Financing Urban Growth in Brazil

With one of the fastest growing economies in the world, Brazil is a highly competitive, heavily industrialized country that is often compared to the developed world. Its burgeoning economy – the seventh largest by nominal GDP in the world – reached urban maturation over the past three decades, with approximately 90% of GDP being produced in cities today.1 Rapid urbanization occurred in Brazil between 1930 and 1980 in response to political, economic, social and demographic transformations. In 2010, cities comprised 87% of Brazil’s population,2 compared to just 31% in 1940.3 Population booms in Brazil’s largest cities have tapered off over the last 30 years as smaller cities have begun to attract more people and the urban growth rate has slowed in general.4

As urban migration trends exploded, Brazil’s cities have struggled to accommodate and provide services for the population influx, and this remains a challenge at present. Urban infrastructure and social services such as wastewater treatment and sewage systems were pushed to capacity and are still severely lacking in many of Brazil’s metropolitan areas. While Brazil has improved access to basic services such as piped water and electricity in recent decades, there still exist regional and city-wide disparities where such services are inadequate or nonexistent, and transport and connective infrastructure have also deteriorated in many metropolitan areas for lack of maintenance.5 In the face of mounting pressure to develop and upgrade urban infrastructure and social services as Brazil prepares to host the 2014 FIFA World Cup and the 2016 Rio Olympics, the federal government has allocated some 65 billion Reais (US$32 billion) over the course of several years to economic acceleration packages aimed at infrastructure.6 Brazil’s metropolitan areas have thus seen a recent flurry of urban infrastructure projects.

While there is certainly no lack of business opportunity or funding for urban infrastructure projects in Brazil, the process of securing a pipeline of bankable projects and getting these undertakings off the ground is often held up at the federal level for lack of public investment, a dearth of private partnerships, and other bottlenecks. As is customary in developing countries, Brazil’s federal government funded urban infrastructure projects through taxes or government-sponsored banks and financial institutions—a model that takes accountability away from cities and doesn’t provide incentive for adequate risk management. Public-private partnerships (PPPs) are often touted as economical and effective ways to hold cities accountable for the financial risks and responsibilities associated with development projects. Among many benefits, PPPs can help attract additional financing, improve project selection, accelerate projects, and offer cost-effective design and construction. There are still difficulties in securing and executing bankable projects through PPPs, as is evident in the case of Brazil. Oftentimes, municipal governments do not have the resources or capacity to execute technical studies, cost assessments, modeling compliance efforts, environmental impact assessments and other essential processes for such projects. Agility and speed in the bidding and procurement processes are essential to producing successful projects because elected officials typically only have a two- or three-year window to carry out project and development mandates before the next election cycle.
AN INNOVATIVE FINANCING SOLUTION

Estruturadora Brasileira de Projetos (EBP) is a special purpose company that was launched in 2009 as a joint venture between the Brazilian Development Bank (BNDES) and eight financial groups in an effort to support the public sector to meet infrastructure and public policy goals by acting as a sell-side advisor for concessions or PPPs. EBP assists governments (municipal, state or federal) in all stages of the bidding and procurement processes, executes studies and assessments to ensure modeling compliance with government regulations, and helps with project economic and financial structuring, among other things. Project areas include water supply and sewage management, solid waste, airports and transport, parking and bus terminals, and social infrastructure such as hospitals and schools. In its 4 year history EBP has already helped structure over US $1.4 billion in municipal infrastructure projects.

“I like to say we’re a private company that does work in the public interest,” says Mr. Helcio Tokeshi, Managing Director of EBP. “We operate under the supervision of Brazil’s Competition Authority according to our private bylaws in order to focus on issues of public interest.” EBP is a full equity company - its nine shareholders (BNDES plus the eight banks) invest equally in the form of cash and it does not accept debt payment for any projects in its portfolio. The investor who wins the bid repays the initial expenditure if the project is successful. In this sense, EBP’s shareholders compete with one another for projects and its bylaws stipulate that shareholders are not allowed privileged access to government information regarding the projects.

“Essentially, what we do is take political risks,” says Tokeshi. “We invest our shareholders’ capital in the studies to get a government project off the ground, and our target is to preserve our capital base, so that we can recycle the money through several rounds of projects.” EBP’s role is strictly that of a bid advisor on the sell-side of the operation. Its bylaws stipulate that it will not invest, finance, provide guarantees or insurance, or even advise on the buying side for any of its projects.

While EBP is not providing any new groundbreaking service, the speed and agility with which it operates are what make the projects possible. EBP’s technical studies have involved upwards of 150 technicians in specialized partner companies and last for approximately two years on average, with the briefest taking 12 months to complete. This fast turnaround would not be possible if the government alone carried out all necessary assessments and navigated the bidding process. “There were lots of bottlenecks - and they were kind of obvious,” notes Tokeshi of the previous project model before EBP’s birth. “There was lots of money and investment opportunities, but the governments weren’t able to prepare a decent pipeline of projects following demands to meet environmental goals, reasonably allocate grants between the public and private sectors, and produce a solid contract behind it all. And so what we do is provide a service that will essentially build these things—we build these studies - and provide good groundwork for the project.”

While EBP’s speed and dexterity are a large part of what makes the company successful, it can still be quite challenging to anticipate and address all the complex, and often unforeseen, details that can emerge after work begins on a large urban infrastructure project. Tokeshi gives the example of a situation when mid-way through the development of a bus terminal in Belo Horizonte, it was apparent that the surrounding street and road network would have to be changed, which led to other issues such as developing the project for these changes and negotiating with the Federal Government that was responsible for the nearby road. These large projects require a great deal of toil from EBP’s nimble staff of 17, and unexpected challenges must be met with agility and aptitude.

RIO WASTEWATER TREATMENT PROJECT

Consisting of 21 neighborhoods, Area 5 (AP5) comprises a large section of the western part of the city of Rio de Janeiro and is home to 2.5 million people - approximately 30% of the city’s population. If it were a city of its own, AP5 would be the 8th most populated city in Brazil. While other sections of the city have stagnated in terms of population, AP5 has continued to grow as urbanization in Brazil has escalated, producing city sprawl. The municipality has not kept up
with this level of growth, resulting in poor infrastructure and
deficient social services to support this growing population.
One of the major infrastructure challenges faced by AP5
has been absence of wastewater treatment - less than 4% of the wastewater produced was treated. This has led to
major sanitation concerns.

In 2007, the Mayor of the City of Rio worked with the Governor
of the State of Rio de Janeiro to attempt to address the lack
of wastewater treatment in AP5, but the system they enacted
was somewhat dysfunctional. At the time, the state-owned
company Cia Estadual de Aguas e Esgotos (CEDAE) was
tasked with water distribution for most of the municipalities of
Rio de Janeiro including the metropolitan region. CEDAE has
been - and still remains - challenged to improve efficiencies
and improve technical capacities. The solution negotiated
by the municipal and state governments in 2007 was for
CEDAE to distribute the water for AP5, but the wastewater
treatment would fall under the municipality’s jurisdiction. A
company called Rio Águas was created for this purpose, but
it lacked the structure and the experience to adequately treat
the effluent. As a result, the wastewater was not treated, and
disconcertingly, the residents of AP5 were paying the tariffs for
partial services - sewage collection with very limited treatment.

In a second attempt to address the wastewater problem in Rio,
the city released an invitation for bids for the concession of
sanitation services for AP5 on August 25, 2011. Estruturadora
Brasileira de Projetos has represented the city since the
inception of the project, executing all the necessary feasibility
and technical studies, and facilitating the bidding process. In
November 2011, the bid was awarded to a consortium of Foz
do Brasil and Aguas do Brasil (the Concessionaire), with an
annual concession fee of 82.24 million Reais (approximately
$38.5 million/ yr). The 30 year design, build, operate and
transfer contract was signed in March, 2012.

Capital investments for the AP5 sanitation are projected
to be 1.67 billion Reais (approximately $780 million USD).
Throughout the 30 year concession, the Foz do Brasil and
Aguas do Brasil will build 2,000 km of underground piping and
19 wastewater treatment stations. With this system, sewage
will be collected from the residences and commercial build-
ings in AP5 and transported to the treatment stations where
the wastewater will be processed and sanitized. Less than
4% of sewage was being treated in AP5 but the project has
ambitious targets stipulated in the concession contract:
40% treatment by year 5; 70% by year 10; 80% by year 15,
and at the end of year 25 it will reach a final target of 90%
treatment. Since the contract signing in the first quarter of
2012, the project inauguration has been held, one waste-
water treatment plant has opened, and the Concessionaire
has managed to raise 640 million Reais ($301 million) from
Caixa Econômica Federal.

“This is a very important project for Brazil because the
borrowing was based on a limited recourse project finance, not
on corporate guarantees,” says Maria Eduarda Berto, Project
Director for EBP. “In Brazil, typically when a Concessionaire
raises financing from banks, they ask for various corporate/
sponsor guarantees.”

One of the challenges posed by the AP5 sewer and wastewater
treatment project was getting CEDAE, the public company
originally responsible for collecting tariffs for water and sewage
treatment from residents, to pass this function to a future
concessionaire since a model based on regular periodic
payments from CEDAE was considered non-bankable. EBP
helped navigate the contracting process, working with the
municipal and state governments to include an economic
incentive in the contract agreeing that the Concessionaire
would collect tariffs and compensate CEDAE for their services
providing piped water.

The other side of the tariff challenge was that many residents
were delinquent in paying their water and wastewater bills. EBP commissioned a study of AP5 residents to determine
what incentives would repair trust and encourage them to start paying again. Says Eduarda Berto of the survey, “We asked what would make you pay those bills? What bills do you prioritize? Energy bills, telephone bills, water bills?” Results showed that residents were willing to pay if the service was reliable, but also to avoid having their name listed with credit bureaus. Through this study, EBP determined it would take a mix between carrot and stick methods to get residents to pay the tariffs. This information was used to inform the strategies of interested investors for the bid process and the municipality.

Another challenge was establishing a sound legal framework to support the project. “Here in Brazil, we have a very controversial situation about who’s in charge of the water and wastewater services - if it’s the municipality or the state,” says Eduarda Berto. Since the water can be processed in more than one city, it would make sense that the state is responsible for its distribution, but the Constitution indicates that the municipalities are granted the right to control water distribution and wastewater services. Eduarda Berto contends that “it was controversial for this 30-year project because under the existing laws, there was limited guarantee that policies wouldn’t change and the contract couldn’t be challenged part way through.” In order to shift jurisdiction of the water from the state to the city, two laws had to be approved - one at the municipality level and one at the state level. EBP helped navigate this process so that the project’s contract would have a strong legal basis and security to bidders.

Another risk that EBP helped to mitigate was the unreliability of CEDAE’s water distribution services. “The potential bidders came to us worried because CEDAE had been known to ration the water at times, and if you don’t have water, you don’t have sewage,” says Eduarda Berto. “Bidders were asking us, ‘what do I do in this situation? What if in a couple months my revenue decreases by half?’” To mitigate this risk, EBP wrote into CEDAE’s contract a clause specifying a guaranteed minimum volume of water that must be distributed each year in order to ensure that there will be sewage to treat.

Unknown challenges that crop up during big urban infrastructure projects require dexterity, speed, and the proper expertise to resolve. This is EBP’s specialty - a team of experts with the ability to quickly respond to emergent obstacles. Helcio Tokeshi notes that “there are always so many small, unforeseen details, so you have to act fast.” One aspect that made the project easier for EBP was the cooperation between the state and city governments. “Fortunately, the Governor of the state of Rio de Janeiro, Sergio Cabral, and the city’s Mayor, Eduardo Paes, have been well aligned and cooperative on a number of initiatives, including this project,” states Eduarda Berto. Both politicians are in their second mandate and have a long history of strong collaboration that has produced effective results. “EBP can work efficiently and quickly, but if the government does not play their role—if they miss the political moment, then it can ruin a project environment’s chance of success.”
LESSONS LEARNED

1. **An intermediary can help streamline PPPs:** While PPPs are increasingly being recognized as positive models for efficient, cost-effective urban infrastructure projects, there are aspects of PPP cooperation that fall outside the scope and know-how of both the private and public entities involved. EBP is a successful intermediary company that helps navigate the terms and conditions of the project and resolve financing bottlenecks - from the bidding and procurement processes to the necessary feasibility, environmental impact and technical assessments, to the various social, legal, technical and financial aspects and challenges that crop up during the project. Because of its focused expertise and agility, EBP is able to resolve obstacles and drive the project along swiftly and competently.

2. **Reducing political, social and financial risks enables a strong investment environment:** Much of EBP’s sense of purpose and accrued success derive from its role in managing and reducing risks for both public and private stakeholders. They are willing to take on risk by investing their shareholders’ capital in the studies and legal proceedings to get public projects off the ground. They also help mitigate risk for bidders by, for example, providing support for the government to change legislation for the Rio wastewater project; restructuring contractual terms by shifting tariff collection responsibilities from CEDAE to the Concessionaire; and designing guarantees to build project safeguards such as the guarantee requiring CEDAE to distribute a minimum volume of water annually.

3. **Good governance and political will are a precondition for strong urban infrastructure projects:** No matter the competence and agility of the various project stakeholders, infrastructure projects need government support and an enabling political environment to get off the ground. As mentioned by Helcio Tokeshi, project timing is fundamental - it doesn’t make sense to launch an initiative if the contracting process cannot be wrapped up before the end of an election term. Evident from the Rio wastewater case study is the fact that strong political will and collaboration at multiple levels of government facilitate a smooth project cycle and prevent bottlenecks and impediments. It is important that governance structure, political environment, and levels of political support be taken into account in any context to plan for an urban infrastructure project that will be able to progress.

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REFERENCES

3. Martine & McGranahan, p 10
4. Martine & McGranahan, p 18