Fiscal Consolidation and Long-Term Growth

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POLICY DISCUSSION BRIEFS

FISCAL CONSOLIDATION AND LONG-TERM GROWTH

LIMA, OCTOBER 8, 2015
The following policy discussion briefs were prepared as the basis for discussion during the Seventh Meeting of Finance Ministers of the Americas and the Caribbean held in Lima, Peru, on October 8, 2015, and chaired by Mr. Alonso Segura, Minister of Economy and Finance of Peru.

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The opinions expressed in these policy discussion briefs are those of the authors and do not necessarily represent the views of the Inter-American Development Bank, the International Monetary Fund, the World Bank, the United Nations Economic Commission for Latin America and the Caribbean, the CAF - Development Bank of Latin America, or their member countries.
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Fiscal Consolidation and Long-Term Growth

Lima, October 8, 2015

The Meeting of Finance Ministers of the Americas and the Caribbean – also known by its acronym RFM – is an annual policy dialogue whose objective is to discuss issues of strategic importance and with the potential to promote economic integration and regional cooperation.

RFM meetings are attended by Finance Ministers from 34 countries of the Americas and the Caribbean, as well as the Heads of the International Monetary Fund (IMF), the World Bank (WB), and the Inter-American Development Bank (IDB). Regional institutions such as the United Nations Economic Commission for Latin America and the Caribbean (ECLAC), the Development Bank of Latin America (CAF), the Central American Bank for Economic Integration (CABEI) and the Caribbean Development Bank (CDB) contribute to the discussion of Ministers.

The Inter-American Development Bank, through the Integration and Trade Sector, acts as the Technical Secretariat of the Meeting of Finance Ministers of the Americas and the Caribbean, and provides technical and logistical support in coordination with the country that chairs and organizes the annual meeting.

During the Seventh Meeting the Ministers will discuss technical issues related to fiscal consolidation and long-term growth, focusing on policy options that are best suited for achieving fiscal consolidation without affecting future economic growth.

The policy discussion notes included herein introduce the issues that will be covered by the speakers:

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Mr. Jorge Familiar
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Mr. Alejandro Werner
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Mr. Enrique García
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Ms. Alicia Bárcena
Executive Secretary
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Mr. Alonso Segura, Minister of Economy and Finance of Peru, will moderate the discussion among the Finance Ministers of the Americas and the Caribbean.
A big push for productivity is required

Current growth projections are much less promising than they have been in previous years. In the absence of external factors that generate economic growth, the region will have to boost productivity, a task that has proven quite difficult for Latin America and the Caribbean (LAC) (Pagés, 2010; Crespi and others, 2014). Productivity, which is the engine of sustainable growth, has been very mediocre in LAC; it has grown at higher rates in all other regions except the Middle East. To register growth rates similar to those of the past decade, the region must double its total factor productivity (TFP) growth (IDB, 2015).

The labor market has a significant role in increasing growth

Despite the key role that labor productivity and employment rate play in the region’s income level, the labor market in Latin America and the Caribbean is rarely considered an important source of growth. Jobs for Growth, a recent IDB publication, shows not only that growth has important repercussions on countries’ labor market performance but also that labor market performance itself can have important consequences for growth.

Labor market challenges can reduce growth

The region suffers from various fundamental challenges in its labor markets:

- **Misalignment between labor costs and productivity, contributing to high informality:** The costs of employing a worker in compliance with labor regulations, vis-à-vis his or her productivity level, are higher in LAC than in the OECD (see Graph 1). This contributes to high informality (see Graph 2) and is reinforced by the expansion of non-contributive programs that provide free benefits to informal workers and which constitute, de facto, a subsidy to informality (Bosch, Cobacho, Pagés, 2013 and Levy and Schady, 2013). More than half (55%) of jobs in the region are informal, even among the
middle class. Informal jobs are much less productive (Busso, Fazio and Levy, 2012),\(^6\) imply tax revenue losses, do not contribute to national savings (because they do not generate savings for old age) and create greater demand for non-contributive benefits.

- **Mismatch between workers’ characteristics and job requirements:** Latin America and the Caribbean is the region where more companies declare labor force skill gaps to be an obstacle to firms’ growth (OECD, CAF and ECLAC, 2014).\(^7\) At the same time, many dismissals seem to be caused by a mismatch between employers’ demands and workers’ characteristics and productivity.

Graph 1. Minimum wage and non-wage labor costs in LAC and OECD (as percentage of GDP per person employed)

![Graph showing minimum wage and non-wage labor costs in LAC and OECD](image)

*Source:* Author’s calculations based on the labor legislation in each country (as of December 2013) and OECD (2015).\(^8\)


\(^7\) OECD, CAF and ECLAC. Latin American Economic Outlook, 2015: Education, Skills and Innovation for Development. Available at: http://dx.doi.org/10.1787/leo-2015-en

• **High instability that results in very low levels of investment in human capital:** Despite having employment protection legislation that is similar to, and in some cases even more protective than, that of the OECD countries, LAC’s labor turnover is much higher than OECD’s. One out of four workers in LAC has been in his or her job for less than one year, compared to 15% in the OECD countries. This turnover does not lead to better jobs: in Brazil, Argentina and Mexico, between 40 and 55% of workers who change jobs worsen their salary conditions and other benefits after doing so. High levels of turnover can reduce incentives to invest in workers’ human capital (which would increase their productivity). While, in OECD countries, 50% of workers on average receive some training within a period of a year, in LAC, this figure is below 10%. In a similar vein, the percentage of workers in informal jobs who receive some type of training is close to zero.

• **Unused capacity:** In Latin America, 21.5% of the youth population in the region (approximately 21.5 million people) neither study nor work, and in some LAC countries, the percentage of women who participate in the labor market is still very small. Moreover, in some countries, such as Guatemala, Chile and El Salvador, a relatively small percentage of those with low education levels find jobs. Adding these vulnerable populations to the labor market would result in considerable gains. For example, it is estimated that employing all youth who neither study nor work, the region’s GDP would be 5% higher.

The aforementioned information suggests that, in the region, high levels of labor instability and informality and low levels of productivity negatively reinforce each other, trapping the region in a vicious cycle of low-quality jobs, low productivity and low growth.
Pro-productivity labor policies are needed

Labor policies can help deactivate this vicious cycle. These policies must have a holistic approach and be centered along two main fronts:

**Promote more formal jobs**

It is necessary to create a better match in the region between the costs of formal jobs and the productivity of labor, especially through measures that improve workers’ productivity. In some cases, it may be helpful to review the level and/or financing of labor benefits through the following processes:

- Improve the quality of services that formal workers receive in exchange of their contributions.
- Increase the effectiveness of intermediation policies to provide more and better investments in public employment services.
- Promote human capital development policies for workers who find it challenging to join the labor market (e.g., youths looking for their first jobs, women, and less-qualified workers).
- Protect job-seekers’ income during periods of unemployment.
- Improve law enforcement by optimizing labor inspection and the use of administrative data.

**Promote productive labor stability**

Favoring productive labor stability in the workplace lays the foundation for labor relations that are longer lasting and more productive. In this sense, two main lines of action are proposed:

- Invest more in employment training; in particular, increase the efficacy, quality and relevance of training expenditures to protect, update, and improve workers’ human capital.
- Simplify the regulatory framework for dismissals through a simple and easy-to-apply legal system that generates neither uncertainty nor legal disputes.

**The region’s ministries of finance (MFs) can improve labor performance and promote faster growth based on the following:**

- **Promote formal employment.** Formal employment carries with it a series of positive externalities in terms of tax collection, savings, training, and productivity. For this reason, investing in ways of generating formal employment has higher social returns than investing in programs for workers who are not covered by social security (as such programs promote informality). Investments in labor intermediation, training programs for current and potential workers, and improvements in law enforcement can promote growth and save important state resources in the medium term. Likewise, the MFs could encourage formality by reducing the labor tax burden by shifting these costs to other tax sources (See Box 1).
Box 1: Reduction of labor costs without worsening job quality: Colombia’s example

The 2012 tax reform considerably reduced non-wage costs and replaced (or attempted to replace) the loss of resources by raising firms’ earnings taxes. Specifically, the reform eliminated employers’ contributions to health, training and family well-being, which reduced non-wage costs by 13.5 percentage points. The loss of these resources was financed through a newly created tax on firms’ profits. Immediately after the reform, a clearly positive tendency toward the creation of formal employment can be observed (Graph 1.1).

Graph 1.1: Percentage of pension contributors
2007-2015: National Total and 13 Urban Areas

The percentage of formal workers went from 30% before the reform to around 34% after the reform (and from 43 to 47% in the 13 urban areas). Even though this is not conclusive evidence of impact, this change is consistent with two general equilibrium studies, by Antón (2014) and Fedesarrollo (2015), which suggest that the tax reform should generate an increase in the formality rate of between 2 and 3 percentage points. This in turn translates into an additional 400,000 to 600,000 formal jobs and a net salary increase for formal workers of approximately 4.9%.

- **Promote more cost-effective labor policies.** There is very limited information with respect to the cost-effectiveness of labor policies. The region’s MFS could demand greater accountability and strategically use tools like impact evaluation to measure the effectiveness of labor policies as a precondition for channeling additional resources to these policies.

- **Promote improvements in the capacity for analysis, design, and management of labor policies for the Ministries of Labor and Finance in the region.**

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The Seven Sins of Flawed Public-Private Partnerships

There are three stakeholders in a public-private partnership (PPP), (a) the government in office, (b) private firms (financial and non-financial) and investors (individual and institutional), and (c) final beneficiaries (taxpayers or users, present and future). The raison d’être of PPPs is threefold: (i) to crowd in private firms and investors into projects that they would otherwise not undertake; (ii) to transfer to the private sector a significant part of the risks and costs that the government would otherwise fully absorb; and, (iii) to ensure that the project’s efficiency/quality is at least equal to that obtained if the government alone carried all costs and risks.

Important (yet often ignored) implications follow. First, outsourcing (e.g., construction and maintenance) to the private sector does not by itself constitute a PPP if all risks and costs are, in one way or another, still borne by the government. Second, a PPP does not reduce total risk; it simply distributes it differently, involving private sector firms and investors. Third, the total costs borne by the final beneficiaries would be lower under a PPP (compared to a project whose costs and risks rest completely in the government’s balance sheet) only if the PPP achieves efficiency gains; otherwise, what beneficiaries save in taxes they would pay in user fees, although, under a PPP, more of the costs would be assigned to direct beneficiaries/users, than to taxpayers at large. Fourth, that a PPP can provide (cash) budget relief may be a welcome corollary for the government in office but it is not a core objective of a PPP.

The problem is that achieving in practice the raison d’être of PPPs is much more complicated than often believed. In particular, things are biased against final beneficiaries. Why? Because, under a weak PPP policy, regulatory and institutional framework, the interests of private firms and investors, on the one hand, and those of the government in office, on the other, do not naturally coincide with the interests of present and future taxpayers and users. The government in office has incentives to get the projects on the ground as soon as possible (the “monument effect”) without affecting today’s budget but leaving liabilities to future governments (the “myopic cash saving” effect). It also has incentives to underestimate or hide contingent liabilities associated with PPPs (the “concealment” effect). For their

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12 As regards risks, this note focuses only on the idiosyncratic risks associated with a particular PPP. Aggregate and systemic risks, which affect economic activities within a given national jurisdiction across the board, by definition cannot be diversified away within that jurisdiction. Aggregate and systemic risks are incorporated in sovereign risk ratings and can only be reduced slowly overtime via sustained economic development and institutional improvement.

13 Any contingent liability that the government bears under a PPP remains in reality in the budget (inter-temporally), regardless of whether it is disclosed or not in the budget numbers. Moreover, as noted, taxpayers and/or users still get the entire bill of a PPP (and not just the part borne by the government), if not via taxes, via user fees; although they may also (and hopefully) get some efficiency benefits.

14 Democratically elected governments are typically pressured during the four to six year term to inaugurate some visible infrastructure projects. Considering that a construction period of a typical highway, port, or airport may take three to five years, the lag time for negotiations is limited, hence the tendency to negotiate poorly and over-guarantee.
part, private firms and investors involved in PPPs have incentives to earn as much profit as possible while transferring as much of the costs and risks as possible to the government (the “one-sided bet” effect—heads I win, tails the government loses). In the absence of a sound PPP policy framework, therefore, the dice are indeed loaded against final beneficiaries, whose interests are not well represented in the PPP design and selection process.

Hence, to ensure that PPPs actually add value to society, a well-designed policy framework (including well-designed laws, regulations and procedures) is of the essence. Such a framework would adequately represent the interests of the final beneficiaries, by promoting efficiency gains, by greatly reducing the incentives of the government in office to over-guarantee, and by significantly curbing the incentives of private firms’ and investors’ to unduly shift costs and risks to the government. The rest of this note highlights seven deadly sins of poorly designed PPPs, the key things to avoid when designing and implementing PPP policy.

**Sin #1: Provide excessive government guarantees**

As noted, the combined incentives of the government in office and private firms and investors militates in favor of excessive government guarantees. Over-guaranteeing provides a quick fix for a cash-strapped government in office and for private players but at the expense of vitiating project selection, distorting resource allocation, saddling future governments with large fiscal obligations, and widening the space for the costs to the final beneficiaries to be higher than otherwise (and the quality of services lower than otherwise).

To avoid over-guaranteeing, it helps to keep in mind that *an important subset of PPPs may require minimal or even no government guarantees*. There are indeed infrastructure projects that are not structured by private firms alone not because risks are high but because of coordination failures. In those cases, governments could award PPP projects simply by playing a catalytic role rather than by offering guarantees. By offering active coordination services and assigning the PPP on a flexible term basis (more on this below, under Sin #7), for instance, the government can shift much of the construction and demand (e.g., traffic volume in the case of a highway) risks to the private sector. There are in fact successful experiences of PPP highway concessions with no government guarantees on demand or construction. These projects require a good concession contract and a relatively sophisticated (deep and diverse) financial services industry.

If government guarantees must be provided, four important considerations can help. irst, it is in general preferable to *separate subsidies from finance*. Hence, it would be better not to embed any subsidy that the PPP structure may contain (where warranted by identifiable un-internalized externalities) into the price of a government-originated guarantee or loan. Instead, governments should strive to price their loans or guarantees as fairly as possible, using a price that reflects the best feasible estimate of expected loss.

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Second, even where government guarantees are provided within a PPP structure at a fair price, it is in general superior for the government not to guarantee 100% of the risk (i.e., of the variance around the expected loss) or for the government-originated loans not to cover 100% of the finance. Government guarantees that cover 100% of construction or demand risks create incentives for private construction or maintenance firms to shirk or take excessive risks. And if a government guarantee granted to a private creditor covers 100% of, say, the default risk, the private creditor would have no incentive to screen and monitor the project adequately. By offering only partial yet fairly priced guarantees, the government separates subsidies from finance and ensures that the private players involved in the PPP have skin-in-the-game, which is essential to align the incentives of the agent (the private firms and investors) with those of the principal (the government and, ultimately, the taxpayers).

Third, government guarantees should be transparently booked and disclosed. Guarantees increase the government’s contingent liabilities, transferring risks to future generations. Absent sound accounting and disclosure standards, the contingent liabilities embedded in government guarantees not only undermine inter-temporal budget discipline but taxpayers (citizens) are deceived by the government in office into holding a heavy bag that they did not know existed. A solid accounting and disclosure framework for PPP-related contingent liabilities is, thus, essential.

And fourth, exchange rate guarantees should be limited, to the extent possible. Pressures for governments to provide exchange rate guarantees are likely to be higher where: (i) the local currency is not the preferred store of value and, as a consequence, the dollar is heavily used for financial contracts; (ii) there is not significant market for local currency-denominated long term finance; and (iii) exchange rate regimes are relatively inflexible. By yielding unduly to pressures to provide exchange rate guarantees, governments could reduce the maneuvering space for monetary and exchange rate policy. To be sure, however, the decision would depend on the counterfactual. For instance, in the extreme, if in the absence of a PPP governments would undertake the infrastructure project on their own, the counterfactual would be an explicit rise in dollar-denominated government debt, with similar implications for policy space.

**Sin # 2: Miss opportunities for market tests**

This sin is bound to be committed if sin #1 is also committed. However, even if government guarantees are partial, fairly priced, and adequately booked and disclosed, a sound PPP policy should involve conscious efforts by the government to take advantage of market tests. For example, provided that private players have sufficient skin-in-the-game, governments can and should leverage on the private sector comparative advantages in screening and monitoring projects. By not seizing this type of market test, the scope for projects with low private (let alone social) rates of return grows wider. Missing market tests is more likely to happen where PPP-based projects are financed largely by government-owned (commercial or development) banks.

True market tests arise only if there is sufficient skin-in-the-game of well-informed, sophisticated private investors. For instance, the infrastructure bond market is suitable for qualified investors, and the provision of insurance against, say, construction risks, is suitable only to well-run insurance firms. This
implies that involving at the margin only small, unsophisticated investors does not offer a true market test and may instead widen the scope for abuse of small, unsophisticated investors by sophisticated brokerage institutions. It also implies, unfortunately, that true market tests are in relatively short supply in underdeveloped financial systems.

**Sin #3: Have multiple PPP agencies within the government**

A problem common to many countries is that almost any ministry with a government can initiate and award PPPs. This is inefficient and wasteful. Indeed, there are strong reasons that militate in favor of centralizing PPP capacity in a single governmental agency.

On the one hand, the PPP contractual technology requires a high degree of expertise and sophistication on the side of the regulator. On the other hand, such technology, once mastered, can be applied to all sorts of PPP projects, from highways to hospitals, from airports to jails. Hence, a specialized, professional, and credible government agency that can deal with these contracts in a centralized manner is a superior alternative to dispersed PPP initiators with weak capacity. Since learning on the job is necessary, the agency would need to attract top talent and provide an interesting career path to high performers. In addition, having sufficient in-house expertise would enable the specialized PPP agency to leverage and adequately supervise external expertise, local and international.

The PPP agency should advise on the type of projects that are more suitable for PPPs. It should also be able to identify the sectors where PPPs provide the highest value for money compared to other options (i.e. privatizations or government procurement contracts). A high-quality PPP agency, furthermore, would significantly mitigate the asymmetry of information between concession companies and the government.

**Sin #4: Fail to adequately address conflicts of interest and disputes**

Given conflicts of interest, it makes sense to separate the awarding function from supervising function in PPP policy frameworks. The agency that grants the concessions should not be the same as the agency that supervises the implementation of contracts. Experience suggests that the incentives for contract renegotiation have been greater in cases where the same agency performs both functions. Contract renegotiations are, in some cases, a consequence of omissions or mistakes made by the agency that granted the concessions. When that agency is also in charge of supervision, it would tend to avoid escalating the conflict with the concessionary company and be thus more inclined to yield to renegotiation pressures.

The supervisory agency needs to have the authority to supervise and to impose significant pecuniary sanctions on the concessionary company in cases of breach of contract. This is an additional reason for having qualifying as bidders only concessionary companies with a sound capital base that they will defend by avoiding, to the extent possible, breaches of contractual agreements.

It is also essential that PPP frameworks put in place an efficient mechanism for dispute resolution. Disputes between the concessionary company and the government may arise due to different views on
the nature and extent or risk sharing. They may also arise under when unforeseen changes in technology lead to an early termination of the contract that calls for fair compensation to the concessionary company. In addition, contracts may not have provisions to resolve all types of differences. A credible and efficient conflict resolution is thus needed.

Note that avoiding Sins #3 and #4 goes a long way into fending off Sins #1 and #2. In effect, seizing the opportunities for market tests, on the one hand, and ensuring proper due diligence, checks and balances, and accountability in the process of screening, awarding and monitoring risk sharing structures, on the other hand, is not realistic in the absence of an appropriate organizational structure, composed of highly professional but separate governmental agencies for awarding and supervising PPPs, alongside a sound dispute resolution mechanism.

**Sin #5: Assume that defined-contribution pension funds provide a silver bullet**

While commercial banks have been one of the largest supporters of project finance in the past, the introduction of new capital rules (Basel III) will make it more expensive for banks to participate in the market of long-term financing. Therefore capital markets, particularly via institutional investors, are likely to play a more relevant role in the financing of infrastructure in the future. Privately-administered defined-contribution pension funds (i.e., 401[k]-type individual savings accounts for retirement) have become an important type of institutional investor in many Latin American countries. A common error, however, is to assume that these funds offer a silver-bullet solution to PPP-based infrastructure long-term finance.

To be sure, defined-contribution pension funds can be part of the solution (and there is room to improve their role as long-term investors), but they are far from being the whole solution. The main limitation of these funds arises from the simple fact that they are pure asset managers (they do not have a formal liability and, hence, are not asset-liability managers). Although they manage savings for old age, they tend to behave like any mutual fund with shorter-term horizons (with an eye to the next quarterly or monthly report). All the risks are fully borne by the workers that put their savings into these pension funds, and not by the fund managers. Managers try not to deviate from the performance of their peers, which fosters a herding behavior. In all, under current regulations, defined-contribution pension funds do not have an inherent and consistent vocation to invest in truly long-term assets. They invest in long assets only if such assets command high secondary market liquidity (which tend to be, for instance, the case of government bonds). Infrastructure-related financial assets, however, are typically illiquid.

A fundamental solution to long-term infrastructure finance denominated in local currency can come only from well-regulated (prudent) institutional investors that have formal long-term liabilities and, hence, are systematically in need of long-term assets to match their liabilities. This is the case, for example, of life insurance companies that sell fixed annuities to retirees. These institutions are dedicated long-term investors because they have a contractual obligation to provide a fixed stream of payments to individuals for many years after retirement. Hence, infrastructure bonds can easily prosper in the context of a national financial system that has this type of dedicated long-term asset-liability
managers. In most of the Latin American countries with defined contribution pension funds, annuity providers are incipient and face regulatory challenges that inhibit their development.

Engaging defined contribution pension funds in long-term bonds, including infrastructure bonds, is not impossible, but it would require regulatory changes that induce pension funds to operate with longer investment horizons. For example, regulations can be amended to measure the performance of a defined-contribution pension fund against long-term benchmarks commensurate with the long-term nature of savings for old age, rather than against short-term indicators (e.g., the average performance of the industry) as is typically mandated in many Latin American countries today.  

**Sin #6: Assume that construction and concessionary companies are good substitutes**

The traditional business of construction companies is to build infrastructure and make a profit from this activity. The business of concessionary companies in the PPP context is rather different. It involves not only building and maintaining the infrastructure project, but also finding investors willing to finance the construction based on the expected revenues from the operation of the asset during the concession period. Those in the construction business are skilled at building; those in the concessionary company require more long-term finance skills.

In addition, capital structures needed by both types of company are different. PPP projects typically require high leverage, and investors want sound capital structures to provide buffers as well as solid projects with good rates of return. These capital structures are rare in construction companies which, typically, seek to extract the maximum profit during the construction stage and do not care what happens after the construction is completed and they get paid.

Thus, the set of skills, governance and capital structure of concessionary companies should be a key factor for selecting eligible bidders for PPP-based projects.

**Sin #7: Award concessions based on the wrong bidding parameters**

Auctioning a concession helps dissipate rents and allows the ultimate beneficiaries (the users of the PPP-based infrastructure) to appropriate much of the consumer surplus, as long as there is no undue renegotiation of the concession terms after it is awarded. Hence, bidding criteria should be set pragmatically and with an eye at reducing the time inconsistency problem, whereby bidders have incentives to bid low, win the concession contract, and subsequently re-negotiate and extract additional benefits.

Such time inconsistency problem is exacerbated when the concession is awarded by an insufficiently informed government agency to a bidder that offers the lowest user fees (the lower tolls in the case of a highway) or the shortest length of the concession period. Once the concession is awarded, the government is so to speak “on the hook” and winning bidders can take advantage of the situation to

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16 See De la Torre, A. and H. Rudolph (2015). “*Sistemas de Capitalización Eficientes: Fricciones de Mercado y Desafíos de Política.*” in Fortaleciendo los cimientos del sistema de capitalización individual para asegurar su sostenibilidad. FIAP.
renegotiate and ask for additional government guarantees or other concessions.\textsuperscript{17} This problem is not mitigated by complicating the bidding criteria, for example, by awarding concessions based on a weighted average of several parameters, including user fees, length of the concession, amount of guarantees, and payments to the government (if any). Such an approach may not only not reduce the time inconsistency problem but may add unnecessary complications.

Renegotiation of contracts can transfer back risks to the government in a significant magnitude but in a less transparent manner. Analyzing a large set of infrastructure concessions in Latin America in the 1990s, Guasch (2004) finds that more than 50 percent of the PPP contracts are renegotiated, with renegotiation typically initiated by the concessionary company.\textsuperscript{18}

There are at least two complementary ways of mitigating the time inconsistency problem that leads to post-auction repeated contract renegotiation. One is for the government agency to have more complete information about the technical and financial feasibility of the project so as to be better prepared at the time of the auction and, thus, more readily identify unrealistic bids. But even then, significant uncertainties and risks will remain since the bidder may not be able to predict well the future demand, in the presence of a fixed-term contract he/she may have incentives to renegotiate the contract as soon as it gets the concession award. Renegotiations are typically settled with extensions of the concession period.

Hence, a second, complementary way to reduce the scope for ex-post renegotiation is to use \textit{flexible-term PPP contracts}. Under this modality, bidders compete by disclosing their target present value of user fee-based revenues (PVR), the government sets the maximum user fee and the discount rate to be used in calculating the PVR, and the duration (i.e., the number of years) of the concession contract is left open. The winner (i.e., the bidder that offered the lowest PVR) then operates the concession for as long as needed to collect such PVR, and once that is achieved, the concession contract expires. In addition to drastically reducing the scope for ex-post renegotiation, this auction modality can mitigate significantly the need for governments to provide guarantees to cover demand risks. This risk is transferred to the concession company, which manages and absorbs it over time, under a flexible-term contract. In the presence of less developed capital markets, this type of PPP contracts may still require government to provide some form of targeted guarantees, such as backstop facilities to give comfort to financiers.

\textsuperscript{17} This time inconsistency problem is often referred to as the “winners curse”—having offered to charge unrealistically low user fees, once in possession of the concession contract, winners will try to recover some of their expected losses via repeated renegotiation.

Macroeconomic Risks of Public-Private Partnerships in Infrastructure

Overview

Public investment can be an important catalyst for economic growth. Both theoretical and empirical studies have underscored the positive relationship between high quality public infrastructure and economy-wide productivity. Against the background of a steady decline in public investment as a share of GDP in advanced economies, evidence of infrastructure bottlenecks in emerging and developing economies, and the sluggish global economic recovery, many have called for ramping up public investment to raise long-run economic growth. However, the economic and social impact of public investment critically depends on its efficiency.

Public-private partnerships (PPP) in infrastructure investment are one avenue for governments to meet this challenge, as PPPs can leverage the expertise, efficiency, and financing options of private firms. In the last decade, a growing proportion of infrastructure services has been delivered through PPPs. The PPP capital stock has increased more rapidly in emerging markets (EM) and low income developing countries (LIDC) to around 5 percent of GDP on average in 2013, than in advanced economies (AE) where it averaged about 1 percent of GDP.

Risk of Inefficient Investment

When used effectively, PPPs can deliver substantial savings relative to purely public provision of goods and services. Under a typical PPP, a firm provides upfront financing, and designs, builds, operates, and maintains an asset in exchange for a combination of user fees and/or periodic payments by the government over the life of the contract. PPPs can offer significant advantages over traditional public procurement in terms of mobilizing private financial resources and know-how, promoting the efficient use of public funds, and improving service quality. Although private financing is typically more expensive than government borrowing, a well-designed PPP contract can generate efficiencies that more than offset the higher cost of private capital by bundling the design, construction, and operation of an asset to incentivize the efficient, timely construction of high-quality assets, and the maintenance of and cost recovery from those assets over time.

However, not all investment projects can be effectively delivered using a PPP. The benefits of PPPs mainly arise from the government’s ability to allocate risks efficiently between public and private parties to ensure the right incentives and reduce overall project costs. To do so, the outputs and the quality of services must be predictable and measurable for the duration of the project. PPPs in the information technology (IT) or health sectors can be difficult, as the technological change is simply too rapid in relation to the typical length of a PPP contract.

PPPs require strong legal, policy, appraisal, approval, and monitoring arrangements to negotiate contracts and ensure that private partners meet their obligations. First, there should be a clear investment strategy to select public investment projects on the basis of national priorities and cost-
benefit analysis. Once projects are selected, the next step should be to determine whether procuring the project as a PPP provides greater efficiency than traditional public procurement. Second, it is essential that the Ministry of Finance manages a “gateway process” for PPPs that gives it sufficient control over PPPs at each stage of the process, including contract renegotiation. And third, a sound legal framework for PPPs should establish a clear, fair and predictable legal environment for the private sector. A dedicated PPP law can be helpful in this regard, as this has been associated with lower rates of contract renegotiation.

**Risk to Fiscal Sustainability**

Many governments resort to PPPs, not only to benefit from the expertise and efficiency of the private sector, but to circumvent budgetary oversight and postpone recording the fiscal costs of providing infrastructure services. By spreading the capital cost of a project over its lifetime, some governments may seek to overcome short-term cash budget constraints. Governments implementing cash-based accounting systems recognize the entire capital cost of infrastructure as expenditure during the construction phase, even if it is in practice financed by borrowing. Since PPPs spread cash outflows over time, governments facing short-term cash budget constraints will tend to undertake infrastructure investment through PPPs sooner.

PPPs are also perceived as a way for governments to overcome public sector borrowing constraints. When governments that face a borrowing constraint—which may arise from prudent public financial management policies—even commercially viable, fully ‘user pays’ infrastructure projects may not be implemented in the public sector. Under a PPP the project is financed by private sector rather than public sector borrowing, which may in some circumstances enable a government to overcome this constraint. Of course, this option is probably not open to governments that are considered insolvent, as they may not be able to credibly enter into a long-term contract.

This has led some governments to go forward with low-quality and fiscally costly projects that would otherwise have been excluded from their public investment plans. At best, this can create budgeting issues; at worst, it can enable governments to use PPPs to bypass their own prudent public borrowing and budget limits—creating a temptation to spend more now, in response to political and other pressures to deliver new and improved infrastructure. At the time a PPP project is approved, the future payment commitments still may not be included in budgets and expenditure plans, which often do not look more than one to three years ahead.

Managing fiscal costs and risks arising from PPP operations requires strong budgeting, fiscal accounting, and reporting practices. Governments should aim to achieve full and transparent disclosure of all future budgetary costs and fiscal risks from PPPs. The impact of PPPs on future government outlays should be incorporated in debt sustainability analyses and medium-term budgetary frameworks. The use of commitment appropriations in the budgetary process, which authorize governments to commit public resources for future years, can also be helpful in drawing attention to the future costs of PPPs. The implementation of accrual accounting would also be critical for improving PPP reporting. The latest public sector accounting standards require most PPP assets and liabilities to be included in government
balance sheets. This means that the ability to use PPPs to increase the ‘fiscal space’ available for infrastructure are in practice very limited. However, accruals are complex to implement, and can only be a medium-term objective in most EMs and LIDCs.

Governments should also establish appropriate risk analysis for PPPs at the project level. Governments typically bear or share certain project risks, such as through the provision of guarantees on particular risk factors such as demand, exchange rates, or certain costs. PPP contracts often contain compensation clauses in case of termination of the agreement for a range of reasons. In some cases, PPPs have resulted in large fiscal costs due to the realization of contracted risks, such as those associated with revenue guarantees. Without an adequate measure of contingent liabilities and other risks, governments are likely to take on significantly more fiscal risk under PPP projects than they had expected, or than would be consistent with prudent fiscal management. A sensitivity analysis of PPP projects to different scenarios (including macroeconomic conditions), and their fiscal implications, should be a standard practice when governments evaluate PPPs. This can provide valuable information to policymakers on whether a given PPP project is affordable and its risks.
Introduction

After ten years of strong growth, between 2003 and 2012, the global context is turning less favorable for Latin America. Growth rates have reduced significantly and key macroeconomic indicators such as fiscal deficits and current account balances have deteriorated. We do not expect this to be a transitory setback – like the brief recession in the aftermath of the financial crisis of 2009. This is more likely a structural and more persistent change in global conditions (i.e. China’s structural convergence to lower and more sustainable growth rates, technology upgrade that increased the world supply of the region’s main commodities, normalization of US monetary policy). This will imply lower commodity prices, receding and volatile capital flows to emerging markets and a higher cost of financing. In this new scenario, what reform agenda could Latin American countries follow in order to preserve fiscal sustainability without further dampening medium and long-term growth perspectives?

In this note we suggest that such an agenda could focus on: a) tax reforms and fiscal rules that aim to moderate the impact of commodity price fluctuations on fiscal revenues; b) improving state capacities for planning, evaluating and monitoring public investment and social programs; c) public procurement regimes that are more accountable and competitive; d) PPP infrastructure schemes to improve efficiency in key growth-inducing public services; and e) civil service regulation with the right incentives to attract more competent and motivated public employees.

We do not develop the proposed reforms in detail. We just aim to highlight what each reform should aim at and motivate a debate around that.

The Reform Agenda

Taxes

An important priority in the reform agenda is to pursue policies to diversify fiscal revenues away from natural resources-related revenues. Between 2003 and 2012 a large fraction of the increase of fiscal revenues can be attributed to windfall in natural resources-related revenues. This windfall sustained the significant increase in public spending in many countries of the region. For example, natural resources-related fiscal income represented around 2.9% points of GDP in Argentina by the end of the last decade, 10.6% in Bolivia, 3.4% in Chile, 2.6% in Colombia, 11% in Ecuador, 8% in Mexico, 2% in Peru, and 16% in Venezuela (CAF, 2012).

CAF 2012: Reporte de Economía y Desarrollo, “Finanzas públicas para el Desarrollo: fortaleciendo la conexión entre ingresos y gastos”.

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The significant fall in commodities prices since 2012 has implied important losses in public revenues for many of these economies (i.e. Colombia’s fiscal income fell around 3% of GDP). The volatility of these resources has to be addressed with special instruments so that they do not complicate the budget process. For this reason various countries have established fiscal rules or special funds to smooth out these fluctuations. Countries like Chile, Colombia, and Peru have this type of rule in place though there is still room for improvement, especially in terms of how they are articulated with current budget decisions. In particular, it is important to design more transparent rules as to when and to what extent governments can tap into these funds to finance budget deficits.

Beyond these fiscal rules, the region needs to benefit from more regular sources of fiscal income. There is a lot of evidence that shows that Latin American countries have lower tax burdens than what could be expected according to their per capita income levels (CAF, 2012). Apart from cases like Brazil and Argentina, where tax ratios are above 30% of GDP, the average Latin American country has tax revenues well below 18%, which is quite low even for developing economies standards. This derives from to two issues that tax policies need to address. First, income tax bases are narrow and not progressive enough, especially, in the case of personal income taxes. Second, tax evasion is pervasive in the region: around 27% in value-added tax (VAT) and 50% in income taxes. Tax evasion is not only relevant for increasing revenues without having to increases tax rates, but also for ensuring tax neutrality and equity, elements that are crucial to reduce inefficiencies and improve citizen confidence in State institutions.

Taking steps in this direction could be problematic in times of lower growth. Nevertheless, these are imperative reforms with a long-term view of attaining (or preserving) fiscal sustainability on the basis of a more ample and stable tax base.

**Improving public sector capacities for planning, evaluating and monitoring public investment and social programs**

Citizens may be reluctant to pay more taxes, especially in times of economic distress. So it is quite important that the public sector shows that social programs and investment projects are correctly designed, evaluated and implemented. Public capacities in these areas have to be strengthened. This could be promoted by institutions specially designed for this purpose. For example, National Systems of Public Investment (“Sistemas Nacionales de Inversión Publica” or SNIPs ) are a point in case. These mechanisms should promote not only the *ex-ante* economic and financial evaluation of projects but also the analysis of their social and environmental impact. In many countries these capacities are relatively well developed at the national level, but are nevertheless quite absent at the provincial and municipal level of government.

This *ex-ante* mechanism of evaluation should be integrated with schemes that allow for a monitoring and *ex-post* evaluation (in terms of its economic and social benefits) of public spending programs. Some countries like Chile (DIPRES), Mexico (CONEVAL), Peru (RESULTA) and Colombia (SINERGIA) have introduced these methods through the so called “outcome-based budgeting techniques”. Specific inputs, processes, products and result indicators are developed for each public program so that public

20 CAF 2012, op. cit.
administrators and the general public can evaluate their implementation and results. This allows timely policy adjustment and also prioritization of public programs according to their expected and actual outcomes (CAF, 2015a).  

Public procurement regimes

The implementation of public investment and social programs requires the acquisition of numerous inputs. Many policies fail at the implementation stage. Low competition and lack of transparency can result in waste of resources or, even worse, deviations for private gains (corruption). On the other hand, excessive controls to avoid over-spending and corruption could unnecessarily complicate procurement processes, making them lengthy and cumbersome, ultimately affecting deliverance (CAF, 2015a). A way out of this apparent dilemma is to make the system more transparent and competitive. Recent reforms in some countries have established centralized electronic platforms (i.e. “Chile Compra” in Chile, and “Compranet” in Mexico) to inform about different public agencies’ requirements of inputs and goods, allowing for suppliers to post their bids. These mechanisms have resulted in significant cost reduction because of increased competition and facilitated surveillance.

Public-private partnerships (PPPs) in infrastructure projects

Given the expected decline in public revenues, especially for public investment, a common solution to maintain investment in infrastructure is to replace public funds by private investment through PPPs. Nevertheless, PPPs should not be seen as a way to replace public financing of infrastructure, especially when there are subsidies, guarantees and other types of contingent public income committed as a mechanism of risk sharing between the private and public sector. Social gains from PPPs rather stem from improving project design, implementation and operation of infrastructure services when private providers are involved (CAF, 2009; CAF, 2015b). This depends on the characteristics of PPPs regimes and regulations, and on whether private funding, especially from institutional investors like pension funds, can be channeled to this sector. In this regard, there are interesting new experiences in the region such as the creation of infrastructure funds in Colombia and Uruguay where the CAF has been involved.

Civil service reforms

Efforts at fighting tax evasion, the creation of new public sector institutions to promote project planning, evaluation and monitoring, and even promoting well designed PPPs programs require a more sophisticated bureaucracy. This not only implies selecting the people with the right technical requirements, but also designing contracts for public servants with the right incentives to maximize their effort. Contracts should not only specify wages throughout their career path but also other features such as opportunities for training and promotion. The data on public salaries and other characteristics of

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21 CAF 2015a: Reporte de Economía y Desarrollo, “Un Estado más efectivo: Capacidades para el diseño, la implementación y el aprendizaje de políticas públicas”.
22 CAF 2015a, op. cit.
public sector contracts shows that even though wages are, on average, higher in the public sector compared to the formal private sector (even after controlling for sex, age and education), this advantage is reversed for highly educated individuals (CAF, 2015a).\textsuperscript{24} In Latin America public sector wages do not increase much with career experience and depend less on performance than in the private sector. Also public employees declare that promotions depend less on effort compared to formal employees in the private sector. All this reduces the chances for the public sector to attract highly educated and motivated workers and to promote their effort once they enter into the bureaucracy.

Reforming public sector civil service regulation is thus crucial in order to make wage contracts and career paths in the public sector more related to technical competence, responsibilities, and performance (individually or collectively) of public workers. This is important to improve public management through a high quality bureaucracy.

Final Remarks

The global context has become less favorable for the region and is likely to stay so for a while. Though most countries in the region are still on a relative good footing, growth has decelerated significantly and fiscal balances have deteriorated. The region needs to focus its attention on reforms that assure public debt sustainability and also increase the effectiveness of the public sector in the provision of goods and services, so that the State may promote growth and social inclusion.

\textsuperscript{24} CAF 2015a, op. cit.
Economic Commission for Latin America and the Caribbean

Fiscal Policy Challenges in Reconciling Cyclical Tendencies with Growth in the Medium and Long Term

The period of deceleration through which the region is passing raises important challenges for fiscal policy. On the one hand, how to respond to the current economic cycle and on the other hand how to promote growth in the medium and long term. The heterogeneity of growth observed in the countries of the region as well as in their macroeconomic situations opens new areas and strategies for fiscal policy.

Fiscal space is usually defined as the availability of resources for a specific purpose, which when used does not alter the sustainability of the financial position of the Government (public debt) or of the economy as a whole. As can be seen in figure 1, and as was discussed in ECLAC (2015a), the level of public debt in Latin America remains low and stable, despite some deterioration in government deficits. The region exhibits a diverse situation in the levels and composition of public debt. In South America, public debt levels on average are expected to remain stable at around 30%-31% of GDP, with domestic debt representing the larger share (19% of GDP) and with an external debt of around 12% of GDP. On average public debt levels in Central America are expected to be around 36% of GDP, with a greater share of external debt (22%) compared to domestic debt (14%). Public debt levels in the Caribbean will remain at high levels, averaging 80% of GDP, with a relatively equal participation of external and domestic debt (roughly 40% of GDP for each).

Figure 1. Latin America and the Caribbean, gross public debt of the central government, 2000-2015
(In percentages of GDP)

Note: Gross public debt refers to gross debt of the central government. This definition excludes subnational debt and the debt of public enterprises and public banks.
Source: ECLAC, on the basis of official figures.

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25 ECLAC 2015a: Panorama Fiscal de América Latina y el Caribe 2015: Dilemas y espacios de políticas (LC/L.3962), Santiago.
The end of the so-called commodities supercycle has affected differently the macroeconomic situation of the region’s countries and in particular their public revenues, with a more profound impact on commodities exporting countries. First, the reduction in the price of commodities has resulted in improved terms of trade for many countries in the region, especially in Central America and the Caribbean (ECLAC, 2015b). Second, in countries with a flexible exchange rate the fall in commodities prices has been tempered by currency devaluations, which in turn has softened the blow on public accounts, especially in commodities exporting countries. Third, various countries of the region have implemented tax reforms that have resulted in an increase, sometimes very significant, in public revenues.

Recent data shows that on average there has been a pronounced deceleration in fiscal revenues but with differences between countries that export commodities and those that do not (figure 2). On average the principal commodities exporting countries have registered negative growth rates in their total public revenues during 2015, whereas for the average of the other countries in the region growth has slowed but remains positive.

Figure 2. Latin America and the Caribbean (24 countries), year-on-year real variation in total revenues and tax revenues, 2008.Q1-2015.Q2
(In percentages)

(a) Principal exporters of minerals and metals, and hydrocarbons
(b) Other countries of Latin America and the Caribbean

Note: Total revenues correspond to tax revenues, social contributions, non-tax revenues, capital revenues and external donations. Tax revenues correspond to tax revenues excluding social contributions.
Source: ECLAC, on the basis of official figures.

There is a consensus that the fall in the investment rate is one of the principal factors that explains the reduction in the potential growth rate of the region’s economies (ECLAC, 2015b). The fall in the pace of investment in a number of countries reflects the contraction of investment in sectors linked to the production and export of commodities. Hence, the need arises to propose alternatives that could compensate for this negative effect, opening the opportunity for other productive sectors of the economy to gain prominence and thereby boosting growth in the medium-term.

A central element in this regard is investment in infrastructure, which if well targeted and managed, could have important positive effects on growth in the medium and long term. The countries of Latin

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America continue to exhibit a significant infrastructure shortage, although the situation is not homogenous among countries. Between 2009 and 2012 infrastructure investment in Latin America reached an average of 3% of GDP, which represents only half of the expenditure necessary as estimated by ECLAC in order to satisfy the needs of companies and final consumers (6.2%). In this context, it is entirely possible to safeguard fiscal space (and maintain solvency) if capital expenditures aim to encourage growth and thereby generate greater future tax revenues. In other words, public expenditure, well managed, could help to generate a virtuous cycle of sustainable growth.

In this environment, in countries with the necessary space, it is desirable to promote investments in infrastructure and human capital that have adequate social returns, such as social housing, urban renewal, transport, energy and many more. Promoting these investments in periods when other private investments have temporarily declined is an efficient way to temper volatility and the persistent weakness in aggregate demand. In the presence of persistent under-utilization of capacity, a fiscal impulse in the form of investment could more than offset its initial cost if interest rates are reasonably low and the returns of the projects are positive.

The capacity that countries have to promote public investment depends on their particular fiscal situation and their ability to mobilize resources. Despite the differences that exist across countries, it is possible to think that the region has space to advance in public investment aimed at promoting productive capacity and competitiveness through infrastructure projects. This kind of investment not only promotes productivity gains, but also serves as an incentive for private investment.

Emphasizing an increase in public investment as a central element in the growth of total investment poses new challenges to the counter-cyclical architecture of Latin America and the Caribbean. The region has taken positive steps in undertaking policies designed to smooth public revenue flows in the face of cyclical changes in the sources of these revenues. This advance has been crucial in sustaining economic growth and must be strengthened. At the same time, inasmuch as investment becomes a central variable of the economic future and growth, it is necessary to find, within the counter-cyclical framework, mechanisms that ensure the financing of investment needs throughout the different phases of the cycle. Strengthening investment not only helps to mobilize internal demand in the short term and promote growth, but it is also the principal bridge between the challenges of the economic cycle and that of economic growth and development in the medium and long term. In this context, fiscal policy must not only seek to smooth the economic cycle, but also to boost productive development and structural change, through the protection of the dynamism of investment over time.

The influence of the State in the accumulation of physical capital goes far beyond its direct action, and it is thus essential to create the right fiscal framework for investment promotion. This should not be geared towards providing incentives to reduce labour or capital costs or to increase the profits of private enterprises. In general terms, promoting investment means, on the one hand, generating the fiscal space needed to finance public goods and building the capacities to manage them and, on the other, creating the conditions for private-sector participation in achieving development goals.
Fiscal frameworks for investment promotion should therefore aim to create an investment-friendly climate through organizational capacity-building and improved institutional arrangements. In this way, publicly managed investment plans could reverse diminishing investment rates while ensuring long-term competitiveness and productivity gains in strategic areas for structural change and supporting efforts to close infrastructure gaps. Investment plans may combine mutually interactive ventures, mobilizing public and private sources of funding, contributing to jobs and growth with a strategic and territorial perspective, and promoting clean and renewable energies.