

# Evaluating the environment for public-private partnerships in Latin America and the Caribbean The 2010 Infrascope

A guide to the index and methodology

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## Preface

This document describes the second edition of a learning tool and benchmarking index that assesses the capacity of countries in Latin America and the Caribbean to carry out sustainable public-private infrastructure partnerships. The analysis and content covers the time period from July of 2009 through August of 2010. The index was built by the Economist Intelligence Unit and was 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 designed the study and conducted the research. Vanesa Sanchez was the editor and project manager. Eduardo Bitrán and Marcelo Villena were joint research managers; William Shallcross built the index.

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## Executive summary

**G**ood infrastructure is essential to economic growth. Energy networks power factories, while roads, seaports and airports enable and reduce the cost of commerce, as well as facilitating labour force mobility. Yet investing in infrastructure carries risks: infrastructure is expensive to finance and complex to build, and financial returns are not always stellar. These challenges are as true for developed countries as for poor ones. And the costs never end; the more important the infrastructure, the more it is used, and the more repair, expansion and improvement it requires.

Governments have found it more difficult to raise financing for infrastructure in the wake of the 2008-09 global recession, which in many cases drove budgets deeply into the red. Indeed, some governments are under pressure to cut their commitments to infrastructure to improve fiscal outlooks. But reducing infrastructure investment carries its own risks, including lower productivity and slower economic growth, especially in emerging markets.<sup>1</sup> With the BRICs<sup>2</sup> and other emerging markets, such as the so-called CIVETS<sup>3</sup>, expected to grow faster than the rich economies in the years to come, it is essential that they invest in the infrastructure that will allow them to sustain growth into the long term.

One way to bridge the financing gap and improve efficiency is to bring private funding into the mix through public-private partnerships (PPPs). For example, the Mexican government's 2007-12 national infrastructure plan contemplates a major role for PPPs in financing large infrastructure investments and envisions hundreds of individual PPP projects. Unfortunately, fiscal constraints continue to hamper progress, and a lack of feasibility studies for some projects, as well as regulatory hindrances, have caused delays and forced the government to reconsider parts of the plan. Such challenges, which are often political, are just as great in developed economies. The UK's much-acclaimed private finance initiative (PFI) contracts, which supporters say improve investment efficiency in infrastructure, have been criticised by opponents as little more than accounting tricks designed to take liabilities off the public balance sheet. Such bureaucratic and political disputes only serve to derail private investment in important projects.

This means PPP financing must be pursued aggressively to attract adequate private investment and PPP projects must be implemented properly to ensure successful outcomes. Indeed, governments must improve project planning and selection, as well as implementation capacity. At the same time, private sector stakeholders must conduct thorough due diligence if these projects are to succeed. With these issues in mind, the Economist Intelligence Unit in 2009 created the Infrascope, a learning tool and benchmarking index that evaluates government capacity to implement sustainable and efficient infrastructure PPPs. It is designed as a guide for policymakers and development institutions seeking to

1. According to Marcelo Carvalho of Morgan Stanley, Brazil needs to double its annual investment in infrastructure to 4% of GDP if the Brazilian economy is to continue to expand at 5% a year.

2. Brazil, Russia, India, China.

3. Colombia, Indonesia, Vietnam, Egypt, Turkey, South Africa.



improve country-specific conditions for these vital and complex projects.

The Infrascope originally focused on the capacity of 19 countries in Latin America and the Caribbean to implement PPP projects in the water and transport sectors. With the continued support of the Multilateral Investment Fund (MIF), a member of the Inter-American Development Bank Group, have updated the index for 2010 to include the energy sector (focusing on electricity generation when it operates independently of public utility companies with regulated tariffs). We have also added two new indicators to the index: the first evaluates political will for PPP projects in the three sectors covered by the analysis; the second is a sub-national indicator that evaluates frameworks and experiences on a regional, state and municipal level. PPPs are used in a wide variety of sectors beyond transport, water/sanitation and energy generation, but we have focused on these sectors because of data-availability constraints and the need to maintain a tight analytical scope. PPPs for telecommunications, hospitals, prisons and schools may be addressed at some point in the future.

The Infrascope, which takes the form of an index, features an Economist Intelligence Unit evaluation of each country, but also allows stakeholders to self-score indicators and re-weight categories. These characteristics enable the Infrascope to serve as both a benchmarking index and a learning tool. Although the index is not designed as an investment tool for private sector financiers (as the data and indicators are largely qualitative and aggregate sectors), it provides a valuable starting point for a private-public dialogue about improving project conditions and strategies. The Infrascope does this by analysing the laws, regulations, institutions and practices that relate to infrastructure projects and by tracking these over time. This comprehensive summary of laws and regulations is available in the benchmarking index, an Excel tool that is available free of charge at [www.eiu.com/sponsor/LACInfrascope](http://www.eiu.com/sponsor/LACInfrascope). Finally, the Infrascope's standardised structure enhances transparency, advancing stakeholder knowledge of PPPs on a broader level.

Chile, one of the region's more developed economies, topped the index again in 2010. It scored 79.3 points out of 100, owing to strong regulatory, institutional and investment conditions, and to legal reforms this year that improved the PPP process. The second- and third-ranked countries, Brazil and Peru, displayed similar characteristics, along with strong political will to initiate projects, strong institutional capacity and sound implementation practices.

Venezuela, Nicaragua and Ecuador occupy the other end of the index, with scores below 20 out of a possible 100. Venezuela and Ecuador are increasingly hesitant to incorporate private investment in infrastructure as a result of deteriorating political will and have dismantled the institutional capacity needed to execute and oversee projects properly. This is despite a prior track record of successful PPP programmes in the late 1990s or early 2000s. Nicaragua has had a more modest project history, and infrequent, inconsistent application of existing PPP frameworks has led to institutional atrophy.



## Infrascope background and methodology

**I**n 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.

The themes identified in the study, as well as the sector focus, were developed in collaboration with a group of regional and sector experts during the last two years. This group was composed of country specialists and stakeholders (policymakers, lawyers, consultants and development bank staff) as well as regional and international PPP experts. The group validated the choice of sectors, as well as the addition of political will and sub-national level indicators. Category weightings were also adjusted to provide a more even distribution across thematic indicator groupings.

As with the original Infrascope, the categories that make up the overall index pinpoint crucial aspects of the PPP value chain, starting at project conception and spanning contract design, enforcement, supervision, termination and financing. Specifically, the index evaluates readiness and capacity by dividing the PPP project life cycle into five components: 1) a country's legal and regulatory framework for concession projects; 2) the design and responsibilities of institutions that prepare, award and oversee projects; 3) the government's ability to uphold laws and regulations for concessions, as well as the number and success rate of past projects (that is, "operational maturity"); 4) the business, political and social environment for investment, and 5) the financial facilities for funding infrastructure. An additional, stand-alone sixth category and indicator for sub-national PPPs was added in 2010.

Several of the indicators that compose the index are based on quantitative data; these have been drawn from international statistical sources. The others are qualitative in nature and have been produced by our team. Many of these focus on legal and regulatory factors and are informed by interviews with sector and country experts. Each year, we seek to expand the network of country and sector contacts who contribute to the study. Moreover, in some cases qualitative indicators are used as a placeholder for what may eventually become quantitative indicators, as significant data gaps remain for PPP project



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evaluations on an international level. For example, the current, qualitative “risk allocation” indicator could one day be measured directly by project cost overruns as a percentage of total project value; the business environment indicator could be replaced by a measure of sector-specific investment. In the absence of such data, the Infrascope uses qualitative measures that capture some elements of these important factors.



## Scoring criteria

**T**he Infrascope index comprises 19 indicators, of which 15 are qualitative and four quantitative. Data for the quantitative indicators are drawn from the World Bank and the Private Participation in Infrastructure Advisory Facility (PPIAF) Private Participation in Infrastructure data base and from the Economist Intelligence Unit's Risk Briefing service. 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 Latinobarómetro survey.

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

A detailed explanation of each indicator and scoring method is given in Appendix 2.



## Index results

### Overall scores

The overall results of the 2010 Infrascope show country rankings as based on 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 ranks by individual indicator can be seen in the Infrascope Excel index, which is available for free download at [www.eiu.com/sponsor/LACInfrascope](http://www.eiu.com/sponsor/LACInfrascope).

Rank	Country	Score/100
1	Chile	79.3
2	Brazil	73.2
3	Peru	67.2
4	Mexico	58.1
5	Colombia	53.7
6	Guatemala	42.4
7	Panama	34.6
8	Costa Rica	32.3
9	Uruguay	31.8
10	El Salvador	30.6
11	Trinidad & Tobago	29.9
12	Argentina	27.5
13	Jamaica	25.4
14	Honduras	24.6
15	Paraguay	24.5
16	Dominican Rep.	23.7
17	Nicaragua	16.0
18	Ecuador	14.2
19	Venezuela	4.2

## Category scores

### Regulatory framework

Rank	Country	Score/100
1	Chile	84.4
2	Peru	75.0
3	Brazil	71.9
4	Mexico	56.3
5	Guatemala	53.1
6	Colombia	50.0
7	Panama	37.5
=8	Costa Rica	34.4
=8	Uruguay	34.4
10	El Salvador	28.1
=11	Jamaica	25.0
=11	Paraguay	25.0
=11	Trinidad & Tobago	25.0
=14	Argentina	21.9
=14	Dominican Rep.	21.9
=14	Nicaragua	21.9
17	Honduras	15.6
18	Ecuador	6.3
19	Venezuela	0.0

Out of the 19 countries in this study, four have reformed their regulatory framework for PPPs since 2009. Reforms in three countries—Chile, Mexico and Panama—have modified and improved pre-existing laws. Chile’s reforms were applied to the country’s main concessions law, to improve dispute resolution and contract renegotiation mechanisms. Mexico revised its acquisition and public-works law to improve bidding processes and introduce specific arbitration options for dispute resolution. These changes ultimately facilitate Private Service Provision Schemes (PPS), which are Mexico’s main mechanism for establishing long-term contracts for infrastructure provision with deferred payments from the state. Panama’s Law 127 of 2010 modifies the public contract law from 2006 to improve transparency and bidding processes for large projects.



The fourth country, Guatemala, approved a new and comprehensive PPP law in April 2010 for concession projects in the transport and energy sectors. The law establishes clear conditions for compensating the private sector and protecting its interests during project renegotiations. The law also creates a common framework for all transport infrastructure projects.

Additional countries, such as the Dominican Republic, El Salvador and Mexico, are debating possible legal reforms in Congress. Uruguay and Paraguay are making efforts to prepare and approve new PPP laws. The Honduran government is also considering a modification of the 1998 regulations governing public-works concessions along the same lines of an earlier discussion with the IMF, where the state would concentrate its activities on basic services so as to open room for private investment in other areas. However, it is still early to assess whether the initiative will gain the political support required to progress and whether it would improve the existing legal framework.

Since 2009 we have added to the study an evaluation of the electricity industry in each country, and this has affected most country scores. Frameworks for PPPs in energy generation were largely in keeping with, or in many cases better than, transport and water frameworks in each country. The inclusion of the energy-generation sector contributed to a reduction in indicator scores for only four countries: Dominican Republic, Venezuela, Costa Rica and Argentina.

## Institutional framework

Rank	Country	Score/100
=1	Brazil	75.0
=1	Chile	75.0
=1	Peru	75.0
4	Mexico	58.3
=5	Colombia	50.0
=5	Guatemala	50.0
=7	Argentina	33.3
=7	El Salvador	33.3
=7	Honduras	33.3
=7	Uruguay	33.3
=11	Costa Rica	25.0
=11	Jamaica	25.0
=11	Nicaragua	25.0
=11	Panama	25.0
=11	Paraguay	25.0
=11	Trinidad & Tobago	25.0
17	Dominican Rep.	8.3
=18	Ecuador	0.0
=18	Venezuela	0.0



The top three countries in the overall index—Brazil, Chile and Peru—also have the best scores for institutional frameworks. All have reasonable checks and balances in place for the project planning and oversight stages. In Brazil and Peru, ministry-level agencies assist in project preparation and approvals, while sector regulators play an oversight role to create a balance of power. Although responsibilities during the PPP process are overly concentrated at the ministerial level in Chile, the system does function relatively well. The judicial process in all three countries is also favourable to PPP projects, and the risks that private actors will use courts to delay projects and cause lengthy and costly renegotiations are low. The risk of expropriation by the state is not a concern in these countries, and this helps provide for a stable environment for project dispute resolution and arbitration.

All three countries also have room to improve. Peru would benefit from faster, more effective and impartial judicial processes and better co-ordination between relevant PPP agencies. In Brazil, creditors' step-in rights have not been established and contracts have become overly complex as a result of attempts to protect creditors. Institutional checks and balances still need strengthening in Chile, as the Ministry of Public Works' General Contracting Co-ordinating Office promotes projects, co-ordinates their preparation, and supervises project construction and operation. It is even manages and awards grants for projects from other ministries and municipalities. Chile's sectoral regulators are also concentrated as a single entity (instead of multiple commissions) and are appointed and fired by sectoral ministers, reinforcing ties back to the ministerial level.

## Operational maturity

Rank	Country	Score/100
1	Brazil	87.5
2	Chile	72.2
3	Mexico	54.0
4	Peru	53.6
5	Colombia	46.7
6	Costa Rica	42.1
7	Guatemala	35.4
8	Honduras	35.1
9	Ecuador	33.0
10	Jamaica	25.3
11	El Salvador	25.1
12	Uruguay	19.3
13	Argentina	16.7
14	Paraguay	15.6
15	Dominican Rep.	14.0
=16	Nicaragua	13.1
=16	Panama	13.1
18	Trinidad & Tobago	9.5
19	Venezuela	0.6



Six of the countries in this study have had at least 20 concessions projects in the past ten years (1999-2008). Of these, Brazil, Mexico and Chile have had the most, which is not surprising given their favourable attitudes toward PPPs and their more developed economies. Of the six countries with most experience, Chile and Brazil have been most successful at implementing these with a low incidence of cancellation and distress ; Mexico, Colombia and Peru have wrestled with project distress problems a bit more, though Argentina has fared worst out of the group. Besides the top six, another five countries with moderate project experience have struggled with frequent project distress. Eight countries have had fewer than five projects over the same ten years, with three of these experiencing at least one project distress (Uruguay, Venezuela, and Trinidad and Tobago).

Countries in the region still lack full capacity to plan and oversee PPPs, and to effectively regulate all sectors on a consistent basis. In two countries (Chile and Brazil), agencies generally have the necessary comprehensive project planning and design experience, and exhibit moderate oversight capacity. Another six (Colombia, El Salvador, Jamaica, Mexico, Peru and Uruguay) benefit from some project-planning and financing expertise, with more limited project and service quality oversight capacity. The remaining 11 countries either have very limited expertise and capacity or do not have any at all. Interestingly, in most cases the inclusion of the electricity sector has not affected countries' scores for PPP planning capacity (the exceptions to this are Jamaica, Brazil, Nicaragua and Venezuela). Rather, improvements and deterioration in this indicator over the past year have generally been observed for transport projects.

Generally, those countries with good capacity levels also have better methods and practices for awarding projects. Moreover, the countries with sound project award practices tend to execute more projects and to have a better risk-allocation record.



## Investment climate

Rank	Country	Score/100
1	Chile	85.4
2	Peru	75.2
3	Colombia	72.4
4	Brazil	58.8
5	Panama	58.1
6	Mexico	56.1
7	Guatemala	52.9
8	Dominican Rep.	49.1
9	Honduras	47.1
10	Uruguay	43.7
11	Costa Rica	40.7
12	El Salvador	40.3
13	Trinidad & Tobago	39.9
14	Jamaica	35.9
15	Paraguay	31.4
16	Argentina	19.0
17	Ecuador	17.9
18	Nicaragua	15.6
19	Venezuela	10.5

Most countries in the region grapple with political interference in institutions, policy implementation and business. However, the study found that three countries—Chile, Colombia and Peru—have a high level of political will for PPPs across sectors. These countries not only enjoy political consensus around PPPs, they also have active strategies to develop PPPs (such as Colombia’s “2009 counter-cyclical fiscal plan”, which centred on public-private infrastructure investment). Another six countries in the region benefit from favourable political attitudes and strategies for PPPs, although project implementation is generally slower. These countries are Brazil, the Dominican Republic, Guatemala, Honduras, Mexico and Panama. Four countries—Argentina, Venezuela, Nicaragua and Ecuador—demonstrate political disinterest and even opposition to most PPPs.



## Financial facilities

Rank	Country	Score/100
1	Chile	97.2
=2	Brazil	72.2
=2	Mexico	72.2
4	Panama	63.9
5	Peru	61.1
6	Trinidad & Tobago	58.3
7	Colombia	55.6
8	El Salvador	47.2
9	Costa Rica	41.7
10	Argentina	33.3
=11	Dominican Rep.	30.6
=11	Uruguay	30.6
13	Paraguay	25.0
14	Guatemala	22.2
=15	Ecuador	16.7
=15	Jamaica	16.7
=15	Venezuela	16.7
18	Honduras	11.1
19	Nicaragua	8.3

Although the risk of non-compliance with PPP contracts has not changed for most countries since last year, for three countries—Uruguay, Argentina and the Dominican Republic—there have been improvements in their evaluations on this indicator. For the Dominican Republic, this was the result of improved fiscal stability and an upgrade in its sovereign debt risk score. For Argentina, score improvements were largely supported by recent payments to settle longstanding debts owed to various concessionaires since 2001. In the second half of this decade, the Uruguayan government has also demonstrated commitment to honouring obligations to concessionaires (in contrast with the earlier half, when the fallout on Uruguay from Argentina’s debt default of 2001 and subsequent financial crisis hampered authorities’ ability to meet concessionary agreements). The country has also maintained a sound fiscal position in recent years. Venezuela has seen deterioration in its payment risk indicator, owing to a mediocre credit rating and increasing political hostility toward PPPs.

Not many changes to infrastructure subsidy schemes have been observed in the past year, although the inclusion in the study of the electricity industry has improved country scores in some cases (Brazil, Honduras, Jamaica, Mexico, Peru, Nicaragua and the Dominican Republic). This is owing to the more focused nature of these subsidies, which benefit low-income and low-volume users more than the general subsidies used more commonly in transport and water/sanitation services.

Capital markets for infrastructure finance have remained relatively stable. This does not mean that



innovations and advances have not taken place; for example, in Argentina one top private investment company became the first to create a 100% private trust to finance infrastructure projects for a municipal government in the province of Córdoba. This was a first in Argentina for any municipal, provincial or national entity, and has already been replicated several times, making it an alternative means of financing for economically viable municipal and provincial governments in the absence of a solvent federal government.

Exchange- and interest-rate hedging instruments are generally underdeveloped, and many countries that are currently active in PPPs (such as Colombia, Panama, Uruguay and Peru) still depend on foreign funds and currencies to finance projects. The few exceptions are Chile, Brazil and to some extent Mexico, which have deeper capital markets and more local-currency financing options.

## Sub-national adjustment

Rank	Country	Score/100
1	Brazil	75.0
=2	Argentina	50.0
=2	Chile	50.0
=2	Colombia	50.0
=2	Mexico	50.0
=2	Peru	50.0
=7	Dominican Rep.	25.0
=7	Ecuador	25.0
=7	Guatemala	25.0
=7	Jamaica	25.0
=7	Paraguay	25.0
=7	Trinidad & Tobago	25.0
=7	Uruguay	25.0
=14	Costa Rica	0.0
=14	El Salvador	0.0
=14	Honduras	0.0
=14	Nicaragua	0.0
=14	Panama	0.0
=14	Venezuela	0.0

Of the 19 countries in this study, six facilitate and implement PPP projects at a sub-national level. Although it fell short of a perfect score, Brazil tops the list for this new indicator. Brazilian states are generally active in PPPs and many have their own PPP laws and regulations (although these cannot override the federal regulations). The biggest constraint at a sub-national level is the heterogeneity caused by the variation among state frameworks and institutional setups, which creates a maze of regulatory detail. Mexico also has a state-driven regulatory framework, but trails behind Brazil in the ranking because transparency and regulatory capacity are generally low, partly owing to a more



politicised business environment at local levels.

A handful of other countries have a more varied track record on a sub-national level. In some cases (such as Chile, Colombia and Peru), a unitary juridical framework enables regional projects to be planned and co-ordinated using central government agencies. Regional oversight capacity remains weak, however. In the case of Argentina, the otherwise strong regional and municipal capacity and programmes are blocked by federal government opposition.

The remaining countries struggle to plan and implement sub-national PPP projects. In some cases, this is owing to a lack of interest and a stronger focus on national-level projects. In others, the legal framework and political requirements to approve sub-national projects are overly cumbersome.



## 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 index's underlying index and "country profile" tab available at [www.eiu.com/sponsor/LACInfrascope](http://www.eiu.com/sponsor/LACInfrascope).

### Argentina

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	27.5	21.9	33.3	16.7	19.0	33.3	50.0
Rank	12	14 (tied)	7 (tied)	13	16	10	2 (tied)

Argentina has a strong history of PPPs in the transport sector. The country's regulatory framework for concessions has enabled over 10,000 km of highways to be contracted to private providers since the early 1990s, as well as railway projects, ports, and sanitary services. A law passed in 2000 enabled the government to make financial contributions to concessions through deferred payments. Regulating entities charged with supervising tariff levels and ensuring service quality were also established for both the transport and water sectors. However, political and social attitudes toward private participation in infrastructure investment have suffered since the 2001-02 economic crisis, for which the blame has largely been placed on the privatisation and deregulation of the 1990s. The current government has also shown a preference for public sector projects across the board, and political factors have become increasingly important in project planning and selection processes.

The inclusion of energy projects and frameworks has negatively impacted Argentina's evaluation. The electricity industry's generation, transmission and distribution capacity was unbundled by reforms carried out in the early 1990s through Law 24,065 of 1991. The reformed electricity industry functioned well until the devaluation of the peso in 2002, after which government interference in the market became pervasive. Only projects financed by government funds are now seriously considered. Regulatory and contracting agencies across sectors are also losing their previous planning, preparation and supervision capabilities as political factors play an increasingly important role in decision making.



## Brazil

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	73.2	71.9	75.0	87.5	58.8	72.2	75.0
Rank	2	3	1 (tied)	1	4	2 (tied)	1

According to World Bank data, in the past ten years Brazil has had extensive experience with PPPs and has implemented the most concession projects of any country in the region. At the federal level, transport and energy projects are regulated by various laws and regulations, such as the 1995 Lease Law (Lei de Concessões de Serviços Públicos 8987) and the 2004 Private-Public Association Law (Lei Parceria Público-Privada 11079), which extended contract lengths to 35 years). Contracts with mixed financing by users and the state are allowed, although any such projects where the state contributes more than 70% of resources must be approved by Congress. Sector-specific laws establish regulatory capacity and principles at the federal level and political attitudes toward national-level transport projects have been relatively favourable. Water sector PPPs have also been implemented, although these are managed at a sub-national level.

In contrast with the open environment for private participation in transport and water infrastructure, state-owned enterprises dominate the electricity industry. The state operates most electricity generation, transmission and distribution. This state dominance persists despite the creation of an energy-sector regulator in 1996, the Agência Nacional de Energia Elétrica, (ANEEL, the Brazilian Electricity Regulatory Agency) and despite a 2004 electricity industry reform implemented to address an electricity shortage that occurred in 2000-01. The 2004 reform established mandatory bidding for long-term contracts by distribution companies as a way to attract private investment in generation.

Although no major changes have been observed since last year in the legal framework or project initiatives, the inclusion of the electricity industry and the addition of the sub-national indicator have boosted Brazil's rating.

## Chile

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	79.3	84.4	75.0	72.2	85.4	97.2	50.0
Rank	1	1	1 (tied)	2	1	1	2 (tied)

In April 2010 Chile established a new regulatory framework by passing the Public Works Concession Law. This new law modifies the original concession law from 1996. The law provides objective criteria to be used to compensate private actors for acts of government authority and places restrictions on the possibility of unintended transfer of commercial risk to the government. The reform establishes limits for renegotiations, and mandates additional bidding for significant additional works in order to



enhance transparency. The reform also creates a faster process for terminating problematic concessions and provides a more precise compensation mechanism. Overall, the new regulation creates a more level playing field for private participation. It has helped boost Chile’s score for 2010.

The electricity industry has its own legal framework for granting indefinite concessions for public services. Electricity generation is almost fully privatised. The regulation that establishes the functioning of the electricity industry in private hands was put in place in 1981, and was modified in 2004 and 2005. Under these modifications, private generation companies are permitted to invest in and sell energy to both the distribution companies that bid for long-term contracts and directly to big individual firms that consume the energy. This has increased the transparency of tolls paid to transmission and distribution companies, and reduced entry barriers for new electricity generation companies. The inclusion of electricity generation has improved Chile’s indicator scores throughout the index.

## Colombia

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	53.7	50.0	50.0	46.7	72.4	55.6	50.0
Rank	5	6	5 (tied)	5	3	7	2 (tied)

Colombia has been active in water, transport and electricity PPPs, although national projects focus only on transport and energy. In a recent move to increase PPP activity, the Uribe government (2002-10) implemented a “2009 counter-cyclical fiscal plan” to boost economic growth that focused on public-private infrastructure investment. A total of US\$23.5bn was earmarked for infrastructure projects, of which US\$13.7bn (or 58% of the total) was through private concessions. Although the country does not have a national concessions law, the General Public Acquisitions Act (Act 80) establishes the power to contract out public services. In light of this, specific sector laws have been passed, but in practice regulations change as a result of terms set in specific contracts and because of resolutions and decrees handed down by the Consejo Nacional de Política Económica y Social (Conpes, the Economic Council of Ministers). The complexities created by such decrees, along with different regulatory and contracting powers at different levels of government, have created a system where PPP projects are not fully and properly overseen.

The electricity industry has its own regulation for private participation that dates back to 1995. With Laws 142 and 143, distribution, transmission and generation activities were separated and the Comisión Reguladora de Energía y Gas (CREG, the industry regulator) was established. Since these reforms, the state has maintained the ownership of transmission and distribution. Dispatch is carried out in a centralised manner according to price quotes given by power companies, rather than based on marginal costs, as is the case in most Latin American countries. This process generates significant competition, and Colombia’s index scores have been improved as a result.



## Costa Rica

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	32.3	34.4	25.0	42.1	40.7	41.7	0.0
Rank	8	8 (tied)	11 (tied)	6	11	9	14 (tied)

Costa Rica's Public Works Concessions Act of 1998 allows private investment in public projects irrespective of the government agency responsible for contracting out the service or asset. An executive secretariat in the Consejo Nacional de Concesiones (CNC, National Concessions Council, an autonomous agency under the Ministry of Public Works and Transport), bears the responsibility for preparing, tendering and supervising projects. So far, Costa Rica has focused on transport and electricity PPP projects, although it has been more active in transport and has not pursued these projects in great number. No significant institutional, regulatory or projects changes have taken place since last year. Costa Rica's evaluation in the transport sector has remained largely unchanged.

The country has been fairly closed to private participation in the electricity industry and is one of the few Latin American countries that has not restructured segments within the industry. Electricity operations are mostly controlled by state-owned enterprises, of which the Instituto Costarricense de Electricidad (ICE, the Costa Rican Electricity Institute) is the most relevant player. ICE owns one-third of the distribution and the transmission capacity and houses the majority of the country's generation capacity. The private sector can only participate in small renewable energy projects selling power to the state monopoly. Furthermore, Law 7508 of 1995 prohibits private generators from producing more than 20 mw and sets a limit on all private generation so that overall private generation cannot exceed 15% of the country's total generation capacity. Costa Rica's score has been downgraded to reflect state dominance in the electricity industry.

## Dominican Republic

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	23.7	21.9	8.3	14.0	49.1	30.6	25.0
Rank	16	14 (tied)	17	15	8	11 (tied)	7 (tied)

In the past ten years, the Dominican Republic has been most active in transport and energy PPPs. At present, the country does not have any specific concessions laws and all concession contracts must be approved by Congress. Once a project has been approved, it is regulated under the Law for Public Purchases and Acquisitions 360-06, as well as according to the terms of the specific contract, which creates a set of unstable rules for private participation. However, at the beginning of 2009 a new bill was sent to Congress that would substantially improve the country's regulatory framework, albeit without changing the legal requirement for guaranteed return on investment often used to justify contract renegotiations. As of July 2010 Congress was still debating this initiative.

Project selection in the transport sector has undergone some improvement in the past year. For



example, the selection of a private operator to manage the Caucedo Port should transform the port into a regional Caribbean and Central American hub for shipping to Europe. The government’s decision to undertake the Viadom toll road and the Santo Domingo-Punta Cana road project as public investment, rather than as a PPP project, was also based on a sound “value for money evaluation”, as the benefits of a hypothetical transfer of project risk from the public to private sector would not necessarily outweigh the cost of attracting private investment and using non-recourse financing. On the other hand, public capacity to plan transport projects in some cases has been weak; for instance, the plans to build additional metro lines in the capital city, Santo Domingo, have encountered serious challenges and criticism for lacking sufficient technical evaluation.

Experiences and frameworks in the electricity industry have not been much better than in transport; in practice, most public investment and concession projects are awarded by means of a bilateral negotiation process, which inhibits transparency. Government intervention in 2003 also kept electricity prices low, despite increasing oil prices, and led to severe disruptions in the distribution system, henceforth discouraging private investment in the industry. Furthermore, the institutional design in the electrical industry is inherently flawed, as a holding of state enterprises, the Corporación Dominicana de Empresas Eléctricas Estatales (CDEEE, the Dominican Corporation of State Electric Companies), now owns stakes in several companies and overshadows sector regulators and policy bodies. As a result, the country’s indicator scores have either been held at the same level or reduced. Although an attempt to reintroduce economic incentives for private investment in the sector is taking place with the help of multilateral organisations, it is too early to assess the impact of this initiative.

## Ecuador

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	14.2	6.3	0.0	33.0	17.9	16.7	25.0
Rank	18	18	18 (tied)	9	17	15 (tied)	7 (tied)

Although Ecuador made significant efforts to develop transport, water and energy PPPs in the early 1990s, these efforts have been stalled since the passing of the 2008 constitution. The current central government has attempted to annul concessions such as the Port of Manta, the Quito airport and select drinking-water concessions. These concessions have survived only owing to the efforts of regional governments to maintain them. Since 2008 new electrical generation projects no longer include private participants and all initiatives are being undertaken by state-owned companies. Today, more than 80% of energy generation, all of transmission and most distribution capacity are under government control. Prices are heavily subsidised and distorted, reducing scarcity signals that are necessary for proper pricing and which enable the sale of electricity in the spot market.

The conditions for PPP projects in Ecuador at present are largely a continuation of country conditions since last year. The country’s relatively low scores across regulatory, institutional and operational maturity categories since 2009 have been maintained. Moreover, the agency responsible for supervising PPP monitoring by individual state-level and local-level agencies Consejo Nacional de Modernización



del Estado (CONAM, the State Modernisation Council) merged with the planning secretariat in 2009. As a result, CONAM may play a reduced role in promoting modernisation through private investment.

## El Salvador

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	30.6	28.1	33.3	25.1	40.3	47.2	0.0
Rank	10	10	7 (tied)	11	12	8	14 (tied)

Although the constitution and an acquisitions act (Ley de Adquisiciones y Contrataciones de la Administración Pública) allow concessions to be granted for public services and works, El Salvador does not have any prior project experience in transport or water and sanitation PPPs. Congressional approval is required for each individual project, and the concessions concept is restrictive inasmuch that projects must be developed at the risk and cost of the contractor, without any funds from public entities. For many years, political polarisation made it virtually impossible to establish ad hoc legislation or pass contract laws for specific projects, such as the long-attempted concessions of the Ports of Acajutla and Unión. The new administration in place since 2009 has expressed interest in attracting private investment for much-needed infrastructure projects, although some members of the ruling party, the Frente Farabundo Martí para la Liberación Nacional (FMLN), continue to oppose the seaport projects currently underway. Despite some setbacks created by this opposition, plans to carry out these projects and other eventual PPPs (such as an international airport) are continuing to move ahead. Also, a new PPP law has been drafted in discussion with the International Finance Corporation (IFC) and has been sent to Congress for legislative review.

The inclusion of the electricity industry has improved El Salvador's evaluation. The country restructured the electricity industry in 1996 when it segregated generation and distribution segments and placed them in private hands, while keeping transmission under government control. Recently, the government adopted a marginal cost approach to enhance competition, and distribution companies have to sign long-term supply contracts (over ten years) with power plants. Institutional design for the sector is also adequate, as there exists a clear separation of the regulatory, supervisory and entrepreneurial roles of the state.

## Guatemala

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	42.4	53.1	50.0	35.4	52.9	22.2	25.0
Rank	6	5	5 (tied)	7	7	14	7 (tied)

Guatemala has struggled to implement PPPs in the past, but comprehensive PPP law approved in 2010 (Ley de Alianzas para el Desarrollo de Infraestructura, Law 2862) seeks to improve conditions for transport PPPs. This law applies a common framework to all transport infrastructure projects and



establishes clear conditions for compensating the private sector—and for renegotiation based on the principle that an unexpected act of authority that affects the business has to be compensated for. It also creates a new institutional regime for transport projects. A national PPP agency has been created to oversee the system, leaving day-to-day contract management, as well as planning and technical design, to sectoral agencies. There are expectations that this new institutional design, combined with a technical assistance grant from the Multilateral Investment Fund (MIF), will help to improve capabilities for project selection and implementation (although at present technical project planning capacity is low).

Water PPPs are ultimately governed by the Law of State Concessions (Ley de Contrataciones del Estado) of 1992. Although Guatemala has not been highly active in water or sanitation PPPs, the inclusion of energy generation has helped Guatemala’s 2010 index scores. Electricity industry reforms in 1996 established a vertically disintegrated scheme, with private operators incorporated into both distribution and generation operations. The new law approved in 2010 also applies to the energy sector and should improve stakeholder compensation and negotiation processes. There is a reasonable, technically competent sector regulator and the system is based on marginal cost quoting. Private generators have to enter into long-term contracts with distribution companies, facilitating project financing. The recent establishment of a long-term contract between a generator in Guatemala and a distribution company in El Salvador is a positive sign of openness to cross-border, private participation in the region.

## ■ Honduras

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	24.6	15.6	33.3	35.1	47.1	11.1	0.0
Rank	14	17	7 (tied)	8	9	18	14 (tied)

The 1998 Promotion and Development of Public Works Law (Ley de Promoción y Desarrollo de las Obras Públicas y la Infraestructura) establishes regulations that facilitate concessions for transport and water/sanitation infrastructure projects. The regulations are very restrictive, however. They only allow the private sector to receive revenue from users and there is no provision for the state to fund part of the investment. The Honduran constitution mandates that concession projects be approved by Congress and the length of concessions is 22 years, generally too short to appeal to investors. With such restrictions in place, Honduras has only been able to achieve modest improvements in infrastructure through concessions. There was hope that a new framework for transport would be introduced by the Zelaya government (2006–09); however political turmoil that started in June 2009 paralysed any possibility of reform of the PPP regulatory framework. In 2010 a newly elected government proposed a modification to the 1998 regulations governing public works concessions along the same lines of an earlier (2007) discussion with the IMF, where the state would concentrate its activities on basic services so as to create space for self-financed private investment in other areas. However, it is still early to assess whether the initiative will gain the political support required to progress, and the draft remains a fair way from best practice.

Experiences in the energy sector have not been much better. Honduras has not yet incorporated



significant private participation, as the electricity industry is vertically integrated and is dominated by the state-owned Empresa Nacional de Energía Eléctrica (ENEE, National Electrical Energy Company). This company owns most distribution, transmission and generation capacity. It sets service tariffs and is the only buyer for small private generating companies. Honduras remains one of the few countries that have not developed independent regulatory capacity (apart from the state-owned companies themselves) in the electricity industry. Recent PPP projects have also shown worrying signs: in February 2010 the newly elected Congress voted to revoke the prior approval of the Nacaome hydroelectric concession. However, the government in July took a positive step forward by reforming electricity subsidy schemes to reduce subsidies and tax higher-volume consumers. These changes should improve the fiscal outlook of state-run electricity operations.

## Jamaica

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	25.4	25.0	25.0	25.3	35.9	16.7	25.0
Rank	13	11 (tied)	11 (tied)	10	14	15 (tied)	7 (tied)

There is no single, common legal framework that regulates concessions in Jamaica; each sector has specific laws that authorise private participation and govern concessions. Under these individual laws, Jamaica has developed road, airport and port concessions. However, planning and award practices for key concession projects, such as Plan Highway 2000 show slow progress and leave room for improvement. In other cases, such as the Kingston Port and the National Water Commission monopoly, public investment seems to be the main strategy for infrastructure development.

The inclusion of energy generation projects has generally improved Jamaica's evaluation scores. Recent efforts to increase capacity and independence at the Office of Utilities Regulation (OUR), responsible for the electricity industry and water sector, are seen as a step in a positive direction. Nevertheless, a single firm, the Jamaica Public Service Company (JPSCo), is in charge of most electricity generation, distribution and transmission. An unbundling of JPSCo is necessary if Jamaica is to develop a more competitive electricity generation segment. OUR regulates the JPSCo monopoly through price caps, so that generation is legally open for competition; nevertheless, the power of JPSCo's monopoly limits the interest and strength of potential additional private participants. Moreover, in contrast with other countries in the region, which have welcomed private participation in renewable energy projects, the state-owned Petroleum Company of Jamaica (PCJ) is investing in these projects directly.



## Mexico

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	58.1	56.3	58.3	54.0	56.1	72.2	50.0
Rank	4	4	4	3	6	2 (tied)	2 (tied)

Mexico has been involved in national-level transport PPP projects for interstate roads, airports and seaports. The country has implemented a wide variety of infrastructure projects using concessions and special PPP contracts called *Contratos de Pago Por Servicio* (PPS, Service Project Provision contracts). Efforts to include more private participation in transport have also been demonstrated through the Farac highway bidding process. The country has even incorporated private actors in the energy sector through power purchasing agreements with the state-owned *Comisión Federal de Electricidad* (CFE, the Federal Electricity Commission). However, the overwhelming power of the CFE undermines the attempts to introduce market-driven criteria in the project bidding and awards process, and the constitution reserves the CFE's right to generate electricity. Independent power plants may only inject energy into the grid for the export of electricity and for co-generation surplus. Water PPPs have been carried out in Mexico, but these are generally municipal-level projects.

The Mexican institutional system for PPPs is highly fragmented; each sector and level of government is responsible for planning, implementing and supervising projects. There is no council at the ministerial level that establishes policies and oversees the entire system. Government expertise and resources for project planning and development are limited at present. However, a significant effort undertaken since 2008 aims to build capacity to plan, prepare and structure national and state-level projects at the Transport Ministry and in *Banobras*, the state-owned public works bank that established *Fonadin*, the infrastructure fund. Separately, the Ministry of Finance and Public Credit has commissioned a consultancy project to examine best practices in PPP project structuring and development as part of a larger programme meant to improve the efficiency, effectiveness and quality of public spending. Individual Mexican states have also been engaging multilateral support to develop PPP capacity-building programmes.

In 2009 the Calderón government also amended existing public works laws to improve project bidding and arbitration processes. These modifications make project implementation easier by separating discussions of monetary compensation from those related to acquisition. Simultaneously, the Mexican government proposed a new PPP law (*Alianzas Público Privada en Infraestructura*, or Public-Private Alliances in Infrastructure) to Congress, designed to enhance significantly the regulatory framework for PPPs by defining a new type of long-term contract for the partnerships. The law would also clearly establish that commercial risk borne by the state should be explicitly set in the bidding documents and contract for each project and would also facilitate contract adjustments when and if these need to be made for acts of government authority that adversely affect the project. However, as of early September 2010 this reform had not yet been approved.



## Nicaragua

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	16.0	21.9	25.0	13.1	15.6	8.3	0.0
Rank	17	14 (tied)	11 (tied)	16 (tied)	18	19	14 (tied)

Nicaragua has a special PPP law for concessions for the road segment, and under the law that governs the Empresa Nacional de Puertos (ENAP, the National Ports Company), the company can concession out specific infrastructure projects. In 1998 the Drinking Water and Sewage Law (Ley General de Servicios de Agua Potable y Alcantarillado Sanitario 297) split the national water company into a regulatory agency, the Instituto Nicaragüense de Acueductos y Alcantarillados (INAA, Institute of Aqueducts and Sewage), and an operating company, Enacal, a move that authorised the government to seek private investment in the sector and was considered a prelude to the eventual privatisation of Enacal. However, sources report that at present the government does not have plans to use the concession law for transport infrastructure or water projects. This ambivalence may well be related to a more general lack of capacity and skills to handle the technical aspects of project preparation, selection and oversight. Moreover, the inability to commit future revenue flows from a project in favour of creditors makes project financing near impossible.

Conditions for private participation are different in the energy generation sector, where there are indications that the government is trying to create incentives for private investment in generation. Although the government has intervened heavily since an energy crisis in 2006, it has introduced tariff adjustments to reduce financial pressure on providers. There are even indications that the government may pass legislation that would enable distribution companies to reduce losses. With support from multilateral organisations, the Ministry of Energy is also enhancing its project planning and promotion capabilities, with a special focus on renewable energy. Nicaragua's index scores have therefore benefited from the inclusion of the energy generation sector.

## Panama

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	34.6	37.5	25.0	13.1	58.1	63.9	0.0
Rank	7	7	11 (tied)	16 (tied)	5	4	14 (tied)

The Ministry of Public Works' Law No 5 of 1988 regulates the creation of concession projects, including roads and airports. Seaports have a different legal framework and have been covered through contract laws approved by Congress, with an ad hoc judicial arrangement for each port. With this framework, Panama has developed significant projects in the transport sector. However, these have encountered important difficulties. External audits of the North and South Corridor have shown that the concessionaires will not be able to recuperate the investment at 10-12% return, and urgent investments are needed to maintain the project. This has led the new government to buy back a proportion of the shares of the two road concessions. More generally, the project rescue operation lacks minimum



levels of accountability and transparency and raises serious concerns about the signals sent to future concessionaires. The current agreement to rescue two road concessionaires (ICA and PYCSA) also demonstrates that an uneven assumption of risks between the state and the private sector persists. The public perception of abuses by private concessionaires will be increased after this planned project rescue, which will allegedly use funds from the social security system. However, it is expected that the new Law 127 of March 2010 will address these problems by improving the transparency and evaluation of large project awards. Law 127 requires separate technical and economic proposals for each project bid, which should ultimately improve the soundness of each award and subsequently reduce the risk of the need to rescue concessionaires at later project stages. The reform has also boosted Panama's score.

Projects in the water sector have also faced challenges. Law No 2 of 1997 established the legal and regulatory framework to incorporate private sector capital, but political difficulties have prevented implementation. The Instituto de Acueductos y Alcantarillados Nacionales (IDAAN, the public water company) was included in the privatisation process, but its sale was suspended following violent demonstrations in Panama City. The Moscoso government (1999-2004) reached an agreement with the IMF in 2000 to restructure the company, allowing private companies to take charge of billing, metering and other services. The National Assembly subsequently passed a law that reorganised IDAAN, creating a board of administrators and granting the company more financial autonomy. This restructuring left a regulatory vacuum in the water sector.

The electricity industry has a different framework, as it was reformed in the mid-1990s so that the former state electricity monopoly in generation, transmission and distribution would be dissolved. Distribution companies were privatised and private investment in generation was incorporated, with generating companies selling to distribution companies through long-term contracts. Reforms also established a regulator to oversee distribution and transmission charges. However, significant political interference in electricity prices persists and there is pressure to involve the state in electricity generation activities. Despite these continued challenges, risk allocation has been more reasonable in the electricity industry than in other areas. The inclusion of electricity in this year's index has therefore helped improve Panama's scores.

## Paraguay

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	24.5	25.0	25.0	15.6	31.4	25.0	25.0
Rank	15	11 (tied)	11 (tied)	14	15	13	7 (tied)

In practice, Paraguay has very little experience with concession projects. However, in early 2010 the Ministry of Public Works and Communication began work to design new PPP legislation designed to modernise the framework for private participation in transport infrastructure. A tentative plan for future transport infrastructure concessions has also been presented by the government. This includes a road network within the so-called Plan Triángulo, several airports and a hydro-way in the Paraguay-Paraná river. In order to develop the transport concession programme, an effort is being made to enhance public



planning capabilities. This has benefited Paraguay's score for public PPP planning and oversight capacity. Its score for project award criteria has also improved owing to plans to use present value of revenue as the allocation criterion for recent roads projects.

Since 2002 water provision has rested in the hands of the government. In 2002 unions and community organisations pushed for the enactment of Law No 1932, which prevents the privatisation of public service firms, after the government attempted to privatise the former water firm, Corposana. The Empresa de Servicios Sanitarios del Paraguay (ESSAP, the Sanitary Services Company of Paraguay), a public firm, now provides drinking water and sewage services in the majority of Paraguay's municipalities.

In the electricity industry a single state-owned company, the Administración Nacional de Electricidad (ANDE, the National Administration of Electricity), controls the whole industry in a vertically integrated fashion. The private sector does not participate in the provision of electricity, and the efficiency of public provision is especially low in distribution and transmission. A new regulatory framework is being discussed in Congress for the electricity industry that would introduce a regulatory agency and allow the private sector to invest. However, prospects for this new reform effort remain uncertain in the near term.

## Peru

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	67.2	75.0	75.0	53.6	75.2	61.1	50.0
Rank	3	2	1 (tied)	4	2	5	2 (tied)

Peru's original public-works concession law has been in place since 1996, allowing public works to be contracted out for highways, water sanitation projects and airports. New laws and regulations approved in 2007 and 2008 further improved the country's PPP frameworks. Specifically, the Regional and Local Public Investment with Private Participation Law 29230 (Ley que Impulsa la Inversión Pública Regional y Local con Participación del Sector Privado) made it easier for the government to attract investment by relaxing some of the conditions for approving disbursement of funds through the Sistema Nacional de Inversión Pública (SNIP, the National Public Investment System). These changes facilitated the approval of water and sanitation, road-building and other public works projects that expand existing services. In addition, Legislative Decree 1012 from May 2008 regulates the private sector's participation in public infrastructure and services through PPPs, establishing risk-allocation principles according to each party's ability to mitigate each risk. An earlier norm, Supreme Decree 104 from July 2007, approved guidelines for the provision of public services through co-financed concessions involving the government and the private sector. This overall framework has resulted in a good pipeline of projects for the country in the past ten years.

Recent bids for regional airports in Peru show significant competition levels; the process used was successful in awarding contracts. The Paita port concession was also finally completed after significant controversy. These developments have counted positively toward Peru's index score. However, the government's capacity to plan and prepare transport infrastructure projects remains limited. The inability to carry out proper engineering efforts, environmental studies and social evaluations limits the flow of



projects and often leads to poorly prepared bids. Recent conflicts with concessionaires have also forced renegotiations of terms for numerous projects since 2008.

Peru has a strong regulatory framework for private participation in the electricity industry. The country initiated sector reforms in 1992 along the same lines as other Latin American countries, creating a national sectoral regulator, the Dirección General de Electricidad (DGE, the General Directorate of Electricity). Generation, transmission and distribution segments were separated and a centralised dispatch scheme based on marginal costs and private investment was established in all three segments. The Organismo Supervisor de la Inversión en Energía y Minería (Osinergmin, the Supervisory Organ for Investment in Energy and Mining, the energy regulator), also serves as an arbitrator in price-setting and service quality determination. It enjoys institutional independence and professional prestige. The inclusion of electricity boosted the country's score for several indicators, including dispute resolution, public capacity to plan PPPs, institutional design and expropriation risk.

## Trinidad and Tobago

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	29.9	25.0	25.0	9.5	39.9	58.3	25.0
Rank	11	11 (tied)	11 (tied)	18	13	6	7 (tied)

A cumbersome scheme exists in Trinidad and Tobago for PPP projects, and a very limited number of projects have been developed in the past ten years. In 2006 a process was initiated to establish a private operator for the Port of Spain airport, but the country nevertheless remains one of the few nations in the region that has not yet contracted out any of its airports using concessions. In the road segment, no toll roads have yet been contracted through concessions. Although there are no restrictions in place for any particular sector, the terms and conditions of each project must be established separately by each contract and a special purpose state-owned company must first be created to contract out the particular service. The only PPP project recorded by data sources has been a water desalination project.

In the electricity industry, the state-owned Trinidad and Tobago Electricity Commission (T&TEC) is in charge of the distribution and transmission grid. It also operates electricity generation capacity. Although there have been previous steps taken to reform the industry and introduce private participation, it is the state-owned National Gas Company (NGC) that is undertaking a new combined-cycle gas-powered project. This suggests that the electricity industry will ultimately remain in public hands.

Although Trinidad and Tobago's current PPP track record remains largely unchanged, the environment seems to be improving. For example, the government promoted private sector investment in the cargo-handling operations of the Port Authority of Trinidad and Tobago in 2010 as a first step toward involving the private sector in developing the Port of Spain seaport. Several new desalination plants are being planned under a PPP scheme that would be contracted out by the Water and Sewage Authority (WASA). The National Infrastructure Development Company (NIDCO) is also preparing several toll road projects for PPP agreements.



## Uruguay

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	31.8	34.4	33.3	19.3	43.7	30.6	25.0
Rank	9	8 (tied)	7 (tied)	12	10	11 (tied)	7 (tied)

Uruguay has traditionally been open to private participation in transport infrastructure. The country has had a general framework for such projects that dates back to 1984. This framework has been built upon through numerous revisions to the country's public purchase laws throughout the years, and the latest version of this is the Texto Ordenado de Contabilidad y Administración Financiera (TOCAF, Ordered Text of Accounting and Financial Administration). In 2001 the government developed a road concessions system called the Roads Mega Concession. In this scheme, the Corporación Vial del Uruguay (CVU, the National Roads Corporation) was created as the operator for more than 1,000 km of roads. This company can incorporate up to 40% private capital and is responsible for contracting private construction companies for the development and maintenance of the network, and must obtain financing from the market or from government subsidies. However, this scheme is in reality equivalent to public investment, since no additional risk is transferred to the private sector, while borrowing is classified as off-public-balance-sheet, reducing public accountability. This set-up ultimately creates a de facto state monopoly without any formal regulator to manage the main road network. Uruguay has, however, granted concessions for other transport infrastructure, such as airports and seaports. It did this to develop an international airport and the main container terminal. Both projects have increased the country's logistic capabilities and demonstrate that it does have some capacity for designing concessions.

The new government has also expressed intentions to continue to grant concessions in airport and seaport infrastructure, and the possibility of a private concession in the railroad sector is currently under discussion. Nevertheless, in order to advance, these intended programmes will require a significant strengthening of public capacity for successful planning, evaluation and project structuring. The government has also indicated interest in promoting a national PPP programme to facilitate more effective infrastructure investment, and has been preparing legal reforms, which still need to be debated in Congress, to improve the PPP frameworks.

Despite the country's relative openness to transport PPPs, water and electricity have remained largely state-run. Electricity regulations establish that services can only be offered to consumers by the state-run Administración Nacional de Usinas y Transmisión Eléctrica, (UTE, the National Administration of Power Stations and Electricity Transmission). This company can contract out energy generation capacity from the private sector. A new policy to attract private investment in renewable energy was defined in 2007, where UTE is the only buyer of the energy generated. Although traditional electricity generation methods remain in the hands of UTE, renewable energy is an exception and UTE is calling for private company bids that are generating significant competition. The government is also promoting private investment in micro-hydraulic, biomass and wind-energy generators.



## Venezuela

	Overall index	Regulatory framework	Institutional framework	Operational maturity	Investment climate	Financial facilities	Sub-national adjustment
Score	4.2	0.0	0.0	0.6	10.5	16.7	0.0
Rank	19	19	18 (tied)	19	19	15 (tied)	14 (tied)

Venezuela has been moving away from incorporating private participation in infrastructure projects, despite having a framework since 1999 that enabled concessions in the earlier half of the decade. Road development efforts have been centralised in the hands of government agencies and tolls have been frozen (and later eliminated), leaving government obligations for concession projects unpaid. In 2007 the law that had previously permitted concessions in the water sector was changed to transfer the concessions oversight functions previously served by the Superintendencia de Servicios Públicos (Superintendency for Public Services) and the Oficina Nacional para el Desarrollo de los Servicios de Agua Potable y Saneamiento (National Office for Drinking Water Development) to the state holding company, the Compañía Anónima Hidrológica (Hidroven, the Hydrological Company). Since then, the government has pulled back from incorporating private capital in the sector.

As with other areas, prior reforms to enable electricity concessions are now being reversed. In 2001 Venezuela passed Law 5568 and established a vertically disintegrated system with private operators in generation, transmission and distribution. The Comisión Nacional de Energía (CNE, the National Energy Commission) was established as the sector regulator. However, the government has kept prices artificially low, creating a major disincentive for private investment, and in 2007 extensive energy shortages resulted. This led to a renationalisation of sector operations and to a declaration of electricity as a strategic industry for the state. The structure established in 2001 was dismantled and a state holding company, the Corporación de Electricidad Estatal (CEE, the State Electricity Corporation), was established. Although the country's scores were already at low levels in 2009, further reductions have been made to reflect the increased risk that the government will not honour financial obligations to the private sector and in light of deteriorating institutional capacity.

## Appendix 1: 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.

## Appendix 2: Detailed indicator definitions

### Legal and regulatory framework

**(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

**(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

**(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

**(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

**(5) 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

**(6) 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

**(7) 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

**(8) 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

**(9) 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

**(10) Experience in transport, water and electricity projects:** This indicator shows the number of transport, water and electricity concession projects in the past ten years (1999-2008) in each country, as recorded by the World Bank's Private Participation in Infrastructure (PPI) database. Scoring is conducted on the basis of raw data, where a higher number of projects is better.

**(11) Quality of transport, water and electricity projects:** This indicator evaluates the percent distress and failure rate of transport, water and electricity concession projects over the past ten years (1999-2008). Figures are taken from the World Bank's PPI database.

- Scoring: 0=For countries with five or more projects in the PPI database, this indicates a project failure/distress rate above 20%. For countries with fewer than five projects, this indicates a failure/distress rate of 25% or above; 1=For countries with five or more projects in the PPI database, this indicates a project failure/distress rate between 14% and 20%. For countries with fewer than five water and transport projects, this indicates a 0% failure/distress rate; 2=Failure/distress rate between 8% and 14%; 3=Failure/distress rate between 3% and 8%; 4=Failure/distress rate between 0% and 3%

## Investment climate

**(12) Political distortion:** 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 World Bank public sector ethics index. Scores range from 0 to 100, where 0=worst and 100=best.

**(13) Business environment:** 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, and the World Bank corporate ethics index. Scores range from 0 to 100, where 0=worst and 100=best.

**(14) 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 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

**(15) 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 and whether countries have had active partnerships with the World Bank’s Multilateral Investment Guarantee agency during the past five years to insure transport or water projects.

- 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

**(16) 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

**(17) 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

**(18) 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

**(19) 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 3: Methodology and sources

### 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.

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
- The Latinobarómetro and the Latin American Public Opinion surveys
- 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 30 in-depth telephone interviews were conducted with policymakers and country infrastructure experts from multilateral or consulting institutions.

### Research team

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### 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.

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