law should limit such risks in the future by limiting renegotiation, but it does not address all concerns.

A new National Infrastructure Agency was created in 2011 from the previous National Institute of Concessions (INCO) to centralise PPP responsibility for multiple sectors. Most of the new agency's personnel have been transferred from INCO, but they lack project planning experience. The Treasury has gained some expertise in evaluating contingent liabilities, which could help limit the state's financial risk from PPPs. In the electricity sector, private electricity generation companies make investment decisions based on price signals and sell energy to mostly state-owned distributors.

■ Costa Rica

Costa Rica enjoys a stable institutional framework, but progress will require the government to convince stakeholders of the benefits of PPPs, both inside and outside the government.

The transport sector has been and will continue to be the dominant sector for PPPs in Costa Rica. Law 7762/8643 limits PPPs in the electricity sector (as well as in telecom and health services, which are outside the scope of this study), prohibiting concessions, but allowing Build-Operate-Transfer (BOT) projects. Public opposition to privatisation in the water sector has made it difficult for the government to grant concessions in this sector. Successful PPPs have been developed in toll roads and airports, but even these projects have faced opposition and required changes along the way. The National Concession Commission (CNC) is the co-ordinating agency for concessions, charged with preparing, tendering, and supervising projects. Sector ministers and industry representatives are members of the CNC's board, while an executive secretariat controls daily operations. The CNC is responsible for managing concessions in Costa Rica, but the commission lacks sufficient resources, and is only one of many agencies that must approve PPPs. The multitude of agencies involved in the process makes it difficult for a single entity like the CNC to push the concessions agenda forward,

especially because the CNC's decisions lack binding force and other PPP modalities are outside the CNC's scope of operations.

Costa Rica is one of the few Latin American countries that has not restructured its electricity industry. The state-owned Costa Rican Electricity Institute (ICE) is vertically integrated and controls the vast majority of energy generation and significant portions of transmission and distribution of electricity. The private sector can only invest in small renewable energy projects that generate 50 MW or less, and total private generation cannot exceed 30% of country's generation capacity.

The law allows for sub-national PPPs, but so far, all activity has been at the national level. The bidding process for PPPs is fair and transparent, but the government could benefit from clearer guidelines for choosing winning bidders as well as improvements in the design of business models for PPP projects. Multiple avenues of appeal have kept regulations transparent and fair, but they have also made approvals of contracts with the public sector slow and litigious. The lack of step-in rights for creditors has increased risk for investors. With PPP experience, Costa Rica has improved risk allocation, but risk management is still an area for improvement. A substantial increase in PPP activity is only likely if Costa Rica achieves a broader political and social consensus that PPPs are a viable option for meeting the infrastructure deficit that the president has called attention to. Social mobilisation has stalled some projects and increased implementation risk.

■ Dominican Republic

The lack of a specific PPP-framework has limited widespread adoption, but the model is still evolving in specific sectors.

Despite the lack of a specific PPP law, the Dominican Republic has been active in transport PPPs, particularly in toll roads and airports. The public procurement law passed in 2006 (Law 340-06) governs concessions generally, but specific terms

are typically set via project-specific contracts. The arrangement has created unstable conditions for private participation. Sector ministries are allowed to grant concessions in their areas of competence and Law 340-06 designates each ministry's procurement office as the managing entity for its PPPs. In transport alone, at least five different agencies have the authority to plan and manage PPPs at a national level. The decentralisation of PPP experience has created pockets of success within sectors. In transport, toll roads and airport concessions have been successfully implemented, but seaports have faced difficulties consolidating support among different stakeholders. The requirement for Congressional approval of all concessions, including at the municipal level, has limited sub-national PPP activity.

As the government has accumulated experience in PPPs, the Dominican Republic's track record in risk allocation has evolved. Via successive toll road PPPs, the model contract for road concessions has developed to include minimum terms to standardise risk allocation in PPPs. However, a risk hangover from an energy crisis in 2003 has continued to limit investment in the energy sector. While there is political will in support of more efficient power generation projects, high subsidies from the national treasury and a lack of liquidity at the state holding company would require outsized risk premiums for the projects and keep wholesale electricity prices high. Nonetheless, renewable energy incentives established in 2007 (Law 57-07) have promoted the creation of the country's first two wind energy projects.

In general, PPP decisions have been politicised, a situation compounded by the requirement for congressional and presidential approval of all PPPs. The political nature of PPPs to date has undermined objective planning efforts and cast doubt on some public transportation projects in particular. The oversight capacity of the government needs to be strengthened to ensure successful project implementation. In recent years, alternative dispute resolution via national and international arbitration has developed into a credible alternative to the national court system and has increased

investor confidence.

PPPs have generated limited market competition for tenders, and most public investment and concession projects have been awarded via a bilateral negotiation process. In the past, hydroelectric projects have been awarded via direct negotiation, but the involvement of multilateral banks in projects has changed some norms. Nonetheless, influence via political contacts is as important if not more so than formal regulations. Concessions funded via project financing generally present a more transparent tender process and are open to all firms foreign and domestic. This trend should continue as multilateral lenders and the international capital markets have been the largest sources of financing for infrastructure projects.

■ Ecuador

Ecuador has stalled its PPP efforts in recent years, and recent moves forward are in the context of a highly politicised process.

The post-2008 Constitution era has seen a marked decrease in PPP activity compared to the period of economic liberalisation in the 1990s and early 2000s. Changes in laws and regulations since 2007-2008 have rolled back much of the PPP framework that had been in place since 1993. The current framework delegates responsibility to sector ministries. Although there is no central PPP authority after the State Modernisation Council (CONAM) was merged with the planning secretariat in 2009, the office of the president has fulfilled this role to some extent for PPPs that enjoy political favour. Renewable energy projects are among those favoured, with the electricity industry regulator (CONELEC) facilitating 15-year power purchase agreements and preferential energy dispatch for renewable energy projects up to 50 MW. Some government ministries have lobbied for a reengineering of the current system to recentralise PPP knowledge on best practices among agencies currently managing concessions, but any such action would likely need the support of the office of the president.

The 2008 Constitution and associated laws have limited or eliminated the role of the private sector in infrastructure and reduced the state's ability to partner with them. Control of strategic sectors is reserved for the state, including energy, transportation, and water, among others. The constitution prohibits international arbitration between the state and private entities, and Ecuador withdrew from ICSID in January 2010. PPPs or concessions can only be authorised in these strategic sectors in exceptional circumstances. The 2010 Production Code establishes that exceptional concessions can be made when the concession is in the public interest, when the State lacks the technical or financial resources to provide the good or service, or when existing public or mixed enterprises cannot meet immediate demand. These general criteria are further defined by the ministries that regulate strategic sectors. In practice, the office of the president has certified any exceptional cases which allow the government to pursue concessions, creating a highly centralised and politicised PPP selection process.

The Port of Manta, which was abandoned by the previous concessionaire in 2008 after disputes with the government, is again up for concession after several years under government management. The president has identified it as a priority for improving export competitiveness. It is unclear what procedures the port tender will follow. The re-concession of the Port of Manta will be a test of the government's willingness to allocate risk in a manner that can attract private investment at a reasonable cost.

■ El Salvador

El Salvador has made practical advances while legal changes are still in progress.

Although the country still lacks a PPP framework law, El Salvador has made advances in transport PPPs and boasts an electricity sector with high levels of private investment. Since 2009, the executive branch has undertaken efforts to reform the PPP system, but has had difficulty achieving the

necessary political agreements with the legislative branch. A high priority port project at La Union has moved slowly toward becoming a PPP. Since passing a law authorizing the concession of the port in 2011, the government has missed previous tender deadlines and now plans to complete the concession process in late 2013.

In January 2012 the President presented the country's first PPP bill to the Legislative Assembly. The proposed law delimits the institutional framework, the supervisory body, the rights and the obligations of the private participants and the termination of contracts. Congress has not yet passed the bill as of August 2012, and delay remains a risk as some ruling party leaders have not embraced the pro-private investment vision of the president. Under the new bill, sector ministries would be the contracting entities in charge of project preparation and contract management. The national investment promotion agency, PROESA (Agencia de Promoción de Exportaciones e Inversiones de El Salvador), would promote the project and manage the bidding process, while sector regulators or the PPP regulator (OFAPP, Organismo Fiscalizador de Asocios Público Privados) would oversee contract enforcement and compliance issues. The proposed scheme would exchange the current system that fragments PPP expertise across sectors, but combines implementation and supervisory authority for one that centralizes tenders and oversight while decoupling implementation from oversight in many cases.

The electricity sector has received significant private investment since vertical disintegration in 1996. A majority of energy generation and all distribution is privatised. Distribution companies must sign long-term contracts (ten years or more) with generation companies. Project selection remains an area for improvement. A history of political gridlock has resulted in PPPs selection based more on political factors to achieve consensus rather than more objective criteria. Government officials have slowly increased their capacity to manage PPPs, and this process could be sped up if the new PPP bill becomes law. PPPs

in road transport could be limited by the lack of an existing toll road system.

■ Guatemala

New PPP framework legislation has been in place for more than two years, but Guatemala still needs to show proof of concept in project implementation.

Guatemala has demonstrated incremental progress in PPPs since 2010. The single active highway concession (Palin-Escuintla) and numerous energy generation projects with long-term power purchase agreements demonstrate a low to moderate level of experience with PPPs. A legal framework, updated in 2010, has the potential to increase PPP activity, but the PPP law's implementation has taken more than two years and is still in progress. The government has spent this time in international consultations, rule-writing, and setting up the national PPP council. In September 2012, an executive director was selected to head the PPP agency.

Law 2862 is designed to facilitate PPPs in the transport and electricity sectors, and does not apply to PPPs in the water, education, or health sectors. All PPP contracts still require congressional approval, but the law's creation of a PPP agency and council should reduce the risk of introducing political conditions into the approval process. In addition, new requirements will improve transparency in accounting for the state's financial commitments to PPPs. Tenders have an uneven history of meeting transparency requirements, so the PPP law lays out a detailed process for preparing and running PPP tenders. As the first projects work through the new system, the law's success (or lack thereof) at injecting more transparency into the process will be apparent. Project-specific evaluation commissions will be convened to evaluate PPPs' technical and economic merits.

The PPP agency (ANADIE, Agencia Nacional para Alianzas para el Desarrollo de Infraestructura Económica) will coordinate PPP development, with an early focus on the transport sector.

Sector ministries are responsible for identifying PPPs and coordinate with ANADIE through the project's planning and implementation phases, sharing oversight responsibility. Isolated pockets of PPP expertise exist within the government, particularly at the Ministry of Communications, Infrastructure and Housing and in the Project Planning Department at the National Electricity Commission. ANADIE will likely rely on outside expertise for its first set of PPPs, but officials have already demonstrated a willingness to look beyond Guatemala for expertise when necessary.

Guatemala has created strategic plans to guide investment in the transport and electricity generation sectors. The plans identify specific projects, and could serve as a project pipeline for PPPs once the legal framework is fully implemented. More than two years after the passage of the PPP law, the agency that is supposed to oversee the new process (ANADIE) has yet to be formed and most observers agree that the new agency will not be operational until 2013. The government's competitiveness planners would like to see infrastructure investment increase as a proportion of GDP. Such an increase could be achievable if the government completes implementation of the PPP law.

■ Honduras

Honduras' new law fosters PPPs, but political risk raises concerns.

In 2010, the Honduran government passed the PPP Promotion Law, codifying agency responsibilities, establishing budget limits and changing the PPP selection criteria. As its name suggests the law should promote further development of PPPs in the country, but, as written, the law lacks some details that would ensure a well-functioning PPP framework. In some cases, the law appears to confuse PPP schemes with traditional public works investment and it is not clear on the allocation of risks between the public and private sectors. Despite these limitations, the law has updated the institutional framework for PPPs.

The PPP Promotion Law establishes a PPP agency (COALIANZA, Comisión para la Promoción de la Alianza Público-Privada) that works with sector ministries and the private sector to identify and develop PPPs. COALIANZA performs a cost-benefit analysis for potential projects, and the law sets specific tender requirements designed to increase transparency, including notification requirements for new tenders and public proceedings for bid evaluations. COALIANZA is the signatory authority on PPP contracts. In addition, a regulatory agency (SAPP, Superintendencia de Alianza Público-Privada) is charged with overseeing PPP contract compliance. SAPP should serve as a check to COALIANZA's power, but both agencies are relatively untested and their effectiveness will depend on their expertise, resources, and political support.

The government has moved quickly to test its new PPP framework in the transport sector via the Puerto Cortes modernisation project and the North-South transport corridor (Corredor Logístico). In the electricity sector, the state-owned electricity company (ENEE, Empresa Nacional de Energía Eléctrica) has years of experience buying from private energy generation facilities, which produce more than 60% of the country's electricity. Increasing PPP activity in the sector will depend on ENEE's ability to effectively manage its finances. Government transfers and energy supplier credit have been used as financing tools in the past. Recently, some subsidies have been removed and tariffs normalised, but further attempts to increase efficiency and sustainability have stalled. Positive signs include continuing private sector interest in electricity generation as evidenced by a recent auction to supply 250 MW in which 40 private generation companies participated. As in other countries in the region, renewable energy projects are a political priority and enjoy support for PPPs.

Overall, political will is supportive of PPPs and advances are underway in two large transport projects, but the future of PPPs in Honduras will depend on the successful implementation of these projects. Additionally, threats of expropriation of at least two sugar producers and refiners have raised

concerns among the business community about the government's commitment to promoting private investment.

■ Jamaica

Jamaica drafts a new law, but decisions raise issues of transparency. Improvement will result from institutional strengthening and controlling the transfer of risk to the state.

A new PPP legal framework passed the Jamaican Cabinet in September 2012. The framework provides an overview of the proposed PPP process and addresses risk allocation issues. In May 2012, the government announced the creation of a PPP Secretariat within the Development Bank of Jamaica. The unit will coordinate with sector ministries, like the Ministry of Transport and Public Works, in their project identification efforts and screen the identified projects. The PPP unit will rank the proposed projects and pass them on to the Cabinet for approval. The National Investment Bank handles the bidding process for concessions, while the Fair Trade Commission and the Corruption Prevention Commission work to guarantee their transparency. The PPP Secretariat has received multilateral technical assistance, as has the transport sector, to improve PPP implementation. Meanwhile, bilateral technical assistance has sought to improve regulatory capabilities. The government's budgetary constraints have contributed to agreement between the two main political parties that PPPs present a viable model for infrastructure development.

Establishing institutional strength remains a key challenge, especially given a history of weak project evaluation and expensive projects. Negotiations with winners after the bidding process has completed reduce the discipline of the contract award process. Lack of competitive bidding has also reduced award discipline in some cases. After obtaining Chinese loans, the government awarded major road projects under the Jamaica Development Infrastructure Programme via a sole source procurement process to a state-owned

Chinese firm, China Harbour Engineering Company (CHEC). Separately, the risk of administrative expropriation is also present, as highlighted by the case of the privately held National Transport Co-operative Society (NTCS) and its nearly fifteen-year dispute with the government. Numerous overturned decisions and appeals in venues ranging from arbitration, to the Supreme Court, and even the Privy Council characterise the long-running dispute.

Transport PPPs have benefitted from improved supervisory capabilities in entities separate from, but linked to the Ministry of Transport and Public Works. For example, the Toll Road Authority has oversight responsibility for quality of service, users' rights, and enforcing agreed-upon tolls. Similar regulators exist for airports and seaports and act as a counterbalance to the Ministry of Transport and Public Works in terms of regulation and administration of PPPs. In the electricity sector, the high cost of new generation projects has raised doubts about the openness and fairness of the current system. Unlike many other countries in the region, public funds instead of private capital have been leveraged for renewable energy projects. The water sector has been awaiting legal reform for several years to clear up overlapping and confusing regulatory, policy, planning, and operational responsibilities.

■ Mexico

Mexico makes improvements, but issues of transparency and a closed electricity sector present challenges to greater PPP development.

The Mexican Congress approved a new PPP law in January 2012, which came into effect by late 2012. The new law simplifies the PPP framework by defining and enabling a new type of long-term contract for private development of infrastructure services. The law will improve visibility of the state's commercial risk in PPPs, facilitate necessary contract adjustments, reinforce creditors' rights, and require reasonable allocation of project risks. Additionally, the law will reduce judicial ambiguity regarding right of way for transport projects and

applies at national and sub-national levels. The law does not consolidate Mexico's fragmented institutional framework. Sector ministries maintain much of their authority over relevant PPPs without any significant independent oversight on contract compliance.

Transport PPPs, including inter-state roads, airports, seaports, and railroads have been developed extensively at a national level, and the new law addresses many of the deficiencies present in the previous system. The law reinforces PPP planning, requiring environmental and social impact studies, cost-benefit and value-for-money analyses, and financial feasibility studies. Project selection has demonstrated a subjective component that involves negotiation with state and local stakeholders, but the federal government has recently initiated a strategic review with the goal of more closely connecting transport infrastructure with economic competitiveness goals. Water and sanitation and transport PPPs have occurred at a sub-national level, and at least 24 of Mexico's 31 states and 1 federal district have laws that allow PPPs. Specifically, wind energy projects have been implemented in Chiapas and roadway PPPs in Guanajuato, and sub-national PPP activity extends beyond sectors covered by the Infrascope, including hospitals and even museums.

However, the new law does not address the energy sector. Mexico's electricity industry has not been restructured in the same way as that of most Latin American countries. It remains essentially a state-operated and vertically-integrated industry. The Federal Electricity Commission (CFE) controls all energy purchases and PPP activity in the sector has been limited to a few power purchase agreements with independent energy producers. Constitutional limitations and internal resistance have limited liberalisation of the electricity sector. However, the newly elected government has expressed its intention to increase private investment in energy generation, an area in which the previous government faced significant political resistance.

Bidding and award transparency remain important challenges in PPP implementation. Road bidding in particular would benefit from increased

transparency that would improve the efficiency of resource allocation. The government's goal is to award consistent PPP contracts that increase access to a modern road network at competitive rates, increasing Mexico's competitiveness. Large projects have been awarded via direct negotiation in cases where there has only been one bidder. The PPP law requires competitive bidding processes, but provides exceptions for projects that demand high levels of technical expertise or other resources where competition is likely to be limited. The new law does not require competitive rebidding for contract modifications. Public works expertise has continued to focus on project preparation instead of supervision of existing PPP contracts.

■ Nicaragua

Nicaragua lacks a unified PPP framework. Progress will require the long-term planning approach that has taken hold in the energy sector to spread to other sectors as well.

PPPs are governed by sector-specific laws that have created a myriad of regulations that vary across sectors. The electricity sector is by far the most sophisticated in terms of private-sector activity. The lack of PPP activity in other sectors, despite the obvious need for infrastructure points to the lack of a regulatory framework in the country. The Ministry of Transport and Infrastructure is responsible for awarding and overseeing road concessions, while the Nicaraguan Institute of Aqueducts and Sewers has responsibility for the water sector. No road or water concessions have been implemented. Specific project proposals, such as the Monkey Point Port and the tourist Coastline Highway, have received media attention, but have faced delays. Moving these projects forward, and promoting others like them would require an update to the current regulatory environment for PPPs in the transport sector.

An energy crisis in 2006 mobilised action in the electricity sector, creating a model for private-sector investment and adding a focus on long-term development of energy resources. Independent

electricity producers must sell to privatised electricity distributors or large consumers, enhancing market discipline based on prevailing costs and tariffs for these investments. The Ministry of Energy and Mines was created in 2007 to supervise operations in the sector.

Most concessions have been awarded via direct negotiation between the contracting ministry and the concessionaire. Tenders have not been widely used, and the current legal framework lacks guidelines for their implementation. In the case of renewable energy concessions, private partners have approached the government with offers which are then evaluated and negotiated. The national investment promotion agency (ProNicaragua) has played the role of matchmaker and advisor to the contracting ministry.

Approved by the National Assembly in July 2012, Law 800 outlines the Nicaragua Grand Interoceanic Canal and creates and concedes route construction and operations to a Canal Company with 51% government ownership and 49% available for purchase by investors. Investors' purchase of shares in the Canal Company would finance the project. The law provides few details on project financing, risk evaluation, and contract design, in addition to the lack of a regulatory framework for concessions in the country. The law authorises the Nicaragua Grand Interoceanic Canal Authority to define these details and supervise the project.

■ Panama

PPP opportunities exist in Panama, but the regulatory and institutional frameworks are fragmented and incomplete.

Progress on PPPs has been uneven in Panama since 2010, with some initiatives to boost PPPs coming from the government, but failing due to opposition. The government sent a new PPP law to Congress in 2011, but it was withdrawn in the face of opposition from public-sector workers who saw greater private-sector participation as a threat to their job security. The PPP environment is characterised by myriad legislation that varies sector by sector, with little

concentration of decision-making authority or expertise.

PPPs in the water sector are still on hold, as the current government has not determined the legal status of private participation in the water and sanitation sector. In contrast, the cabinet approved a major concession for a container port in Colon, demonstrating the government's willingness to involve the private sector in infrastructure investment. However, seaports operate under a different legal framework than other sectors, and PPPs have proceeded via individual contract laws passed through Congress, following the landlord model of port regulation.

Three highway projects have been poorly prepared as concessions, and the government established the National Road Company (ENA, Empresa Nacional de Autopistas) in 2010 to revive two of them. This state-owned company can undertake road concessions or buy shares of other companies that do so. Its debt is off the government balance sheet, allowing it to operate as if it were a private company. Use of this model raises the risk of reduced fiscal discipline and could crowd out private participation as the ENA can obtain financing from the government with an implicit fiscal guarantee. Additionally, the ENA can use future toll revenues as collateral for financing from the private sector. The ENA may increase planning capabilities in the sector, but at the cost of private sector participation.

Opportunities for new PPPs in the electricity sector remain limited by market conditions. A change in regulation in 2010 directed the state grid company ETESA (Empresa de Transmisión Eléctrica S.A.) to concentrate the purchase of energy from all power generating companies and then transfer it to individual energy distribution firms. The change was designed to counter the market power presented by the highly concentrated electricity generation market. Further regulatory changes are under consideration which would establish a multi-tariff system and segment the market for long-term contracts according to the type of technology used to generate electricity. Such a system could distort investment choices by private participants.

■ Paraguay

A boost in political will in support of PPPs could promote new projects.

Paraguay's current PPP legal framework lacks a clear hierarchy between the different laws and as a result could vary significantly from one concession to another. Sector ministries are responsible for preliminary studies, evaluating proposals, and selecting and executing the contracting process via a required public bidding process. Under the current legislation, concession length is capped at 30 years and risk allocation is ambiguous. All PPPs must be approved as individual laws. This process has contributed to the low level of PPP activity in Paraguay, with just one of three projects presented approved under the previous government.

In November 2011 the government formalised a relationship with the Multilateral Investment Fund to design a new PPP legal framework for the transport sector. The framework would enable the government to act on previous plans for transport infrastructure concessions to develop roads, airports, and a hydro-way on the Paraguay-Parana River. Congress has approved the National Investment System, a new division within the finance ministry that will undertake cost-benefit analyses of both public investments and PPPs with assistance from outside technical advisors at the outset.

Paraguay has little experience with concession projects. Law 1614 prioritises municipal governments as service providers in the water sector. Strong public opposition has prevented any privatisations in the sector. A single state-owned company (ANDE, Administración Nacional de Electricidad) controls the entire electricity industry as a vertically integrated unit. The private sector does not currently participate in electricity provision, but a new regulatory framework before Congress could open up the industry to private investment. Reform efforts are uncertain, however, and could face opposition similar to that in the water sector.

■ Peru

Peru continues to evolve, but social resistance poses a new challenge.

Peru's 1996 public works concession law continues to form the basis of a well-developed PPP framework. Additions in 2007 and 2008 streamlined regulations for investment funds flowing through the government system and allowed for co-financed concessions. The most recent modification, approved in July 2011, allows the private sector to submit proposals to the government for co-financed projects. All concession projects with some level of government guarantee or participation are subjected to a value-for-money analysis that considers all service delivery options. Weak regulation of contract changes has increased the possibility of frequent renegotiations and opportunism by concessionaires. The lack of a lifecycle approach to contract management has created ambiguities regarding responsibility in cases of problems or failures. Overall, the system could benefit from increased coordination and independent oversight of contracts.

The current government has continued its predecessors' support for PPPs, proposing a US\$10 billion program that includes 26 projects in transport infrastructure and energy. In the electricity sector, private investment in generation, transmission, and distribution has been allowed since reforms in 1992. Since 2008, investments in non-traditional renewable energy sources have received incentives, including higher prices for this type of energy. Bidding procedures for long-term contracts and a short-term marginal cost model have facilitated a level playing field for power plants competing in the market. In addition, the sector has benefitted from an independent regulator that has played the role of arbitrator in price setting and service quality determination.

However, social conflicts and environmental protests are creating political difficulties in the development of key projects for the country. Dealing with environmental and social issues during project preparation has become a crucial

factor for economic and political feasibility. Civil society has mobilised to protest the social and environmental impacts of some projects, signalling to the government that it will have to invest increased time and resources in environmental and social impact assessments while keeping the process transparent and open to public participation. This new reality contrasts with the government's limited capacity for planning and technical studies. The new Law 29.785 requires consultation with indigenous populations prior to project implementation, which will fall under the responsibilities of the national agency for private investment (Proinversion).

■ Trinidad & Tobago

Trinidad & Tobago is working on a stronger framework that would streamline the PPP process.

No legal framework for concessions currently exists in Trinidad & Tobago, but recent developments point to advances. According to the finance minister, a PPP unit will be created in the Ministry of Finance and will co-ordinate with the Ministry of Trade and Industry. Meanwhile, the Multilateral Investment Fund has provided grant financing to develop the technical, managerial, and institutional capacity to design and manage PPPs within key government ministries and agencies.

Despite the current lack of a legal framework for PPPs, there are no explicit restrictions. The few existing PPPs operate under terms and conditions established in the individual contracts. The existing scheme is cumbersome because the government must establish a state-owned special purpose company in each sector to contract services to private partners. Investment decisions are currently made at the cabinet level, but this office lacks the resources and expertise to subject projects to rigorous analyses. The process is usually outsourced to external consultants. Decisions to move forward with PPPs are usually subject to considerations of their effect on employment, and the government must generally create contingency plans or new

employment opportunities to counteract any changes. Bidding transparency has been hindered by the lack of disclosure requirements for the special purpose companies that contract services for PPPs.

In the electricity sector, private participation takes the form of power purchasing agreements with state-owned utility (T&TEC, Trinidad and Tobago Electricity Commission). To date, there are only two independent power generation companies and one is 51% state owned. The government sets energy prices at all levels. In the transport sector, public entities play a dual role as service providers and regulators. The state continues to be the key operator and investor in the transport and water sectors, with little experience with concessions in either sector. Nonetheless, political will in support of PPPs appears to have coalesced in recent years, with government officials voicing support private investment in infrastructure.

■ Uruguay

Improvements to Uruguay's concession law are matched by political support for private investment in the transport sector.

A new PPP law that entered into effect in August 2011 established a new legal framework for PPPs that operates as an alternative to concession schemes defined in previous legislation. The new framework applies to transport infrastructure and alternative energy projects, but not to the water sector. Good practices like value-for-money and cost benefit analyses, appropriate risk allocation, and assessment of fiscal risk are part of the new law.

The PPP law clearly establishes the process for identifying and planning projects. The Office of Planning and Budget evaluates PPPs' financial feasibility, while a new PPP unit within the Ministry of Economy and Finance assesses fiscal risk and performs cost-benefit and value-for-money analyses to determine a project's suitability. The pre-existing institutional framework in the transport sector, in the form of the Port Authority of Montevideo and Road Corporation of Uruguay

(CVU, Corporación Vial del Uruguay), combines the roles of service provider and regulator. However, in the electricity sector an independent regulator oversees operations of the state electricity company UTE and private electricity generation companies. Although experience in centrally planning and implementing PPPs as the new law proposes has been limited, Uruguay's institutions are high quality and are increasing their focus on technical capacity with support from the government and multilateral institutions.

Political will for PPPs in transport infrastructure is high, but has not been matched in water or electricity sectors. PPPs are forbidden in water and sanitation. Investment in non-traditional renewable energy generation has been allowed since 2007. The state electricity company (UTE, Usinas y Terminales Eléctricas) is the only buyer for such projects, and private generators are not allowed to participate in traditional generation methods. Private generation represents less than 10% of energy generated in Uruguay at present. The limited availability of renewable energy resources in Uruguay will limit private sector participation in energy generation.

policies and the perceived lack of a stable regulatory framework. The classification of most infrastructure sectors as strategic has effectively halted all concession activity.

Infrastructure investment is now in the hands of the state, with most authority centralised in the federal government. The process surrounding investment decisions is opaque and off-balance-sheet mechanisms are used for financing. The central government's overriding power has meant that the pre-existing concession framework is not applied in practice. The Concessions Committee has lost power and independence as the government has centralised the procedures.

The overall investment climate has suffered as contractual security has been eroded by central government expropriations. Continued tightening of the exchange rate control system is creating serious difficulties for repatriation of dividends, which require specific authorisation from the government. Any participation of entities other than the Venezuelan government in infrastructure investment has been the result of direct negotiations and bilateral agreements with countries such as China. ■

■ Venezuela

The retreat from private participation in infrastructure continues.

In both the water and transport sectors, the Venezuelan government has pulled back from incorporating private capital since the 2007 presidential election. Private participation in the water sector was later ruled out. After a severe energy crisis in 2007, the government declared the electricity industry as a strategic sector and the vertically-disintegrated system established in 2001 was dismantled. A state firm (CORPOELEC, Empresa Eléctrica Socialista) was established as a holding company for nationalised utilities. The legal framework still allows for PPPs in the sector, but there has been no activity due to a general deterioration in the investment climate resulting from uncertainty regarding direction of government

Appendix 1: Methodology, sources and indicators

Scoring criteria

The Infrascopes index comprises 19 indicators, of which 15 are qualitative and four quantitative. Data for the quantitative indicators are drawn from the Economist Intelligence Unit's Risk Briefing service and the World Bank. Gaps in the quantitative data have been filled by estimates.

The qualitative data have been drawn from a range of primary sources (legal texts, government web sites, press reports and interviews), secondary reports and data sources adjusted by the Economist Intelligence Unit. The main sources used in the index are the Economist Intelligence Unit, the World Bank, Transparency International and the World Economic Forum.

The categories and their associated indicators are as follows:

1. Legal and regulatory framework (weighted 25%)

- 1.1 Consistency and quality of PPP regulations
- 1.2 Effective PPP selection and decision-making
- 1.3 Fairness/openness of bids, contract changes
- 1.4 Dispute-resolution mechanisms

2. Institutional framework (weighted 20%)

- 2.1 Quality of institutional design
- 2.2 PPP contract, hold-up and expropriation risk

3. Operational maturity (weighted 15%)

- 3.1 Public capacity to plan and oversee PPPs
- 3.2 Methods and criteria for awarding projects
- 3.3 Regulators' risk-allocation record
- 3.4 Experience in transport and water concessions
- 3.5 Quality of transport and water concessions

4. Investment climate (weighted 15%)

- 4.1 Political distortion
- 4.2 Business environment
- 4.3 Political will (replaces the 2009 indicator "Social attitudes towards privatisation")

5. Financial facilities (weighted 15%)

- 5.1 Government payment risk
- 5.2 Capital market: private infrastructure finance
- 5.3 Marketable debt
- 5.4 Government support for low-income users

6. Sub-national adjustment factor (weighted 10%)

- 6.1 Sub-national adjustment

Methodology

The methodology for this benchmarking study was created by the Economist Intelligence Unit research team in consultation with the Multilateral Investment Fund, regional sector experts at the Inter-American Development Bank and the World Bank, and a wider group of sector stakeholders. The original indicator list and research focus was conceptualised at a workshop attended by international and regional sector experts and practitioners in late December 2008. Final index design was also influenced by previous frameworks developed by the Economist Intelligence Unit, the World Economic Forum and the United Nations Development Programme. This indicator list was again revised in early 2010 after extensive peer review, with an eye to maintaining consistency across years as much as possible, while increasing index rigour, relevance and global applicability. Changing information availability and insights gathered over the course of the series has resulted in changes to the sources of information by which several indicators have been calculated, as outlined in the below section on detailed indicator definitions.

The Economist Intelligence Unit research team gathered data for the index from the following sources:

- Interviews and/or questionnaires from sector experts, consultants and government officials
- Legal and regulatory texts
- Economist Intelligence Unit country risk ratings and country reports
- Scholarly studies
- Websites of government authorities
- Local and international news media reports
- Inter-American Development Bank country strategies and Public Policy Management and Transparency Network documents
- The World Bank's Private Participation in Infrastructure database
- The World Bank's Multilateral Investment Guarantee Agency project database
- Transparency International

- The Economic Commission for Latin America and the Caribbean
- The Latin American Energy Organization (OLADE)
- The World Resources Institute

Qualitative scores were assigned to each country for each indicator based on an assessment of relevant information from three main sources: legal and regulatory texts; interviews and questionnaires; and infrastructure rankings, such as the World Economic Forum's Infrastructure Private Investment Attractiveness Index (IPAI), which covers 11 Latin American and Caribbean economies included in this study. Secondary reports were also referenced on a country-specific basis. For the financial facilities category, a number of sources were considered, including the Economist Intelligence Unit's sovereign debt risk ratings, marketable debt risk ratings, and Country Finance and Country Commerce reports.

Interview and questionnaire participants

Owing to the sensitive nature of the content of this report, we will not disclose the names of individual participants. Over 40 in-depth telephone interviews were conducted with policymakers and country infrastructure experts from multilateral, consulting institutions and the private sector.

Research team

- Manisha Mirchandani and Vanesa Sanchez of the Custom Research division of the Economist Intelligence Unit were project managers, with support from Paula Cerutti and Romina Bandura.
- Dr Eduardo Bitrán is a professor at the Adolfo Ibañez University in Chile. He was joint research manager for this study and can be reached at eduardo.bitran@vtr.net
- Dr Marcelo Villena is an associate professor of Economics at the Adolfo Ibañez University in Chile. He was joint research manager for this study and can be reached at marcelo.villena@uai.cl

- David Bloomgarden is a project specialist at the Multilateral Investment Fund. He can be reached at davidb@iadb.org
- Dennis Blumenfeld is a consultant at the Multilateral Investment Fund. He can be reached at dennisb@iadb.org
- William Shallcross, the principal of F1 Research, built the Excel index. He can be reached at will@f1research.com

Concept definitions

In this study, PPP refers specifically to projects that involve a long-term contract between a public sector body and a private sector entity for the design, construction (or upgrading), operation and maintenance of public infrastructure. Finance is usually provided by, and significant construction, operation and maintenance risks are transferred to, the private sector, which also bears either availability or demand risk. However, the public sector remains responsible for policy oversight and regulation; and the infrastructure generally reverts to public sector control at the end of the contract term.

Financial or economic equilibrium: an equation that relates costs, revenue and return on investment for private sector participants. The equilibrium principle is specified in project contracts and makes important assumptions about demand levels, proper service levels, a project's financial stability (including transfer payments to the government) and project investment costs.

Collusion risk: the risk that private sector bidders or operators will create agreements among themselves that do not benefit the sustainability of a project or the government-financing portion.

Hold-up risk: the risk that private sector actors will lengthen arbitration processes in order to skew outcomes in their favour.

Acts of authority: unilateral actions by the government to change the economic specifications and terms of a contract.

Equity arbitration: a more informal arbitration regime where parties attempt to resolve disputes based on fairness and equity considerations, rather than using a strict application of the law.

Value for money analysis: an analysis that compares the benefits of contracting infrastructure projects through PPP with the benefits of traditional public sector procurement and investment.

Economic criteria: criteria for selecting PPP projects based on economic factors, such as the net present value of a project's revenue, the amount of subsidies requested by bidders or payments offered, among others.

Technical criteria: criteria for selecting PPP projects based on engineering, architectural design and technological aspects.

Public comparator: a method of evaluating PPP projects where the costs of contracting infrastructure projects through full public provision and financing are used as a benchmark to assess the value for money benefits offered by PPP alternatives.

Calculating the index

Indicator scores are normalised and then aggregated across categories to enable a comparison of broader concepts across countries. Normalisation rebases the raw indicator data to a common unit so that it can be aggregated.

The three indicators of quantitative data where a higher value indicates greater experience with concessions, a better business climate or better political environment have been normalised on the basis of:

$$x = (x - \text{Min}(x)) / (\text{Max}(x) - \text{Min}(x))$$

where $\text{Min}(x)$ and $\text{Max}(x)$ are, respectively, the lowest and highest values in the 19 countries for any given indicator. The normalised value is then transformed from a 0-1 value to a 0-100 score to make it directly comparable with other indicators. This effectively means that the country with the

highest raw data value will score 100, while the lowest will score 0.

For the two quantitative indicators where a high value indicates low performance—public opinion against using the private sector to develop the economy and distress and cancellations of concession projects—the normalisation function takes the form of:

$$x = (x - \text{Max}(x)) / (\text{Max}(x) - \text{Min}(x))$$

where $\text{Min}(x)$ and $\text{Max}(x)$ are, respectively, the lowest and highest values in the 19 countries for any given indicator. The normalised value is then transformed into a positive number on a scale of 0-100 to make it directly comparable with other indicators.

Modelling and weighting the indicators and categories in the index results in scores of 0-100 for each country, where 100 represents the highest quality and performance, and 0 the lowest. The 19 countries assessed can then be ranked according to these indices.

Qualitative data

All qualitative indicators have been scored on an integer scale. This scale ranges from 0-4 or 0-3; scores are assigned by the research managers and the Economist Intelligence Unit's team of country analysts according to the scoring criteria. The integer scores are then transformed to a 0-100 score to make them comparable with the quantitative indicators in the index.

Weighting the index

At the conclusion of the concession readiness research exercise, the Economist Intelligence Unit selected a series of default weightings deemed appropriate for the overall index calculation. These weightings are not meant to represent a final judgment on relative indicator importance. These may be changed by users at will.

Detailed indicator definitions

Legal and regulatory framework

(1.1) Consistency and quality of PPP regulations:

"How consistent are PPP laws and regulations for national-level PPP projects? Do regulations establish clear requirements and oversight mechanisms for project implementation (project preparation, bidding, contract awards, construction and operation)? Must risk be allocated to different parties according to ability to manage them? Is there a clear system for compensating the private sector for acts of authority that change sector-specific economic conditions not foreseen during bidding?" Also considers if regulations avoid open-ended compensation rights for changes in financial equilibrium so that the state only assumes explicitly written commercial contractual contingent liabilities.

- Scoring: 0=The legal framework is so cumbersome or restrictive that in practice national-level concessions are extremely difficult to implement; 1=The legal framework allows national-level concessions, but it is ill defined and risk allocation and compensation is unclear and inefficient; 2=The legal framework allows national-level concessions and also establishes general, open-ended oversight, risk-allocation and compensation rules; 3=The legal framework is generally good and coherent, addressing risk-allocation issues while leaving some ambiguity with regard to compensation schemes and project implementation; 4=The legal framework is comprehensive and consistent across sectors and layers of government, addresses risk-allocation and compensation issues according to strict economic principles and establishes sophisticated and consistent oversight of project implementation

(1.2) Effective PPP selection and decision-making: “Do regulations establish efficient planning frameworks and proper accounting of contingent liabilities? Have regulators determined appropriate project planning and cost-benefit analysis techniques to ensure that a PPP is the optimal project-financing and service-provision option? Does the Budget Office systematically measure contingent contractual liabilities and account for delayed investment payments in a way consistent with public investment accounting?”

- Scoring: 0=Decision-making processes are not defined—they are erratic and subject to change, without accounting for liabilities; 1=Decision-making processes are defined, but are only occasionally followed, and accounting for liabilities is not well established; 2=Decision-making processes are defined and upheld, but accounting practices are not adequate; 3=Proper decision-making is both defined and used for PPP project decisions, although accounting for liabilities should be improved for more consistent decisions; 4=PPP project selection is a consistent result of various efficiency, cost-benefit and social-evaluation considerations required by law and accompanied by rigorous accounting practices

(1.3) Fairness/Openness of bids and contract changes: “Do regulations for national-level concession projects unfairly favour certain project bidders and operators over others? Do regulations require and establish competitive bidding (that is, use of objective criteria during the selection process, requiring the publishing of necessary bidding documents, contracts and changes in contracts)? Do regulations require bidding for any significant, additional work necessary? Is a system established for independent oversight of such renegotiation procedures and conditions?”

- Scoring: 0=Regulations unfairly favour certain bidders over others, transparency requirements are not in place and contracts are changed in a discretionary manner; 1=Regulations introduce

some bias toward particular parties, and bidding, transparency and renegotiation schemes are poor; 2=Project bidding is fair and transparent, but renegotiations and expansions are regulated poorly; 3=Regulations generally define a fair playing field, with considerations for contract expansion, renegotiation and adjustments; 4=Regulations establish fair and transparent bidding procedures, set limits to renegotiations and adjustments and require independent oversight of post-award procedures

(1.4) Dispute-resolution mechanisms: “Are there fair and transparent mechanisms for resolving controversies between the state and the operator? Does the law provide technically adequate and efficient conciliation schemes? Must arbitration rulings proceed according to law and to contracts, without lengthy appeals?”

- Scoring: 0=Dispute-resolution systems for PPPs are undefined and insufficient; 1=Dispute-resolution mechanisms exist, but these are not transparent or efficient; 2=Adequate dispute-resolution mechanisms exist, but arbitration and appeals are lengthy and complex; 3=Comprehensive, effective dispute-resolution mechanisms exist, incorporating necessary technical considerations; 4=Effective and efficient dispute-resolution mechanisms establish independent arbitration according to law and contracts, without lengthy appeals and with accompanying viable prejudicial reconciliation options

Institutional framework

(2.1) Quality of institutional design: This indicator evaluates the existence and role of various agencies necessary for proper project oversight and planning at the federal level, such as a PPP board at ministerial level, a State Contracting Agency and a PPP Advisory Agency and a Regulatory Agency for enforcement of project standards. It also considers the oversight role and involvement of government budget and planning offices.

- Scoring: 0=PPP-specific agencies or boards do not exist and relevant institutions in this sector lack accountability and independence from rent seekers; 1=Some oversight and checks and balances exist, but these are not comprehensive and agencies are highly prone to political distortion; 2=Agencies exist and are fairly technical in nature, but do not play all necessary roles for comprehensive sectoral oversight; 3=The necessary agencies exist and generally fill all necessary roles for sector oversight, although their structure and roles could be improved; 4=The institutional design establishes satisfactory oversight and planning agencies, and incorporates checks and balances so as to ensure effective planning, regulation and increase accountability

(2.2) PPP contract, hold-up and expropriation risk:

“Does the judiciary enforce property rights and arbitration rulings? Does the judiciary uphold contracts related to cost recovery? Can investors appeal against rulings by regulators, expedite contract transfer for project exit and obtain fair compensation for early termination?” Also considers whether the state has an expedite mechanism for replacing failed operators, to protect creditors’ rights.

- Scoring: 0=The judiciary is a poor enforcer of private operator and investor rights and arbitration rulings, and there is no effective appeals process; 1=The judiciary occasionally upholds PPP operator and investor rights and arbitration rulings, but in an inefficient manner; 2=The judiciary usually upholds contracts, PPP operator and investor rights and arbitration rulings, but hold-ups are common; 3=The judiciary consistently and effectively upholds contracts and allows for appeals to regulator rulings, ensures fair compensation for early termination and transfer of contracts, although delays occur and can generate hold-up risk; 4=The judiciary effectively enforces PPP operator and investor rights and arbitration rulings, allowing for expedited contract transfers and

ensuring that early termination occurs only in exceptional public-interest circumstances, with fair compensation to the operator and protection to creditors

Operational maturity

(3.1) Public capacity to plan and oversee PPPs:

“Are public capabilities for planning, design/engineering, environmental assessment, oversight of national-level project service standards and conflict resolution robust? And do government officials have expertise on project financing, risk evaluation and contract design? Do financial authorities employ proper accounting practices when considering fiscal and contingent liabilities? Do they have a reputation for designing contracts that reduce post-bid opportunism?”

- Scoring: 0=Federal agencies do not have any of the necessary expertise or experience; 1= Federal agencies have very limited project expertise and experience; 2= Federal agencies have some project planning, design and financing expertise or experience; and oversee service quality to a limited extent; 3= Federal agencies generally have the necessary comprehensive project planning, design and financing expertise and experience, exhibiting moderate service quality oversight capacity; 4= Federal agencies have the necessary expertise and experience and effectively regulate the sector on a consistent basis

(3.2) Methods and criteria for awarding projects:

“What is the track record of federal agencies for using competitive bidding and objective economic factors as the primary consideration in final project and contract awards? Are incentive-efficient schemes used for allocating projects (for example, in toll-road projects, using net present value of revenue with contract periods of variable length)?”

- Scoring: 0=The granting agency awards projects based on subjective considerations and does not use objective, economic variables; 1=The granting agency has a poor track record, but does consider economic factors with some

limits to discretion; 2=The regulator considers economic criteria to award projects, although these are not always the most efficient and appropriate ones, and subjective factors still play an important role; 3=The regulator has a good track record that could be improved (that is, it uses economic variables, but does not give these priority over other factors); 4=The regulator has an excellent track record and uses economic criteria in an effective, transparent and consistent manner

(3.3) Regulators' risk-allocation record: "Has the allocation of risk between the state and private sector been successful for national-level projects in recent years? How effective has the use of guarantees and performance bonds for project risk-diversification been?"

- Scoring: 0=Risk allocation is often handled inappropriately; 1=Risk has been allocated properly only on certain occasions, as evidenced by a high incidence of contract renegotiation, and hedging and insurance instruments have been minimally used; 2=Risk is usually distributed fairly between the state and the operator, but renegotiations are still common and financial instruments, such as insurance, guarantees and performance bonds are occasionally used; 3=Risk has been fairly distributed, renegotiations have been moderate and parties employ some financial risk-hedging practices; 4=Risk has been consistently allocated correctly between the state and the private sector to minimise renegotiations, with extensive and effective use of financial instruments

(3.4) Experience with transport, water and electricity projects:¹ This indicator draws upon information from the World Bank's Private Participation in Infrastructure (PPI) database on the number of concession projects that reached financial closure in the past ten years (2001-2011) and observations made by researchers in-country. Scoring: 0 = No evidence of projects in market; 1 = Evidence of a handful of projects in market; 2 =

Approximately under 100 projects in market; 3 = Between approximately 100 - 250 projects in market; 4 = Approximately more than 250.

(3.5) Quality of transport, water and electricity projects:²

This indicator draws upon distress and failure rates of transport, water and electricity concession projects over the past ten years (2001-2011) from the World Bank's PPI database and observations made by researchers in-country. Scoring: 0 = Evidence of retreat of PPPs or nationalisation; 1 = Likely high risk of distress; 2 = Likely moderate risk of distress; 3 = Likely low risk of distress; 4 = Very rare cases of distress.

Investment climate

(4.1) Political distortion:³ Evaluates the level of political distortion affecting the country's private sector. Each country's score is a weighted average of the Economist Intelligence Unit's political stability and government policy effectiveness risk scores, and the Transparency International Corruptions Perceptions Index. Scores range from 0 to 100, where 0=worst and 100=best.

(4.2) Business environment:⁴ Evaluates the quality of the general business environment for infrastructure projects. Each country's score is a weighted average of the Economist Intelligence Unit's market opportunities and macroeconomic risk scores. Scores range from 0 to 100, where 0=worst and 100=best.

(4.3) Political will: This indicator evaluates the level of political consensus, or will, to engage private parties in concessions (PPPs) and to provide favourable implementation frameworks across the electricity industry and water/sanitation and transport sectors.

- Scoring: 0=The government has consistently expressed a lack of interest or inconsistent intentions in engaging private participation through concessions or improving frameworks. Conditions for private investment are hostile; 1=The government has shown some reluctance

1. Previously calculated from project numbers collated from the PPI database. In this edition, the historical scores for 2009 and 2010 have been rescored according to the current indicator definitions.

2. Previously calculated from distress rates deduced from the PPI database. In this edition, the historical scores for 2009 and 2010 have been rescored according to the current indicator definitions.

3. Previously calculated from a weighted average of the Economist Intelligence Unit's political stability and government policy effectiveness risk scores and the World Bank Corporate Ethics index. In this edition, the historical scores for 2009 and 2010 have been rescored according to the current indicator definitions.

4. Previously calculated from a weighted average of the Economist Intelligence Unit's market opportunities and macroeconomic risk scores and the World Bank Corporate Ethics index. In this edition, the historical scores for 2009 and 2010 have been rescored according to the current indicator definitions.

to engage private participation through concessions (PPPs) and provide favourable frameworks, either because of disagreement among or explicit opposition from significant political groupings; 2=There is political consensus surrounding the need to engage private participation through concessions (PPPs) and provide favourable frameworks, although implementation is slow; 3=There is political consensus to maintain favourable frameworks and to be pro-active with concession projects, where appropriate, and the likelihood of major political delays is low

Financial facilities

(5.1) Government payment risk: “Does the government regularly fulfil obligations for PPP contracts or use liquidity-guarantee schemes to reduce non-payment risk?” Also considers the Economist Intelligence Unit’s sovereign debt risk ratings.

- Scoring: 0=The government struggles to fulfil obligations to concessionaires; 1=The government occasionally fulfils obligations; 2=The government usually fulfils obligations; 3=The government usually fulfils obligations, and provides some minimal guarantees to investors, 4=The government has an excellent track record of fulfilling obligations, and provides strong guarantees to investors. Please note: in certain cases where project- or sector-specific information was not obtainable, scoring considers the Economist Intelligence Unit’s sovereign debt risk ratings. For these instances, scoring employs the following guidelines: 0 = rating of CCC and below, 1= B rating, 2=BB rating, 3=BBB and A rating, and 4=AA or AAA rating

(5.2) Capital market for private infrastructure finance: “How available and reliable are long-term debt instruments for infrastructure financing? Is there a developed insurance and pension market with useful products for infrastructure risk reduction? Are interest-rate, exchange-rate hedging instruments available?”

- Scoring: 0=The markets for finance and risk instruments are underdeveloped or non-existent, and only foreign sources provide project funding; 1=The market for local finance is slowly developing, although most finance comes from international sources and risk-hedging instruments are not robust; 2=Some finance and risk instruments exist, although financing still comes mainly from foreign and multilateral organisations; 3=The domestic market presents a large, reliable financing market, but risk instruments are still developing in size and complexity; 4=There is a deep, liquid finance market locally, as well as a reliable and large local market for hedging instruments

(5.3) Marketable debt: “Is there a liquid, deep local-currency-denominated, fixed-rate, medium-term (five yrs +) bond market in marketable debt (that is, debt that is traded freely)?”

- Scoring: 0=There is no securities market for fixed-rate financing of over one year; 1=There is a government securities market in place, but for short maturities only; 2=The government is fostering a medium-term market and it should be in place soon; 3=There is a medium-term (five yrs +) debt market, but only for public sector (government bond) issuers; 4=There is a medium-term (five yrs +) debt market for both public and private sector issuers

(5.4) Government support for low-income users and infrastructure affordability: “Does the government provide subsidies that allow low-income users better access to electricity, water and transport services?”

- Scoring: 0=The government does not subsidise the water or transport sector, or has done so in an extremely distortionary manner; 1=The government does not subsidise the water or transport sector, or has done so in a moderately distortionary manner; 2=The government occasionally provides subsidies for improved access to water or transport for the poor, but

these are infrequent or applied only in certain cases; 3=The government usually provides satisfactory subsidies for low-income users, but this can vary by sector and project; 4=Subsidies are common, reliable and effectively target low-income users

Sub-national adjustment

(6.1) Sub-national adjustment: This indicator evaluates whether infrastructure concessions can be carried out at a regional, state or municipal level, and the relative success and consistency of these frameworks.

- Scoring: 0=The legal framework does not allow regional or municipal entities to concession public works, or in practice the requirements are extremely cumbersome; 1=The legal framework allows regional and municipal entities to concession public works, but technical capacity or political will is lacking; 2=A few successful examples of regional or municipal concessions exist, but capacity and projects at this level across the country are generally weak; 3=A significant concessions programme has been developed at a municipal or regional level, with good implementation capacity and institutional design; 4=An important and diverse (in terms of sectors and locations) concession programme has been developed at the municipal or regional level, and it benefits from a homogeneous framework, good local implementation capacity and institutional design. ■

Appendix 2: Methodological adjustments

How do we define PPPs?

In the electricity generation sector, we consider as PPPs either Build-Operate-Transfer (BOT) or Build-Own-Operate (BOO) schemes with long-term contracts or power purchase agreements (PPAs) with public or private distribution companies or integrated State Electricity companies. Even though the power plant does not revert to the state and remains private property, we consider both BOO and these long-term contracts to be PPPs, as they differ from the integrated public utility with rate of return regulation.

In the water sector, our analysis includes private sector investments via Build-Operate-Transfer (BOT) and Build-Own-Operate (BOO) with incentive price regulation schemes as PPPs. Examples include water treatment and fresh water provision or fully integrated water utilities, either under a long-term contract, or periodic rate setting as long as the rate setting promotes efficient provision.

Unbundling projects: when is it still a PPP?

Unbundling PPP projects has become increasingly important to generate value for money. Bundling investment, financing, construction, operation, and maintenance has the potential to reduce a project's value for money by affecting competition. Such complex projects frequently require firms to form consortiums to complete them, a process which can lead to significant transaction costs. In addition, private financing can be more expensive than

public financing. Our minimum standard for PPPs requires the private sector to take responsibility for operation and maintenance, and face significant demand risk. At the other end of the spectrum, we exclude fully privatised and integrated utilities with rate of return regulations. With these limits in mind, we consider the following cases to be PPPs: when the government undertakes a project with minor initial investment and financial requirements, but transfers operation, maintenance, and demand risk to the private sector; when the government builds and finances a project, and later transfers operation, maintenance, and significant commercial risk to the private sector; and when the government provides debt financing, while the private sector contributes equity, constructs, operates, and maintains the project, assuming significant demand risk. However, we exclude lease contracts from our definition of PPPs, because they are essentially financing operations in which commercial and operational risks remain with the state.

Adjustments to indicator definitions and scoring criteria

Minor changes to indicator definitions have been made since the 2010 study in order to improve precision as we gather data on countries across Latin America and the Caribbean. We outline those changes below. A full listing of the detailed indicator descriptions is available in Appendix 1.

Legal and regulatory framework

We increased our attention to the consistency of regulations for PPPs across sectors and emphasised whether they established incentives to drive efficient service provision. Similarly, we examined the flexibility and incentives of regulation to ensure that risks were assigned to the party best equipped to manage them. In terms of project selection, we increased our attention to the use of value for money techniques to ensure that PPPs presented good options for service provision.

The European fiscal crisis highlighted the instability created by PPP projects financed off government balance sheets that nonetheless depend on deferred payments from the government. As a result, we have adjusted how we evaluate the fiscal effects of PPPs. We have given more emphasis to the distortions introduced by governments' current accounting methods and we have expanded our focus to consider whether the budget office effectively plays a gatekeeping role that ensures fiscal discipline. We also added more detail to our analysis of dispute resolution mechanisms, examining the role of dispute resolution boards and the jurisdiction of local and international arbitration options.

Institutional framework

We increased the rigour of our analysis of the institutions involved in the PPP process: not just confirming their existence, but also assessing the extent of co-ordination among agencies, applicability and use of sector-wide planning efforts to identify PPPs, and the allocation of contract management and oversight responsibilities to those agencies with the best incentives to supervise the project.

We specifically looked for PPP units and coordinating boards that centralised expertise and policy-making. Finally, we examined how a country's institutional framework created the checks and balances necessary for accountability.

In terms of contract enforcement and hold-up and expropriation risk we extended our analysis to consider step-in rights for creditors and early termination options with proper compensation in

case in which public interest would require major changes to a contract.

Operational maturity

We increased our attention to contract modifications, primarily to measure contracting agencies' capabilities for enforcing efficient and fair contract changes. We streamlined our examination of countries' risk allocation and financial enhancement record to consider concrete results from recent projects.

Bibliography

Amorelli, Lara Caracciolo. (2009). "Brazilian Federal Road Concessions: New challenges to the regulatory framework". The George Washington University – The Institute of Brazilian Business and Management Issues. <http://www.gwu.edu/~ibi/minerva/Spring2009/Lara.pdf>

Asamblea Nacional Nicaragua. (December 2012). "Últimas Leyes Aprobadas". Internet article accessed December 2012. <http://www.asamblea.gob.ni/trabajo-legislativo/agenda-legislativa/ultimas-leyes-aprobadas/>

Ausubel, Lawrence M. and Cramton, Peter. (May 2010). "Using forward markets to improve electricity market design". Utilities Policy. <http://www.cramton.umd.edu/papers2005-2009/ausubel-cramton-forward-markets-in-electricity.pdf>

Energía de Bogotá. "Sector energético en Colombia". (2012). Internet article accessed December 2012. URL: <http://www.eeb.com.co/transmision-de-electricidad/sector-energetico-en-colombia>

Hammons, T.J., et al. (1999). "Competitive Generation Agreements in Latin American Systems with Significant Hydro Generation". IEEE PES Winter Meeting. <http://www.energy.komisc.ru/seminar/LaAm.pdf>

Javeed, Asha. (September 2012). "Howai's Test". Trinidad Express Newspaper. Internet article accessed December 2012. URL: http://www.trinidadexpress.com/news/HOWAI_S_TEST-172030701.html

Jimenez, Manuel. (October 2011). "Dominican Republic starts up wind power project". Reuters. Internet article accessed December 2012. URL: <http://www.reuters.com/article/2011/10/11/us-dominican-power-wind-idUSTRE79A7BI20111011>

La Prensa Gráfica. (September 2012). "CEPA: Puerto de La Unión, concesionado en septiembre de 2013". Internet article accessed December 2012. URL: <http://www.laprensagrafica.com/economia/nacional/281934-cepa-puerto-de-la-union-concesionado-en-septiembre-de-2013>

Nielsen, Stephan. (August 2011). "Dominican Republic Bait \$770 Million of Wind Farms With Perks". Bloomberg. Internet article accessed December 2012. URL: <http://www.bloomberg.com/news/2011-08-04/dominican-republic-baits-770-million-of-wind-farms-with-perks.html>

Pastrán, Rosa María. (November 2012). "Inician promoción del puerto La Unión". La Prensa Gráfica. Internet article accessed December 2012. URL: <http://www.laprensagrafica.com/inician-promocion-del-puerto-la-union>

Presidência da República Casa Civil Subchefia para Assuntos Jurídicos. (August 2011) "Lei Nº 12.462, de 4 de Agosto de 2011". http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2011/Lei/L12462.htm

Ribiero, Karisa, et al. (2001). "The Brazilian Experience in Road Concession: Past, Present and Future". https://encrypted.google.com/url?sa=t&rct=j&q=first%20road%20concessions%20brazil&source=web&cd=3&ved=0CD0QFjAC&url=http%3A%2F%2Ffir.canterbury.ac.nz%2Fbitstream%2F10092%2F609%2F1%2F46731_ribeiro%2520et%2520al%2520wctr2001.doc&ei=WH66UKPFC8jorA

[GLyYHQDw&usg=AFQjCNGRm7w5olBczn6TJS_gW_Qno6xgLA&cad=rja](http://www.unctad.org/TradePolicyReview/ElSalvador)

United Nations Conference on Trade and Development (UNCTAD). (2010). "Investment Policy Review: El Salvador". New York and Geneva.

Véron, Adrien and Cellier, Jacques. (March 2010). "Private Participation in the Road Sector in Brazil: Recent Evolution and Next Steps". Transport Papers TP-30. The World Bank Group, Washington DC.

World Trade Organization (WTO). (March 2007). "Trade Policy Review Body - Trade Policy Review - Costa Rica - Report by the Secretariat". Geneva. ■

Whilst every effort has been made to verify the accuracy of this information, neither the Economist Intelligence Unit Ltd nor the sponsors of this report can accept any responsibility for liability for reliance by any person on this report or any other information, opinions or conclusions set out herein.

London

20 Cabot Square
London
E14 4QW
United Kingdom
Tel: (44.20) 7576 8000
Fax: (44.20) 7576 8476
E-mail: london@eiu.com

New York

750 Third Avenue
5th Floor
New York, NY 10017
United States
Tel: (1.212) 554 0600
Fax: (1.212) 586 0248
E-mail: newyork@eiu.com

Hong Kong

6001, Central Plaza
18 Harbour Road
Wanchai
Hong Kong
Tel: (852) 2585 3888
Fax: (852) 2802 7638
E-mail: hongkong@eiu.com

Geneva

Boulevard des
Tranchées 16
1206 Geneva
Switzerland
Tel: (41) 22 566 2470
Fax: (41) 22 346 93 47
E-mail: geneva@eiu.com