



PPP AND CONCESSIONS
SUGGESTIONS TO EXPAND
GRANTS AND PPPS IN STATES
AND MUNICIPALITIES

CBIC

PPP AND CONCESSIONS
SUGGESTIONS TO EXPAND
GRANTS AND PPPS IN STATES
AND MUNICIPALITIES

Co-Organizator



*Iniciativa da CNI - Confederação
Nacional da Indústria*

Organizator



PPP AND CONCESSIONS

SUGGESTIONS TO EXPAND GRANTS AND PPPS IN STATES AND MUNICIPALITIES

Brasília, June 2016

José Carlos Martins President, CBIC

Carlos Eduardo Lima Jorge President, Public Work Committee – COP/CBIC

Technical Coordination

Denise Soares Project Management – COP/CBIC

Collaboration

Geórgia Grace Project Coordinator – CBIC

Doca de Oliveira Communication Coordinator – CBIC

Ana Rita de Holanda Communication Advisor – CBIC

Sandra Bezerra Communication Advisor – CBIC

Content

GO Associados

Gesner Oliveira GO Associados, Partner

Fernando S. Marcato GO Associados, Partner

Pedro Scazufca GO Associados, Partner

Andréa Zaitune Curi GO Associados, Project Manager

Marcela de Lima Altale GO Associados, lawyer

Rodrigo Cintra Pires GO Associados, Analyst

Luiz Fernando Castelli GO Associados, Analyst

Fernando Fernandes Neto GO Associados, Consultant

Images

Guilherme Kardel

Banco de Imagem

Graphics and Lay-Out

Gadioli Branding e Comunicação

Translation into English

Eduardo Furtado

Brazilian Construction Industry Chamber – CBIC

SQN - Quadra 01 - Bloco E - Edifício Central Park - 13º Andar

CEP 70711-903 - Brasília/DF

Phone: (61) 3327-1013 - www.cbic.org.br

All rights reserved 2016. ©

COP
COMISSÃO DE
OBRAS PÚBLICAS,
PRIVATIZAÇÕES E
CONCESSÕES

CBIC

PPP AND CONCESSIONS SUGGESTIONS TO EXPAND GRANTS AND PPPS IN STATES AND MUNICIPALITIES

Co-Organizator



Organizator



THE AUTHORS



ANDRÉA ZAITUNE CURI

Ph.D. in Economics by Economics School of Fundação Getúlio Vargas-SP. Master in Economics by the Institute of Economic Research of FEA/USP. More than nine years of experience in Economics consulting. Expert in Economic Research focusing on mathematical, econometric, and statistical methods and models, working primarily in Market Intelligence, Demand Estimation and Projection, Regulation and Protection of Competition. GO Associados, Project Manager.



MARCELA DE LIMA ALTAIE

Master in Law of the State by the University of São Paulo - USP. Lawyer working in Grant and Public-Private Partnership models, economic-financial adjustment processes, studies and projects for protection of competition, contracts, bank contracts, merger and acquisitions, partnership restructuring and project financing. Graduated by Mackenzie Presbyterian University. Monitor of Administrative Law and Economic Law disciplines at University São Judas Tadeu. GO Associados, Lawyer.



RODRIGO CINTRA PIRES

Graduated in Economics by the University of São Paulo (USP). Working in economic-financial evaluation, cost projects and industry reporting. GO Associados, Analyst.



GESNER OLIVEIRA

Chairman of Economic Protection Administrative Council (Conselho Administrativo de Defesa Econômica, CADE) (1996-2000); CEO of Sabesp (2007-10); Ph. D in Economics by the University of California/Berkeley; Professor of Fundação Getúlio Vargas-SP since 1990. Visiting Professor at University of Columbia, USA (2006); GO Associados, Partner.



FERNANDO S. MARCATO

Master in Compared Public Law - Master Recherche 2, avec mention (with honors) by the University Panthéon-Sorbonne (Paris I), Paris, France; Professor at Pós GV-Law in Infrastructure, Fundação Getúlio Vargas de São Paulo – FGV-SP Law School and of Law at EDESP – FGV/SP; GO Associados, Partner.



PEDRO SCAZUFCA

Expert in economic research, regulation, protection of competition, trade, infrastructure and business models; Master in Economics by the Institute of Economic Research of FEA/USP; GO Associados, Partner.



TABLE OF CONTENT



SUPPORTING THE DEBATE	11
INTRODUCTION	15
BALANCE OF THE EXPERIENCE OF PPP AND GRANTS IN BRAZILIAN STATES AND MUNICIPALITIES	19
RECENT DISCUSSIONS WITHIN THE FEDERAL ADMINISTRATION ABOUT INFRASTRUCTURE, PPPS AND GRANT PROJECTS	39
PROPOSALS TO FOSTER PPPS AND GRANTS IN STATES AND MUNICIPALITIES	55
CONCLUSION	99
REFERENCES	107
ATTACHMENT	111





SUPPORTING
THE DEBATE



José Carlos Rodrigues Martins
President, Brazilian Construction
Industry Chamber



Carlos Eduardo Lima Jorge
President, Public Work Committee,
Brazilian Construction Industry Chamber

SUPPORTING THE DEBATE

To expand and upgrade the Brazilian infrastructure requires the implementation of Concession and PPP programs as a means to supplement the scarce public resources from the Public Administration.

The last years have seen a real “silent revolution” in Concessions and PPPs in states and mainly in cities, while the Federal Administration lagged behind due to more difficulties and less speed for structuring their programs.

There are several aspects for improvement (or reinforcement) in Concession and PPPs to ensure a growing participation from states and cities with satisfactory results. These aspects encompass three sets of efforts that intertwine: Capacity to structure projects, finance improvement, and increased legal security.

This work aims to list an agenda of changes to attract better projects, more companies and increase sustainability for Concessions and PPPs in states and cities. This agenda is part of a goal shared by the Brazilian Construction Industry Chamber (CBIC – Câmara Brasileira da Indústria da Construção) and National Industrial Learning Service (Senai – Serviço Nacional de Aprendizagem Industrial) to support Brazil’s development and the generation of jobs and income.





INTRODUCTION



1. INTRODUCTION

To expand and upgrade the Brazilian infrastructure requires the implementation of Concession and PPP programs as a means to supplement the scarce public resources from the Public Administration.

The last years have seen a real “silent revolution” in Concessions and PPPs in states and mainly in cities, while the Federal Administration lagged behind due to more difficulties and less speed for structuring their programs.

There are several aspects for improvement (or reinforcement) in Concession and PPPs to ensure a growing participation from states and cities with satisfactory results. These aspects encompass three sets of efforts that intertwine: Capacity to structure projects, finance improvement, and increased legal security.

This work aims to list an agenda of changes to attract better projects, more companies and increase sustainability for Concessions and PPPs in states and cities. This agenda is part of a goal shared by the Brazilian Construction Industry Chamber (CBIC – Câmara Brasileira da Indústria da Construção) and National Industrial Learning Service (Senai – Serviço Nacional de Aprendizagem Industrial) to support Brazil’s development and the generation of jobs and income.





BALANCE OF THE
EXPERIENCE OF
PPP AND GRANTS IN
BRAZILIAN STATES AND
MUNICIPALITIES

2. BALANCE OF THE EXPERIENCE OF PPP AND GRANTS IN BRAZILIAN STATES AND MUNICIPALITIES

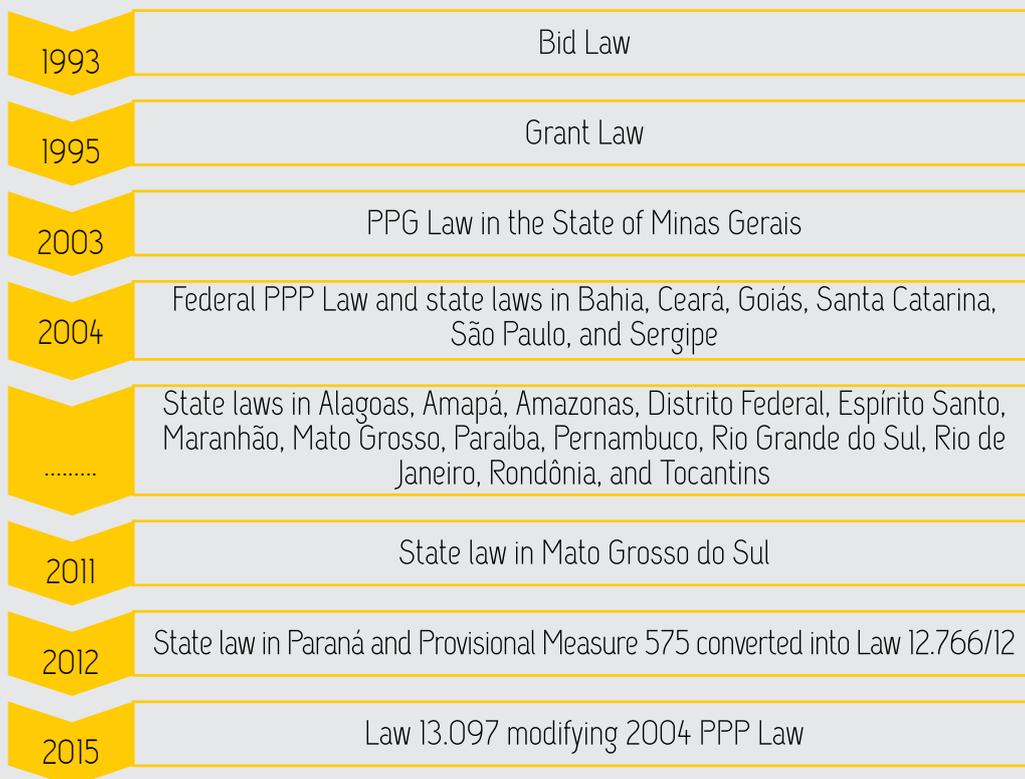
The goal of this Section is to highlight the main aspects of the Brazilian experience in the development of Public-Private Partnership and Grants, focused in the experience of States and Municipalities. In this regard, this Paper starts with a brief context of the evolution of the legal framework and proceeds with a balance of partnerships made in Brazil.

2.1 THE EVOLUTION OF THE LEGAL FRAMEWORK FOR PPPS AND GRANTS

Attempts to overcome the lack of infrastructure through the deployment of private resources started in the decade of 1980. The end of the military rule and the economic crisis, added to the lack of public resources and the failure of the state-based model unlocked the privatization wave in the country. In the decade of 1990, this model has actually become official policy. More than 120 state-owned were sold to the private sector, and some of the most notorious cases are: Usiminas (1991), CSN (1993), Embraer (1994), Companhia Vale do Rio Doce (1997), and Sistema Telebrás (1998).

Law 8.987/95 has established the legal framework for Grants and Law 11.079/04 has established the Federal framework for PPPs. At the same time, several States have passed bills related to PPP and attracting the private sector to projects that were not attractive to it until then. Chart 1 shows the evolution of the regulatory framework for Grants and Public-Private Partnerships at a Federal and State levels.

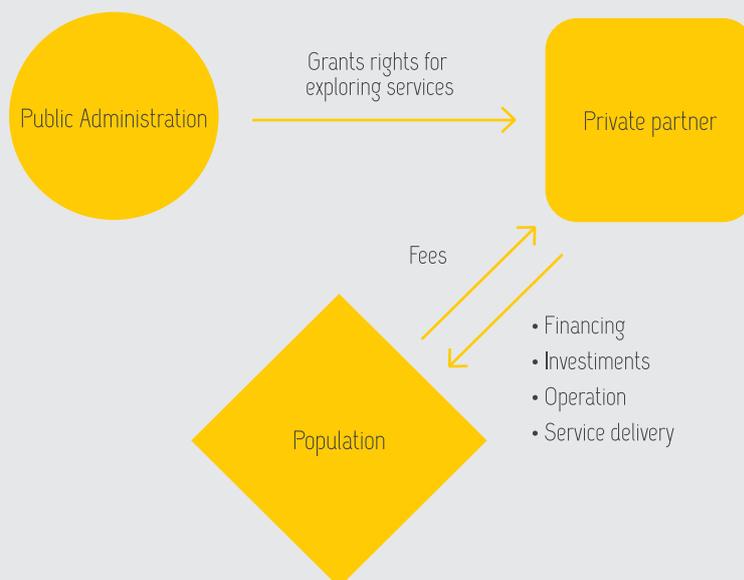
CHART 1: EVOLUTION OF THE REGULATORY FRAMEWORK OF GRANTS AND PUBLIC-PRIVATE PARTNERSHIP IN BRAZIL



Elaboration: GO Associados

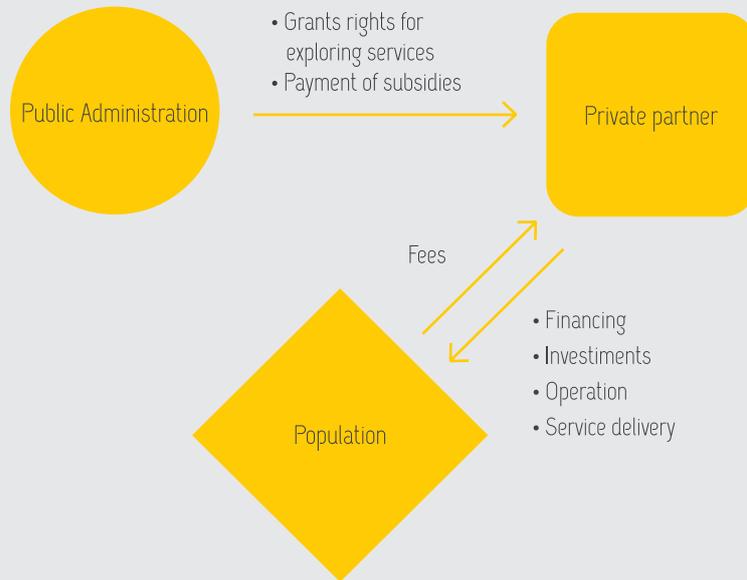
Whereas Law 8.987/95 instituted the so-called Ordinary Grants, i.e., the grant of public services and the grant of public services preceded by public works, Law 11.079/04 instituted two new grant models: The Sponsored Grant and the Administrative Grant. A Sponsored Grant is the grant of public services and public works covered by Law 8.987/97 whenever it involves counter payments in cash from the Public Partner to the Private Partner, in addition to fees charged from users. The Administrative Grant contract involves the delivery of public services, of which the Public Administration is a direct or indirect user, and it also may include the execution of works or the provision and deployment of assets. In this case, the Grantee's compensation takes place only through a counter payment in cash. In order to fulfill the obligation of the counter payment, public guarantees for such payment are structured. Chart 2, Chart 3 and Chart 4.

CHART 2: ORDINARY GRANT



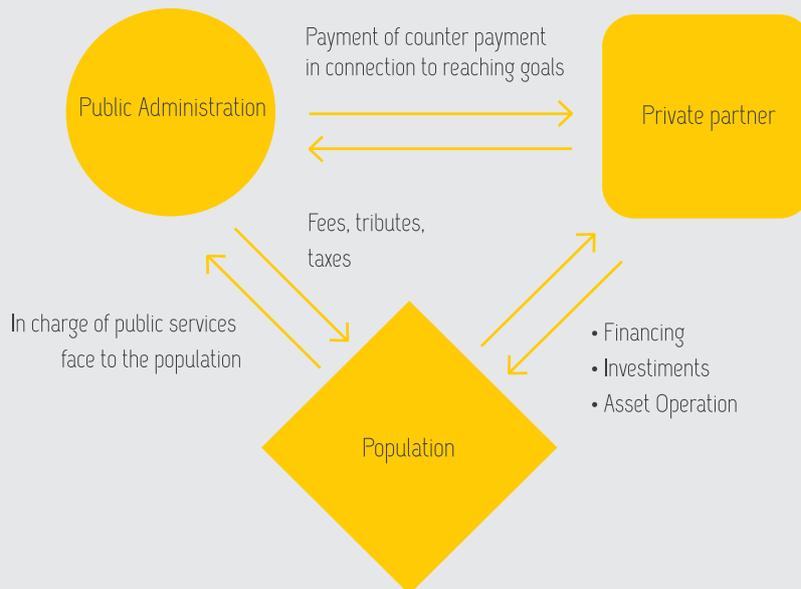
Elaboration: GO Associados.

CHART 3: PPPS, SPONSORED GRANT



Elaboration: GO Associados.

CHART 4: PPPS, ADMINISTRATIVE GRANT



Elaboration: GO Associados.

For some specific projects, compensating the Grantee only through fees charged from users is attractive and allows for compensating investments made, so that Grants, similarly to those Grants governed by Law 8.987/95, are the best method to transfer the delivery of services for the private initiative. In the other hand, some projects yield lower returns to the private sector while are of social interest, thus the State steps in to encourage the participation of the private sector by setting up a proper compensation structure. In this case, developing Public-Private Partnerships under the Law 11.079/04 may be the best choice.

2.2 THE SILENT REVOLUTION OF PPPS AND MUNICIPAL GRANTS

There has been in the last two decades an expressive growth in Grants and Partnerships in several industries, namely sanitation, public lightning, solid waste, and highways. While at a Federal level, discussions and projects hovered over the Logistics Investment Program and the Growth Acceleration Program, some states, such as São Paulo, Pernambuco, Bahia, Minas Gerais among others implemented PPP programs and projects. However, a true and silent revolution is seen in PPPs and Grants carried out by municipalities, which represent the majority of new partnership contracts and are absolutely critical for the infrastructure leap required to improve the quality of services delivered to communities and to increase Brazil's competitiveness.

The Painel de Parcerias Público Privadas (4Ps)¹ bring some relevant insights on recent contracts and projects. Data were divided into intention to partnership, partnership² in development³, and hired partnerships. Chart 5 provided an overview of Grants and PPPs per state. And Chart 6 segregates projects and PPPs in operation per industry.

The survey suggests:

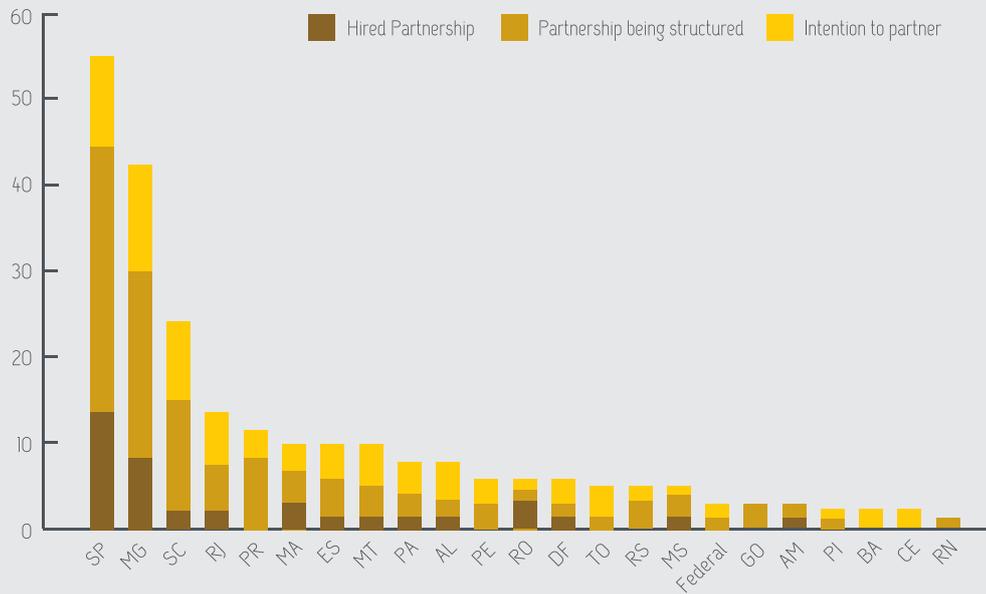
i) The timeframe for learning how to apply the legislation was relatively long: upon more than ten years after the passing of Law 11.079/04,

1 The 4Ps is drafted based on postings on Government Journals compiled by GO ASSOCIADOS. The survey started in June 2014, so the figures may not reflect the amount of projects effectively being executed, but certainly are able to indicate trends in partnerships and grants contracts.

2 Initial studies (PMI) and expressions of interest by public entities to grant services.

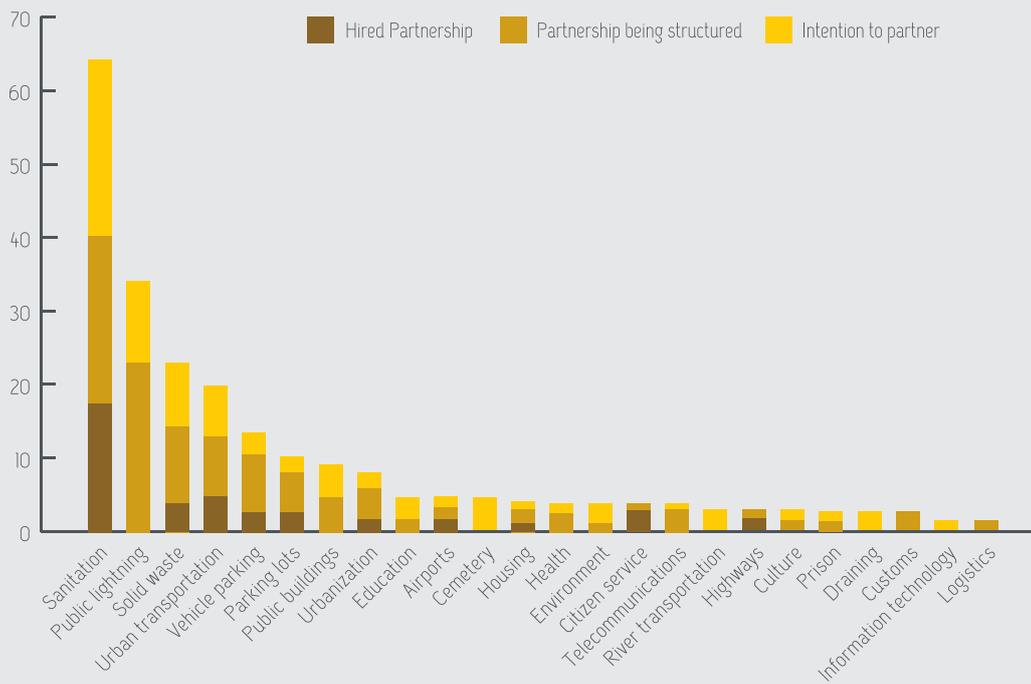
3 Partnerships with bid's notice minutes, published bid's notice and in bidding process.

CHART 5: PPPs IN EXECUTION AND PPP PROJECTS
JUNE 2014 TO MAY 2016



Source: Official Journals. Elaboration: GO Associados.

CHART 6: PPPs IN EXECUTION AND PPP PROJECTS PER INDUSTRY
JUNE 2014 TO MAY 2016



Source: Official Journals. Elaboration: GO Associados.

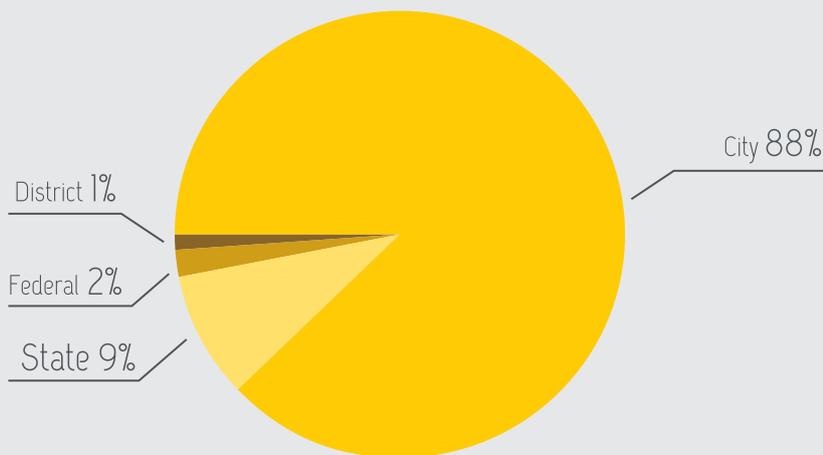
the number of hired projects is relatively small, so that not all states have PPPs in execution. Furthermore, there are a concentration of partnerships in some regions (namely the South and Southwest).

ii) Recently, water supply and/or sanitation, transportation, solid waste and public lightning were areas with the largest amount of projects;

iii) There is an inventory of PPP projects that may indicate that this model has potential to grow faster in the coming years; this more likely to happen if some deficiencies in this partnership model are addressed.

Chart 7 compiles all projects by Administration levels. It is noted that more than 80% of recent projects are executed by municipalities. São Paulo, Belo Horizonte, Rio de Janeiro, Vitória, Porto Alegre, Curitiba, Natal and Palmas are some of the cities that have already passed laws on Public-Private Partnerships.

CHART 7: ADMINISTRATION LEVEL IN CHARGE OF PPPS
JUNE 2014 TO MAY 2016



Source: Federal Official Journal. Elaboration: GO Associados.

It can be seen that the largest cities are those developing most PPPs, as they have larger institutional capacity and technical ability to conduct complex studies required to model these projects. In the other hand, small and mid-sized cities face a huge lack of theoretical and practical knowledge on this topic, which shows the need for creating frameworks to help them. By training these cities, PPPs could be performed by urban operations in consortium and consortiums formed by cities, for instance.

2.3 BARRIERS FOR IMPLEMENTING GRANTS AND PPPS PROJECTS IN STATES AND MUNICIPALITIES

Considering the amount of executed projects and the Brazilian experience in PPPs and Grants, one can find that there are several barriers to format new PPPs and Grants, especially in states and municipalities. Issues range from structural, legislative, institutional, financial and even cultural.

These barriers can be ranked in three major areas. The first one relates to the capacity of formatting and executing projects by states and cities. The second relates to the need for attracting more resources to Grants and PPPs. And the third is about formatting project risks and guarantees.

2.3.1 Barriers related to the capacity of formatting and executing projects

The first deficiency identified is that states and cities face difficulties on formatting most projects. The barriers aforementioned are identified in a not-exhaustive list.

2.3.1.1 Lack of qualification in states and cities

Structuring Public-Private Partnerships and Grants require a very specific technical knowledge and complex studies. A large majority of public agents is not properly qualified to hire consultants to help structure a PPP or a Grant. In this context, disseminating technical context demands that federal and state entities support states and cities with lower qualification levels.

2.3.1.2 Issues on hiring consultants

Hiring experts for modeling Public-Private Partnership projects is subject to Law 8.666/93 and to the availability of public resources. This explains the slowdown on the implementation of social and economic infrastructure projects, which are critical for overcoming bottlenecks, creating jobs and ensuring long-term economic growth.

2.3.1.3 Paperwork and time for formatting projects

One of the largest bottlenecks found on formatting PPPs is the red tape on the process and the difficulties related to formatting projects. In addition to the long time required for approving projects, the lack of metrics to analyze and approval prevents a larger number of projects.

For PPPs, the PPP Units were originally created to be excellence centers for modeling these projects with capacity to support Public Administration during their development.

However, there are limits to human and material resources in several cases. Furthermore, it is seen in some cases that PPP Units, along with PPP Management Councils, have become additional instances for approving projects, relenting their coordinating and promoting roles for formatting PPPs. Also, one of the largest barriers for executing these projects is the hardship for hiring consultants and experts for modeling.

One of the undesirable consequences of the lack of technical knowledge in approving partnerships by the Public Administration is the slow pace in the approval process.

For instance, for a public company owned by a local state, a PPP project must be approved: i) by the company's internal instances, including the board and the administration council; ii) by the State PPP Unit, by committees that may include the State's Attorney General or state secretariats relevant for that particular project, and iii) by a PPP Council in the state, involving state secretaries and other representatives. Also, the PPP shall undergo by public consultations and other discussions for convincing the overall society.

2.3.1.4 Low competition

Another bottleneck found lies in the PPP and Grants notices that are usually created for large projects. Whether by the size of the hiring or by restrictions placed by the bid's notice, the access of smaller and/or new companies is not satisfactory yet. For this reason, barriers for entry are created, adding to this a risk allocation that lacks efficiency and the same pool of companies are attracted to such bids.

2.3.1.5 Threshold of 5.0% of commitment of state and municipalities income with PPPs

The PPP Law (Law 11.079/04) foresees two cases of threshold for hiring PPPs. The first one is directly applicable to the Federal Administration and the second is indirect, which is applied by states, municipalities and the indirect administration (solely to those dependent entities) to ensure receipt of guarantees and the performance of voluntary transfers to states and municipalities.

The first case says that the Federal Administration may only hire a Public-Private Partnership when the sum of ongoing expenses derived from the set of partnerships already hired has not exceed 1% of net current

income in the previous year, and yearly expenses of valid contracts, in the ten subsequent years, do not exceed 1% of the net current income projected for the respective fiscal years (article 22).

Article 28 forbids the Federal Administration to provide guarantees and perform voluntary transfer to states, Federal District and Municipalities⁴ if the sum of ongoing expenses derived from the set of partnerships already hired by such entities (including direct and indirect administration, except non-dependent entities) is higher in the current fiscal year than **5 (five) percent of the net current income in the previous fiscal year or if yearly expenses of valid contracts in the next 10 (ten) years are higher than 5 (five) percent of the net current income projected** for the respective fiscal years.

Thus, according to the rule in article 28, caput, hiring a Public-Private Partnership shall consider not only information on the current income, but also RCL's future projects.

Such limitation placed both by the article 22 and article 28 clearly aims to bring fiscal responsibility principles and prevent PPPs to be used as an instrument to hire debt by the hiring entities. Such concern rises largely from the fact that contracts celebrated as PPPs are not classified as credit operations (debt) as a rule, which voids rules established by the Fiscal Responsibility Law.

In theory, issuing guarantees and performing the aforementioned resource transfers are under the discretion of the Federal Administration, so that the ordinary law does not prevent hiring new PPPs. However, in practice, almost all federation entities depend on the Public Administration guarantees to renegotiate their debts; smaller ones, specifically, rely on voluntary transfers. Punishment, however, is extremely acute and submits States and Municipalities to an indirect limitation to hire PPPs reflected in the impossibility of accessing Federal resources if the limitation of 5% of the net current income is exceeded. (Belsito & Viana, 2013)

The PPP Law poses to the Public Administration several budgetary, accounting and financial limits for hiring Public-Private Partnerships. Such limits applied in Brazil were not determined by many European countries

4 Paragraph 2th By applying the threshold forecast on caput of this article, expenses derived from partnership contracts celebrated by the direct public administration, autarchies, public foundations, public companies, mixed partnership societies and other directly or indirectly controlled entities by the respective entities, excluding non-dependent state-owned companies, will be calculated.

until recently, which allows one to say that Brazil is a pioneer in the trend of placing fiscal responsibility on PPPs.

Some initiatives in this regard can be mentioned. The United Kingdom has determined several thresholds for each department, ranging from 6% to 7% of their total spending. In Greece, the payment of PPP projects is limited to 6%-7% of public investments. In India, it was established that the threshold of 25% of the five-year budget of every department is not exceeded. In El Salvador, net payments for compensating PPPs cannot exceed 5% of the GDP. In Hungary, long-term commitments (including expenses with investment, renovation, operation and maintenance, purchases of services and rents - even those related to PPPs) may not exceed 3% of the period's budget. In Peru, contingent and non-contingent obligations of PPP projects shall not exceed 7% of the GDP. (World Bank Institute; FPD Network, 2013; Funke, Irwin, & Rial, 2013).

It is argued if the RCL usage limit is high or low. It is worth to remember that the 5% limit established by article 28 was raised by Law 12.766/12, due to the smaller RCL of some federation entities in relation to the Federal Administration.

Upon analysis of the Budget Execution Summary Report (Relatório Resumido da Execução Orçamentária, RREO), as determined by the Fiscal Responsibility Law, it was realized that even states more active in performing PPPs (São Paulo, Pernambuco, Bahia and Minas Gerais) don't even get close to the 5% limit. The State of Bahia, the most committed one, has reached only 1.38% in 2014

Quanto aos Municípios, foram selecionados alguns que já apresentam PPPs em vigor nos quais igualmente se verifica um espaço de manobra relativamente amplo para a contratação de novas PPPs. O Município de Belo Horizonte, identificado em nossa seleção como o mais comprometido, chegou a 3,17%. Belo Horizonte foi um dos Municípios que pressionou pelo aumento do limite de 3% para 5% da Lei de PPPs.

CHART 8: EXPENSES WITH PPP/NET CURRENT INCOME RATIO

States	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Bahia	1,21	1,69	2,14	2,26	2,19	1,92	1,46	1,41	1,37	1,32
Minas Gerais	0,73	0,84	0,82	0,81	0,75	0,66	0,60	0,58	0,57	0,55
Pernambuco	0,33	0,03	0,06	0,04	0,04	0,03	0,03	0,03	0,03	0,02
São Paulo	0,74	1,96	2,19	2,17	2,22	1,20	1,01	1,07	1,01	0,97
Cities	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Belo Horizonte	3,17	2,29	2,31	2,31	2,30	2,30	2,30	2,29	2,29	2,29
Rio de Janeiro	2,60	1,56	0,73	0,56	0,54	0,54	0,55	0,57	0,58	0,60
São Carlos	2,36	0,95	N/D							

Source: RREOs. Elaboration: GO Associados.

As for Municipalities, the selection included some that are already executing PPPs, where it is found a relatively wide playing field for hiring new PPPs. The City of Belo Horizonte, identified in our selection as the most committed one, has reached 3.17%. Belo Horizonte was one of the cities that pushed for increasing the 3% limit to 5% limit in the PPP Law

2.3.2 Barriers related to the need for new resources

Another weakness is related to the attraction of financial resources. As seen before, in the current environment where the project funding comes basically from state-owned banks, it is critical to find new feasible alternatives for financing these projects, such as access to funds.

2.3.3 Barriers related to the allocation of risks and guarantees of projects

The third one is related to the need for improving project structuring, especially those focused on risk allocation.

Considering long-term contracts and the business structure itself, financing structured operations or *project finance is applicable to PPPs and Grants*.

Project Finance is a finance engineering tool aiming to make a given investment feasible. In general terms, a Specific Purpose Entity is created so to insulate shareholders against the risks of the project, and the SPE is responsible for applying directly its knowledge on the service delivery.

This structure has been used abroad mainly in infrastructure projects due to the existence of an income flow that is usually foreseeable, given that many times, due to a large repressed demand, when properly sized, it is hard that the project fails to reach the minimum threshold expected.

The rationale for using *Project Finance* in a project consists in a higher financial leverage, exempting the investor of huge capital inputs. This allows for the delivery of a service with higher quality due to the *know-how* owned by the investor, moving a great deal of the risk of success of the venture to the lenders, so to allow for an ordained infrastructure expansion with operators of known technical qualification.

In this structure, creditors (those bearing the majority of risks) need that investors have mitigated a great deal of risks inherent to the business, aiming to ensure a proper profitability in relation to the minimum attractiveness rate, such as the protection against large variations in the price of energy offered

(achieved by the use of derivatives), traffic guarantee (achieved by establishing a contract-based risk matrix with the Public Administration) or by the use of instruments to protect against exchange rate fluctuations (in relation to eventual imported components).

Thus, in order to ensure peace of mind both for the investor and for the creditor, a key component of *Project Finance* is the ready availability of project receivables to guarantee the payment of financing installments.

For the receivable flow to ensure the payment of loan interests and amortization, an *escrow account* is created in a *trustee bank*, where project income is first deposited and resources for paying financing obligations are accrued (thus shielding the creditor), and then resources are transferred to the investor in order to meet its operational obligations.

Especially due to poor formatting, poor allocation or even by existing risks that are not possible to be efficiently mitigated in Brazil, *project finance* is primarily based upon shareholder's corporate guarantees at least during the build phase (as usually happens in the power generation industry). Thus, although the main idea of a *project finance* is the real venture's guarantees, such as its receivables, pure *project finance* cases are rare in Brazil. The practice in Brazil is to usually request guarantees from shareholders, namely in the build phase of projects.

Adding to the challenges for financing infrastructure, one of the main challenges for financing PPPs is adjusting the need for guarantees vis-a-vis the need for securitizing part of the Grantee's (the Specific Purpose Entity, SPE) receivable flow in order to allow for the issuance of bonds or getting loans from development banks, such as BNDES.

Also, the problem of guarantees faces the lesser availability of traditional project financing sources in Brazil places a huge challenge for capital structuring. **It should be noted that the capital markets tend to be even more rigorous towards the need for solid guarantees than traditional development banks.**

Added to the aforementioned problems, the Public Administration face huge difficulties to keep with the current guarantee structuring, considering that such as they are based on the receivable flow⁵, not upon a capital base, the current solution is quite expensive in terms of opportunities

5 Government's linked income with mandatory destination or receivables arising from public companies or active debt.

for new public investments. Currently, for each 1 BRL in obligations that the Public Administration to the private partner, another 1 BRL is demanded in receivable flow to be given as guarantee, until the minimum coverage levels demanded by lenders are met.

2.3.3.1 Determination of a return rate that is incompatible with market expectations

However, there is also the issue of minimum compensation required for projects so to meet the minimum attractiveness rate for private partners.

A great deal of discussions about project feasibility is around the definition of referential internal return rates for benchmark projects. If the referential rate is not proper, it is quite likely that the bid does not attract any interested parties.

The methodology usually employed by the Federal Administration and its respective regulating agencies to calculate the cost of own capital is heavily criticized by the private sector. This method determines referential internal return rates for the modeling of Grants and PPPs projects.

Several documents produced by the Land Transportation National Agency (Agência Nacional de Transportes Terrestres, ANTT), Power National Agency (Agência Nacional de Energia Elétrica, ANEEL), among others, show that almost all capital cost models are based in the famous but outdated *Capital Asset Pricing Model (CAPM)*.

In the case of the entities mentioned above, this method is widely used to measure the expectation of economic players on the profitability of resources employed in similar projects on publicly listed companies.

In the other hand, to perform such calculations on profitability expectations, these models use unrealistic assumptions and fail to recognize several risk factors that usually stems from the market and players' natural dysfunctions towards theoretical behavior. The main consequence is that there is a trend to undervalue a given asset, as by omitting risks under the rationale of the risk/return ratio, the minimum return requested is undervalued and thus, by the rationale of asset pricing, the value of the asset is positively influenced.

Hence a series of papers in empirical financial economy ended up criticizing CAPM, especially works by Fama & French (1992, 1993, 1996), Cochrane (2005), Yoshino (2009), and Yoshino & Bianconi (2012, 2013).

Among these factors, several authors highlight the following risks:

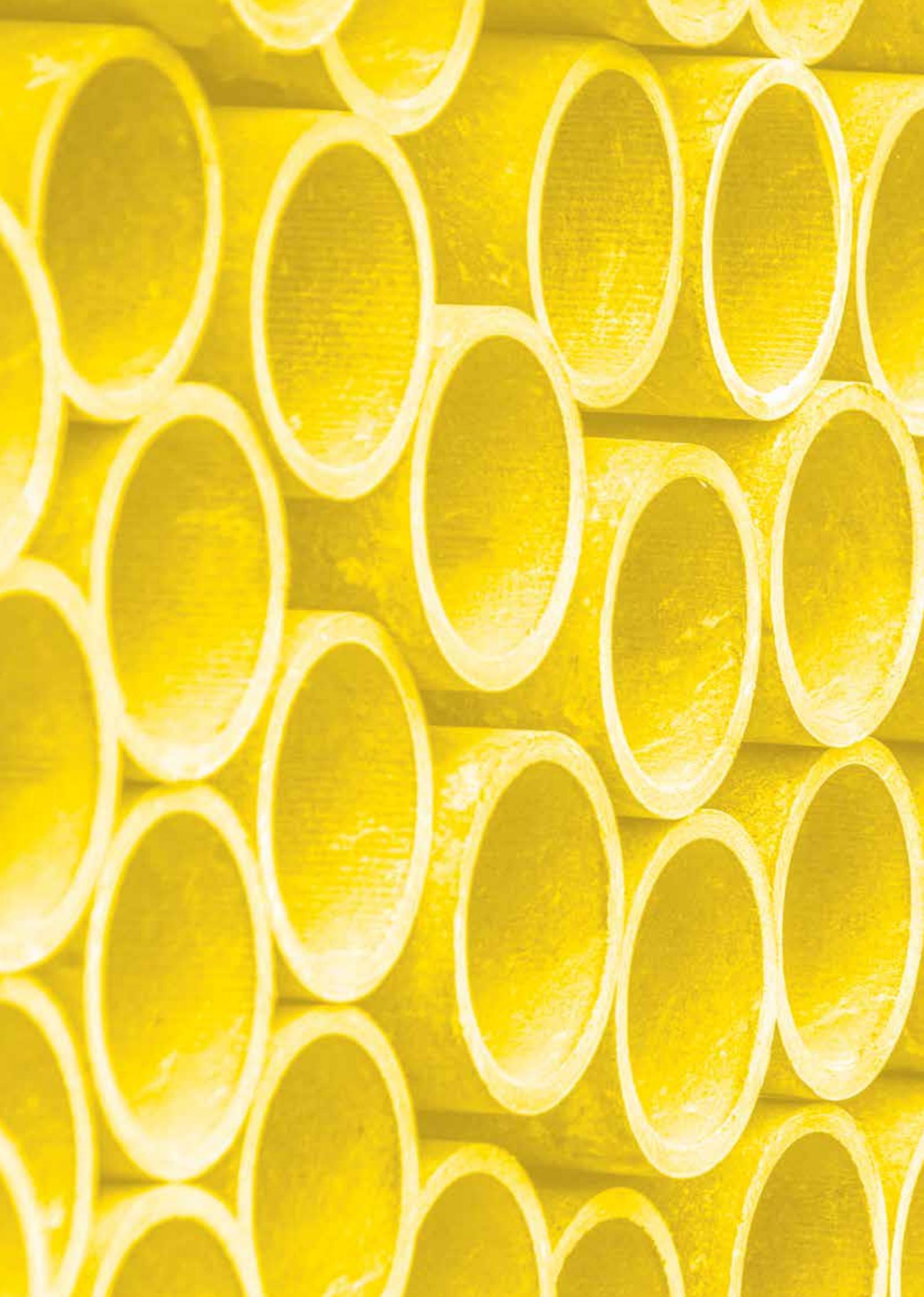
- **MARKET RISK:** Today's economy is globalized, with large capital flows to and fro different economies. Thus, market risks must be weighed not only towards the behavior of local stock markets but also towards the main foreign movements. (Bovespa and NYSE / NASDAQ);
- **RISK AVERSION:** Decision-making is directly impacted by the "fear" the investor has in a given moment in relation to the economic situation being experienced, which, in average, is quite hard to be captured as economy undergoes crisis and booms over the long haul;

Other economic-financial indicators:

- The Financial and Operational Leverage Degree increases the risk of bankruptcy or profit multiplication, impacting the risk assessment;
- The Size of the Company impacts a company's diversity and solidity, so that a larger company tends to be more resistant to go bust in comparison to a smaller one;
- The Periodicity of Distribution of Dividends and Interest on Own Capital affects the perception the investor has in relation to achieving results;
- Crisis Effect Control (allowing for assessing the crisis period), once that under the traditional methodology many authors and CAPM users exclude observations from these periods, but companies obviously exist during these same periods;
- Macroeconomic and institutional risks: exchange rate fluctuation, EMBI + Index
- Fixed Effects: Specific control for the peculiarities of each company, such as corporate governance policies, compliance, and sustainability.

A string of problems rises when such simple model as the CAPM is used, once it is likely that risks are under assessed and thus, the return required by investors for a given project. For instance, such use reflects directly in the amounts for cash counter payments and capital inputs, in the case of PPPs, and in amounts required for fixed/variable encumbered grants in the case of traditional grants.

Thus, a major friction point between the public sector and the private sector is caused due to the lack of understanding, which is the issue of adjusting compensation to risks taken (or that may be taken).



The background of the entire page is a close-up, slightly blurred photograph of numerous yellow pipes stacked together. The pipes are arranged in a grid-like pattern, with their circular ends facing the viewer. The lighting is warm, creating a golden-yellow glow across the scene. In the lower right quadrant, there is a dark grey, semi-transparent rectangular box with a diagonal cut on its top-left corner. Inside this box, the text is written in a clean, yellow, sans-serif font, all in uppercase letters.

RECENT DISCUSSIONS
WITHIN THE FEDERAL
ADMINISTRATION ABOUT
INFRASTRUCTURE, PPPS
AND GRANT PROJECTS

3. RECENT DISCUSSIONS WITHIN THE FEDERAL ADMINISTRATION ABOUT INFRASTRUCTURE, PPPS AND GRANT PROJECTS

This section aims to review recent and relevant discussions within the Federal Administration about attracting the private initiative to the execution of PPP and Grant projects.

One of the measures announced by the Federal Administration is the discussion on the PPP Mais program and the issuance of the Provisional Measure 727, which created the Investment Partnership Program (Programa de Parcerias de Investimentos, PPI). It also deserves attention the changes to the Federal Guarantee Fund (Fundo Garantidor Federal), which is now managed by ABGF. The fund lacks capital and it is not able to provide public guarantees effectively to projects. It is also remarkable the loss of efficacy of Provisional Measure 700, that eased many rules related to expropriation, aiming for speeding up the public work execution.

3.1 THE RECENT PPP MAIS PROPOSAL

The former Ministry of Economy team created in the second half of 2015 a working group to propose improvements to the Brazilian institutional environment. Their goal is to increase efficiency in public hiring along with the required legal security in executing contracts and to attract more parties interested in investing in Brazil. It was then proposed the Ad-

vanced Public-Private Program (Programa Público-Privado Avançado, PPM Mais).

PPP Mais aims to expand and strengthen partnerships between State and the private initiative, encouraging Public Administration at the Federal, State, and City levels to adopt advanced practices in industry policy, as well as in regulation, structuring, approval, bidding, hiring, and development, especially in ventured qualified as nationally relevant. It did approach specific rules for PPPs but for advanced public-private contracts.

PPP Mais would rank projects under its relevancy to the national strategy and would discipline from the regulation and structuring to the respective execution, going through the grant of permits, bids and hiring. It is a model that would be initially applied to a limited number of projects, and then expanded later. Ventures under PPP Mais would be considered as national priority by all public agents of execution or control from the Federal Administration, States, the Federal District and Cities. It was expected to reduce paperwork and increase the speed and quality of projects, as well as bringing in the required legal security necessary to attract private companies.

Some of the PPP Mais proposals include:

- Os projetos serão geridos por conselho de três ministros (Fazenda, Casa Civil e Planejamento) e quatro nomeadas pela Presidente;
- Projects will be managed by a council comprising three ministries (Economy, Chief of Staff and Planning) and four members indicated by the President;
- Foreign companies may lead consortiums;
- Flexibilization of rules regarding bidders' qualification documents;
- A panel of arbitrators would decide upon fee adjustments;
- End of technical- and price-based criteria to define bids;

- Bids without competitors would be declared void;
- CADE would help to dismantle oligopolies in bids;
- It will be forbidden to require prior execution certificates for foreign companies;
- Foundation of the state-owned National Public Structuring (Estruturadora Pública Nacional) company to support PPPs;
- Private infrastructure works may be defined as “national strategic”;
- Government may not change public fees alone;
- Creation of a chief structurer as manager of consortiums.

Currently, there is no indication from the Federal Administration that the proposals discussed under the PPP Mais will be effectively sent for Legislative approval or if they will be enhanced. It must be stressed however, the need for deeply discussing these proposals. There are proposals made within the program scope that if applied to the whole PPP and Grant legislation, would certainly improve the current framework.

Among the proposals that we understand that may be replicated to the overall PPP and Grant legislation, we highlight those that (1) provide best regulatory stability; (ii) ease barriers to entry (demands for homologation); (iii) provide best practices and efficiency in formatting and executing infrastructure projects; and (iv) adopt advanced, recommended practices by the best local and international experiences. They include:

- Exemption of submitting, as technical capacity, previous experience certification for works or for providing equipment by the bidder itself or companies related;

- Exemption of submission as condition for technical homologation previous operation, execution or delivery certificates, by the bidder itself or companies related, of services with characteristics, quantities or deadlines similar to the bid venture, whenever the execution of the contract object may be reasonably ensured by guarantees of executing the contract or by using, by the Hired Party, of specialized consulting firms or outsourced providers;
- The regulation and contract clauses would observe the principles of simplicity, private autonomy and the minimum intervention, not exceeding the strictly necessary to reach the expected goals and always preferring less restrictive, expensive or conflicting measures;
- In any case adjustment and review of fees, prices, counter payments or capital inputs, or their payment and charge, would be linked to uncertain factors or formulae, undetermined or depending on the exclusive criteria of one party, and the contract shall have definitions as complete and precise as technically feasible under the local and international experience;
- The Public Hiring may not, for reasons of public interest, forbid, postpone, or reduce alone the charge or adjustment of fees or prices by the Hired Party unless when authorized by the Panel of Arbitration, whose decision will always be linked to the payment of a monthly compensation in cash for the loss of income;
- Federal, state, Federal District, and city entities, agencies and authorities, even those autonomous and independent, whose operation may impact the feasibility of the venture, shall actuate, together and efficiently in all processes and administrative acts required for the venture's structure, approval and execution, to allow for the completion in a uniform, economical, and within deadlines in line with the primary aspect of the venture.

- Adoption of advanced practices recommended by the best local and international experiences, including:
 - The edition, considered the competencies of the specific legislation and under previous public consultation, of plans, regulations and acts that formalize and make stable all State policies determined by the Executive for each sector that is encouraged or regulated, making safe its execution within the scope of administrative development and regulation;
 - The analysis of the regulatory impact when editing or changing regulations, industry regulation plans and other regulatory acts impacting industries, aiming to guide decision-making and ensure efficiency, efficacy, cohesion and the quality of the regulatory policy, fully respecting rules and rights involved;
 - Previous feasibility study of programs, special regimes or incentive measures that imply increase of expenses, waiver of income, lien or encumbrance of public assets, containing evidences as for its concept structure and strategy for monitoring and assessment, cost effectiveness, impact upon competitors and the efficiency on allocating means of production;
 - Regular monitoring and yearly assessment on execution and results from incentive and regulation measures as established in policies, plans, and regulation;
 - Elimination of bureaucratic barriers for the free organization or exercise of citizenship, civil life and business activities;
 - Articulation with the Economic Defense Administrative Council (Conselho Administrativo de Defesa Econômica, CADE) for increasing efficiency and efficacy of prevention and repression measures to protect the economic order; and

- Articulation with controlling entities and authorities to increase transparency of administrative actions and for the efficiency in receiving and considering of contributions and recommendations.

Despite all positive measures within the PPP Mais scope, it is highlighted the one that would be more efficient that, instead of creating a new state-owned company to perform the so-called “National Structurer”, existing state-owned companies with a similar scope. In this case, and as an example, through a fine adjustment in the Company for Planning and Logistics (Empresa de Planejamento e Logística, EPL), there would be no need for creating a new company and hire staff. In the search for solutions to the Brazilian infrastructure, proposals shall also be focused on the existing instruments and how to perfect them as a measure of efficiency and rationality.

3.2 FIRST FEDERAL ADMINISTRATION PROPOSAL AFTER MS. DILMA ROUSSEFF’S IMPEACHMENT: INVESTMENT PARTNERSHIP PROGRAM (PROGRAMA DE PARCERIAS DE INVESTIMENTOS, PPI)

The first Provisional Measure issued by Temer Administration, MP 727, brings positive signals for resuming investments in the Brazilian infrastructure.

The Provisional Measure creates the Investment Partnership Program (Programa de Parcerias de Investimentos, PPI). The main virtue of this measure is to provide general guidelines for the PPI but not adding a great deal of detailing to the legislation, which could result

in halting all mechanisms for implement it. Specific laws and decrees will provide such detailing.

Anyway, such outline provided by the PPP are fully compliant to demands and proposals elaborated by diverse sectors of society, aiming to unlock investments in infrastructure in recent years.

It is worth to stress the intention to:

- strengthen the State's regulation role, ensuring autonomy to regulating entities (article 2, V);
- legal security to the Government, state-owned entities and private entities (article 3, III) and the execution of studies on the regulatory impact, limiting thus the confusing edition of rules and restrictions (article 6, II);
- regulate federal incentive policies that may benefit infrastructure investments in states and cities (article 4, III);
- concerns on integrate project structuring with protection to competition by the participation of CADE (article 6, VII).

The creation of the Investment Partnership Program Council (Conselho do Programa de Parcerias de Investimentos, CPPI) is also symbolic and important, replacing the current PPP management council. The difference is that the CPPI will be chaired by the President of the Republic itself and CPPI's Executive Secretariat will report to the President. This chain of command ensures legitimacy and signals to society the relevance given by the new administration to the private role in infrastructure.

It is also worth to mention the reference made to Law 9.491/97, that supported privatization in the Cardoso administration. The PPI may go beyond PPPs and Grants and also encourage the privatization of companies.

The following is also worth to mention:

- **Communication and formatting of projects:** The Provisional Measure brings alternatives to the private initiative to submit projects to the Government:
 1. One of these is to allow for any interested party to submit proposals and preliminary studies on projects. However, the cost of such studies will not be reimbursed by the Government (article 13);
 2. In the other hand, the Provisional Measure opens the possibility to perform Procedures for Expressing Interest, through which interested parties can carry out studies for which they will be reimbursed if their project is implemented (article 14, I). Such situation applies especially to infrastructure companies willing to join the bid for the project they have proposed;
 3. There is also the possibility to grant exclusivity to a company to perform such studies. This company can have their costs reimbursed and even be paid a success fee. However, in this case the company cannot join the bid it has helped to create. It seems to be an article focusing on regulating the operation of companies structuring projects, such as the EBP (article 14, paragraph 1).
- **BNDES's fund for structuring partnerships:** The Provisional Measure has also created a project structuring fund for infrastructure projects at the federal, state and city levels. The fund will have its own consultant hiring regime, which signals the intention of the government to ensure a qualified support to ministries to format their proposals.

The fund seems to be inspired in a proposal made by legal experts under request of the then ministry of Economy, Joaquim Levy, which were included in the draft of the bill that created the PPP Mais, establishing the creation of a public company to structure projects. According to the PM, the fund will finance studies, the Program's Executive Secretariat will coordinate the several government entities.

- **Integration between control entities and permit issuers:** Article 18 of the PM features a relevant guideline, which is the joint work of the several entities of authorization and oversight in infrastructure ventures. Mechanisms will be established for the joint operation of these entities, as they will participate on the elaboration of the projects from the beginning. This aims to prevent that later demands lock the execution of projects.

Naturally, this guideline does not mean that the previous studies will not be required, including those for social and environmental permits, but is an important opportunity to give them some rationality. It is also critical that the regulation of this article incorporates current concepts for human rights to these ventures. In this regard, UN's guidelines and the performance of due diligences in human rights may become important mitigators of risks to projects and reduce impact to communities affected.

There is, of course, a lot of work to do in order to regulate the Provisional Measure. It is also critical to ensure that the Program's Executive Committee is able to coordinate and execute projects. It is off to a good start by linking the Company of Planning and Logistics to the Executive Committee.

Now, the new administration has the duty to ensure efficiency on process management and to coordinate the many entities and ministries to make PPI come true. It was understood as the first step in the right direction.

3.3 PROVISIONAL MEASURE 700/15 EXPIRED

It was understood as a Provisional Measure that would help to unlock investments in infrastructure, but on May 19, 2016, the deadline for voting the Provisional Measure was breached and it was expired.

The MP 700/2015 would reduce paperwork required for procedures related to expropriation, by implementing the following changes:

- exemption of legislative permits when expropriation of assets take place through an agreement between Federation entities;
- expansion of the possibilities of private parties to execute expropriations by means of contract bonds such as Grants, PPPs, licenses, permits, once they are hired to execute works and engineering services on turnkey lump sum regime;
- demand for compensation for those expropriated if they occupy lands targeted to land regularization of social interest; and
- usage of the expropriated asset, or of rights emerging from it in a dynamically way, so to allow for the structuring of complex projects. Several instruments for granting assets and rights to third parties (sale, rent, grant, leasing and so on) would be available to the Public Administration, and there would be an express permission for such assets to be used as capital inputs for investment funds and specific purpose entities.

However, the bill was retained in the mixed special committee that would analyze and suggest changes on the text submitted by the Executive. The committee was sat up, but the report on the MP was not voted. Thus, it was filed.

So one of the most known barriers for executing infrastructure projects and to complete these projects within schedule - the effective execution of expropriations - remains unchanged.

3.4 FEDERAL GUARANTEE FUNDS' LACK OF CAPITAL

When the Brazilian experience related to the PPP Federal Guarantee Fund (FGP) or other infrastructure guarantee fund (FGIE), one finds that

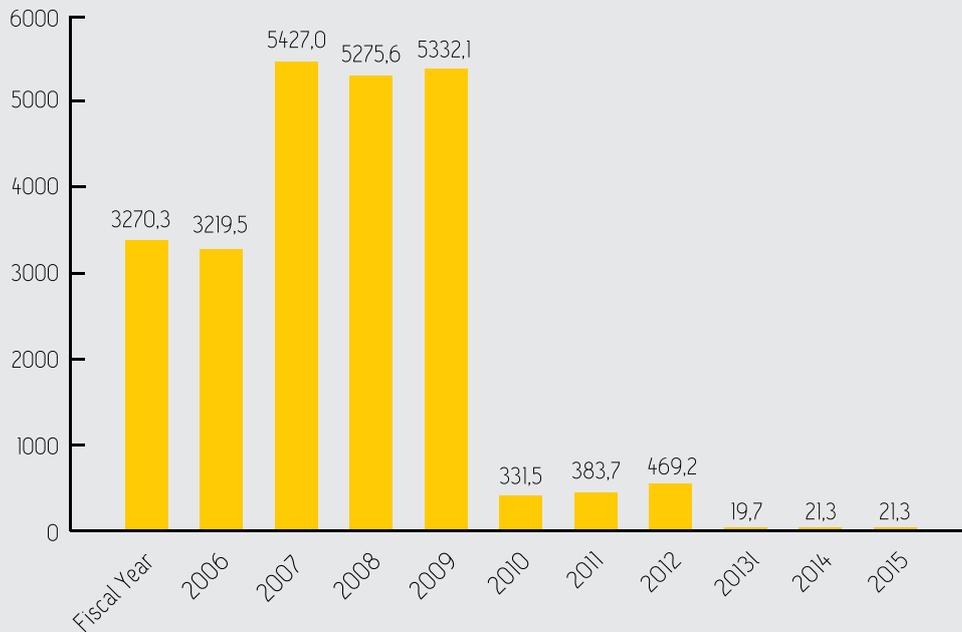
although they are the pillars for unlocking PPPs in Brazil, both are still dormant and requiring public policy to make Federal, State, and even City PPP funds more robust and efficient.

FGP was created by Law 11.079/04, aiming to provide guarantees to the private partner on the fulfillment of counter payment by the public partner. It was an unprecedented move by then, aiming to provide the private partner with the security that public partner's obligations would be paid. However, the FGP did not provide any guarantee during its existence, so the Federal Administration gradually withdrawn the fund's resources - in February 2016, fund assets were merely 21.6 million BRL.

The Federal Administration, FGP single shareholder, transferred all fund quotas to the Brazilian Agency for the Management of Guarantee Funds and Guarantees (Agência Brasileira Gestora de Fundos Garantidores e Garantias S.A, ABGF), as per Decree dated February 2, 2016.

In the last six years, the Federal Administration gradually reduced fund's resources. Such draining totaled 5 billion BRL, which dramatically reduced the fund's ability to provide guarantees. This way, the fund's Net Asset fell to 21 million BRL in 2015 from 469.2 million in 2012 (Chart 9). Such lack of resources of the FGP-PPPs prevents also that the Federal Administration encourage and support state and city PPPs, as approved by Law 12.766/12.

CHART 9: FGP TOTAL ASSET EVOLUTION (NOMINAL)
IN MILLION BRL



Source: Yearly Accounting Statement issued every August. * Monthly Accounting Statement, data as of April 2015.

In addition to this, ABGF was created in 2012 as a state-controlled stock corporation linked to the Ministry of Economy. The company was founded with the goal to centralize administration of guarantee funds, deploying guarantees to risky operations in areas of major economic and social interest, such as infrastructure, foreign trade and agriculture.

Thus, the management of the Infrastructure Guarantee Fund (Fundo Garantidor de Infraestrutura, FGIE) is under ABGF. This fund, private in nature and having its own assets, should be granting guarantees against credit risks and risks of failing on contract obligations related to investment projects in large infrastructure projects⁶, such as those developed under the Logistics Investment Program (Programa de Investimentos e Logística, PIL),

⁶ The FGIE has a committee to guide the Federal Administration on guarantee fund quota holders meetings. The Guarantee Fund Participation Council for Risk Coverage in Operations in Large Infrastructure Projects (Conselho de Participação de Fundos Garantidores para Cobertura de Riscos em Operações de Projetos de Infraestrutura de Grande Vulto, CPFGE) is under the Ministry of Economy and comprises members from the ministries of Economy, Chief of Staff and Planning.

and Growth Acceleration Program 2 (Programa de Aceleração do Crescimento 2, PAC 2). Guarantees for large works are the main obstacle to be overcome due to the growing demand generated by private investments, and are critical for the success of the Federal Administration infrastructure program. FGIE should also support projects resulting from Public-Private Partnerships, including those organized by States or the Federal District.

More specifically, the FGIE should provide solutions for unmanageable and not insured risks, i.e., it should fill eventual structural or circumstantial market gaps to expand available guarantee mechanisms for long-term financing. It would supplement the insurance and reinsurance markets, providing additional capacity to take risks not absorbed, partially or in full, by the insurance market.

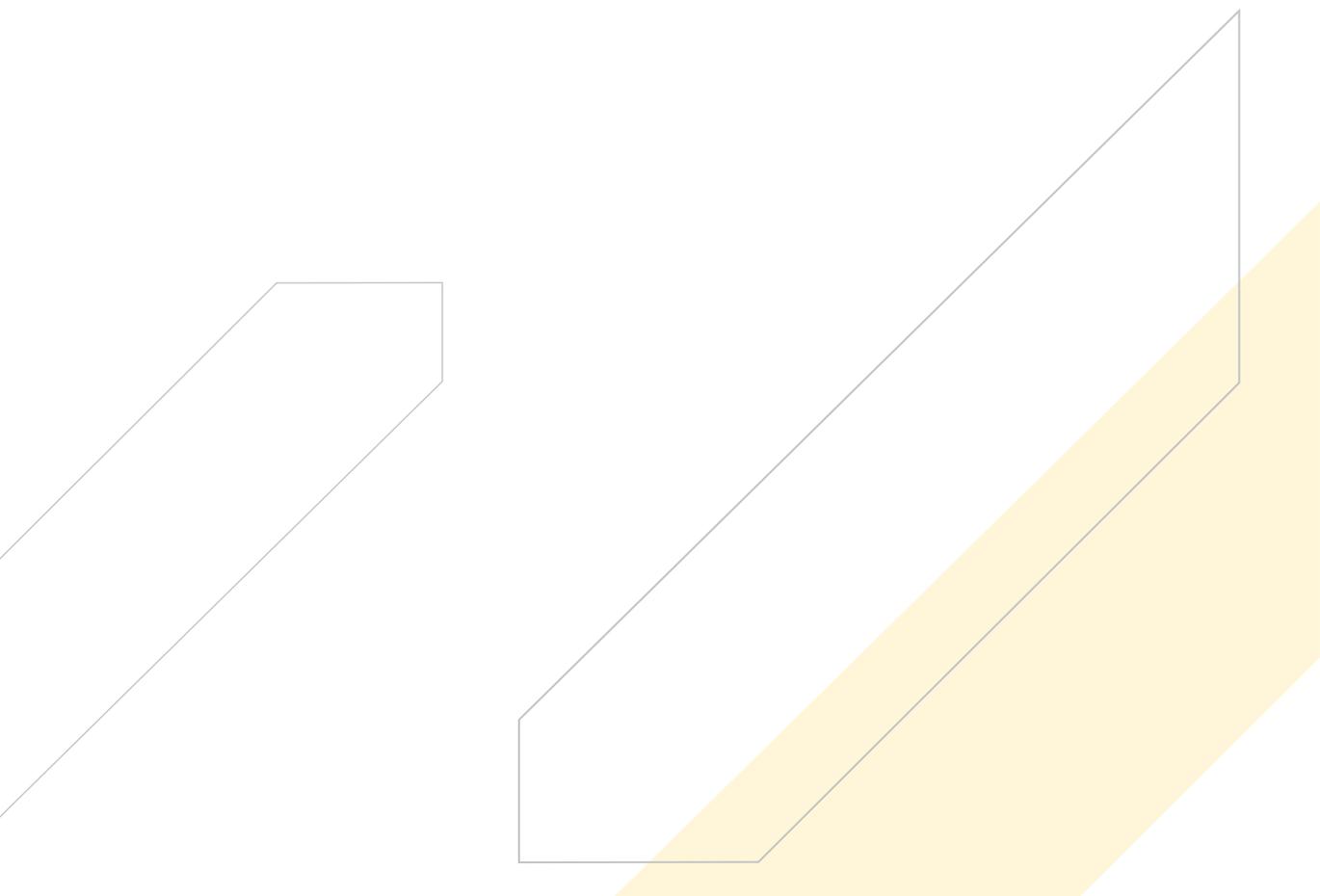
However, the current fiscal restriction is preventing the proper operation of ABGF and its subsidiary funds. As per management reports, due to the uncertainties in the operation of funds to be managed by ABGF, and as a consequence of the compensation of the service contract with the Federal Administration, the company was forced to lay off some one third of expenses with staff. Currently, ABGF is focusing on insuring credits to exports.

This way, just like FGP, FGIE faces uncertainty about its effective capitalization and about the real capacity to grant of guarantees by the fund. Even the expected volume of 50 million BRL determined (but not fully paid in) by Decree 8.329/14 is quite small for guaranteeing any relevant project, as legislation determines that PPPs shall be above 20 million BRL as a minimum. When considered just the capital stock that was actually paid in - 1 million BRL from the Federal Administration, paid in August 8, 2015, the capacity of the fund is irrelevant.

Thus, the fund management could not reach a major goal in 2015, which was to reassess guarantees to be granted to the highway industry within the PIL. Considering that bridge loans for five highways comprising PIL I were due at the 4th quarter of 2015, state-owned banks decided to structure long-term loans without the FGIE to cover non-manageable and non-insurable risks and not delay work schedules.

In these cases, guarantees follow state-owned bank financing rules. In a scenario that excluded the FGIE, equilibrium interest rates shall be significantly higher, once non-insurable risks are transferred directly to the private party. This practice adds costs to the private partner, damaging the economic-financial balance of the partnership.

For this reason, it is critical to capitalize such funds. The success of investments and PPPs depending on fiscal resources goes necessarily through a robust structure of guarantees. Federal guarantee funds are one of the main guarantee mechanisms at a federal level. It is critical to capitalize these funds to make feasible a series of PPP projects by the Federal, State, and City administrations. After that, it would be critical to regulate the delivery of guarantees from the Federal Administration to States and Municipalities.







PROPOSALS TO
FOSTER PPPS AND
GRANTS IN STATES AND
MUNICIPALITIES

4. PROPOSALS TO FOSTER PPPS AND GRANTS IN STATES AND MUNICIPALITIES

This section aims to present a set of proposals to reduce paperwork and extend the number of PPPs and Grants in States and Municipalities. The proposals are organized in groups that are discussed below.

4.1 IMPROVEMENT ON THE EXECUTION CAPACITY: CONSORTIUMS AMONG CITIES AND THE PERFORMANCE OF PPPS AND GRANTS

Public consortium among cities are regulated by Law 11.107/05 and are a company of private rights or public association among two or more cities in the same state, aiming to execute projects, works and/or services of common interest focusing on the regional development.

Small- and mid-sized cities face difficulties to deploy by themselves public policies in areas such Health, Education, Sanitation, Handling and Treatment of Solid Waste, among others. Consequently, creating public consortiums among cities allow for deploying critical projects, supporting the generation of synergies between local governments, allowing for gains of scale and the joint operation of several public entities to connect managerial, political and social fields.

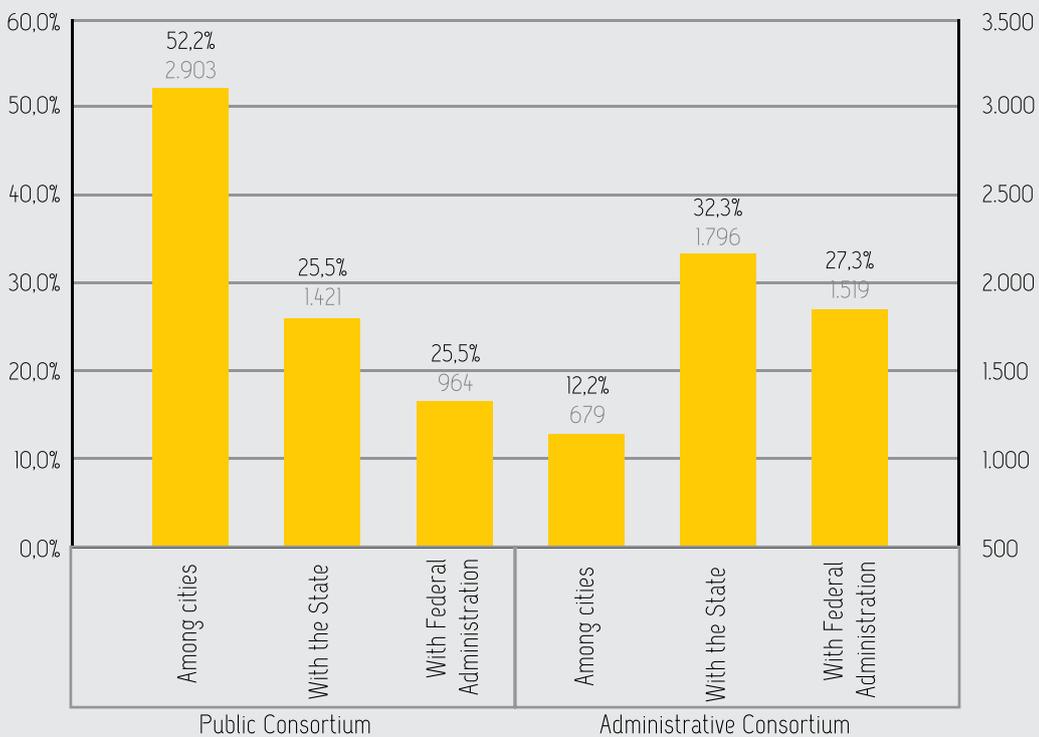
This proposal aims to nurture the creation of consortium among cities, especially the smaller ones. By joining competencies, there are significant gains of scale allowing cities to aggregate knowledge and *know-how* in a single consortium.

According to the Brazilian Cities Profiling Research (Pesquisa Perfil dos Municípios Brasileiros) conducted by the Brazilian Geographic and

Statistical Institute (Instituto Brasileiro de Geografia e Estatística, IBGE) for 2011, 52.2% of Brazilian cities had already created a public consortium among cities for Education, Health, Social Support and Development, Employment, Tourism, Culture, Housing and Environment, and 12.2% of these cities had some administrative consortium among cities (Chart 10).

Furthermore, 25.5% of Brazilian cities had established a public consortium with their states, and 32.3% of these cities had an administrative consortium with their states. As for partnerships with the Federal Administration, 17.3% of Brazilian cities had established a public consortium with the Federal Administration, and 27.3% of these cities had an administrative consortium with the Federal Administration.

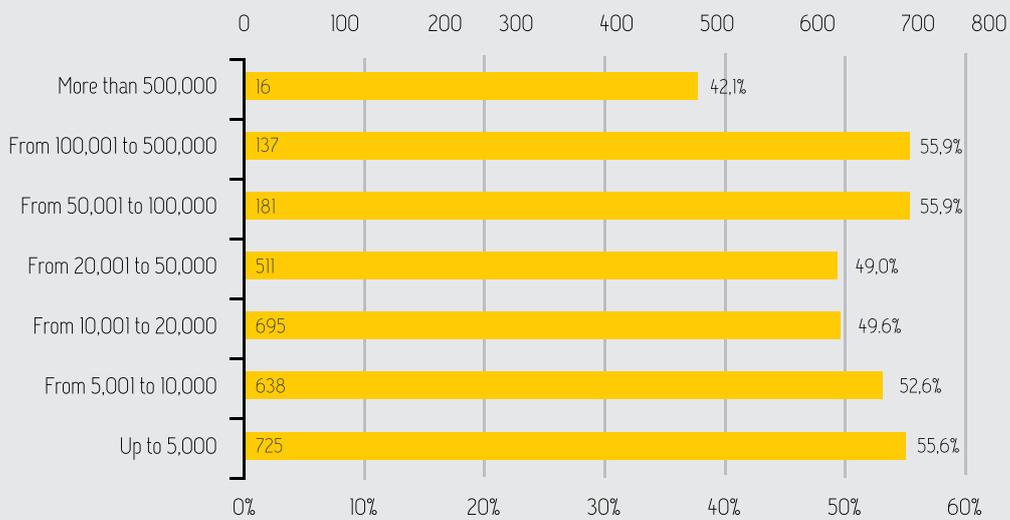
CHART 10: NUMBER/PERCENTAGE OF CITIES BY TYPE OF CONSORTIUM IN BRAZIL



Source: Perfil dos Municípios Brasileiros 2011 – IBGE. Elaboration and analysis: GO Associados

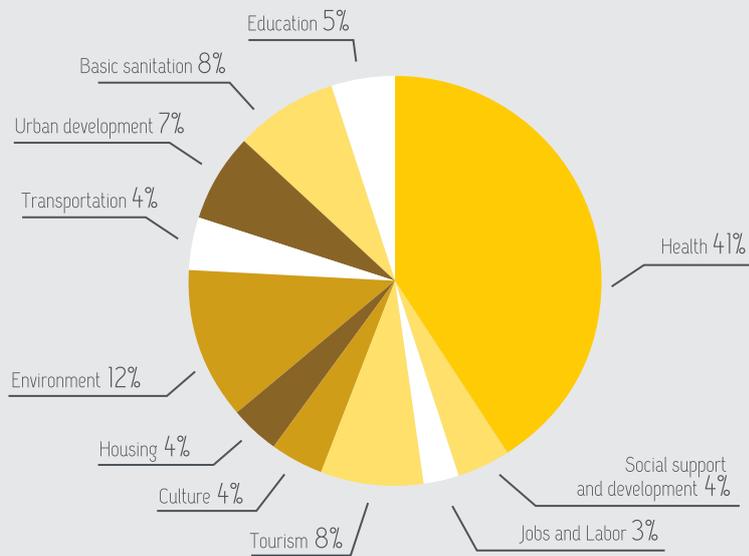
Chart 11 shows the number of Brazilian cities in public consortium with other cities by size (number of inhabitants) and Chart 12 shows the number of cities in Brazil with public consortiums with other cities per area. Consortiums in the area of Health represent 41% of the total, followed by the Environmental area with 12%.

CHART 11: NUMBER/PERCENTAGE OF CITIES IN PUBLIC CONSORTIUMS WITH OTHER CITIES BY SIZE OF CITY (NUMBER OF INHABITANTS)



Source: Perfil dos Municípios Brasileiros 2011 – IBGE. Elaboration and analysis: GO Associados

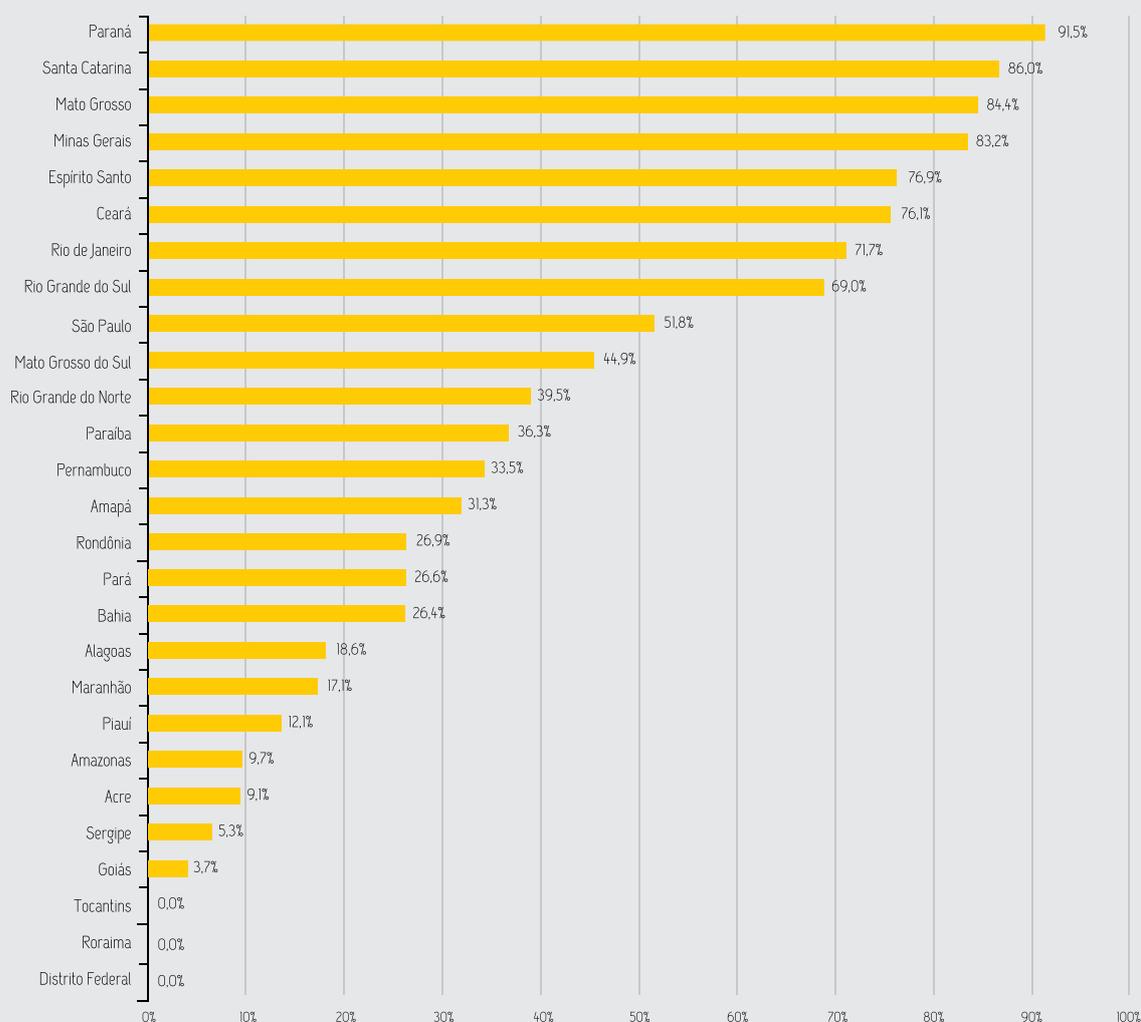
CHART 12: NUMBER/PERCENTAGE OF CITIES IN PUBLIC CONSORTIUM WITH OTHER CITIES PER ADMINISTRATION AREA



Source: Perfil dos Municípios Brasileiros 2011 – IBGE. Elaboration and analysis: GO Associados

Chart 13 shows the percentage of Brazilian cities in public consortium with other cities per State. The State of Paraná has more than 90% of its cities in this type of consortium, followed by the states of Santa Catarina, Mato Grosso and Minas Gerais, with more than 80% each. In the other hand, in the states of Tocantins, Roraima, and Distrito Federal, no city has joined public consortiums with other city.

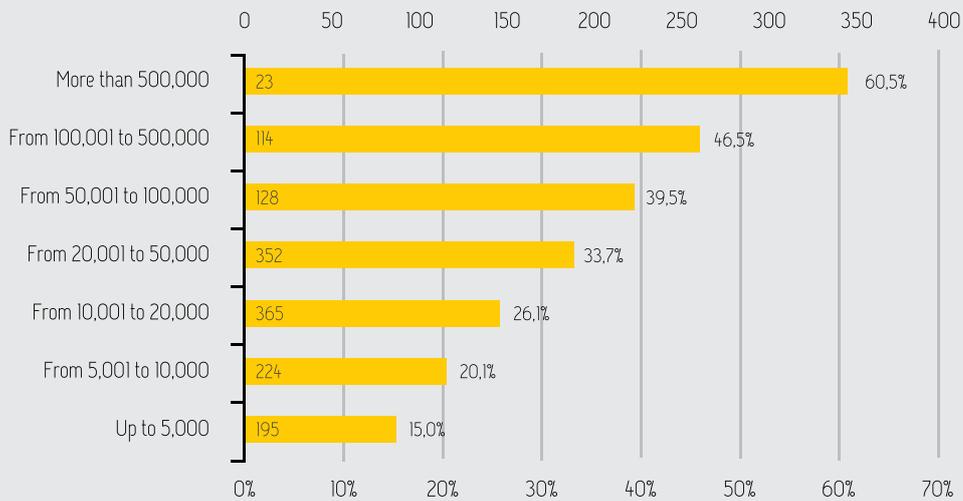
CHART 13: PERCENTAGE OF CITIES IN PUBLIC CONSORTIUM WITH OTHER CITIES PER STATE



Source: Perfil dos Municípios Brasileiros 2011 – IBGE. Elaboration and analysis: GO Associados

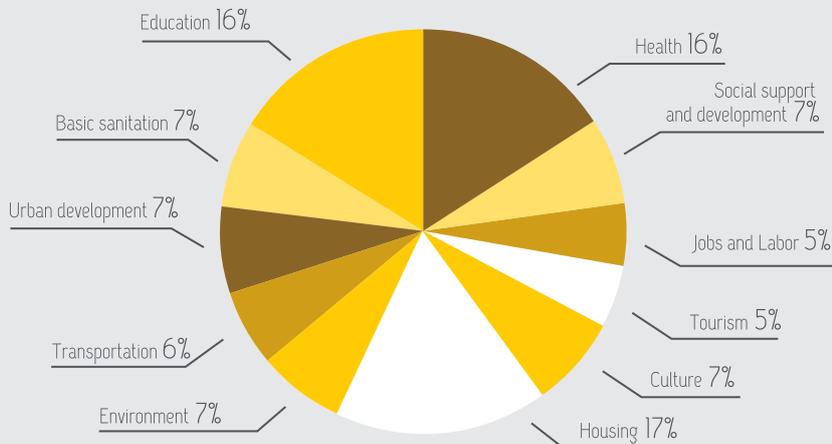
Chart 14 shows the percentage of Brazilian cities in public consortium with the State per size of the city (number of inhabitants). It can be seen a direct relationship between the percentage of cities in a public consortium with the State and the size of these cities. Some 60% of cities with more than 500,000 inhabitants have joined a public consortium with the State, and 15% of cities with up to 5,000 inhabitants joined this type of consortium.

QUADRO 14: NÚMERO/PERCENTUAL DE MUNICÍPIOS COM CONSÓRCIO PÚBLICO COM O ESTADO POR TAMANHO DOS MUNICÍPIOS (NÚMERO DE HABITANTES)



Fonte: Perfil dos Municípios Brasileiros 2011 – IBGE. Elaboração e análise: GO Associados

QUADRO 15: NÚMERO/PERCENTUAL DE MUNICÍPIOS COM CONSÓRCIO PÚBLICO COM O ESTADO POR ÁREA DA ADMINISTRAÇÃO

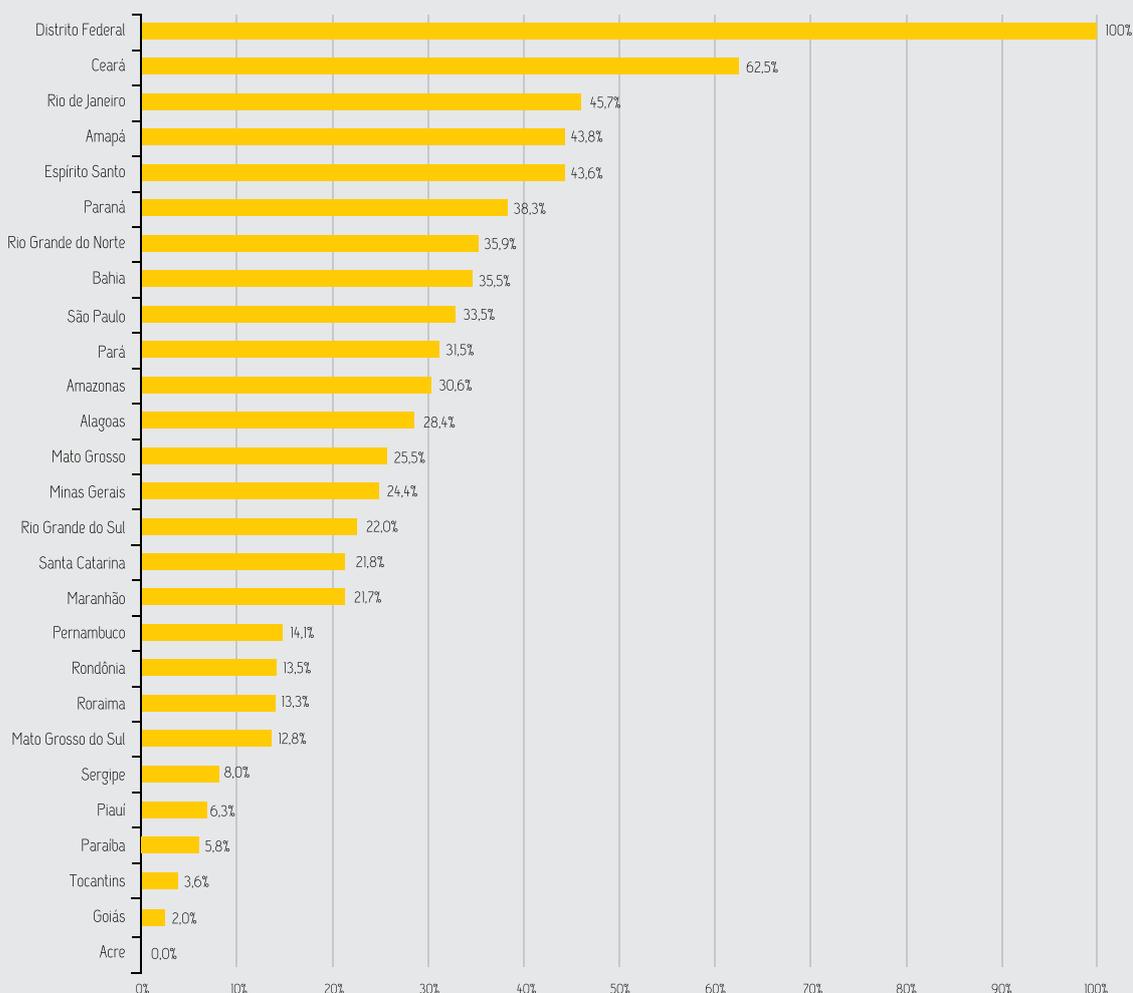


Fonte: Perfil dos Municípios Brasileiros 2011 – IBGE. Elaboração e análise: GO Associados

Chart 15 shows the percentage of Brazilian cities in public consortium with the State per area. There is a concentration of consortiums in Housing, Health and Education, with 17%, 16% and 16% respectively.

Chart 16 shows the percentage of Brazilian cities in public consortium with the State per State. In the State of Ceará, 62% of cities have established a consortium whereas only 2% of cities in the State of Goiás have done the same. There is none in the State of Acre.

CHART 16: PERCENTAGE OF CITIES IN PUBLIC CONSORTIUM WITH STATE ADMINISTRATION PER STATE

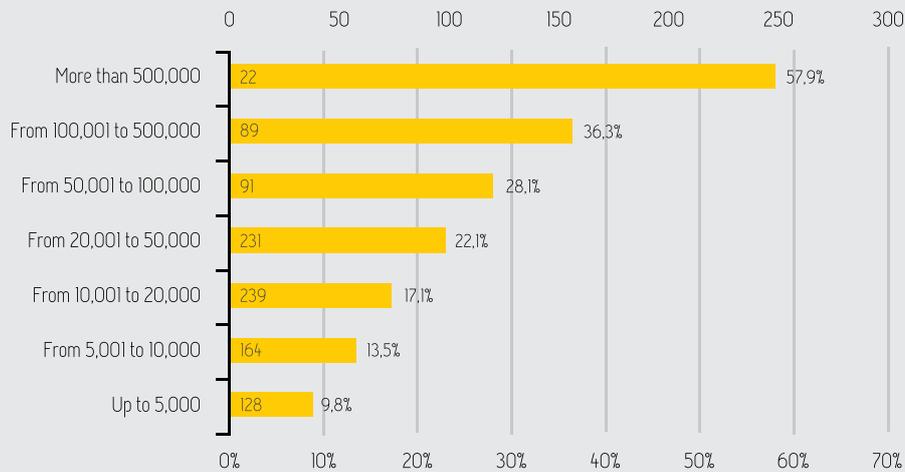


Source: Perfil dos Municípios Brasileiros 2011 – IBGE. Elaboration and analysis: GO Associados

Chart 17 shows the number of Brazilian cities in public consortium with the Federal Administration by size (number of inhabitants) and Chart 18 shows the number of cities in Brazil with public consortiums with the Federal Administration per area.

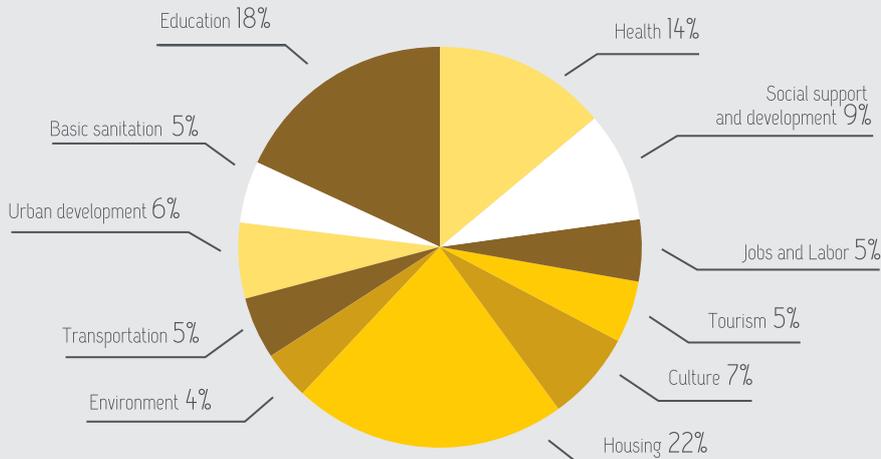
Here as well, larger cities have the majority of this type of consortiums. Some 60% of cities with more than 500,000 inhabitants have joined a public consortium with the Federal Administration, and less than 10% of cities with

CHART 17: NUMBER/PERCENTAGE OF CITIES IN PUBLIC CONSORTIUMS WITH FEDERAL ADMINISTRATION PER SIZE OF CITY (NUMBER OF INHABITANTS)



Fonte: Perfil dos Municípios Brasileiros 2011 – IBGE. Elaboração e análise: GO Associados

CHART 18: NUMBER/PERCENTAGE OF CITIES IN PUBLIC CONSORTIUM WITH FEDERAL ADMINISTRATION PER ADMINISTRATION AREA

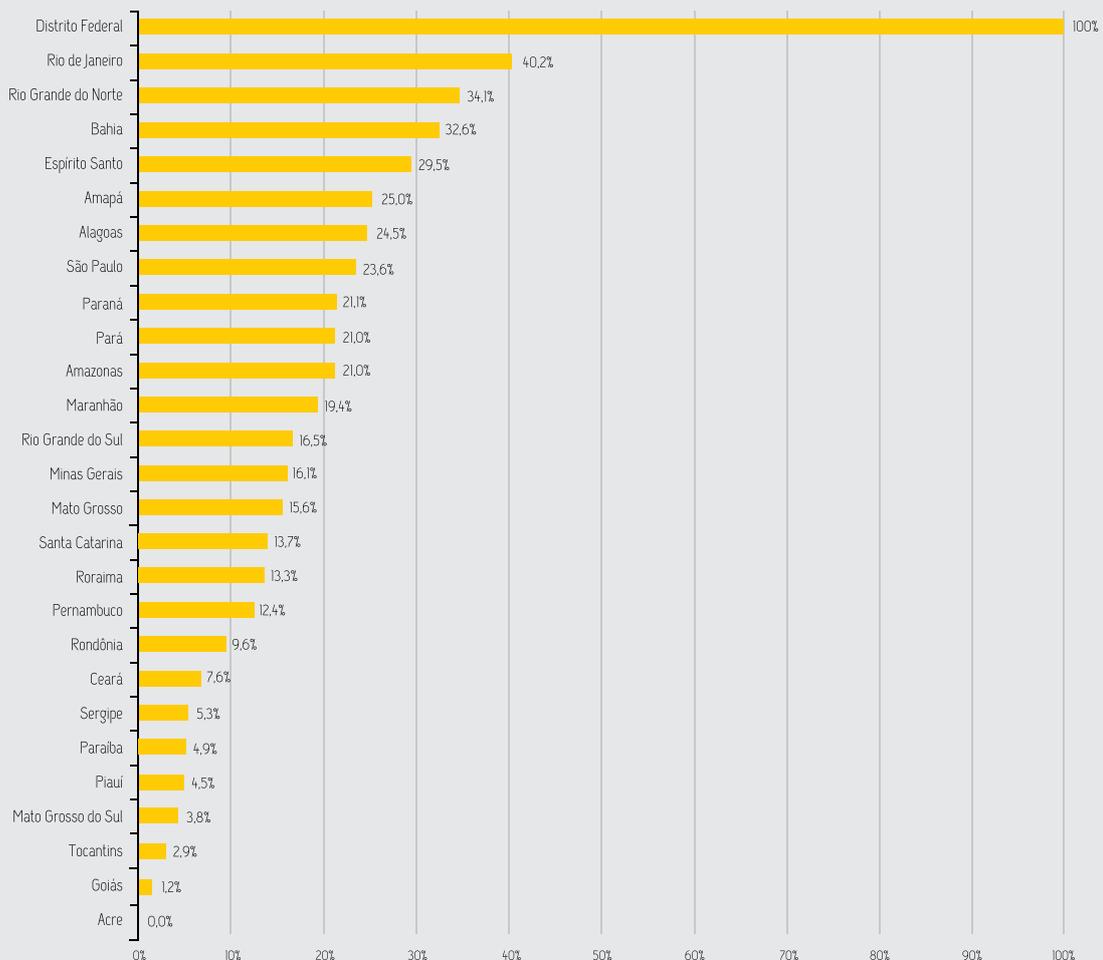


Fonte: Perfil dos Municípios Brasileiros 2011 – IBGE. Elaboração e análise: GO Associados

up to 5,000 inhabitants joined this type of consortium. The main areas are housing, education and health, representing 22%, 18%, and 14% respectively.

Chart 19 shows the percentage of Brazilian cities in public consortium with the Federal Administration per State. The State of Rio de Janeiro has 40.2% of cities in some form of public consortium with the Federal Administration, followed by Rio Grande do Norte and Bahia, both above 30%.

CHART 19: PERCENTAGE OF CITIES IN PUBLIC CONSORTIUM WITH FEDERAL ADMINISTRATION PER STATE PER STATE



Source: Perfil dos Municípios Brasileiros 2011 – IBGE. Elaboration and analysis: GO Associados

The data above unveil the space available for conducting Public-Private Partnerships and Grants by Intercity Consortiums, in small- and mid-sized cities above all - the ones facing most barriers for developing such projects. There is space for deploying PPPs and Grants in several areas, such as Health, Housing, Transportation, and Education.

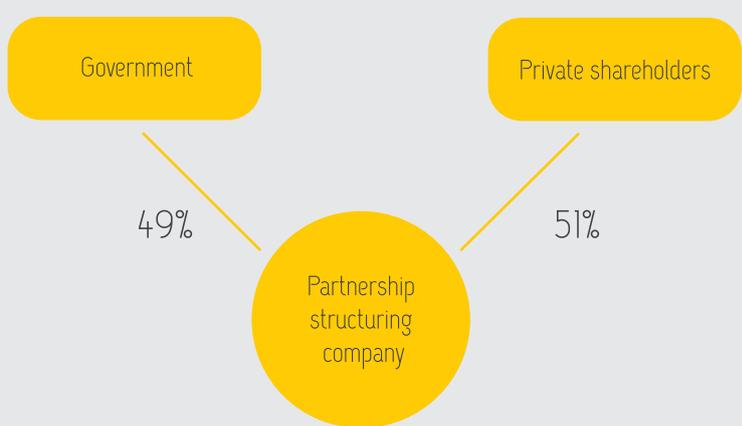
4.2 BEST PROJECTS: CREATION OF STRUCTURING COMPANIES AND PMIS

Especially for the lack of cooperation among states and cities, the following are proposals to address that.

4.2.1 4.2.1 Creation of structuring companies for projects

This proposal aims to encourage the creation of PPP and Grant structuring companies, especially for cities. In addition to the creation of new companies, it would be initially suggested the analysis of the institutional framework for using existing structures. Chart 20 indicates the ideal ownership structure for a partnership structuring company.

CHART 20: OWNERSHIP STRUCTURE OF COMPANIES TO STRUCTURE PROJECTS



Elaboration: GO Associados

As said above, the hiring of experts for modeling Public-Private Partnership projects is subject to Law 8.666/93 and to the availability of public resources. This reason slows down the implementation of social and economic infrastructure projects, which are critical for overcoming bottlenecks, creating jobs and ensuring long-term economic growth. In this context, it is proposed the creation of Partnership and Project Structuring Companies (Empresas Estruturadoras de Parcerias e Projetos, EEPP).

These would not be owned by the government and would focus on conceiving, proposing and formatting Public-Private Partnerships. A EEPP would be similar to a EBP in operational terms, whose experience is described in this Study. Its operation would be restricted to the elaboration of projects, being prevented from the execution and from having any ownership.

Focused on economic-financial, legal, and technical-operational modeling, this company is not subjected to Law 8.666/1993 for hiring consultants and experts, and also it does not depend on the availability of State resources. Thus, the performance of all studies the precede the bid would be faster, allowing for the development of projects with quality and execution in a shorter timeframe.

It is proposed that the EPP operation focuses on modelling Public-Private Partnerships and Grants for cities, considering the complexity of structuring such projects mainly for small cities.

As said before, there is a wide lack of knowledge on how to deploy PPPs, which, added to the lack of human resources and materials required for the task, make the development of these projects quite difficult. In this regard, it must be stressed that modelling is not limited to drafting legal and economic-financial studies, also encompassing the support on developing legal frameworks and stable regulatory environments at the city level.

This way, the EEPP can help cities to constitute consortiums among cities and to develop some of their projects through a PPP. It should be noted that the EEPP operation is not restricted to a given State. Although it is critical having experts on the peculiarities of each state and in sectors presenting larger deficits, the EEPP may elaborate PPPs all over Brazil, disseminating know how and exporting best practices and methodologies for other states.

As stressed above, performing an economic-financial feasibility study is critical to determine a maximum threshold for the counter payment. Such figure shall be under market parameters, so to not fail to attract bidders, but also not above Public Administration's capacity to pay. Contracts shall be designed to allocate risks to the party that is able to manage them best and to convey increased security to private partners and project lenders.

Quality standards shall be properly specified and the Grantee compensation structure shall be modeled according to the quality of services delivered. The execution of all these steps by an expert company has the power to attract private investments for the state from both Brazilian and foreign investors. Furthermore, the operation of this company all over Brazil is able to identify sectors where companies may increase operations, contributing to develop the economies of the states and of Brazil.

Although reimbursement for studies carried out by EEP may be borne by the bid winner, as per article 21 of Law 8.987/95, similarly to what happens with the Brazilian Project Structuring Company (Estruturadora Brasileira de Projetos), there will be need for capital inputs in the company. It is estimated that the initial capital required for its constitution and operation is around 5 million BRL.

4.2.2 Enhancement and dissemination of Procedure for Expressing Interest (Procedimento de Manifestação de Interesse, PMI) mechanisms

The introduction and enhancement of the regulation for procedures for expressing interest shall not only promote a quantitative increase as well as a qualitative one for projects submitted to governments. Decrees alone will not solve Brazil's lack of infrastructure. However, better modeled

projects with proper risks and financially sustainable reduce transaction costs and attract new investors.

As procedures for expressing interest are institutionalized, the need arises for enhancements to current models to meet the goal of attracting best projects in qualitative and quantitative terms. This is based upon three pillars: (i) legal security to elaborate a PMI; (ii) clearer rules; and (iii) less paperwork.

Both the Federal Administration and the State of São Paulo are good examples on enhancements both have promoted for PMIs and MIPs.

4.2.2.1 Federal regulation

In response to the low quantity of PMIs at the Federal level until 2015, Federal Decree # 8.428 dated April 2, 2015, aimed to expand and establish new rules and security to PMIs. As a result, it is expected that the Federal Grant Program gains pace.

(I) REACH

The first meaningful change was the expansion of a range of projects that may be initiated by a PMI whether by companies or individuals. Albeit previous legislation allowed for submitting PMIs to other contract models, the expired decree only made this available for PPPs. This way, its scope was quite enlarged, including grants in general and leasing of public assets. Another news is the possibility that individuals submit their own projects.

Allowing for a company to open a PMI is another change that brought in security and less paperwork. The old decree determined that all studies should be carried out within the PPP Management Committee; such studies would be refused if not requested by this Committee.

(II) ESTABLISHMENT OF NEW RULES

There is the possibility of meetings between the private initiative and the Public Administration during the PMI (article 8) and the possibility of making studies available to other stakeholders. This makes the process clearer and positive externalities are created. By clearly allowing for a dialogue with the Public Administration and the analysis of other studies, participants have incentives to enhance their own studies and thus, to increase the likelihood of being selected by the Public Administration, also increasing the chances of being paid for such studies.

Despite all good news brought in by the new regulation, the decree does not clarify all doubts related to a PMI. Barriers remain, mainly on how these instruments shall be operated. As an example is the possibility that the private player rejects the reimbursement defined by the committee, when information contained in the selected documents will not be used (article 15, paragraph 2). In practice, these mechanisms may be difficult to operate. In addition to the discussion on the value to be paid back for the studies, a bargain power can be created by some interested parties that would cause the whole procedure to fail.

4.2.2.2 Regulation in the State of São Paulo

The State of São Paulo was the first to regulate the Private Initiative Interest Statement (Manifestação de Interesse da Iniciativa Privada, MIP) through Decree 57.289/2011, which allowed for individuals and companies to submit proposals, studies or surveys for PPP projects to the State Government.

Before creating the MIP, the Federal Administration and other state and municipal governments would only allow companies to submit projects through Government request. This is the Procedure for Expressing Interest (Procedimento de Manifestação de Interesse, PMI) model.

In July 21, 2015, the Government of the State of São Paulo gave a step ahead to enhance PMI and MIP mechanisms through Decree 61.371/15. The following decree items deserve the spotlight:

(A) DECREE'S REACH

PMI and MIP are applicable not only to PPPs, governed by Law 11.079/04 but also to Ordinary Grants (governed by Law 8987/95) and permits. As the text is quite high level, it seems possible to add Specific Purpose Entities and joint ventures between Government and private initiative in the list of projects.

(B) EXCLUSIVITY

A recurring problem on MIPs and PMIs was that it was mandatory that the Government invite all interested parties to model a given project. Such mechanism removed incentives for private parties to develop their studies, as they had no security that they would be used. The decree innovates by opening the possibility to grant exclusivity to a single company to perform studies. The exclusivity would be granted by considering advantage criteria against competitors in terms of economy and technique, so that the Public Administration may obtain all subsidies possible at a minimum cost, with monitoring and follow-up of studies and model development.

In this regard, see that the Federal Decree determines that the authorization for submitting projects, surveys, research and studies have no exclusivity, whereas the State Decree opens the chances to grant an exclusive authorization according to benefit, economy and technical criteria, as per decision of the Managing Council of the Public-Private Partnership Program or the Steering Committee of the Decentralization State Program.

Adopting PMI laws that allow exclusivity to perform studies for one interested company. The exclusivity would be granted by considering advantage criteria against competitors in terms of economy and technique, so that the Public Administration may obtain all subsidies possible at a minimum cost, with monitoring and follow-up of studies and model development.

(C) AUTHORIZATION

The new decree is more careful to authorize studies, demanding that the interested company show beforehand its experience in performing similar studies by submitting documents that evidence technical qualification of the company's staff. The company or individual may also submit a schedule for the studies, indicating completion dates for each step and the deadline for delivering the studies. In the same regard, Decree's article 19 determines civil and administrative liability for the exclusive company on the veracity and quality of studies submitted, and shall pay the Public Administration for damages that may rise from the usage of the study.

In order to better understand the procedures determined by the Decree, Chart 21 has a flowchart with the steps expected for submitting projects:

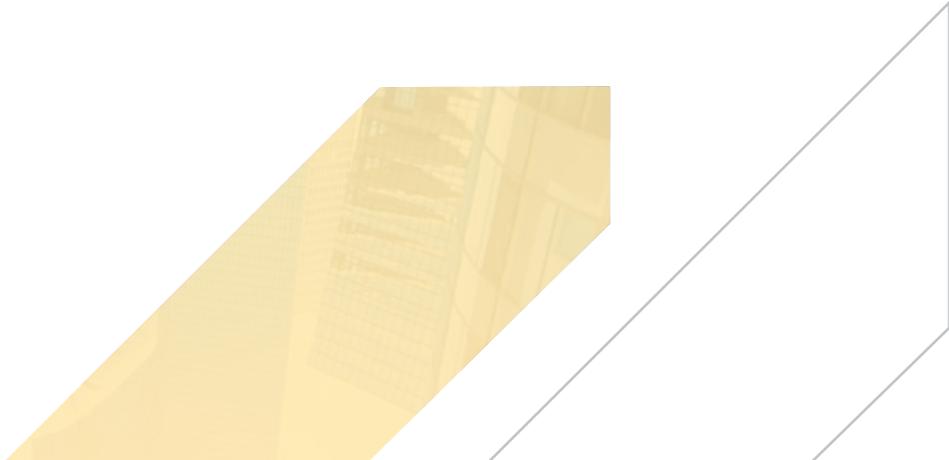
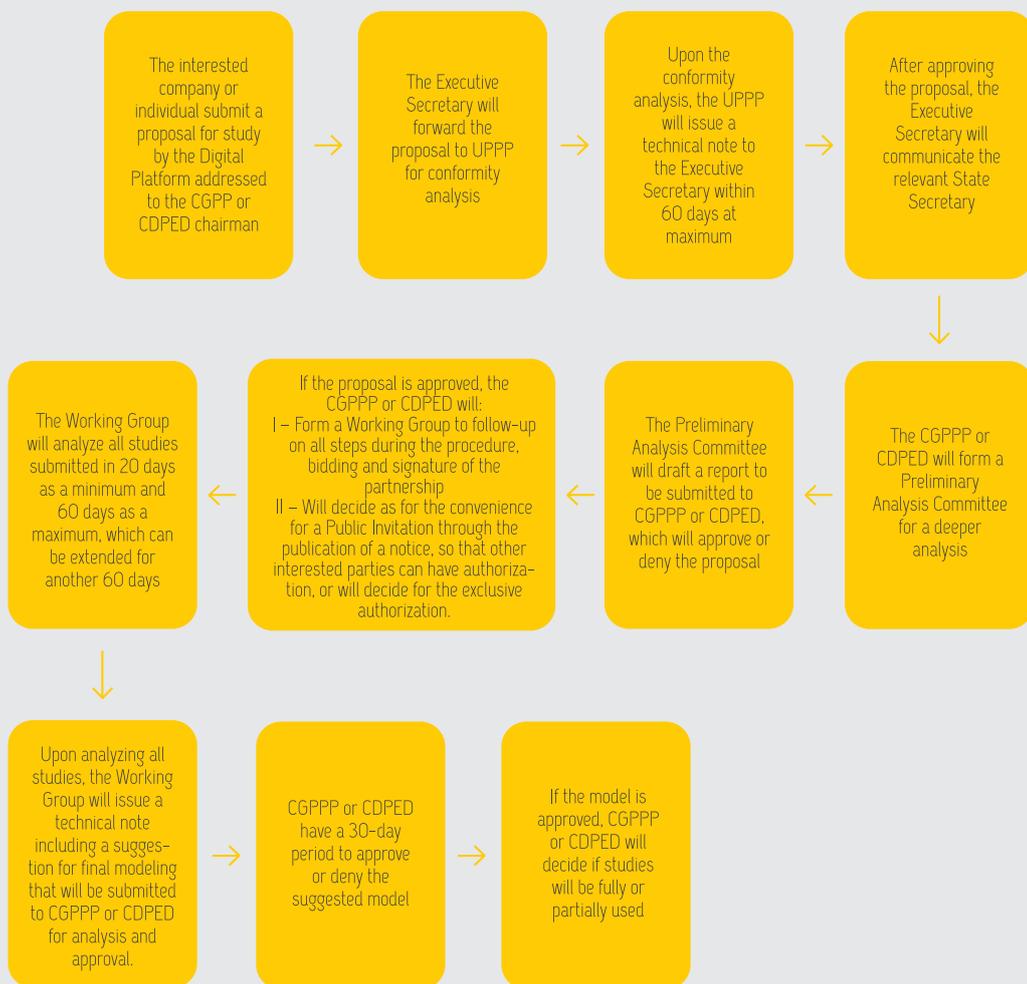


CHART 21: STEPS EXPECTED FOR SUBMITTING PROJECTS FOR EXPRESSING INTEREST

CGPPP: Managing Council of Public-Private Partnership Program (Conselho Gestor do Programa de Parcerias Público Privadas)

CDPED: Steering Committee of the Decentralization State Program (Conselho Diretor do Programa Estadual de Desestatização)

UPPP: Public-Private Partnership Units (Unidades de Parcerias Público Privadas)



Source: Decree 61.371/15. Elaboration: GO Associados.

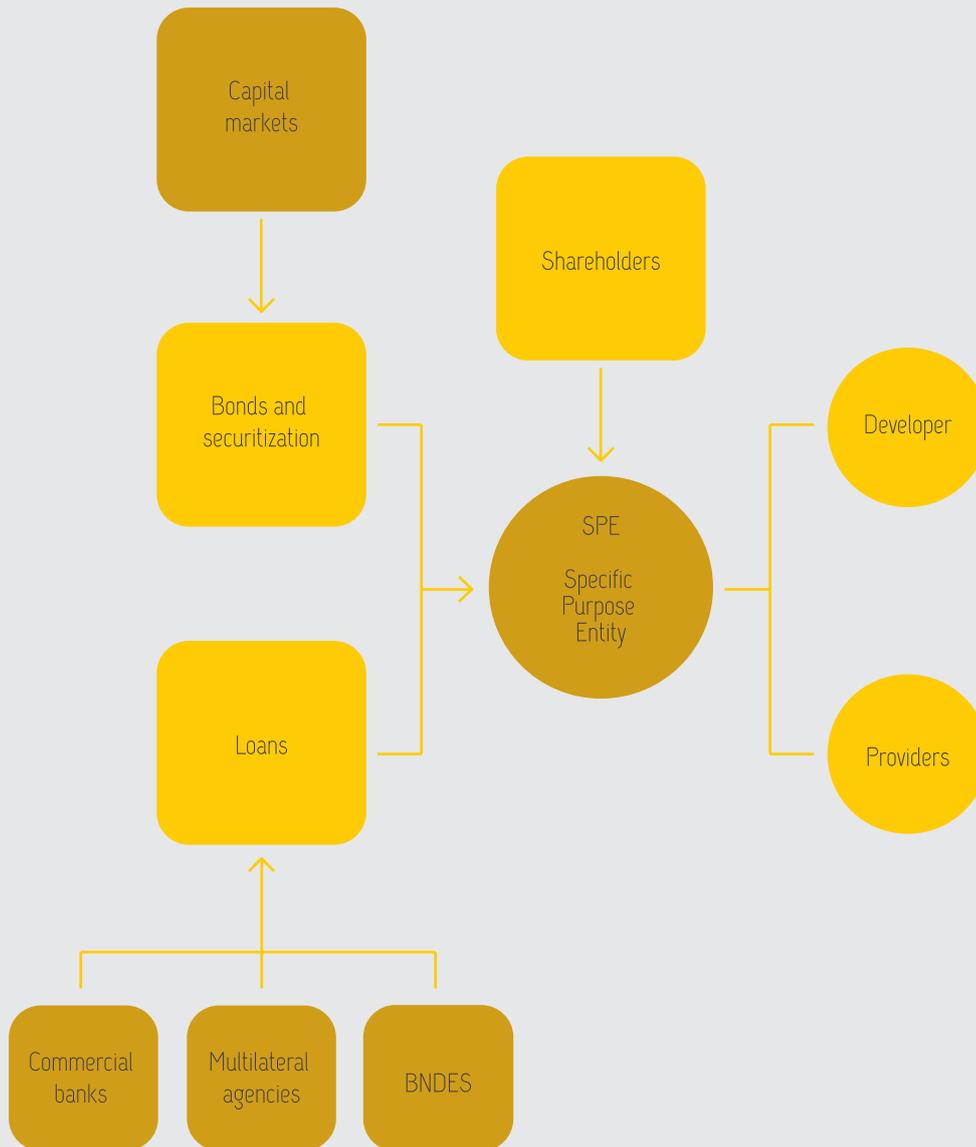
Revamping the PMI/MIP model shows a clear intention by Governments to increase transparency and improve governance for these procedures. It is hoped that by enhancing these mechanisms on all Federation entities, the number of PPPs and Grants multiply across Brazil.

4.3 MORE RESOURCES: CONSTITUTING FUNDS TO FINANCE PPPS AND GRANTS IN STATES AND MUNICIPALITIES

As we have seen, it is critical to develop supplemental structures for financing projects, aiming to encourage more participation from the private sector to expand and upgrade Brazilian infrastructure.

As explained in Chart 22, the financing structure for Public-Private Partnerships in Brazil may take place through capital markets and loans from commercial banks, multilateral agencies and the BNDES. Considering that BNDES is not able to finance all required projects, it is important to

CHART 22: BASIC MODEL FOR FINANCING PUBLIC-PRIVATE PARTNERSHIPS



Source: Ministry of Planning, Budget, and Management.

nurture development of supplemental financing structures through the capital markets, for instance.

The solution for the current crisis demand proposals that match the need for reducing costs and fiscal adjustment with the creation of new expansion frontiers to the economy.

4.3.1 Creation of the Infrastructure Fund

The goal for creating an Infrastructure Fund (IF) is to trigger a virtuous circle that allows for matching efforts to stabilize the debt/GDP ratio with the recovery of investments and growth.

As shown before, investments in infrastructure are critical to this process, as they allow concurrently for stimulate to demand and the increase of supply, enhancing thus the economy competitiveness.

(I) THE URGENCY OF FISCAL ADJUSTMENT AND REDUCTION OF DEBT/GDP RATIO WITH ECONOMIC GROWTH

At the current debt/GDP ratio, if the government increases interest rates, expenses with interest go up eroding trust from economy players as they are unsure if the Government will be able to pay debts with the income generated. It follows that they invest less, due to lower confidence in the future and slowing the economy down.

In the other hand, the desirable reduction on interest rates shall match a real improvement in the fiscal context, on the risk of create more distortions.

Also, if the Government is forced to cut investments and increase taxes to improve the debt/GDP ratio, the economy slows down, reducing even further the perspective for future income obtained from economic activities.

Consequently, it is critical for resuming economic growth and to improve expectation from economic players to reduce debt/GDP ratio by expanding the economy, avoiding the increase of taxes to a maximum.

But the lack of infrastructure in Brazil is one major barrier to economic growth.

By developing the whole production logistics infrastructure, productivity levels would be increased, allowing for sensible GDP expansion - not to mention immediate positive impacts caused by expenses to perform investments.

Hence the importance of a solution that provides for the new composition of the payment structure for portions of debt and that at the same time, allows for directing resources to investments in infrastructure.

(II) IF CHARACTERISTICS

The Infrastructure Fund will be based upon resources originated from credits companies and individuals have with the Federal Administration.

Credits related to the IPI tax, Income Tax, court-ordered payments, among others, may be used as the Infrastructure Fund's capital. This would provide an initial relief to Government's obligations. Instead of paying creditors, Government would first deposit the money in a financial institution, which would finance main infrastructure PPP and Grant projects in Brazil.

Upon the execution of projects, that would generate revenue from the use of the deployed equipment, these would pay the financial institution that, in turn, would transfer interest and principal amortization to original creditors. Thus, a reliable schedule of payment would be created with attractive compensation for the main players involved.

Federal Administration creditors would be insured compensation above benchmark rates such as SELIC or Public bonds, and premiums would be paid after a grace period of 5 to 7 years (required for investments to mature). This ensures attractiveness for IF quota holder.

If the creditor opts out of IF, the creditor will remain in the standard period of wait for being paid, also subject to the Federal Administration's budgetary execution.

With IF, creditors would have a better picture of when their re-sourced will be paid back, would get a premium for their investments and would still have a perspective to have their income increased due to economic growth.

(III) IF GOVERNANCE AND CREDIT RISK REDUCTION

It must be stressed equally that the creation of this fund is related to the deposit of resources aforementioned in fiduciary institutions. This would increase transparency along creditors, enhancing trust.

Consequently, this would solve another issue, still not mentioned but also common sense, that is the financing of infrastructure projects within adverse context for the main sources of resources, such as BNDES and Caixa Econômica.

However, to make such structure possible, it is also necessary the possibility of buying and selling these credits for a proper channeling of demands to interested parties, such as pension funds, retirement regimes and other potential long-term investors.

Hence it is critical for IF success the proper regulation and set up of an off-the-counter market for public debt credit bonds.

A given agent many times is not interested in receiving resources related to a given credit in the long-term. In the other hand, an entity aiming to keep a payment flow related to a grant of future benefits, such as retirement pension and other investment funds, have a natural interest in

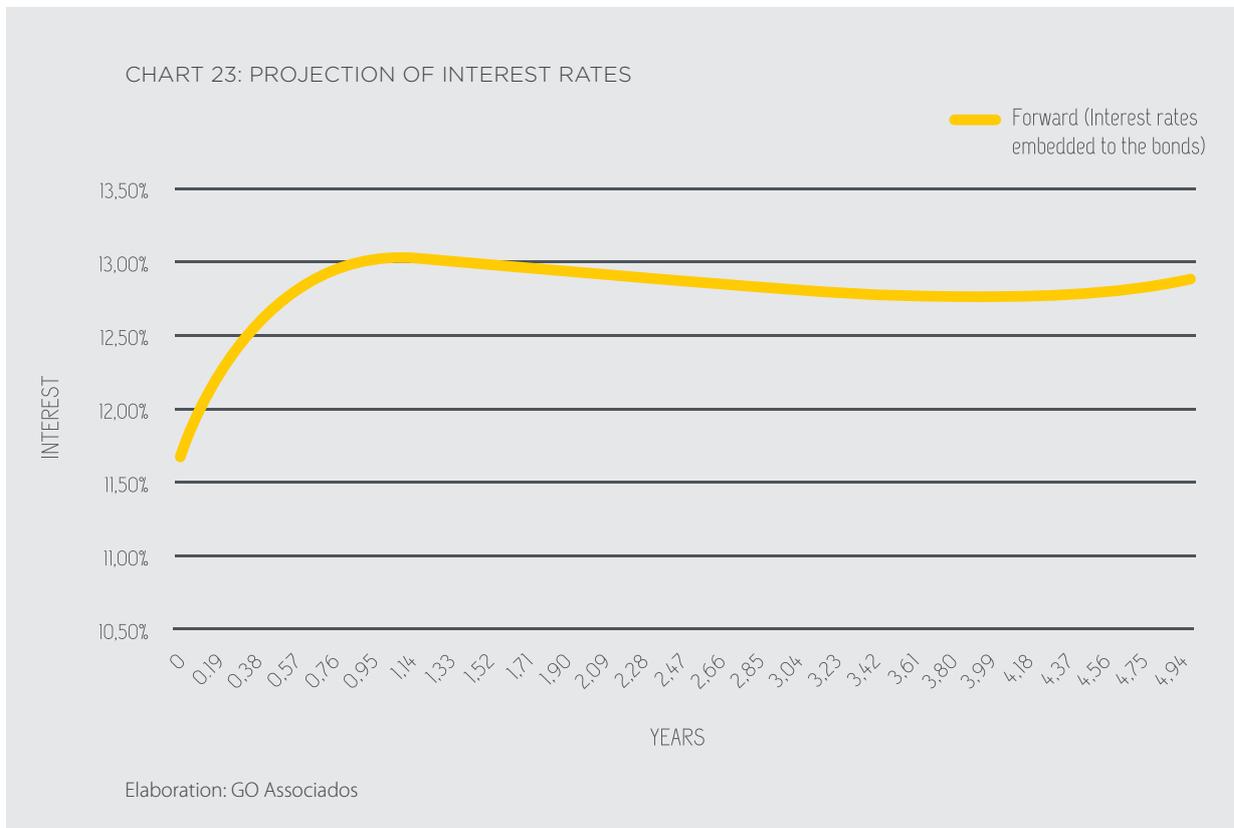
build portfolios based on this type of receivable. A secondary market can meet both demands.

Finally, in order to ensure payments by Special Purpose Entities (SPE) to financial institutions, banks such as BNDES and Caixa Econômica Federal would increase their role of guarantors. Credit risk reduction would increase the willingness of some quota holders to keep their resources invested in IF.

4.3.2 Financing via RPPS Funds

It is known that the Brazilian capital market is not mature enough, causing the borrower to be charged with high *spreads* in relation to risks often overestimated; furthermore, analyses are still strictly performed based in corporate ratings.

To make things worse, a new cycle of higher interest rates is in course, in order to make sure inflation will converge towards the goal, as it can be seen on Chart 23, that shows a projection of *forward* rates extracted from unit prices of Brazilian Treasury Bond (Letras do Tesouro Nacional,



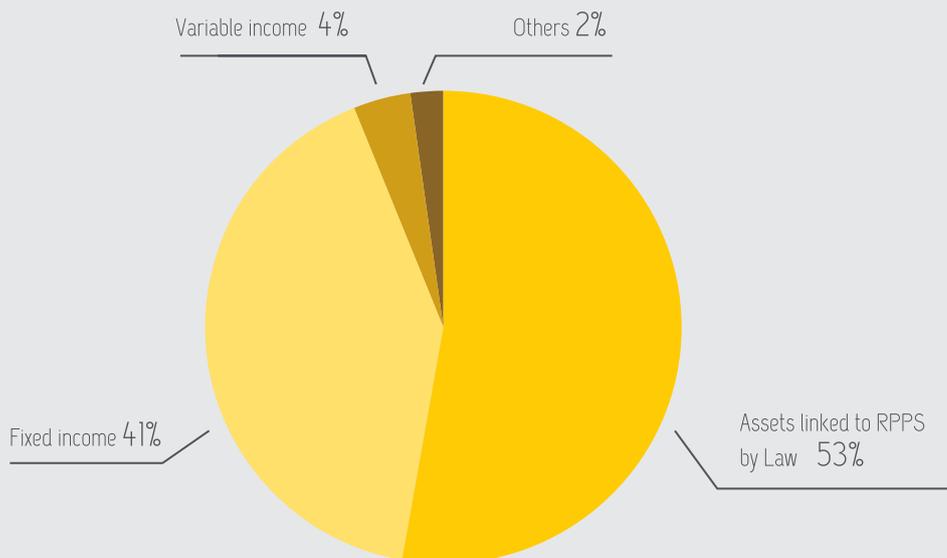
7 For more information on how the forward rate can be calculated, refer to Wilmott (2010).

Thus, considering an increase to interest rates, caused by the need to stabilize prices and the required fiscal adjustment to restore Brazil's capacity of financing as a whole (reflected in indexes as Risk-Country, EMBI and rates as Credit Default Swap), BNDES, until then being capitalized by the Treasury, will have its financing capacity for new loans reduced.

In the other hand, there is a multimillion dollar pension fund industry and social security own regimes (Regimes Próprios de Previdência Social, RPPS) with aggressive actuarial goals to be met, being yet subjected to intense regulation/normatization, posing restrictions to asset allocation such as higher requirements of allocating in fixed income.

According to the Ministry of Social Security, there were approximately 175 billion BRL in resources invested by RPPSs in 2013, all over Brazil. Chart 24 shows how these resources are comprised.

CHART 24: RPPS INVESTMENT COMPOSITION IN BRAZIL

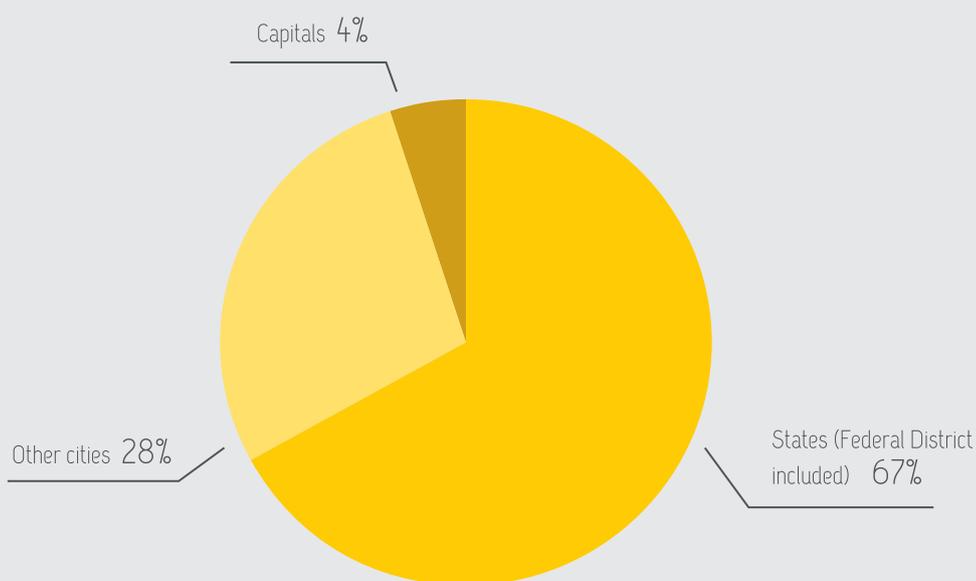


Elaboration: GO Associados

Thus, there is a remarkably high potential for raising funds, when considered 41% of assets in Fixed Income out of the 175 billion BRL. If updated by the IPCA accumulated from September 2013 to January 2015, discounting eventual real gains from the need of reaching actuarial goals, such potential fund raising is approximately 80 billion BRL.

Chart 25 shows the composition of RPPSs resources among municipalities, capitals, and states. Note the room for raising funds from state RPPSs.

CHART 25: RESOURCE DISTRIBUTION BY ENTITY TYPE



Elaboration: GO Associados

Thus, it is convenient to think in bond structuring tied to infrastructure project debt bonds, such as PPPs, issued by their respective Specific Purpose Entities (SPE), which are in charge of management, building, and delivery of services within PPPs.

The aforementioned RPPSs main challenge in Brazil is to meet aggressive actuarial goals in mid- and long-term, considering that as economic agents have less patience in Brazil than in other countries (there is a higher discount rate over time), there is a trend to consume a larger portion of their disposable income, saving less.

As a consequence, they demand dramatically higher returns for their investments and for this reason, the neutral real interest rate (the one where the economy finds equilibrium, keeping inflation, growth and job constant) also becomes significantly higher⁸.

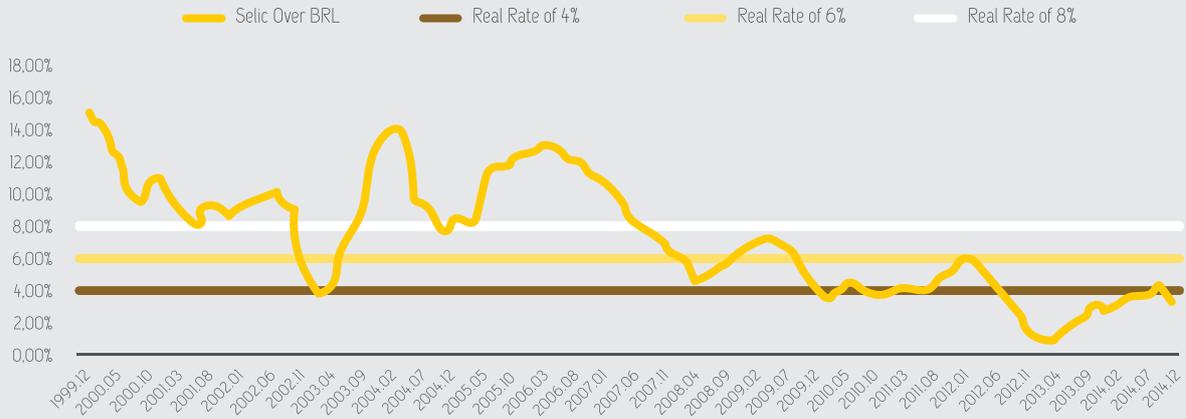
This means that in order to keep satisfaction/utility levels for economic agents, considering that their natural trend is to consume much today and worry less about the future (hence their impatience), they demand higher returns (interest over invested capital) for investing and saving, to compensate eventual loss of well-being that may be caused by less consumption. Thus, as impatient agents are, higher the economy neutral interest rates will be, so that savings/investments made by agents will have to deliver a significantly higher yield to disincentive them to consume.

From this theoretical consideration in Economics and not delving further into the issue of actuarial tables, by taking into account studies measuring discount rates over time demanded by agents in Brazil, such as Mussolini & Teles (2012), Issler & Piqueira (2002) and convert these within a general equilibrium model in neutral interest rates, it is obtained a neutral rate in the range of 4 to 8%.

Thus, given this theoretical demand, agents would make in relation to resources invested in RPPS and considering that recently, the real interest rates was close to 2%, there is a sizeable challenge for asset managers to meet actuarial goals, as shown in Chart 26.

⁸ This issue was developed in the literature by pioneering works of Kydland & Prescott (1981) to recent ones (Smets & Wouters, 2007; Del Negro & Schorfheide, 2013).

CHART 26: EVOLUTION OF REAL INTEREST RATES



Elaboration: GO Associados

Thus, as it can be seen in Chart 26, it was not a small feat to reach such actuarial goals in recent economic past, considering that the economy's basic interest rates have fluctuated due to the need for stabilizing prices and promote economic growth.

The Central Bank, on its turn, has been implicitly applying an interest rule based on Taylor (1991) for guiding such interest rates. Thus, in times when the economy is not growing as it should (way below its potential), the Central Bank tends to reduce real interest rates, in order to provide a stimulus; when the inflation is high, the Central Bank tends to increase real interest rates in order to cool consumption down.

Consequently, it is natural that strong oscillations in interest rates occur caused by economic cycles, generating thus even stronger pressure to reach actuarial goals that aim for reaching long-term yield goals.

It seems appropriate a suggestion to join the needs of both parties here discussed: SPEs from the borrower side; and RPPSs from the lender side. A solution is proposed, through which the former would get facilitated loans from the latter, given the context of large difficulties to obtain new resources. It would also provide RPPSs with a stable guarantee of fixed income yields in the long term.

It should be noted that several municipalities and states have the so-called RPPSs. These are social security own regimes, managed indirectly by the Federation entities themselves, that appoint members to the social security city/state council and RPPSs management board is often an administrative structure of the Federation entity under the form of autarchy, foundation or a direct entity of Public Administration. Ultimately, Federation entities are in charge of the supplemental budgeting required for the financial and actuarial balance of RPPSs.

One can conclude that the Executive branch of the respective Federation entities have political and budgetary responsibility if they fail to manage properly RPPSs resources.

As for this issue, it is worth mentioning a couple of rules. First, Law 9.717/98, that stipulates general rules for the organization and operation of social security own regimes for Federal Administration, State, Federal District and Municipalities employees and the military of the states and the Federal District.

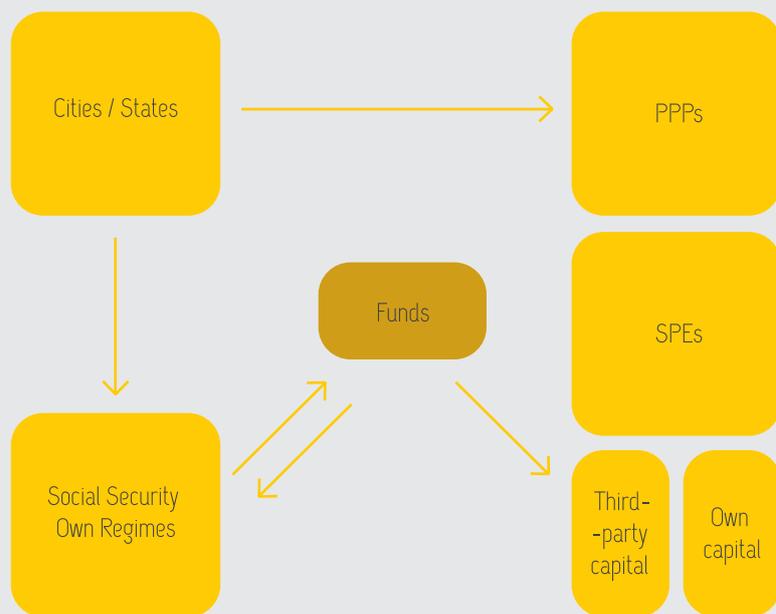
Secondly, Instruction 403/2008 of the Ministry of Social Security, that lays down rules applicable for actuarial evaluations and revaluations of Social Security Own Regimes (RPPS) for the Federal Administration, States, Federal District and Municipalities, defining parameters for segregating the mass. Under such rule, the Social Security Council shall determine regular and supplemental contributions so to reach financial balance for the fund, according to actuarial goals. Ultimately, aiming to ensure fund's financial balance, the Executive is responsible for inputting capital in order to reach such balance.

Thus, there is a natural alignment of interest in a structure where the Federal entity shows up at the both ends of obligations. Also, the Executive

is not interested in a default against the SPE, as the Executive itself would have to input capital into the RPPS as supplemental contribution.

By conceiving a capital flow structure as shown in Chart 27, Federation entities end up at both end, having a structure to manage debt bonds issued by SPE of respective PPPs and by the SPE itself.

CHART 27: CAPITAL FLOW STRUCTURE



Elaboration: GO Associados

It should be highlighted that the presence of the Intermediary Fund is required as per article 14 of Resolution 3.922/10 from the National Monetary Council (Conselho Monetário Nacional), that regulates RPPSs investments:

Os regimes próprios de previdência social somente poderão aplicar recursos em carteira administrada ou em cotas de fundo de investimento geridos por instituição financeira, demais instituições autorizadas a funcionar pelo Banco Central do Brasil ou pessoas jurídicas autorizadas pela Comissão de Valores Mobiliários para o exercício profissional de administração de carteira considerada, pelos responsáveis pela gestão de recursos do regime próprio de previdência social, com base, dentre outros critérios, em classificação efetuada por agência classificadora de risco em funcionamento no País [...]

Note that the need for guarantees from bonds could be mitigated, as for its potential buyer (RPPSs) there would not be a risk of default, as the Executive branch itself would in charge of compensating RPPSs, as discussed earlier.

This would not naturally prevent other subordinated issuances, preserving eventual preference to other creditors the SPE may attract. Such issuances would not be linked to the proposed structure, granting more diversification and flexibility to obtain resources.

Briefly, the proposal determines the following roles for agents involved:

- **FEDERATION ENTITY:** pay regular and supplemental contributions to RPPSs so to ensure their financial balance; pay capital inputs and cash counter payments to SPE;
- **SPE:** execution of investment and service delivery as per the PPP; issue debt bonds in order to raise funds for investments;
- **FUND:** Management of debt bonds issued by SPE in charge of PPP in the city; sell quotas to RPPS and compensate them;

- **RPPS:** Buy quotas sold by the Fund according to its actuarial goals and social security plan, contemplating diversification, risk exposure policies, among others.

Thus, it is expected that at least a portion of capital needs from the potential private investor would be met by making feasible a “new cash”, cheaper than the traditional structure to access capital markets for an issuance, once it is largely unlocked the guarantee issue by Federation entities. It is precisely the issue of guarantees that presents a barrier for conceiving new projects. Financing through RPPSs could be an alternative face the lack of subsidized resources from the main development entities.

4.4 MORE COMPETITORS; UTILIZATION OF GUARANTEES FROM GUARANTEE FUNDS IN FINANCING

Guarantee funds are an alternative for small and mid-sized business that lack real guarantees for loans, according to current guarantee policy.

For instance, São Paulo’s Development Agency Desenvolve SP (Agência de Desenvolvimento Paulista) manages four Guarantee Funds to support unlock investments and loans to small and mid-sized companies.

CHART 28: DESENVOLVE-SP GUARANTEE FUNDS

FUNDOS GARANTIDORES	
Guarantee Fund FDA (Fundo de Aval)	Desenvolve-SP's Fundo de Aval (FDA) relies on the state's Treasury for resources and applies to all financing lines (except for cash flow operations). It serves small companies in any industry, with gross revenue up to 3.6 million BRL per year and the guarantees cover up to 100% of the loan.
Guarantee Fund for Very Small and Small Companies (Fundo de Aval às Micro e Pequenas Empresas, FAMPE)	FAMPE is a guarantee fund from Sebrae to exclusively supplement guarantees demanded from financial institutions. FAMPE aims to meet the needs for small companies to submit required guarantees to obtain a loan. The FDA Guarantee Fund is an option to traditional guarantees provided for a loan, such as properties, vehicles, receivables and so on. Banks demand guarantees from companies to grant a loan and the fund supplements these guarantees.
Investment Guarantee Fund (Fundo Garantidor de Investimentos, FGI)	<p>FGI is a BNDES Guarantee Fund aiming to ease loans to very small, small and mid-sized companies, as well as individual entrepreneurs, cooperatives and autonomous truck drivers, encouraging them to grow and modernize.</p> <p>FGI supplements guarantees demanded from banks or development agencies to grant a loan. Desenvolve SP is able to operate this fund as a guarantee of its operations with resources from BNDES, Finep and its own capital.</p>
Operational Guarantee Fund (Fundo de Garantia de Operações, FGO)	<p>FGO is the guarantee fund by the Banco do Brasil and aims to guarantee portion of the risk of loans and financing granted by Desenvolve SP.</p> <p>It serves very small, small and mid-sized companies and autonomous cargo truck drivers for the acquisition of capital goods related to their activities, with gross yearly revenue of up to 90 million BRL.</p>

Thus, the model used by the State of São Paulo deserves to be studied in order to overcome a well-known bottleneck that prevents access to Project Finance to a larger number of companies, which is the usual requirement for guarantees from shareholders. By structuring guarantees from these funds, such as Desenvolve-SP, the need for guarantee from shareholders in projects may be removed or reduced.

4.5 IMPROVEMENT ON PROJECT ATTRACTIVENESS: ADJUSTING PROJECT ROI TO ECONOMY'S CONDITIONS

The severe economic worsening has been translated as an increased risk perception by the majority of economic players investing in Brazil. In this subsection, an estimation will be presented **for the shareholder ROI in each infrastructure sector in the current Brazilian economy's climate.**

METHODOLOGICAL NOTE:

In order to measure minimum profitability required over the Own Capital Cost for each main economic sector, the CAPM model as modified by Damodaran was used, as it is one of the main benchmarks on establishing benchmark profitability rates in global investments.

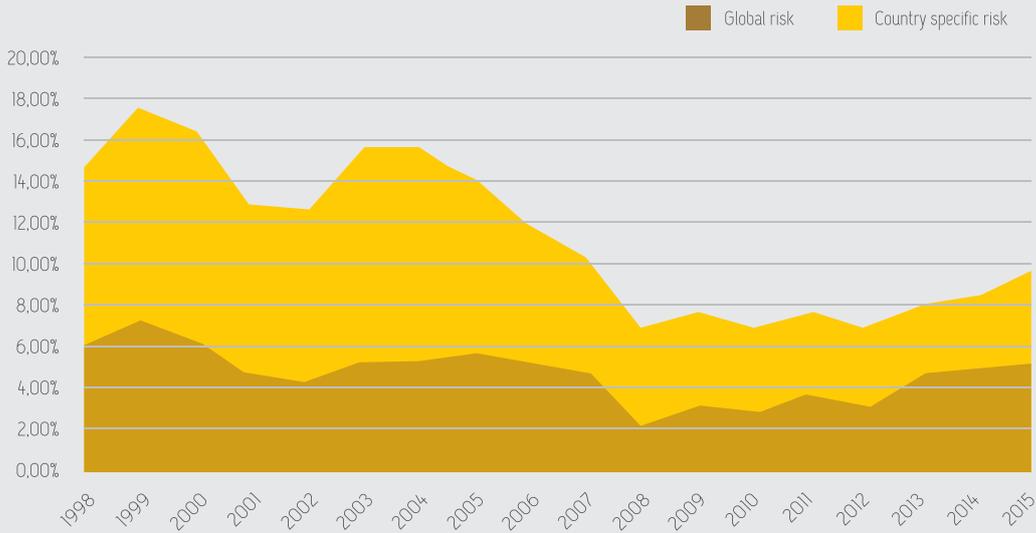
Such model is given by:

$$R_a = \beta \cdot \left[(R_{S\&P500} - R_{f\text{USA}}) + R_p \cdot \frac{\sigma_e}{\sigma_f} \right] + R_{f\text{USA}}$$

where R_a denotes return over an asset (investment) in a given industry; β denotes the relative risk of an industry face a diversified market portfolio; $R_{S\&P500}$ denotes average return of S&P 500 index, which is the composition of returns from 500 largest companies listed in New York Stock Market; R_p is the risk-country; σ_e and σ_f denote respectively the standard deviation (risk) of returns of assets in the Brazilian stock market and returns on Brazilian public bonds; and $R_{f\text{USA}}$ denotes US free risk rate.

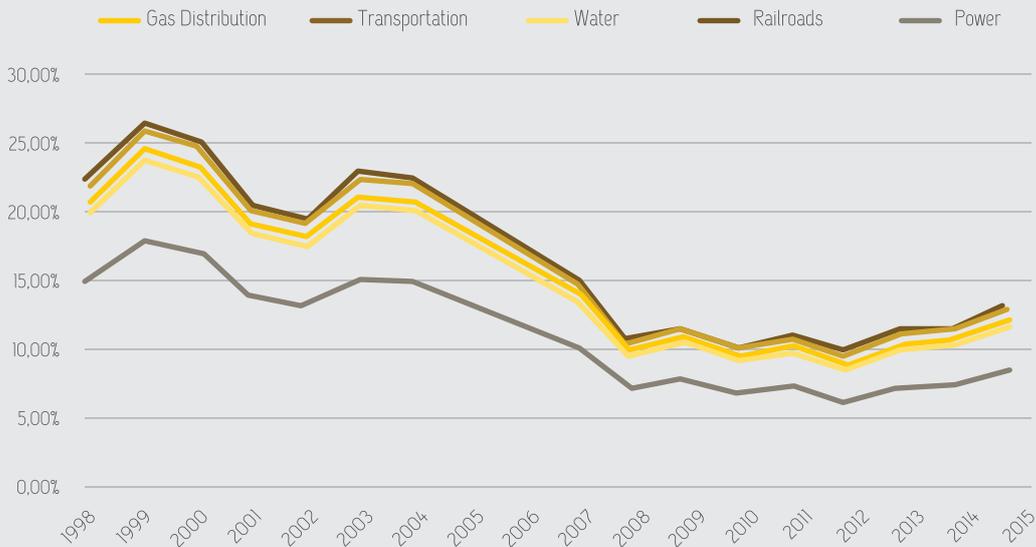
The feasibility of this model to tell the overall historic evolution of risk in investments in Brazil can be seen in Chart 29 and in Chart 30.

CHART 29: DRILLDOWN OF PREMIUM BY OWN CAPITAL IN BRAZIL



Elaboration: GO Associados.

CHART 30: EVOLUTION OF EQUITY COST BY INDUSTRY IN BRAZIL



Elaboration: GO Associados.

Chart 30 shows the evolution of return on assets in Brazil as taking $\beta=1$, so that reflects required average return irrespective of industry. It can be noted that the specific risk-country component has significantly dropped, in line with the improvement of the economy climate experienced between 2003 to 2011.

Starting on 2012, with the worsening of the economic climate, the specific risk-country resumed its climbing along with a growing international risk, caused by the lack of stability in global markets since 2008.

The rate climbing becomes steeper in 2015 upon the loss of investment grade, so that the perception of systemic risk becomes even more relevant.

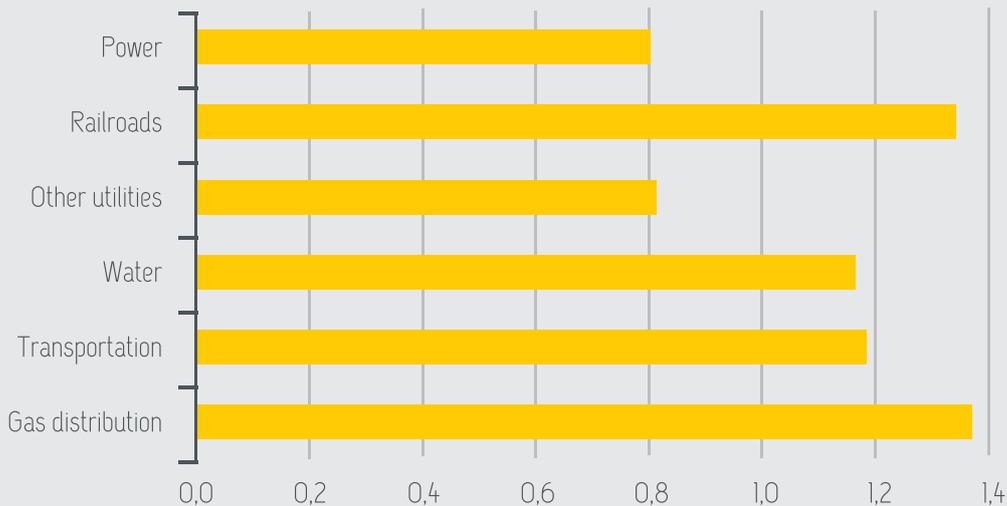
The same can be seen for each infrastructure sector individually indicated in Chart 31. Furthermore, it is important to note that it reflects an evolution in compliance with profitability levels demanded across the past of several infrastructures grant programs that took place in Brazil from the end of the 90s to the middle of 2000 decade.

For this reason, for the success of any infrastructure investment development program, it is critical to establish compensation rates for projects that allow that shareholders adjust their respective profitability rates to their expectations.

And it is precisely for this reason, when comparing rates offered by the Government along with financing conditions available to the private player (resulting in the shareholder profitability rate), the grant program was heavily criticized from 2013 to 2015, not bringing in the results expected by the Federal Government.

It is also noteworthy that the following set of values for industry-related risk for calculating return rates as expected by the shareholders.

CHART 31: BETA FOR INDUSTRY - RELEVAGED FOR BRAZIL
(GLOBAL SAMPLE OF COMPANIES)

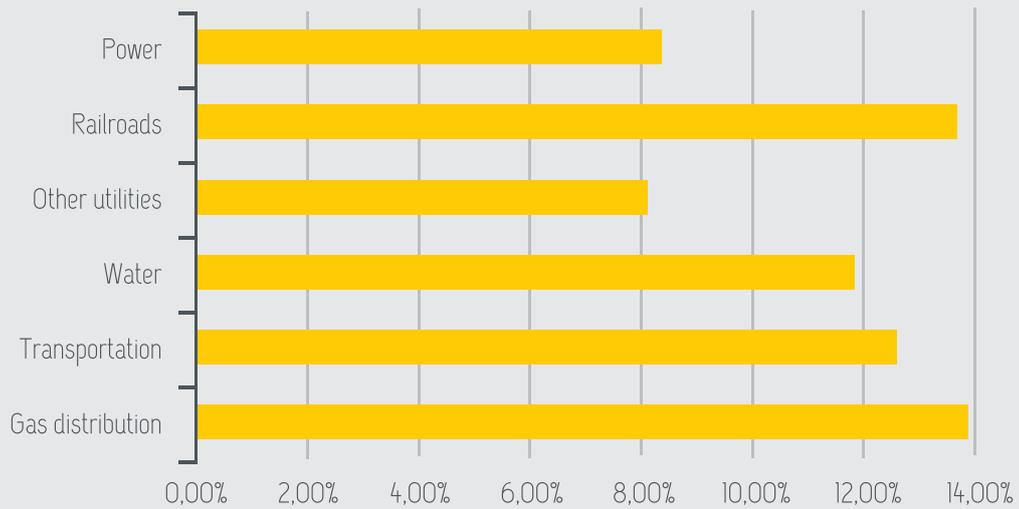


Elaboration: GO Associados.

Based on Chart 31, it is possible to see that the power sector shows less risk and the riskier sectors are gas distribution and railways, considering the financial leverage.

For this reason, and having checked the model capacity to explain the past evolution of profitability required for investing in infrastructure in Brazil, it is interesting to show shareholders' different profitability levels per industry, considering the last events in the Brazilian economic environment, as per Chart 32.

CHART 32: MINIMUM RETURN OF OWN CAPITAL PER INDUSTRY



Elaboration: GO Associados.

Considering thus the methodology and the described economic scenario, returns for attracting investors vary from 8% as in power generation and other utilities to 14% for gas distribution and railroads.

In addition, as an additional recommendation to this point, it is suggested the adoption of financial asset pricing models that best reflect risks taken by private partners both in Grants and PPPs, creating a new convergence point for unlocking infrastructure projects in Brazil.

4.6 GOOD GUARANTEES: DISSEMINATION OF PUBLIC GUARANTEES

The financial dynamics in the loan market, as well as the range of risks involving PPP projects have demanded more creative and innovative solutions for guarantee mechanisms that are able to solve eventual defaults by the Grantor. Much is heard about there is no public guarantees anymore. However, recent experiences show that there are structures and receivables that may be given as guarantee to bring comfort to the lender and to the SPE.

From the observation of guarantee structures tested in PPP projects (such as the Tamoios Project) and in public payment guarantees used for Arena Pernambuco and Arena Fonte Nova projects, it can be seen that there are public guarantees that may bring comfort to the lender when granting Project Finance to the private partner. The idea in this topic is to disseminate mechanisms already used for public guarantees in an economic and legal rationale.

First, it is necessary to divide public guarantees in two different types, in terms of the nature of income to be guaranteed: guarantee for capital inputs and guarantee for counter payments in cash.

(I) THE INNOVATIVE STRUCTURED OF PPP NOVA TAMOIOS

The State of São Paulo constituted the São Paulo Partnership Company (Companhia Paulista de Parcerias, CPP) a stock corporation fully owned by the State of São Paulo, whose creation was authorized by State Law 11,688 dated May 19, 2004.

Thus, usually, the CPP ensures an amount equivalent to six months of counter payments by alienating investment fund quotas primarily for projects that do not use *Project Finance*, where capital is not intensively used or that do not have large cash exposure.

Also, CPP does not always have resources enough to input capital equivalent to the minimum required to ensure financial health of PPP projects. The market has been demanding a counter guarantee structure in a flow that is able to replace the stock constituted by CPP to ensure payment of State's obligations even in case of execution of guarantees provided, considering the growing number of projects structured as *Project Finance*.

This way, a series of alternatives for the traditional structure of guarantees has been designed, by considering the State's budgetary limitations for investing more capital in the CPP (which is not restricted to the State of São Paulo alone but also to the majority of States, due to the perspective of the fiscal adjustment required to reach primary superavit goals).

Discussions related to the Nova Tamoios PPP project, to deliver public services of operation and maintenance of Tamoios Highway, including the duplication of a highway segment, covered a great deal of these innovations. A series of alternatives in relation to guarantees was considered:

• USING DER FIXED GRANTS

By the time studies were drafted, DER should receive some 1.3 billion BRL in the coming 7 years as payment for Fixed Grants owed by Grantees to the first batch of works. Thus, in an eventual solution of this type, these resources would have been deposited in a trustee account, when would only become available to the Public Administration upon the confirmation of input payment.

• LIEN TO EXCEEDING SHARES IN CESP

Shares of CESP in guarantee to State obligations, keeping interest control by the Government, which would only be executed in case of default. Thus, for modeling the guarantee execution, it was considered the amount of shares in possession of the Economy Secretariat (both preferential and ordinary), their respective prices and the potential haircut caused by a massive sell of shares or the effective transfer of control to the private partner if interested.

• **IMPOUNDMENT OF SABESP DIVIDENDS FOR STOCK COMPOSITION**

In this case, resources would be deposited into a subordinated account and would be reverted to the State upon confirmation of payment. Such resources would be impounded and would be supplemented with other sources until they reach the maximum input amount in order to ensure payment for works. However, especially in this case, if the flow is relatively stable, in line with the basic sanitation delivery activity, a yearly payment would suffice even to serve as a counter flow for the guarantee of counter payments in cash during the operational phase.

• **UTILIZATION OF FLOW OF FINES IMPOSED IN THE STATE**

It was initially thought to use fines imposed by DER to drivers to guarantee a portion of the counter payment related to expenses with the legal possibility of potential use. However, given the size of revenue from fines, it was also considered to adopt an impoundment regime similar to what was proposed for dividends paid by SABESP.

• **STRUCTURING FUNDS UPON ACTIVE DEBT**

The Economy Secretariat has been constantly structuring Special Active Debt Funds (Fundos Especiais da Dívida Ativa, FEDAT) under the FIDCs method, so to anticipate future receivables and allowing for the composition of a capital stock that is applied to a yield whose risk is systemic (such as Federal debt bonds)- these funds may be structured so that the amount invested is able to generate withdrawals enough for covering long default period, such as three or four years, long enough for solving controversies in an arbitrage panel or to wait for a court ruling.

• **REAL ESTATE AUCTIONS**

Composition of the structure owning real estate/properties not in use by the Public Administration, in charge for the follow-up of feasibility of their execution and maintenance, so to ensure their possession that in

case of default, it is in charge of executing auctions, always keeping a level of immediate availability in line with the portfolio of bid projects.

Finally, the following guarantees for capital inputs were structured. The first one will be delivered by obtaining a loan and supplemented with resources from State Treasury. While the financing is not obtained, the contract determines the constitution of real guarantee involving a lien or fiduciary grant over emerging credit rights of 10 (ten) current highway grant contracts in the State of São Paulo, held by the Highway Department (Departamento de Estradas de Rodagem) of the State of São Paulo. If it is not sufficient, there is still a lien upon investment fund quotas held by ARTESP on the value of 170 million BRL.

Counter payment guarantees were structured by means of a surety delivered by the CPP for the five first counter payments. Furthermore, a system of guarantees was structured to support the main guarantee. An eventual default of the surety would trigger a lien of part of the quotas in the BB CPP Projetos fund, from which CPP is sole quota holder. If the main guarantee is not recovered, the system also relies on three subsidiary guarantees that may be executed later, as follows: (i) lien or fiduciary grant on revenues from fines applied by DER/SP; (ii) lien on ARTESP Investment Fund quotas; and (iii) lien on other net, liquid assets held by the State of São Paulo up to 150 million BRL. It is worth noting that such guarantees are not structured, as the winner bid 1 BRL as the value for the counter payment.

(II) USING INCOME FROM THE STATE PARTICIPATION FUND

Additionally, to innovations on structure, other feasible sources of income are identified for structuring public guarantees. By using alternative sources of income, the usual issue of lack of resources by the Federation entities is solved. Good examples of this are the PPP projects for Arena Pernambuco football stadium, in Recife (PE) and Arena Fonte Nova football stadium in Salvador (BA). Resources originated from the State Participation Fund (Fundo de Participação dos Estados, FPE), public credit in active debt, state-owned shares and dividends, and oil royalties were used as public guarantees for both projects.

This means that there are alternative structures and sources of income for structuring public guarantees. All that is required is a match between what the State can do with market players expectations.

4.6.1.1 International experiences to overcome lack of guarantees

Lack of guarantees to increase trust among the private sector is a recurring issue abroad. In this regard, different countries have adopted quite innovative solutions that may inspire Brazilian managers.

The international community has developed a broad range of institutions responsible for delivering direct financing to partnerships:

- I).** The UK created the *Infrastructure Finance Unit* (TIFU), to make loans at competitive rates for PPP projects that failed to obtain financing from lenders. After the financing of a sanitation project in Manchester, the mere willingness of the State to lend increased trust in the marketplace, so that new projects were carried out without public financing.
- II).** In the US, the *Transportation Infrastructure Finance and Innovation Act* (TIFIA) created a mechanism for the US Department of Transportation to provide loans (and/or guarantees) directly to private businesses for selected projects. Credit support is usually granted under flexible conditions, taking a subordinated role to attract more private capital.
- III).** India uses the *Viability Gap Fund* (VGF), which is structured by inputs from Treasury to subsidize PPP projects. The fund encourages companies to join bids and the resulting competition caused many projects to be fully financed by private capital, exempting the VGF from capital inputs.

Additionally, governments offered partial guarantee mechanisms to unlock PPPs:

IV). In 2000, Poland insured 358 million euros in the form of a subordinated quota through EIB, in order to make the building of Highway 2 feasible. Such guarantee allowed for the Grantee to get loans from lenders for this project.

V). v). In Korea, the Infrastructure Credit Guarantee Fund ensures credit through a system of counter guarantees. In other words, the fund guarantees a loan on demand, which may be requested by the project to service the debt of *senior* quotas.

VI). Kazakhstan provided guarantees for *bonds* issued for PPPs in the Transportation area. Governmental guarantees provided security for pension funds to invest in these projects.

VII). vii). Peru has created a securitization structure to allow for building highways in the country. Credit is granted by Receivable Certificate for Yearly Payment for Works, guaranteed by a type of bond (PAO) paid each year by the Peruvian government. The structure was used to finance IIRSA Interoceania Sur.



CONCLUSION

5. CONCLUSION

The goal of this section is to summarize the main findings of this Study.

PPPs and Grants are critical for the infrastructure leap and the improvement of public works. However, there is a structural barrier to finance infrastructure, with an overweight on government's financing lines and the stunted private credit market.

In Brazil, after low PPP levels from 2004 to 2010, the last years have seen a silent revolution on PPPs and Grants at the city level, especially in the states of Minas Gerais, São Paulo, and Bahia. PPPs and Grants at a city level shall be reinforced, especially as an alternative to the recession Brazil is currently undergoing.

In order to keep this running and expanded to meet investment needs, it is critical to encourage more companies to participate. However, several barriers to entry for companies in Public-Private Partnerships and Grants persist.

Such obstacles are manifested in several phases of formatting a partnership or grant: capacity of execution, lack of qualification, legal framework, research on recurring *funding* and the delivery of public guarantees. All these stages pose significant barriers and competitive asymmetries preventing an increase of partnerships in states and cities and in the number of participants.

Cities are major players for expanding PPPs and Grants and their role is becoming more relevant, as seen before. However, most cities face a limitation on human and material resources.

Considering the main issues detected, an agenda of changes was produced, hoping to attract better projects and more companies to develop partnerships and grant projects in states and cities.

5.1 PROPOSAL TO INCREASE EXECUTION CAPACITY, ESPECIALLY FOR CITIES

(I) Formatting of consortiums among cities to perform PPPs and Grants;

5.2 PROPOSAL TO OBTAIN BETTER PROJECTS

(II) To encourage the creation of project structuring companies with regional reach and focusing on qualifying and supporting cities;

This proposal aims to encourage the creation of PPP and Grant structuring companies, especially for cities. In addition to the creation of new companies, it would be initially suggested the analysis of the institutional framework for using existing structures.

It is proposed that the EPP operation focuses on modelling Public-Private Partnerships and Grants for cities, considering the complexity of structuring such projects mainly for small cities.

It is worth mentioning that this process generates a virtuous circle. As more projects are well structured and shaped to a given metric, faster and most consistent analysis by lenders will be. This reduces the time for formatting loans as well.

(III) Disseminate procedures for expressing interest across Federation entities and constantly enhance existing procedures for expressing interest, in order to provide more transparency and better governance to projects aiming to attract more projects, both qualitatively and quantitatively;

(IV) Proposition of minutes of decrees/laws for procedures for expressing interest to grant exclusivity for performing studies upon which a single company would be selected;

The exclusivity in the elaboration of studies, as proposed by the model adopted in São Paulo, could be granted by considering advantage criteria against competitors in terms of economy and technique, so that the Public Administration may obtain all subsidies possible at a minimum cost, with monitoring and follow-up of studies and model development.

(V) Resume of proposals to address the expropriation issue, such as Provisional Measure 700;

5.3 PROPOSALS TO ATTRACT MORE RESOURCES

(vi) Creation of an infrastructure fund;

The goal for creating an Infrastructure Fund (IF) is to trigger a virtuous circle that allows for matching efforts to stabilize the debt/GDP ratio with the recovery of investments and growth.

It must be stressed equally that the creation of this fund is related to the deposit of resources aforementioned in fiduciary institutions. This would increase transparency along creditors, enhancing trust.

Consequently, this would solve another issue, still not mentioned but also common sense, that is the financing of infrastructure projects within adverse context for the main sources of resources, such as BNDES and Caixa Econômica.

(VII) Increase of financing resources for PPPs and Grants by the use of resources in Social Security Own Regimes, so to align the need for

reaching long-term actuarial goals to the elimination of large variations in loan rates that investors pay at the issuance of private debt bonds;

5.4 PROPOSAL TO ENHANCE ACCESS TO *PROJECT FINANCE*

(VIII) (v) Use of guarantee funds as an alternative for SPE shareholders lacking real guarantees to be used in credit operations;

The model used by the State of São Paulo deserves to be studied in order to overcome a well-known bottleneck that prevents access to Project Finance to a larger number of companies, which is the usual requirement for guarantees from shareholders. By structuring guarantees from these funds, such as Desenvolve-SP, the need for guarantee from shareholders in projects may be removed or reduced.

5.5 IMPROVEMENT ON THE ATTRACTIVENESS OF PROJECTS:

(IX) adjustment of project financial returns to economic conditions;

Minimum expected returns for attracting investors range from 8%, as in power generation and other utilities to 14%, as in gas distribution and railways.

In addition, as an additional recommendation to this point, it is suggested the adoption of financial asset pricing models that best reflect risks taken by private partners both in Grants and PPPs, creating a new convergence point for unlocking infrastructure projects in Brazil.

5.6 PROPOSALS TO MITIGATE THE ISSUE OF GUARANTEES, ESPECIALLY AT THE CITY LEVEL

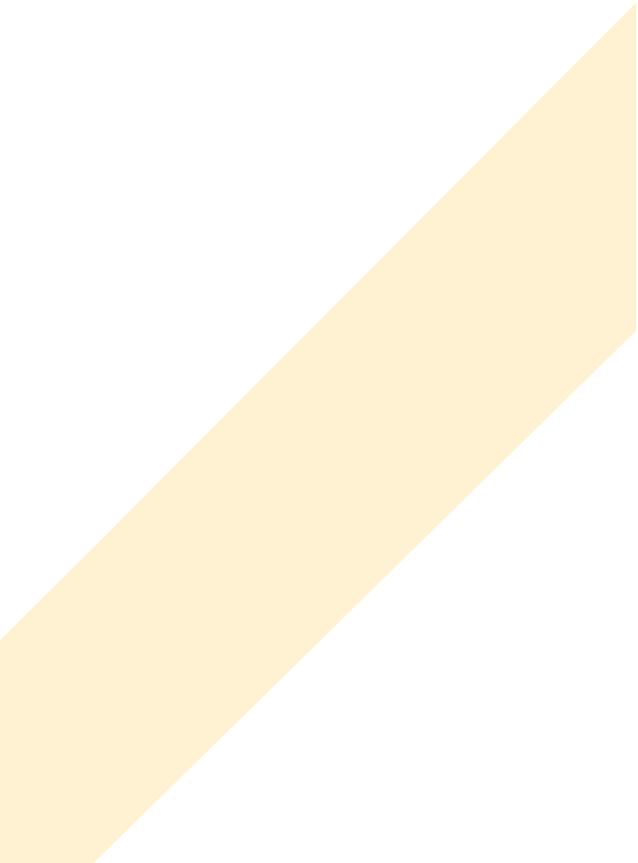
In relation to public guarantees, that are critical in PPPs and to make *project finance* models feasible, the following changes are suggested:

I. Creation of state guarantee companies able to deliver guarantees in city PPPs;

II. ii. Capitalize federal guarantee funds and after regulate the Federal Guarantee Fund in order to provide guarantees in state and city PPPs conditioned to the submission of counter-guarantees by the benefited entities; and

III. Spread of public guarantee models to allow for more robust *project finance models*.

All proposals discussed in these points look for reducing paperwork and create a favorable environment for developing PPPs and Grants. Such institutional change requires updating legislation and operational procedures, but also - and perhaps more importantly - the cultural aspect.







REFERENCES



6. REFERENCES

BELSITO, B. G., & VIANA, F. B. (JUNHO DE 2013). O limite de comprometimento da Receita Corrente Líquida em contratos de parceria público-privada. *Revista do BNDES*, 36.

FUNKE, K., IRWIN, T., & RIAL, I. (2013). *Partnerships, Budgeting and Reporting for PublicPrivate*. International Monetary Fund, Washington D.C.

MINISTÉRIO DO PLANEJAMENTO. (2015). *Parcerias Público-Privadas*. Accessed in May 13, 2015, available at the Ministry of Planning: <http://www.planejamento.gov.br/ministerio.asp?index=114&ler=s1108>

SEBRAE. (2008). *Cadeia produtiva do turismo - cenários econômicos e estudos setoriais*. Recife, PE: Sebrae.

WORLD BANK INSTITUTE; FPD NETWORK. (2013). *Implementing a Framework for Managing Fiscal Commitments from Public Private Partnerships*. Washington.

WORLD TRAVEL & TOURISM COUNCIL. (2015). *Travel & Tourism - Economic impact 2015 - Brazil*. Londres, RU.





EDITORA DO BRAS

GET TO KNOW
OTHER PUBLICATIONS
BY CBIC

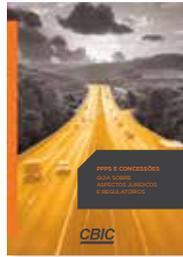
GET TO KNOW OTHER PUBLICATIONS BY CBIC

Visit CBIC's website (www.cbic.org.br/publicacoes) and download the books for free.
Available in English, Spanish and Portuguese.

TOPIC: INFRASTRUCTURE (PUBLIC WORKS AND CONCESSIONS)



PPPs and Concessions
– Proposals to Expand
Participation of Companies
(2nd Edition)
Ano: 2016



PPPs and Concessions
– Guide on Legal and
Regulatory Aspects
Year: 2016



PPPs and Concessions
– Proposals to Expand
Application in States and Cities
Year: 2016



PPPs and Concessions –
Guide for Organization of
Companies in Consortia –
Year: 2016



PAC – Analysis of Outcomes
2007 to 2015
Year: 2016



PAC – Potential Economic
Impact Assessment
Year: 2016



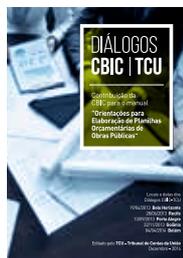
Concession and PPP Regional
Event Cycle – Volumes I and II
Year: 2015/2016



Debates on Long-Term Financing
for Infrastructure
Year: 2016



Investment in Infrastructure
and Economic Recovery
Year: 2015



Dialogues between CBIC/
TCU CBIC contribution for
“Guidelines to Elaborate Budget
Spreadsheets for Public Works”
Ano: 2014



Report International Meeting
Infrastructure and PPPs
Ano: 2015



Proposal to Change the
Bid Act
Year 2015

TOPIC: SOCIAL AND CORPORATE RESPONSIBILITY



Ethics and Compliance Guide for Institutions and Companies in the Construction Sector
Year: 2016



Code of Conduct on Competition
Year: 2016



Industry Sustainable Leadership Platform
Year: 2016
cbic.org.br/liderancasustentavel

TOPIC: ENVIRONMENT AND SUSTAINABILITY



Manual for Implementation of the City Development Council
Year: 2014



Guide for Responsible Purchase in Construction
Year: 2015



Mapping of Economic Incentives for Sustainable Construction
Year: 2015



Guide of Obtaining Environmental Permit
Year: 2015
cbic.org.br/sala-de-imprensa/apresentacoes-estudos/publicacoes-cmabc

TOPIC: LABOR



Guide for Correct Hiring – How to Hire Contractors and Subcontractors in Civil Construction
Year: 2014



Guidelines for Common Areas
Year: 2015



Guidelines for Security
Year: 2015



Guidelines for Becoming a Formal Company
Year: 2016
cbic.org.br/publicacoes/cprt

TOPIC: TECHNOLOGY AND INNOVATION



BIM Implementation
Compilation – Volumes I to IV
Year: 2016



Guidelines for Compliance
to Standard BNT NBR
15.575/2013
Year: 2013



Best Practices for Delivering a
Building since its Inception
Year: 2016



Innovation Catalogue in
Civil Construction
Year: 2016



Technical Standards for
Buildings Catalogue
Year: 2016



Analysis of Compliance
Criteria for ABNT
NBR 15.575/2013
Performance Standard
Year: 2016



National Guidelines for
Elaborating the Building's
Use, Operation and
Maintenance Manual
Year: 2014

TOPIC: REAL ESTATE



Permanence of Housing
Programs – PMCMV: Relevance
and Impacts from na Eventual
Discontinuity
Year: 2016



Improvements to Real Estate
Financing System – The Brazilian
Savings System and Credit for
Real Estate
Year: 2015

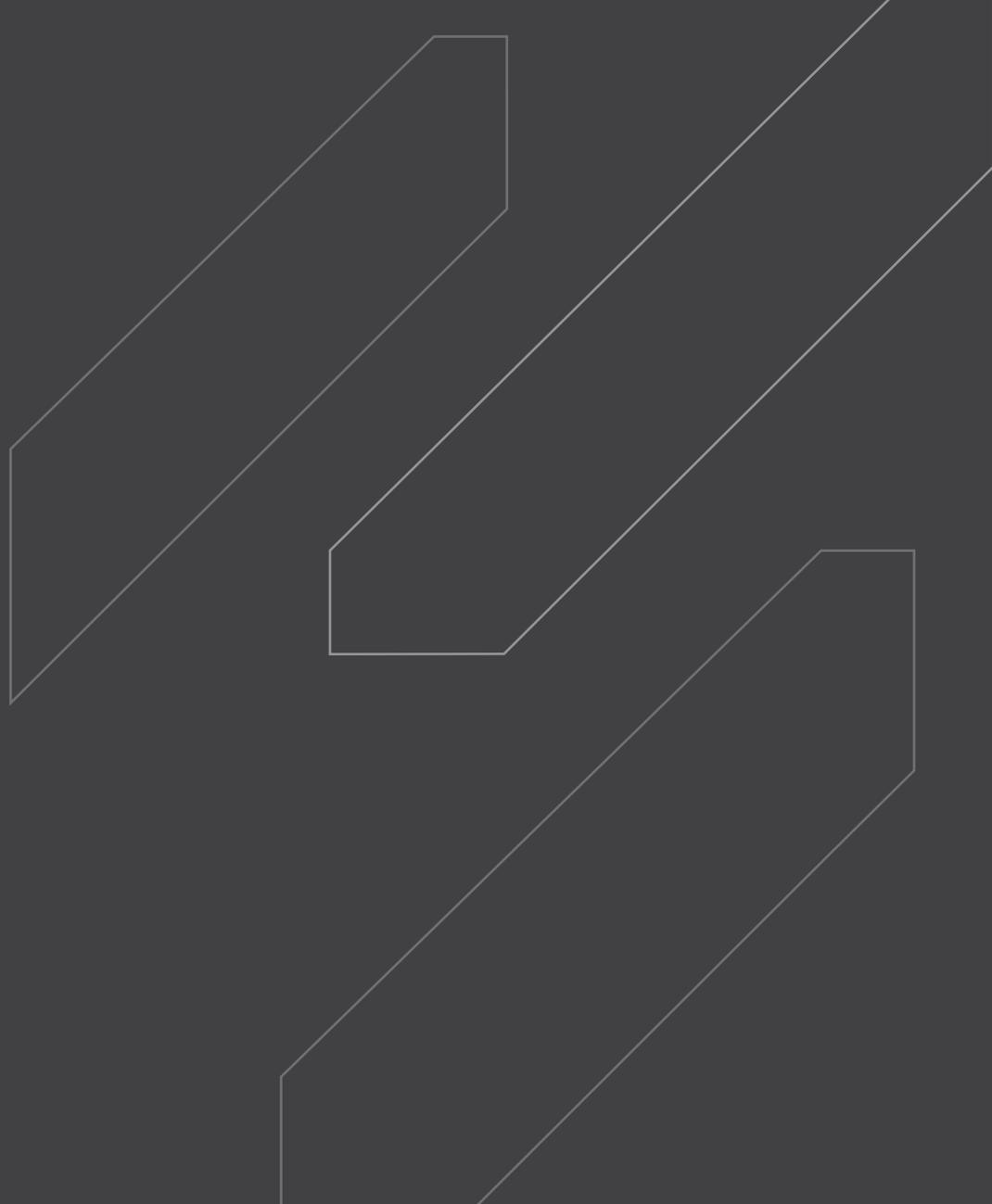


1st National Meeting on
Licenses for Construction
– Year: 2014



The Cost of Paperwork to a
Property
Year: 2014





Co-Organizador

Organizador



Iniciativa da CNI - Confederação
Nacional da Indústria



Co-Organizator



Organizator

