

PANORAMA



By Patrícia Krause, Coface economist based in São Paulo

Time to address the infrastructure gap in Latin America

During the commodity super-cycle that lasted over a decade, until around 2014, Latin American economies showed robust performance.

Growth was possible even in the context of generally weak infrastructure. Higher revenues from the exports of primary goods led to the expansion of public and private domestic consumption. Activity throughout these years was driven by the flourish of an emerging middle class and by populist governments that disregarded the cyclical feature of commodities. The setback in international prices, which became more apparent as from mid-2014, had strong repercussions on growth and exposed vulnerabilities in the region. The ensuing weaker terms of trade caused the depreciation of Latin America's floating currencies against the USD. This depreciation was not enough to boost the competitiveness of manufacturing goods and instead led to the deterioration of trade balances. This, in turn, prompted large twin deficits in the region's current and public accounts. Following two years of negative growth, regional activity is expected to emerge from recession in 2017. Nevertheless, Coface forecasts a somewhat lackluster performance, of just 1.2%.

The poor performance of recent years highlights the region's competitiveness challenges. This problem results from a combination of factors, including labour regulations, heavy taxes, general education levels, bureaucracy and weak infrastructure.

This Panorama analyses indicators in Argentina, Brazil, Chile, Colombia, Ecuador, Mexico and Peru, with a particularly sharp focus on the weaknesses of the region's infrastructure – a major factor in its economic slowdown. The Economic Commission for Latin America and the Caribbean (ECLAC)¹ estimates that the region needs to invest 6.2 % of its annual GDP, for the period from 2012 to 2020 (roughly 320 billion dollars), in order to eliminate the gap between supply and demand. This is far above the current level of investment, as none of the region's major economies is currently investing more than 3 % of its GDP in infrastructure.

With public expenditure under pressure, Public Private Partnerships have gained strength in the region. According to the Economist Intelligence Unit Index for PPP investments, Chile, Colombia and Brazil provide, respectively, the first, second and third best environments for private public partnerships. Overall, the environment for fostering these partnerships has somewhat improved, due to better legislation, but there is still room for further development. Lack of transparency, unappealing conditions and limited sources of funding are just some of the issues that still need to be addressed. Last but not least, public infrastructure works are still associated with corruption in many countries – as witnessed by the escalation of political scandals recently. If foreign investors are to be attracted, these events need to be combated with tougher sentences.

^{1/} Economic Infrastructure Investment in Latin America and the Caribbean Bulletin number 332

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1 WEAK DEVELOPMENT OF INFRASTRUCTURE IN THE REGION

Poor record in improving investment rates

Improvements in infrastructure could boost activity in Latin America. An IMF paper² on the growth return on infrastructure used examples from Argentina, Brazil, Chile, Colombia, Costa Rica and Mexico to assess the relationship between infrastructure and growth. It found that developing the quality and/or quantity of infrastructures has a positive impact on growth. This applies even more to sectors with a higher dependence on infrastructure. Data from the study also indicated that corporate investment spikes when there are improvements in infrastructure. An example from the study showed that when the quality of infrastructure in Colombia advances to the median of the study sample, activity increases by approximately 0.1 percentage points and the rate of corporate investment by 0.43 percentage points.

Statistics show that over the last sixteen years, Latin American economies invested relatively less than other emerging economies. The chart below compares the ratio of total investment to GDP reported by the largest Latin American economies, against the average ratio observed by 21 emerging and developing Asian economies³. The result shows that during the period from 2000-2016 the latter group

invested systematically more than the sample from Latin America. This comparison also underscores the poor performances of Brazil and Argentina in relation to their neighbours over the analysed period. Ecuador, on the other hand, recorded the best score among the countries in the region.

Inadequate infrastructure - a major hindrance to regional competitiveness

The World Economic Forum's annual global competitiveness report includes a ranking on the quality of infrastructure. Not surprisingly, Latin American economies are poorly positioned in the study during the period from 2016-17 - with Chile being the only exception (chart 1). Mexico remains above the average among the sample of 138 countries, but all the other countries in the region are below the average. It could also be questioned whether these countries did not take advantage of the period of strong economic growth to invest in infrastructure, or that investments that were made were not efficiently leveraged. The answer is probably a mixture of both of these elements. Peru and Ecuador were the only countries to move up in the classification over the last decade, although they are still poorly ranked.

Chart 1:
Investment as % of GDP



Source: IMF

2/ The Growth Return on Infrastructure in Latin America - IMF Working Paper, February 2017

3/ A simple average, rather than a weighted average, was used here as the latter would have been highly influenced by the high representativeness of the Chinese economy.

The weak quality of transport and port infrastructures is hampering competitiveness. The Global Competitiveness index examines infrastructure from different aspects. The table below reveals that: 1) transport infrastructure is clearly poor in Argentina, Brazil, Colombia and Peru; 2) Road quality is the Achilles' heel of countries in the region and 3) the quality of port infrastructures is especially poor in Brazil - in fact it is sometimes cheaper to send a product abroad than to another state in the same country.

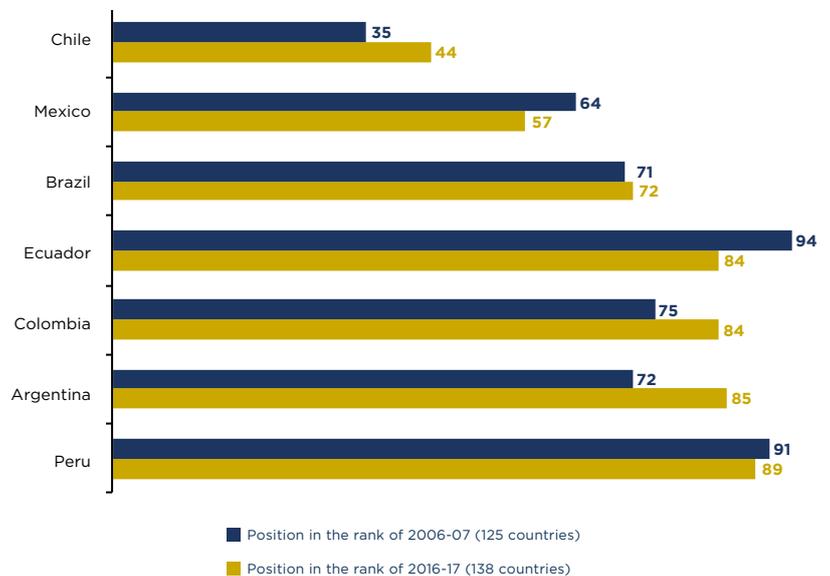
The scenario is not much better for the quality of energy supply. The chart below (chart 3) shows that Chile and Mexico are, once again, above the regional average. Peru is reasonably well positioned, while Argentina, on the other hand, lies at the bottom of the table.

The region's power generation is highly dependent on hydro and thermal sources although, as in other parts of the world, this reliance is expected to lose strength. While thermal energy usually implicates high costs and more pollution, the construction of hydro plants frequently faces anger from local populations due to environmental impacts (with dams being particularly controversial). Moreover in recent years many countries have faced prolonged droughts caused by the El Niño weather phenomenon. These events have exposed the risks of relying on hydro resources.

Chile is well engaged on the path to development of its clean energy sources. The country boasts Latin America's largest solar plant, El Romero, located almost 600 km north of the capital Santiago. El Romero began operating at the end of 2016 and is expected to generate 196 MW of electricity. This will be enough to provide power for one million of the city's inhabitants. The Chilean government has set a target to produce 20 % of its electricity from non-hydro renewable resources by 2025. By this time, the cost of energy production is expected to be around a third lower than current levels. This trend should gain strength in the region over the coming years. Brazil, Mexico and, more recently, Argentina have adjusted their regulations in order to encourage more investment in alternative energies.

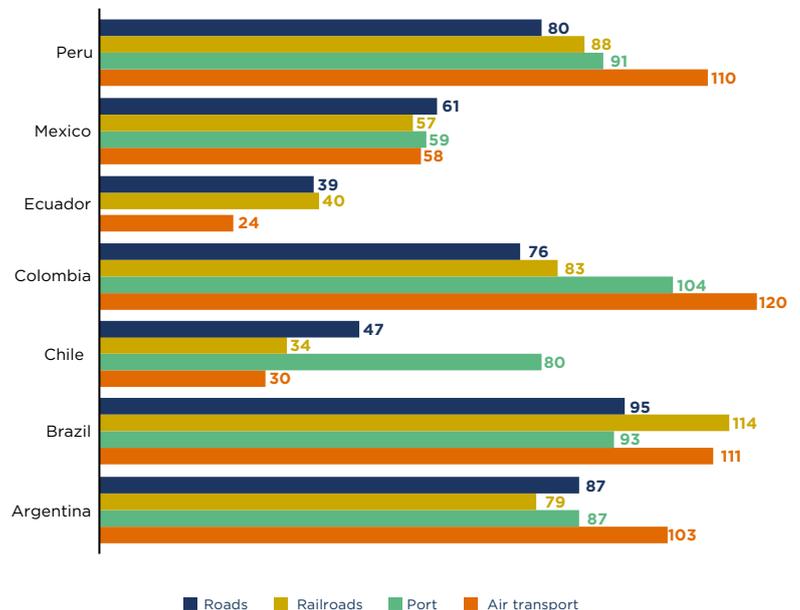
After years of subsidized energy tariffs, which reduced the incentives for investing in the sector, Argentina now has bright perspectives for renewable energy. Clean power currently represents a meager 1.8% of the country's energy production, but the government has set the ambitious objective of having renewables make up 20 % of its energy mix by 2025. Under the leadership of Mauricio Macri, the country launched a renewable energy auction programme, entitled RenovAr, in May 2016. During the first two tenders held last year, 59 projects totaling a capacity of 2.4 gigawatts and valued at 4 billion USD were auctioned. Some of these projects should become operational in 2018. The initial outcome of the programme was considered a success, as it attracted offers to build six times more capacity than the government had originally targeted. Nevertheless, many of the companies that won projects are still looking

Chart 2:
Quality of Infrastructure



Source: World Economic Forum

Chart 3:
Quality of Transport Infrastructure 2016 - 2017 (ranking 138 countries)



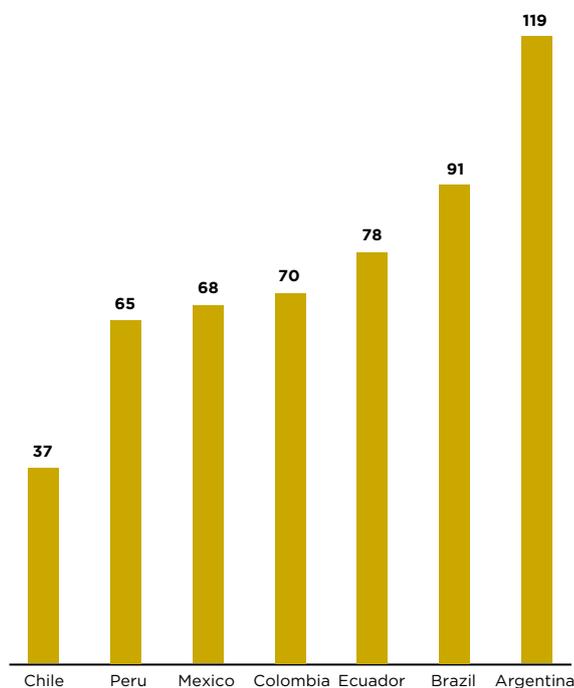
Source: World Economic Forum
*Ecuador data on railroad is not applicable

for financing. Another round is in pipeline for the second half of 2017. During this second round, the government aims to allocate 1.2 GW in capacity through renewable energies.





Chart 4
Quality of Electricity Supply 2016-17 (ranking 138 countries)



Source: World Economic Forum

Public – Private Partnerships a solution for restricted government budgets

Although progress in infrastructure is a necessity, public investment has been reduced in recent years. If it does not gain strength, the region's infrastructural shortcomings will hamper its growth prospects in the longer term. Clearly, in the current scenario, these much-needed investments cannot solely rely on public resources. Lackluster GDP growth and lower commodity prices have hit tax revenues, reducing governments' investment capacity. This means that attracting private investment is of the utmost importance.

An increasingly trend in the region has been the growth of Public-Private Partnerships (PPP). While infrastructure holds some features of public goods, such as no rivalry⁴, they can become feasible opportunities for private investors thanks to the possibility of excludability (for instance by charging a fee). These types of investments are more common in electricity, telecommunications and transportation networks, while water and sewage tend to rely more on municipal provisions.

According to the Economist Intelligence Unit indicator for PPP environments, Chile and Colombia are the best prepared countries in the region for public-private partnerships. The same study assesses the capacity of countries in Latin America and the Caribbean to carry out sustainable public private partnerships for infrastructure (chart 5). It comprises 5 categories: regulations, institutions, maturity, investment and business climate

and financing. The 2017 edition highlights that the sector is advancing steadily in the region, although there is still space for improvements in transparency across the PPP process, for better integration of social aspects into the agreements and for expanding the sources of financing for projects. Across the range of 19 Latin America economies, there is no country in the region that possesses a mature environment for PPP. Brazil stands just behind Colombia, with Chile in third position. Peru and Mexico are also classified in this group, respectively in 5th and 6th positions. Argentina and Ecuador are ranked in the group of emerging countries.

Chile has over 25 years' experience in PPP projects, a strong regulatory and institutional framework, and a solid climate for investment and business. Nevertheless, the country does face challenges - such as the cost of projects, which are viewed as expensive. The Colombian environment benefits from a strong regulatory framework which followed in the wake of a new PPP law implemented in 2012. Despite this, the report mentions that further improvements are still required to make processes more efficient.

Brazil's financing instruments are more developed than those of the remaining countries in the region. BNDES, the state-owned development bank, is the main provider of long term funding at below market rates but it is not able to supply all the financing needed for infrastructure. In 2011, in order to expand financing sources, policymakers established tax benefits for fixed-income products with the aim of specifically funding infrastructure investments. For instance, buyers of infrastructure bonds (foreigners or residents) benefit from income tax exemption. This financing instrument is expected to gain importance over the coming years even though, on the negative side, it has relatively low liquidity and inferior premiums compared to standard government bonds. Foreign investors who are obliged to pay taxes on the income from these bonds in their home countries do not find the bonds attractive enough.

The first PPP law in **Peru** was enacted in 2008 and in 2015 a new framework was put into place to align local regulations with international best practices. Since then, the new president Pedro Pablo Kuczynski (who took office in July 2016) has introduced regulations to enhance transparency and prevent corruption. Among the points to be improved in these new regulations are the unclear definitions of jurisdiction and competencies among entities and the significant delays in the execution phase.

Mexico also benefits from a new law on PPP which was approved in 2012 and followed by an updated regulatory framework in the same year. The main challenge is that PPPs are not yet as widely known in all of the country's states as they are in its pro-market states.

^{4/} A good is considered non rival if for any level of production, the cost of providing it to a marginal (additional) individual is zero.

Coface upgraded Argentina’s assessment to ‘B’ early this year. The country has clearly shown a progression, but it still needs to make up for lost time.

The business climate has improved considerably since pro-business president Mauricio Macri took office in mid-December 2015. Artificial controls used by the previous populist government were dismantled (such as subsidies on public tariffs, import controls and over-evaluated exchange rates), while mistrusted economic indicators have been reviewed. Moreover, the government has also put an end to the holdout issue, which had been dragging out since mid-2014. This has been decisive for Argentina in order to regain access to the international capital markets. In November 2016 a new PPP law was approved and the government announced a series of investments. The government wants to raise the current meagre rate of infrastructure investments (2 % of GDP), to 6 % of GDP within eight years. However, access to big project investments still remains a challenging issue. As mentioned in the previous section, many companies that won projects in the RenovAr renewable energy programme are still looking for financing.

The financing challenge in Argentina stems from its payment history. Admittedly Argentina’s credibility among investors has significantly improved since Mr. Macri took office. Despite this, they still have a cautionary bias, while they wait to see if the new pro-business policies are part of a permanent, positive change. As an example, there is no local public agency that holds an investment-grade credit rating. This poses a challenge for developers that are seeking funding for their projects through power purchase agreements (PPAs) issued by Argentina’s electricity market administrator, Cammesa. Fitch, for instance, recently described Cammesa as a “counterpart with a weak profile and dependent on cash from sovereign”. To improve the attractiveness of investing in its energy sector, Argentina is offering PPAs over the regional general average (with up to 20 years compared to the typical 15 years in



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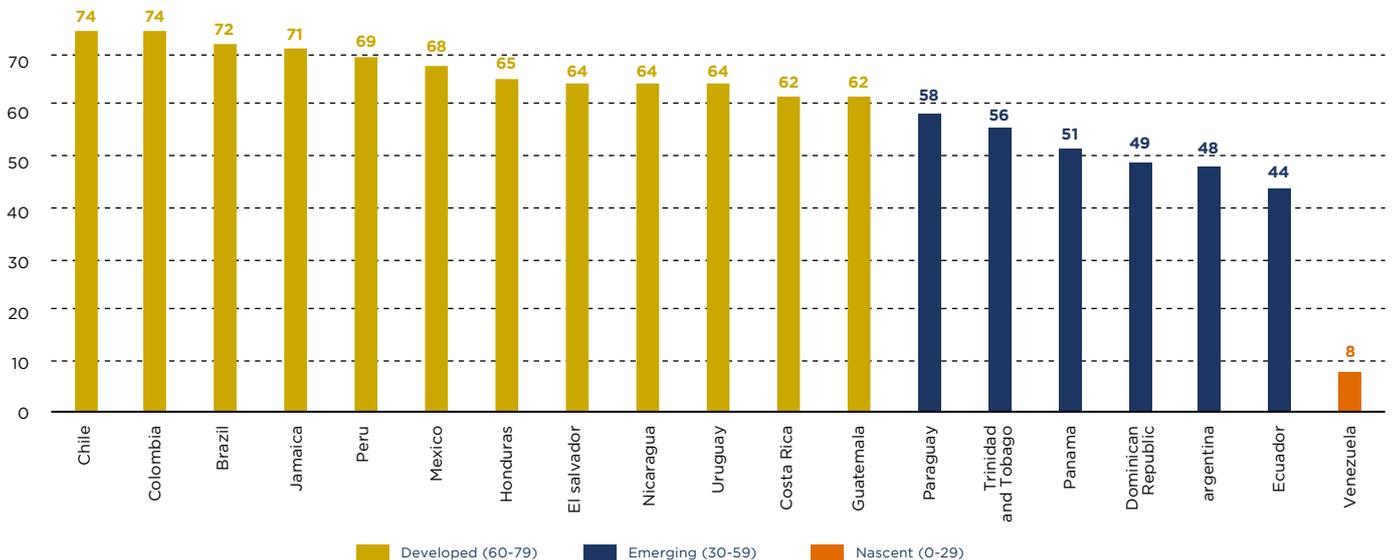


Chile and Mexico). Furthermore, policymakers are looking to offer three layers of guarantee, including the World Bank. Earlier this year, the World Bank approved a 480 million USD guarantee to support private investments in RenovAr. Finally, a regulatory change that is currently pending approval in Congress should allow freely negotiated PPAs between generators and large consumers. The government intends to phase out the role of Camessa as an energy purchaser, so that generators can sell their output directly to final consumers (such as a distributor or a large-scale industry).

As with Argentina, **Ecuador** also suffered from a highly interventionist government. In 2008 its Constitution gave the government the control of strategic sectors (such as water, transportation and energy). The generally high oil prices at the time allowed the country’s public investments to climb from roughly 4 % of GDP in mid-2000, to 15 % of GDP - until the slump in oil prices in mid-2014. A new PPP framework is now gradually coming into force, although there is still much to be improved (such as a PPP unit with proven technical capacity in the domain).



Chart 5
Overall Public-Private Partnership (PPP) Environment - 2017

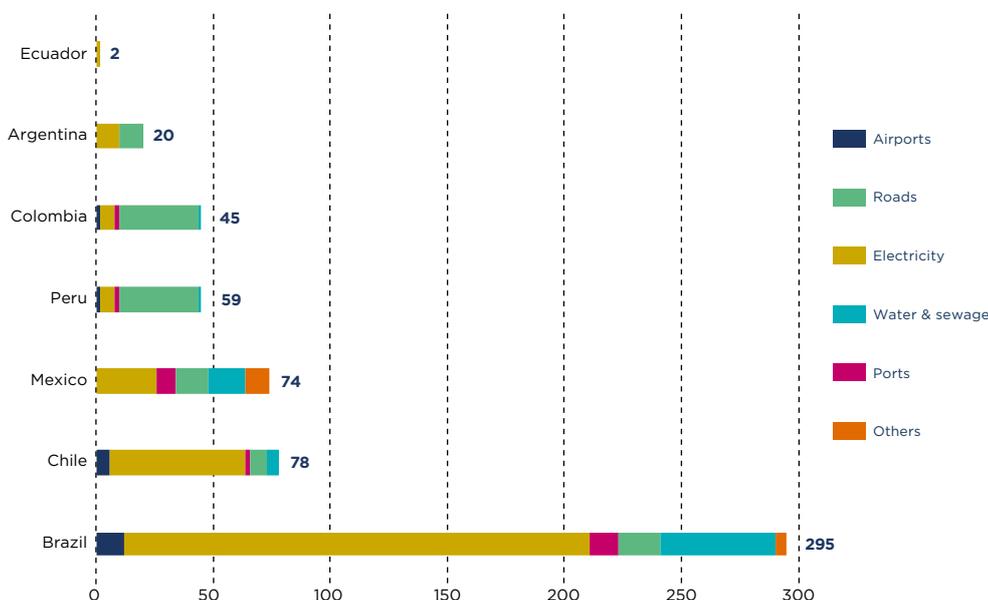




According to the World Bank database, during the period of 2010-2015, most Public Private Partnerships were related to electricity and roads (chart 6). Brazil was the country which developed the highest number of projects. This outcome was already anticipated due to the country's strong representativeness in the region's GDP.

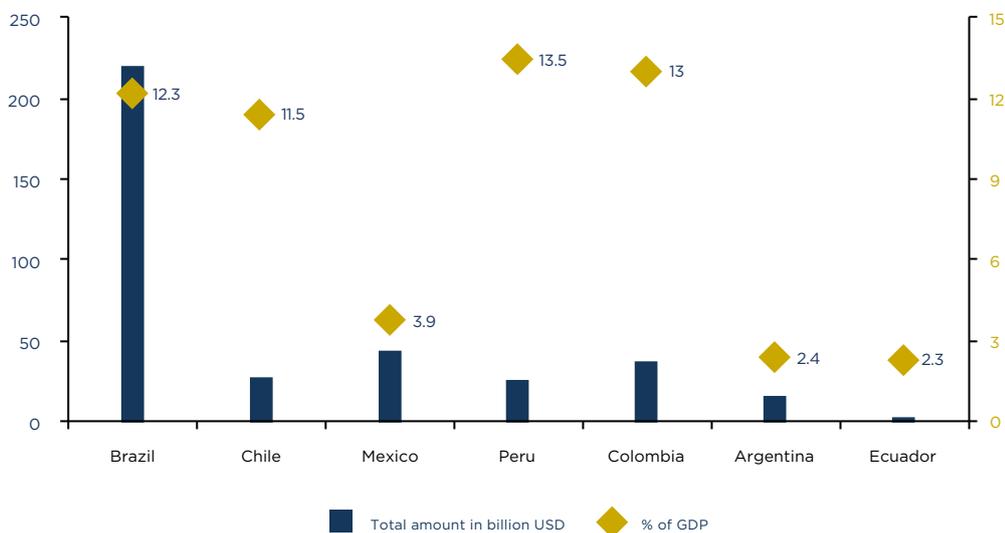
In comparison, however, considering the same portfolio in terms of total amount accumulated in the period, these PPP projects were equal to 12.3 % of Brazil's GDP in 2015 (chart 7) - similar to the percentages observed in Chile, Peru and Colombia, although far above the performances of Mexico, Peru and Ecuador.

Chart 6
PPP Projects by Sector (2010-2015) - Total number of Projects



Source: World Bank

Chart 7
Projects by Country (2010-2015) - Representativeness in terms of GDP



Source: World Bank

*Values for Colombia cover the period of 2010-2016
**GDP considered refers to the year of 2015

2 THE ROLE OF REGIONAL GOVERNMENTS IN WEAK INFRASTRUCTURE

Political environment undermines the attractiveness for private investors

Public Private Partnerships show promise as a way of narrowing the region's infrastructure gap - but they are up against a weak political climate. Infrastructure works generally require long periods of investment - but the region's political environment is not exactly well-perceived and corruption scandals are unfortunately not uncommon.

The Brazilian Car Wash operation⁵ is a recent example. The investigation initially focused on corruption scandals involving Petrobras, the state-owned oil company, and bribes paid by construction firms to the oil company's executives in return for awarding contracts at inflated prices. However, as the case unfolded, a sequence of plea bargains by the implicated executives revealed a much larger network of bribes. Corruption for personal enrichment and/or for the financing of illegal campaigns has encompassed several political parties and more astonishingly, has spread to other governments in Latin America. According to the news and based on local investigations, to ensure preference in public works projects, between 2001 and 2016, a major construction group paid some 386 million USD in bribes in nine of the region's countries - in addition to Brazil (notably Guatemala, Venezuela, Ecuador, Dominican Republic, Mexico, Argentina, Colombia, Panama and Peru).

As corruption scandals lead to delays in investments and incite the mistrust of foreign investors, effective sentencing is important in order to safeguard interest in public private partnerships. The most visible case of this has been in Peru. Private investment in the country fell by 5.1% YoY during the second quarter of 2017 (after -5.6% in 1Q2017 and -6.1% in 4Q16), dragged down by the plunge in infrastructure investments. This weak performance is connected to the Car Wash corruption scandal, which was considered by analysts as the biggest in the country's history due to its political repercussions. Investments such as the southern gas pipeline, the Olmos and Chavimochic irrigation projects, and several tranches of the interoceanic highway were among the projects that ceased. Three former presidents (Alejandro Toledo 2001-2006, Alan Garcia 2006-2011 and Ollant Humala 2011-2016)

are accused of having received irregular payments. Even the current president, Pedro Pablo Kuczynski, who was Minister of Economy during the Toledo government, has been heard as a witness by the investigators. While investment in the country is expected to rebound over the following quarters, scandals such as these certainly contribute negatively to the country's image for foreign investors. The region has plenty of other similar examples.

Improving the outcome of infrastructure investments

In order to optimise the results achieved through investments in infrastructure, there are important aspects that need to be addressed:

- **Expanding the financial tools for investments in infrastructure:** The general lack of financial facilities for supporting private investment is often cited as the main hindrance for entrepreneurs in the region. Many of its countries still depend on multilateral institutions. It is therefore important to develop local bond markets and to boost infrastructure bonds and other forms of finance - such as private pension and sovereign wealth funds - that could contribute to increasing the resources needed.

- **Prospecting new investors:** There is a high level of concentration in the PPP portfolio. In many countries, such as Mexico, Peru, Colombia and Chile, PPP projects are concentrated in the hands of just a few companies. New potential investors need to be prospected, in order to increase the competition during bids and achieve more favourable agreements.

- **Policymakers need to set more appealing conditions:** such as attractive yields and clear regulatory framework, in order to lure the interest of private investors. Analysing the viability of each project from the perspective of investors would also be worthwhile. It could be that some projects are not of interest for the private sector, or may need some adjustments to make them more attractive.

- **Improving transparency:** It is important to improve the controls during all phases throughout investments. This would imply better cost control and service levels. This would help combat cases of overbilling and/or corruption in infrastructure construction projects. For example, one of the positive spillovers from the car wash operation is that companies in Latin America are expected to improve their internal rules on transparency and compliance.

5/ Car wash operation is an investigation being carried out by the Federal Police of Brazil, Curitiba Branch, since March 17 2014 and under the judicial command of by Judge Sérgio Moro.

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