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RIO DE JANEIRO'S INVESTMENT GAP - SUPPORTING THE STRATEGIC DECISION MAKING PROCESS REGARDING THE STATE FINANCIAL NEEDS

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Summary

1.0 - Introduction

This is a very unique moment considering that the State of Rio de Janeiro is hosting three world-class events: The Confederations Cup FIFA 2013, The World Cup FIFA 2014, and the Olympic Games Rio 2016. These events require a great amount of investment, most of it in infrastructure, which normally is a long-term and high-relevance project, demanding a more efficient and educated way to acquire the necessary funds.

In order to achieve such a level of efficiency, it is important to establish a strategic decision making process that suggests which of the available methods of obtaining resources and improving budget execution is the most efficient In a investment based strategy.

First it is necessary to show the contrast between capital and operational expenses, demonstrating the different existing challenges to plan and execute those. Furthermore, it will be shown how the capital budget is developed in Brazil, and therefore in Rio de Janeiro, as well as the legal limitations faced by the policy makers when designing a strategy to acquire the necessary funds to accomplish the government goals. The following chapters will focus on elucidating the meaning of the investment gap itself, describing its different facets and the available tools to bridge it.

The investment gap faced by governments from both developed and undeveloped countries is a broad subject and presents several challenges in its different angles; the focus of this paper is on bridging the capital gap in order to achieve the objectives set by the elected authorities.

2.0 - Capital x Operational Expenses

Expense is a decrease in net worth resulting from a transaction. Governments have two broad economic duties: to assume responsibility for the provision of selected goods and services to the community on a non-market basis and to redistribute income and wealth by means of transfer payments. These responsibilities are largely fulfilled through expense transactions, which are classified in two ways in the GFS system[1]: an economic classification and a functional classification.

In Brazil the economic classification is defined by the Law nº 4,320/64 (Federative Republic of Brazil 1964), which contains the general rules for budget execution, and by the Fiscal Responsibility Law, which will be further examined in this paper; thus, the accounting system recognizes the expenditures as Operating and Capital Expenses regarding economic classification.

It is important to differentiate between operating and capital expenses; while the latter demands more time and expertise to be detailed in terms of cash flows during the project execution and future expending e.g. asset maintenance and modernization, the former normally grows with the government itself, at a similar rate, with almost no shocks in the short and medium term.

2.1 - Operating Expenses:

This category, at a subnational level, relates to the maintenance and day-to-day operations of the legally created institutions in all government branches, and constitutional transfers regarding the amount of tax collectable transactions occurred in the municipality's territory within state borders.

2.2 - Capital Expenses

Usually have the purpose to concur for the formation of a capital asset; they are:

- **Investments:** Public expenditures are considered investments when allocated for the construction of new facilities, permanent equipment acquisition, and expansion in participation or capital increase of non-commercial or financial institutions.
- **Financial Inversion:** Acquisition of new or already in-use government facilities or land, expansion in participation or capital increase of commercial or financial

[1] Government Finance Statistic Manual available at http://www.imf.org/external/pubs/ft/gfs/manual/pdf/all.pdf (International Monetary Fund 2001)

institutions, bonds acquisition, Revolving Marketing Funds Constitution, and loan agreements [2].

- **Capital Transfers:** Debt amortization, public constructions support, equipment acquisition support, financial inversion support, and other capital contributions.

3.0 – Capital Budget

The capital budget cycle starts in the first year of the political term with the proposal of a MULTIANNUAL PLAN LAW, which establishes the government's objectives, guidelines, and goals which will be achieved through capital expenses and the ones originated by them[3] for the next four years. It is thus readily evident that the legislature wanted to guarantee that the next State Governor finished the investments started by his predecessor since in Brazil the Governor has a four year term.

The next step is to elaborate the BUDGET GUIDELINES LAW, which will establish the goals and priorities for the next year. Based on both mandates, every government branch must submit its proposals to the executive chief for compilation and analysis regarding miscalculation or overestimation of revenues.

Many countries and subnational governments fail to establish an effective and efficient capital budget due to some challenges, which are presented, during the elaboration.

First, it is not a simple task to predict future expenditures regarding all intended capital expenses, e.g., hospitals, stadiums, schools, emergence expending due to a climate event such as a flood, etc; nevertheless, managers tends to underestimate costs when investments were made by grants from the central government.

Second, government managers almost never consider the opportunity costs (the value of forgone alternatives when a specific project is chosen).

Third, depreciation and asset replacement costs are often neglected during the estimation of operating costs. This is especially important for those projects that are

[2] When the state is the beneficiary.

[3] Often capital expenditure generates administrative and maintenance expenses which must be observed and estimated during the elaboration of the Multiannual Plan.

funded by user fees, e.g., sewers systems, and water supply, whose fee should include all costs associated with the facility operation.

Fourth, capital programs usually are not integrated so there often is a lack of coordination between government officials during the planning and altering of a specific project, which generates unexpected costs (e.g., when a recently constructed road or sidewalk must be torn up so water and sewers mains can be replaced or rehabilitated). It is worth mentioning that uncoordinated efforts of this sort often turn out to be costly and difficult to justify.

Fifth, due to its unusually high value, capital projects tend to be the focus of well-organized interest groups, e.g., construction companies, producers, and landlord associations which act in order to alter it so they can obtain more benefits or higher profits during and after its implementation.

Sixth, most capital expenditures allocated in short-term rehabilitation and renewal projects. Although long-term projects usually deliver a greater net gain for society, emphasis on short-term over long-term programs arises for two reasons: (Kitchen 2004) First, the authorities, which normally have a relatively short term of four years, tends to be more interested in short-term projects because they coincide with their administration period providing visible signs of political initiative. Second, it may be hard for politicians to commit with long-term projects without guarantee of future funding and a careful debt sustainability analysis.[4]

The FISCAL RESPONSIBILITY LAW passed in 2001 demands that every two months a set of reports must be published for government accountability and fiscal transparency. Table 3.1 illustrates the state budget execution from 1/1/2012 to 12/31/2012, which is the fiscal year in Brazil. It shows the values[5] collected and expended by the state, including non-tax revenue.

Table 3.1 shows the amount raised by the state in each category, demonstrating that the state borrowed from financial institutions R$ 4.7 billion, received R$ 492.7

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4 Financing Local Government Capital Investment, Harry Kitchen available at http://www.trentu.ca/economics/WorkingPapers/Financing%20Capital%20Investment.pdf

5 Average exchange rate in 2012 US$ 1.00 = R$ 1.954

million as transfers from the central government and there was no revenue from PPP's since, until now, the state made no agreements of this sort. From the total of R$ 5.2 billion raised by the State, 91% came from loan operations, 47% of which is the result of agreements with financial institutions from abroad, showing a great liability of the state in relation to the future exchange rate.

The total amount required to amortize the existing debt and pay its interest was R$ 4.86 billion, which corresponds to 7.64% of the total revenue or 13.83%[6] of the total tax revenue.

[6] Total Tax Revenue in 2012 was R$ 35.141.715.07 according to the State Secretariat of finance transparency web site at http://www.fazenda.rj.gov.br/portal/instituicao/transparencia.portal

Table 3.1

Table 3.1	
REVENUES	**JAN - DEC 2012**
Revenues (Except Intra-budgetary) (I)	**R$ 60.574.716.948,00**
Current Revenues	**R$ 55.059.670.492,00**
Capital Revenues	**R$ 5.515.046.456,00**
Loan Operations	**R$ 4.755.172.978,00**
Internal Operations	R$ 2.523.450.817,00
External Operations	R$ 2.231.722.161,00
Asset Alienation	**R$ 23.108.379,00**
Mobile Assets	R$ 505.727,00
Fix Assets	R$ 22.602.652,00
Loan Amortization	**R$ 213.449.963,00**
Capital Transfers	**R$ 523.125.281,00**
Intergovernamental Transfers	R$ 19.034.274,00
Private Institutions	R$ 4.000.000,00
Foreign Transfers	R$ 1.421.379,00
Peoples Transfers	R$ 5.967.346,00
Convenant Transfers	R$ 492.702.281,00
Other Capital Revenues	R$ 189.855,00
Intra-budgetary Revenues (II)	**R$ 3.015.748.506,00**
Current Intra-budgetary Revenues	**R$ 2.737.013.452,00**
Capital Intra-budgetary Revenues	**R$ 278.735.055,00**
TOTAL REVENUE (III) = (I) + (II)	**R$ 63.590.465.455,00**
EXPENDITURE	**JAN - DEC 2012**
Expenditure (Except Intra-budgetary) (IV)	**R$ 60.474.834.776,00**
Current Expenditures	**R$ 52.783.229.624,00**
Personel	R$ 14.388.956.241,00
Debt service (interests payments)	R$ 2.633.461.022,00
Other	R$ 35.760.812.360,00
Capital Expenditure	**R$ 7.691.605.152,00**
Investments	R$ 5.260.977.270,00
Financial Inversion	R$ 204.808.800,00
Debt Amortization	R$ 2.225.819.083,00
Intra-budgetary Expenditures (V)	**R$ 2.980.683.145,00**
Current Intra-budgetary Expenditures	**R$ 2.687.796.119,00**
Capital Intra-budgetary Expenditures	**R$ 292.887.027,00**
Surplus (VI)	**R$ 134.947.533,00**
TOTAL EXPENDITURE (VII) = (IV)+(V)+(VI)	**R$ 63.590.465.455,00**

4.0 - Fund-raising limitations

Brazil created two main instruments to control the debt of central and subnational governments: the Fiscal Restructure and Adjustment Program (Federative Republic of Brazil 1997), and an indicator-based analysis established by the Fiscal Responsibility

Law (Federative Republic of Brazil 2000). Both instruments set several limitations to debt formation, some of those worthy of citation.

4.1 – Fiscal Restructure and Adjustment Program

The lack of an effective fiscal policy and debt management observed in Brazil in the early 90's drove policymakers to intervene in order to stop the debt growth mainly at the subnational level without hurting the federalism protected by the constitution (Federative Republic of Brazil 1988).

Congress passed in 1997 the Law nº 9,496, which was the first step to establish a sustainable fiscal and debt policy. The Law offered the states an opportunity to lower their interest and amortization payments and increase the maturity of the owned debts. In general, the Law contributed to the reduction of the financial debt of the States and the Federal District allowing the central government to assume the states financial obligations and give an initial subsidy. Since it would be the owner of the debts it was possible to establish a greater maturity in order to lower the debt weight in the budget at the subnational level.

The Fiscal Restructure and Adjustment Program, signed by the governors of the 25[7] States that had refinanced their debts (Amapá and Tocantins did not sign it), presents annual goals for a three year period, and several limitations to create new debts.

The Program, beyond the specific aims for each unit of the Federation, contains, obligatorily, goals and commitments regarding:

I. Financial debt with respect to the real net revenue[8] – (RLR in Portuguese);
II. Primary result, understood as the difference between revenues and not financial expenditures (Interest payments);

[7] There are 27 States in Brazil.

[8] It is understood as real net revenue, for the effects of the Law 9496/99, the revenue collected in the twelve previous months to the immediately previous month to that one which is being considered, excluded revenues originated by loan operations, assets alienation, voluntary transferences or donations received with the specific end to supply capital expenditures and for the States the amount that must be transferred to municipalities according to any law or the constitution.

III. Public employees expenditures;

IV. Own tax revenue collection;

V. Privatization, permission or concession of public services, administrative and patrimonial reform; and

VI. Investment expenditures in respect to the real net revenue.

The agreement also stimulates the states to control its debt level by not allowing them to issue new bonds on the market or give management rights to its financial institutions regarding its already issued bonds and even forbidding the subnational governments to acquire new debts while its financial obligations remains larger then its real net revenue.

4.2 – Fiscal Responsibility Law

The main objective of this instrument was to establish rules and guidelines for public finance, aiming a responsible fiscal management, i.e. reinforce the role of planning and more specifically the link between the planning and execution of public expenditures.

For instance, the first paragraph of the first article tries to define what is "responsible fiscal management" establishing that it is a planned and transparent action that enables the public manager to prevent the risks and correct the deviations, capable of affecting the public accounts equilibrium, fulfilling the result goals for revenues and expenditures and obeying the limits and conditions referred to revenue wavering, personnel expenditures, debt, guarantee grants, and next fiscal year payments postponements.

The Fiscal responsibility Law established a new indicator by which the limits for the public debt must be calculated, altering the measurements methods designed by the 9,496/99 Law, it is the Net Current Revenue[9].

[9] According to the Fiscal Responsibility Law Article 2, Line IV, Net Current Revenue is the sum of the tax, contribution, industrials, patrimonial, farming, services, current transfers and other revenues excepting the constitutional transfers to municipaties, and the employees contributions to retirement funds, among others.

Chart 4.2.1 shows the state limits for expenses regarding debts and financial services payments before and after the Fiscal responsibility Law[10].

Table 4.2.1

Table 4.2.1		
	Before	**After**
Parameter	Net Real Revenue	Net Current Revenue
Goal (Debt/Parameter)	1,00	2,00
Limits	-	-
Loan Operations	18%	16%
Debt services	13%	11.5%
Future Tax Recepts	8%	7%
Garantees	25%	22% to 32%
Prohibitions	-	-
Loan Operations	180 days to the end of the political term.	180 days to the end of the political term.

In 2012 according to Table 4.2.2 the Net Current Revenue was R$ 40.613.414.957,00[11].

[10] The limits presented were proposed by the President and established by the Federal Senate Resolution nº 40/2001.
[11] Fiscal Transparency Portal at http://www.fazenda.rj.gov.br/portal/instituicao/transparencia.portal

Table 4.2.2

Table 4.2.2		
2012 Revenues	**Prediction**	**Collected**
Current Revenue (I)	**R$ 54.004.079.071,00**	**R$ 55.059.670.491,00**
Tax Revenue	R$ 36.621.942.997,00	R$ 35.141.715.073,00
Value Added Tax (ICMS)	R$ 28.531.776.000,00	R$ 26.661.527.899,00
Vehicle Property Tax	R$ 1.769.530.000,00	R$ 1.743.605.226,00
Inheritance and Donations Tax	R$ 445.860.000,00	R$ 525.059.853,00
Constitutional Transfer of Income Tax	R$ 1.677.109.456,00	R$ 1.892.773.439,00
Other Tax Revenue	R$ 4.197.667.541,00	R$ 4.318.748.653,00
Contributions Revenue	R$ 1.277.680.901,00	R$ 1.312.756.562,00
Patrimonial Revenues	R$ 7.883.693.350,00	R$ 9.660.784.845,00
Farming Revenues	R$ 128.450,00	R$ 137.257,00
Industrial Revenues	R$ 40.180.000,00	R$ 30.385.367,00
Services Revenue	R$ 350.099.916,00	R$ 362.794.458,00
Current Transfers	R$ 6.284.578.846,00	R$ 5.731.962.885,00
States Fund	R$ 1.015.004.100,00	R$ 946.495.812,00
Transfers from Law 87/1996	R$ 85.776.062,00	R$ 85.776.063,00
Education Fund	R$ 2.750.247.312,00	R$ 2.467.704.663,00
Other Transfers Revenue	R$ 2.433.551.372,00	R$ 2.231.986.345,00
Other Current Revenue	R$ 1.545.774.611,00	R$ 2.819.134.041,00
Deductions (II)	**R$ 14.990.191.061,00**	**R$ 14.446.255.534,00**
Constitutional and Legal Transfers	R$ 8.759.933.874,00	R$ 8.423.771.867,00
Employees Social Security Contribution	R$ 1.213.622.901,00	R$ 1.225.439.774,00
Financial Compensation between Pension Regimes	R$ 61.569.792,00	R$ 66.154.313,00
Deduction for Education Fund Formation	R$ 4.955.064.494,00	R$ 4.730.889.579,00
Net Current Revenue (I-II)	**R$ 39.013.888.010,00**	**R$ 40.613.414.957,00**

With the information provided by table 4.2.2 it is possible to establish the limits imposed by the Fiscal Responsibility Law in FY[12] 2012.

Table 4.2.3

Table 4.2.3		
	FRL	**2012**
Parameter	Net Current Revenue	Net Current Revenue
Limits	-	-
Loan Operations	16%	R$ 6.498.146.393,12
Debt services	11.5%	R$ 4.670.542.720,06
Future Tax Recepts	7%	R$ 2.842.939.046,99
Prohibitions	-	-
Loan Operations	180 days to the end of the political term.	180 days to the end of the political term.

According to the Rio de Janeiro Fiscal Transparency Portal, in 2012, the Debt – Net Current Revenue ratio was 165.13%, demonstrating that the State is fulfilling the

[12] Fiscal Year.

goals set by the Law in question, but at the same time it has been shown that there are very clear limitations regarding new debt formation, which directly impacts any investment policy, planning, and management.

5.0 – Investment Gap

It is fundamental to define what is the so called investment gap of the public sector; usually managers are driven to think only in terms of capital, but it is common knowledge that without other factors, e.g. planning, it is impossible to use the available assets in an effective and efficient way.

Experience, surveys and case studies of successful and unsuccessful regions reveal four key elements that vary from one location to another regarding the investment gap, which are[13]:

- Capital gaps;
- Knowledge (skills and management) gaps;
- Institutional framework gaps; and
- Collaboration (communication, institutional and trust) gaps.

There are important relationships between those, because they impact upon and relate to each other. The investment gap is not just about the money; there are other factors that create the right environment for investment and the right opportunities to invest in.

Changing the amount of capital available or the institutional framework around public finance is not enough on its own. Knowledge and know-how are also required, especially those skills in infrastructure, understanding investment markets and the roles the State plays. Equally, collaboration, which is driven by a clear leadership and aims to support public and private outcomes from investments, is also essential. Furthermore, it is necessary that the market trusts the public institution, not only the elected authority that will be there during a political term, which normally is a barrier regarding long-term investments with the participation of the private sector, since the business cycle (return

[13] (Urban Land Institute 2009)

on equity) of projects, which will directly influence and foster development and economic growth, are longer than the normal political cycle.

Hence, regions that take into consideration the broad meaning of any investment gap usually are more successful in closing it, often with the following benefits:

- It provides more capital than is otherwise available, and in a quicker and more efficient manner;
- It helps to rebuild local investment markets and averts other ‘disinvestment’ from occurring;
- It creates a greater commercial and professional discipline within city development policies and initiatives;
- It attracts wider interest from other commercial players, giving confidence that something of value must be occurring, which might merit their interest;
- It builds a more sustainable finance strategy into state development initiatives, allowing public funds to be gradually unlocked for alternative actions; and
- It re-positions good state development activity as ‘investment’ rather than ‘expenditure’ in the modern economy.

5.1 – Capital Gaps

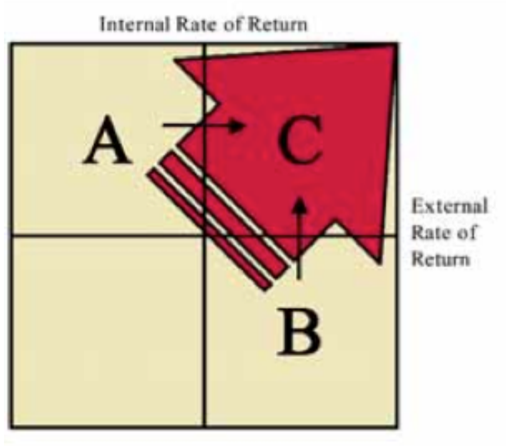
The capital gap can be defined as the difference between what state governments aspires to invest and what the public purse can afford. This gap clearly exists since every year governments set investments plans that go unmet.

Overall, this means that public sector revenue is not enough to meet all the investment needs, so governments must seek investment from other sources; this is the primary gap.

However, this is a normal state of affairs in a market-based economy where investment from private actors, and from financial institutions, would always be expected. Indeed private investment is considered essential, not just to bridge the numerical gap in financing, but also to provide market discipline and expectations to the project, to raise the quality of what is delivered, and to demonstrate to wider investors that the state, and its locations, are attractive for external investors; that is to say, they provide competitive returns from which others can also benefit. In most cases of successful city investments, public and private capital plays complementary roles.

Investment in cities needs to be sustainable in both public and commercial terms, and this requires a good Internal Rate of Return (IRR) for private investors and a good External Rate of Return (ERR) for public investors (Figure 5.1.1)[14].

Figure 5.1.1



Public actors will always need to invest in some activities where there is limited opportunity for private sector co-investment (box B). These will include fundamental public services or welfare oriented expenditures providing non-exclusive and non-rivalry goods (a high ERR). Equally, private actors will always need to invest in certain activities that hold limited interest for public actors (box A) such as purely commercial assets including shops or luxury goods for private use (a high IRR).

However, there is a growing range of activities which are able to offer both a strong ERR for public investors and an acceptable IRR for commercial investors (box C). The range of activities included here are now very wide, from major urban development projects, to infrastructure, public service facilities, and many activities associated with urban regeneration. Because states are a complex mix of public and private functions, investments in many activities offer potential for positive spillovers and spin-offs between sectors.

[14] Image adapted from the European Bank 2008.

The current economic climate in Brazil is very challenging for both public and private investors. Reduced liquidity and limited inter-bank lending combined with a reducing fiscal base in the public sector due to depressed demand and recession. Therefore state development leaders should seek to identify opportunities which can combine public and private returns in order to create an optimum investment level.

5.2 – Knowledge and Skill Gaps

In Brazil, the market has a more efficient way to capture human assets than the public sector, since Brazilian governments must obey a set of legal requirements to hire (public exams) and remunerate (salary ceiling) its human resources, and also due to the fact that people in key leadership positions often change in 4 to 8 years. This consequently generates a knowledge rupture cycle.

Overall, this knowledge and know-how gap might be summarized as:

- Lack of knowledge between public and private actors about how the other works and what is required for effective joint working;
- Information gaps on what investment opportunities are available within regions and which investors are interested in urban investment;
- Lack of government skills in facilitating investment or understanding how their actions impact upon the risk and return profile for private investors;
- Lack of government skills and confidence in utilizing some of the investments tools they do have at their disposal;
- Lack of information within the private sector about who to engage within state governments and inaccessibility of incentives and support;
- Lack of information between investors and developers on what they are considering and the potential for joint working; and
- Lack of co-ordination between different public bodies active in the same state.

There are many examples of attempts to bridge these gaps that stand out from case studies analysis. An interesting one regarding Rio de Janeiro's public work flow environment could be the creation of specialist bodies with unique skills sets, designed to facilitate investment actively between public and private sector, like the Management Council for Public-Private Partnership (Public-Private Partnership Unity 2008).

Notable examples are the urban development corporations and urban regeneration companies established in the United Kingdom and Irish cities (London, Manchester and Dublin). There are also examples of similar bodies in Spain, Germany and Italy (Barcelona, Hamburg and Turin).

5.3 – Institutional Framework

The legal and regulatory systems play an important part regarding investment stimulation. Different levels of government have different levels of freedom in Brazil, requiring co-ordination in order to decrease the time to execute planned projects.

Transparency underpins all aspects of the legal and fiscal system. The requirement for open accounting and for the ‘rules’ to be clear, accountable, consistent and stable for all players is essential to a strong investment in market development.

Given the substantial complexity of the institutional frameworks and the potential for each of the aspects listed to impact upon the opportunities for public and private investment in the state, there is great scope to rationalize institutional frameworks, decreasing bottlenecks in the work flow, so that state becomes more open for private investment. Relative to both Asia and North America, Brazil’s Institutional Frameworks for state investment are complex and highly variable.

Furthermore no subnational governments take asset replacement or depreciation expenses into account[15]. This leads to at least two serious consequences. First, failure to keep track of a major cost component means that tax revenue and user fees are lower than they should be. Second, as the infrastructure depreciate and needs maintenance or replacement there are no revenues available for the project. This is a widespread practice mainly with grants from the central government which is usually treated as “free money”.

5.4 - Collaboration

The fourth dimension of the public sector investment gap concerns collaboration. The importance of public and private collaboration has already been addressed; a lack of trust and effective communication represents a significant issue. It is essential to

[15] Mann (1999), supra footnote 1, at 5.

build working relationships between the public and private sectors in the state to identify and create co-investment opportunities which can deliver high internal and external rates of return, and will both build good investment markets and create substantial public goods. Therefore, in addition to the Public-Private collaboration, governments should foster Public-Public and Private-Private collaborations as well.

5.4.1 - Public-Public collaboration

Because different public administrative systems give distinctive responsibilities to public bodies there is always a need for public-public co-ordination if there is to be a successful public investment market. At the simplest level, this will include the need for co-ordination between providers of land use planning, transport infrastructure, energy, public investment, relevant public land assets and other amenities.

In Brazil, these different functions are not all held by a single public authority. The lack of effective collaboration between the different parts of the public sector is identified by many private investors as a serious deterrent to investment, as they find that the co-ordination failures erode their confidence in the outcomes of decision-taking and the certainty with which they can appraise investment. Lack of public-public collaboration increases the risks and reduces the returns for private investors.

5.4.2 – Private-Private collaboration

Private-private collaboration is also important because it enables both effective supply chains to develop in state investment markets and it can help to encourage innovation and risk-taking among investors. Competition is also a generator of innovation and risk-taking and is desirable in open growing markets. Occasionally, there are opportunities for investment that are so big that the scope for collaboration to make major investment occur is profound as no single investor will take on the project alone (e.g. World Cup FIFA 2014 - Maracanã Stadium).

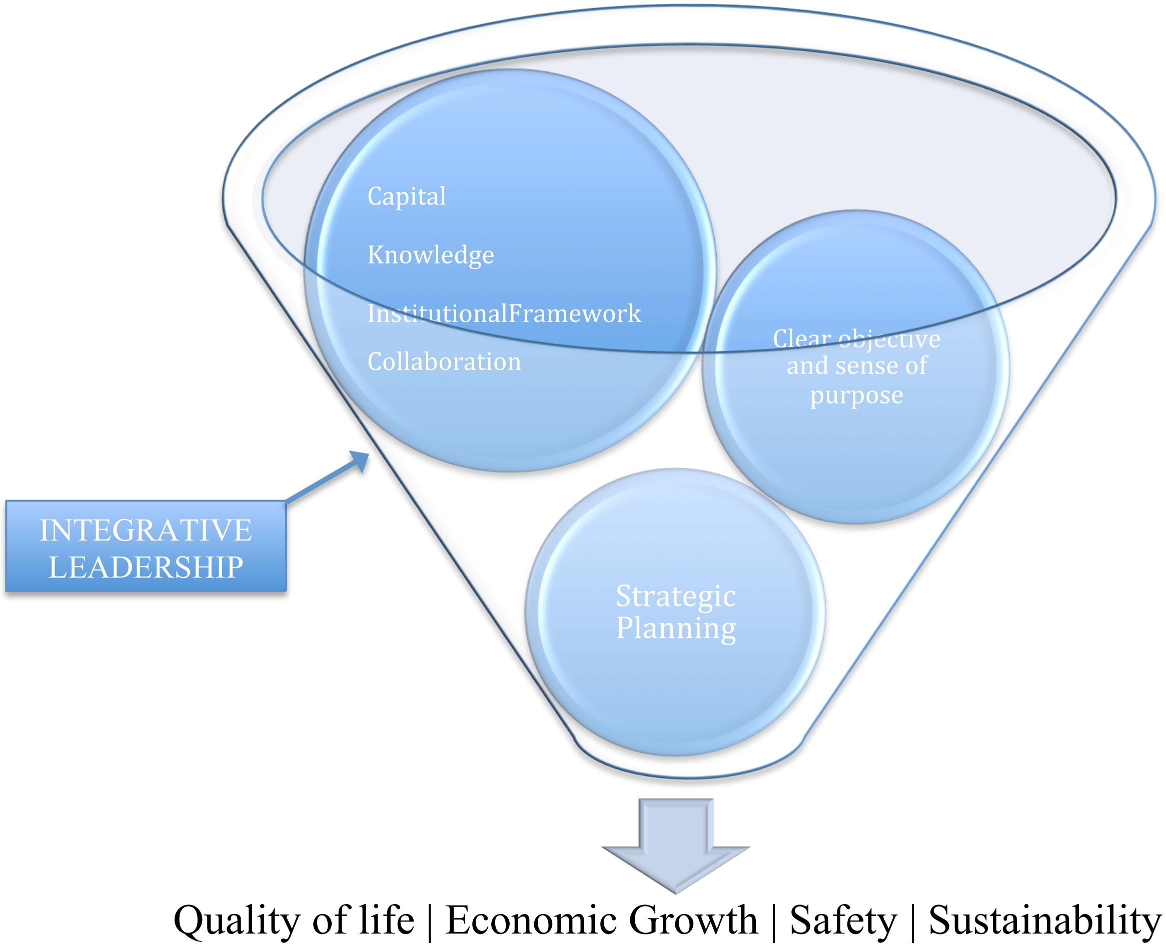
When no private-private collaboration exists, the result is often large scale redevelopment opportunities not being fully realized because the sheer size and scale of the opportunity is beyond the means of any one investor or developer. In these situations, a gap occurs and governments sometimes try to bridge the gap by mounting major initiatives (including Olympic Games, World Cup FIFA, and major events).

Several studies[16] point out that addressing these gaps in isolation from one another will not be effective. What is required is an integration strategy that joins together all four key ingredients around a compelling identity/brand and value proposition (or vision) for the state on a broad assessment of its unique assets and opportunities.

An effective state strategy aiming to cast broad high-level outcomes such as quality of life, productivity, growth, and better management of resources, as well as offering, investment opportunities to public and private sectors alike, should be supported by a purposeful leadership.

[16] For a detailed study about addressing the different gaps go to: http://www.uli.org/wp-content/uploads/ULI-Documents/Closing-the-Investment-Gap-in-Europes-Cities-Updated-Launch-Report.pdf

Figure 5.1 (Adapted from The Urban Land Institute)



In order to achieve the development goals, and bridge the gap, efficiently, those ingredients must come together (Figure 5.1), making it much more possible to:

- Identify and match available capital from both public and private sectors with well-defined and bankable projects and propositions;
- To recruit and develop the skills required to foster urban development and investment and to provide better information to investors and other stakeholders;
- To adjust the institutional framework to better respond to the agreed long term requirements of the state and its regional partners; and
- To achieve effective collaboration around agreed and shared goals, recognizing the different outcomes required by the participating partners.

In these ways, effective state investment strategies are the key tool for bridging the investment gap.

6.0 – Closing the Gap

There is no ”recipe“ or ”check-list” process regarding closing the public sector investment gap; the ways available and applied by different countries, states and cities around the globe varies according to several factors, such as the kind of investment itself, the maturity level of the central and subnational governments, and the economic climate.

The focus of this paper are the methods available to the state of the Rio de Janeiro regarding the actual Brazilian legal framework and Rio de Janeiro institutional structure, which presents three main tools to bridge the referred gap, they are: Loan operations, Grants from the Central government and Public-Private Partnerships.

6.1 – Loan operations

6.1.1 – The decision to borrow

Usually borrowing for capital projects can be justified as long as the benefits from the project fall on future users. This matches the financing term with the asset's life span, so the borrowed funds (principal and interest) will be paid out of future revenues generated by future generations.

Even with the access to capital markets being controlled by the central government (as showed in chapter 4), borrowing plays an important role in financing state government capital projects. Table 3.1 shows that in 2012 the state of Rio de Janeiro raised more than R$ 4.7 billion by loan operations (internal and foreign markets) which represents almost 7.8% of the total revenue and 86.2% of the total capital revenue.

There are some advantages in financing projects by borrowing from the market. Among other reasons, policy makers should take into consideration the Following:

- “Benefits Received Model”;
- Is the project sustainable (user fee)?

- What are the baseline rate and the spread?

The “Benefits Received Model” simply states that those who benefit from the public investment should pay for it, thus it would be unfair if the actual generation had to waive short-term return investments in order to finance a 25 year project that would benefit future generations even more. Policy makers and public managers should then balance the maturity of the loan and the time that the investment will be able to provide benefits without a great volume of investment due to asset depreciation.

Is the investment self-sustainable? Well some kind of projects e.g. subway, and roads, can be remunerated by user fee, so the state must be capable of understanding the future expenses regarding the implemented to be project in order to diminish the pricing system failure and establish a realistic user fee, taking into account macroeconomic factors, such as the inflation rate, and others that usually are forgotten e.g. depreciation and externalities. That is why, among other reasons, the knowledge gap should not be disregarded, during the elaboration of a strategy to bridge the investment gap.

Arguments against borrowing should also be taken into consideration and “pay as you go” financing[17] is a valid option when the administration has the necessary amount to run the project since it will save on interest costs, which represents more capital to expend in other projects, and will avoid the situation where future generations have no say in today’s debt formation but must pay for projects approved by today’s policy makers. (Brunori, Local Tax Policy: A Federalist Perspective 2007)

6.1.2 - Internal x External operations

Brazilian legislation allows the state to borrow from both the internal and external markets, but there are four variables in this process which directly impact the investment chronogram and cost.

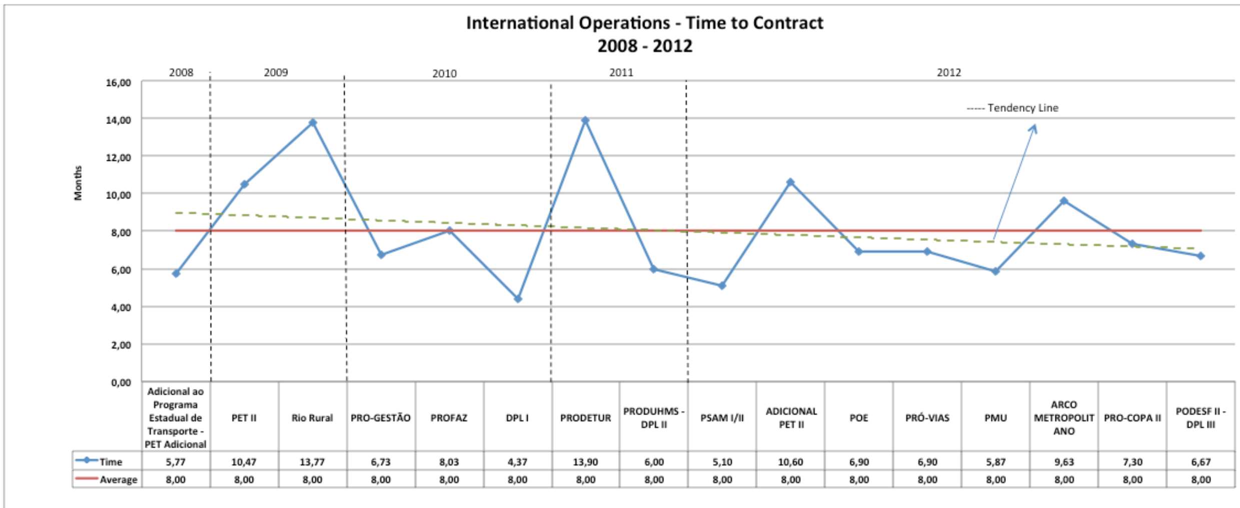
First there is a considerable difference in the timeframe to finance investment from a national or foreign financial institution, most of it due to several legal steps that must be taken to approve an international Loan (see item 5.3 for framework gap), so the

[17] Financing Local Government Capital Investment, Harry Kitchen available at http://www.trentu.ca/economics/WorkingPapers/Financing%20Capital%20Investment.pdf

public managers and policy makers must take it into consideration during the elaboration of the state investment strategy.

Chart 6.1.2.1 shows the total and average time taken from the proposal to the signature of all international contracts signed by the state from 2008 to 2012. The tendency line shows that in 2012 besides closing the capital gap, the state focused on bridging the knowledge gap as well by investing on training and hiring qualified professionals. International operations take twice the time, on average, compared to a national loan. During times when the government must follow an international chronogram, e.g. hosting world class events such as the Olympic Games and the FIFA World Cup, without the proper planning the first alternative is almost prohibitive.

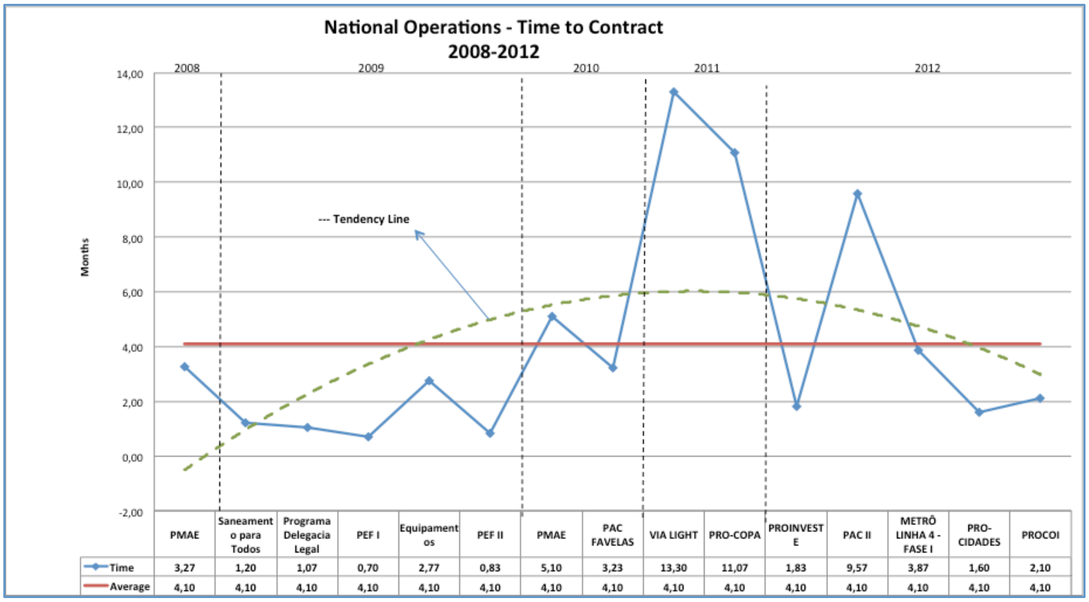
Chart 6.1.2.1



	Adicional ao Programa Estadual de Transporte - PET Adicional	PET II	Rio Rural	PRO-GESTÃO	PROFAZ	DPL I	PRODETUR	PRODUHMS - DPL II	PSAM I/II	ADICIONAL PET II	POE	PRÓ-VIAS	PMU	ARCO METROPOLIT ANO	PRO-COPA II	PODESF II - DPL III
Time	5,77	10,47	13,77	6,73	8,03	4,37	13,90	6,00	5,10	10,60	6,90	6,90	5,87	9,63	7,30	6,67
Average	8,00	8,00	8,00	8,00	8,00	8,00	8,00	8,00	8,00	8,00	8,00	8,00	8,00	8,00	8,00	8,00

Charts 6.1.2.2 shows the total and average time taken from the proposal to the signature of all national contracts from 2008 to 2012. It is noticeable that the state has been chosen to operate with international financial institutions, mainly because of the lower interests rates and the relatively stable exchange rate, but also due to the difference in the time frame between them. It is also clear that policy makers are going in the direction of an effective strategic planning in order to keep its duties on schedule.

Chart 6.1.2.2



	PMAE	Saneamento para Todos	Programa Delegacia Legal	PEF I	Equipamentos	PEF II	PMAE	PAC FAVELAS	VIA LIGHT	PRO-COPA	PROINVESTE	PAC II	METRÔ LINHA 4 - FASE I	PRO-CIDADES	PROCOI
Time	3,27	1,20	1,07	0,70	2,77	0,83	5,10	3,23	13,30	11,07	1,83	9,57	3,87	1,60	2,10
Average	4,10	4,10	4,10	4,10	4,10	4,10	4,10	4,10	4,10	4,10	4,10	4,10	4,10	4,10	4,10

Second, as previously commented, the costs of those two kinds of operations are substantially different due to the fact that commercial and development banks in Brazil index their operations differently than international financial institutions, while most banks in Brazil uses the TJLP[18] plus the financial spread, international institutions normally uses the LIBOR[19] plus the financial spread the latter being directly influenced by the risk evaluation within the operations and is a reflection of the grades given to the state treasury by the rating agencies.

Table 6.1.2.3 shows the grades given to the Rio de Janeiro state treasury by two rating agencies in 2012.

Table 6.1.2.3

Table 6.1.2.3		
Agency	**Global**	**National**
Standard and Poor's	BBB-	brAAA
Fitch	BBB-o	AA(bra)o

Third, the exchange rate must be tracked and extrapolated over time using scenario evaluation and stochastic simulations regarding the currency in the contracts

[18] Long Term Interest Rate – Jan to Mar 2013: 5%
[19] London Interbank Offering Rate (6-month LIBOR): 0.45

and future revenues combined with a broad debt sustainability analysis.

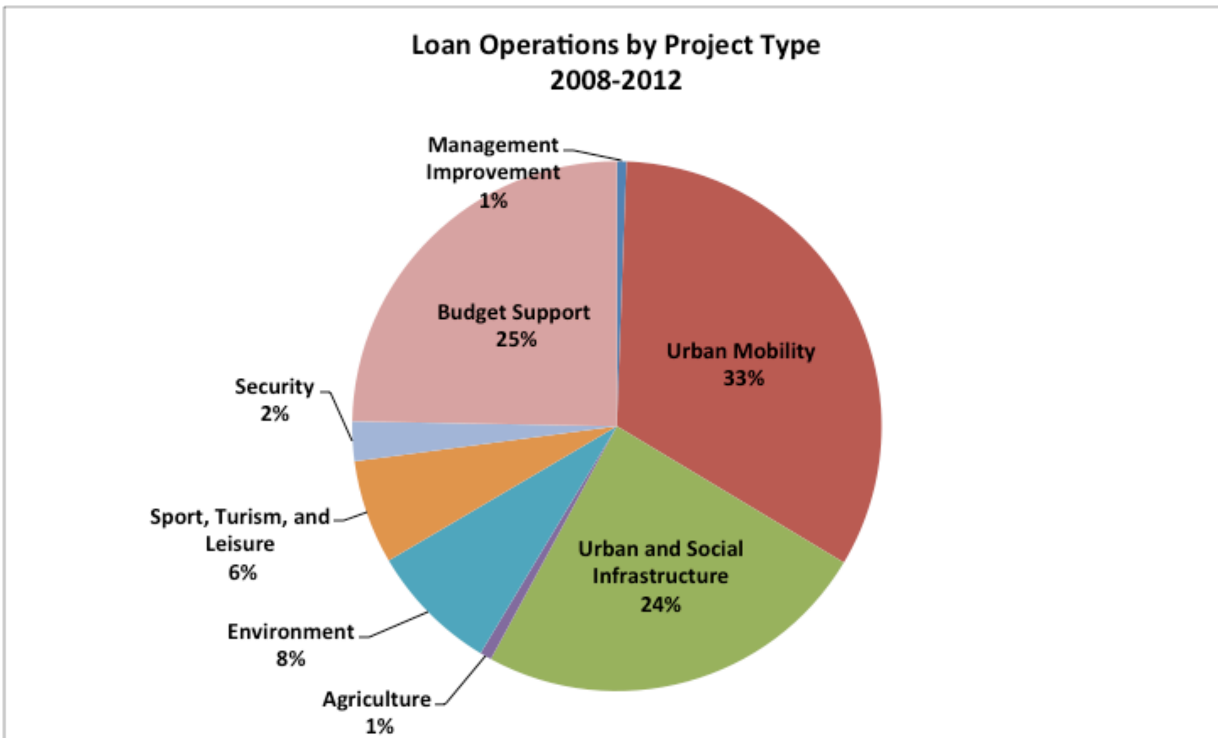
Fourth, the inflation rate should not be disregarded since it is a source of revenue for the government, directly because it decreases the real value of the debt, and besides that, wages that are the biggest budget expenditure are relatively stable over time which helps the public sector to run surpluses and therefore heightens its capacity to pay both amortization and interest rates.

6.1.3 – Project Finance

Government can borrow for a wide range of projects or even as a "blank check" (budget support), so it can provide for several ongoing projects. A proper planning normally should align the time in which the investment is concluded, the time it keeps returning benefits before any major investment must be made, and the return on equity, with the maturity of the loan.

Chart 6.1.3.1 shows the projects, by type, financed by loan operations in 2012.

Chart 6.1.3.1



The investment portfolio cannot be analyzed without taking into consideration the spillover effects of the projects, e.g. investment in security, allows energy, sewage, telecom, and several other companies to go inside communities (previously dominated by drug dealers) to provide their services which will generate a more favorable climate for business in the state, helping to increase collaboration and elevate consumption, and therefore tax collection.

6.2 – Discretionary Grants

The objective of this paper is to support the decision about how to acquire the necessary funds for a specific project/program inserted in the state's strategic plan, therefore the analysis will remain upon the discretionary grants that can be pursued when the result of state actions is aligned with the goals of the central government, bridging the investment gap through public-public collaboration.

Usually central governments have three objectives in providing grants to subnational governments (Oates, 1990)[20]:

- **Financing sub-national services and investments**: If the central government wants to control subnational taxation or capacity to acquire debt, it can provide grants to subnational governments with the objective of improving their general capacity to finance the provision of public services and goods.
- **Subsidization**: When the subnational provision of services has cross-boundary or spillover effects, subnational decision-making may not lead to the optimal nationwide provision of services. If that is the case, the central government could affect sub-national provision by subsidizing the services.
- **Equalization**: The central government may want to enable subnational governments to provide the same basic bundle of services with roughly the same tax effort. This often requires a redistribution of resources to equalize tax capacity and/or service capacity.

In practice, grants often have various objectives at the same time. This can easily lead to inefficiencies, when a single grant is used to accomplish several objectives simultaneously. It is therefore important that the objectives of the grants are clearly

[20] (OECD n.d.) - http://www.oecd.org/ctp/federalism/37388377.pdf

stated and that the grant design allows for a separation of objectives and independent steering and control of grant characteristics that contribute to each of these objectives.

In Brazil the Presidential Decree nº 6,170/2007 regulates the transfers from the central government to state and municipal governments, and private organizations. The mentioned decree defines the two different available tools to transfer funds to different government levels.

- **Covenant**: agreement, adjustment or any other instrument that discipline the transfer of financial resources from consigned endowments in the Fiscal or Social Security Federal Budgets to state, district or municipal governments, or non profitable private entities, aiming the execution of government program, involving a project execution, activity, service, acquisition of good of reciprocal interest, by mutual cooperation; and
- **Transfer contract** – When the transfer of federal resources is intermediated by a Federal Financial Institution.

Table 6.2.1 shows the minimum amounts that can be transferred by mentioned tools.

Table 6.2.1

Table 6.2.1	
Objectives	**Amount**
Common Goods and Services	> R$ 100,000.00
Engineering Projects	> R$ 250,000.00

In 2012, Rio de Janeiro received almost R$0.5 billion to execute projects fostered by the federal government through covenants with the state. It is economically interesting for state to finance its activities with federal funds, first because the costs of the investments are being split with constituents from outside the state, and second because it is almost “free money“ since the subnational government sometimes just has to execute the project with its already set infrastructure.

Grants can be justified to diminish the economic and horizontal equity distortions between regions, as long as the areas receiving the transfers are growing, in such way, that it will be able to collect the necessary revenues to provide the required public goods and services in the foreseeable future.

It is sound budgeting to stimulate agreements with the central government to finance projects within its interests, e.g. investments with beyond borders positive spillovers, in those cases grants could also be justified if the funding rate is proportional to the generated benefits or interests of the donor. If grants are out of proportion they often creates problems.

First, transfers (Rio de Janeiro State 2007) can distort the decision making process since most of the time it requires partial funding from the local government; for example, policy makers could be investing state funds in not priority areas due to the "free money" that is coming from the central government.

Second, surveys and case studies suggests that when funds come from outside sources it drives down the sense of accountability and therefore the quality of the expenditure. Additionally, sometimes they are disregarded during the calculations for the investment costs.

Third, transfers can stimulate the formation of communities that cannot provide for their own, and prevent people from looking for places with better infrastructure and service provision. The main argument is that small, remote areas often have no capacity to finance its needs and since population is relatively low, it is likely that user fees will not cover the costs. Thus, government will have to provide the funds to build and maintain the facilities that may operate under its capacity, while other areas may need additional investments in the same sectors, but could provide the services that are being duplicated.

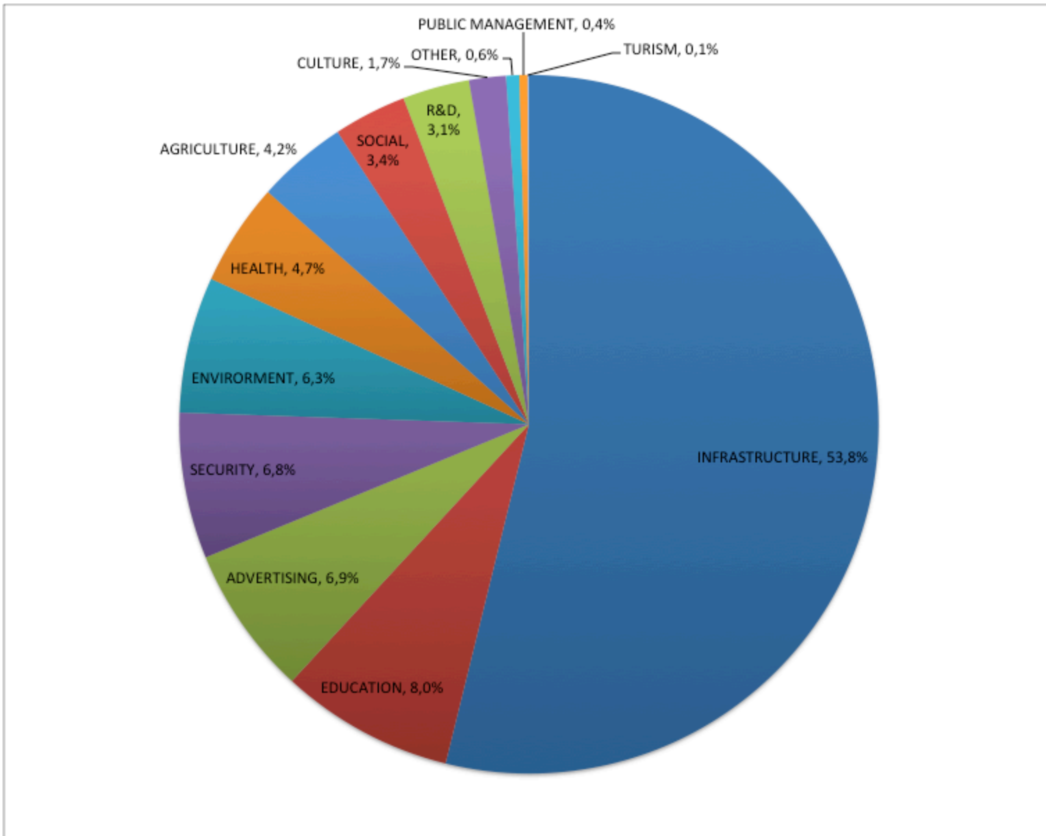
Fourth, large funding from central governments to metropolitan areas can lead to high regional inequalities and distorted growth.

Fifth, when different levels of government fund the same project, accountability problems arises. When the level of government making expenditure decisions is different from the one providing the revenues, responsibility is blurred and there is little or no incentive to be efficient. (Brunori, State Tax Policy: A Political Perspective 2011)

Sixth, discretionary grants usually are dependent on criteria such as total tax revenue or total expenditures of central government; therefore they tend to be volatile. They are influenced by central government fiscal policy and are subject to macroeconomic cyclical effects. In order to enable sub-national jurisdictions to plan their activities on a multi-annual basis, it is important to put in place a mechanism that constrains volatility, e.g. link the size of the general-purpose grants to trend estimates (for tax revenue or expenditures), rather than to real estimates or realizations.

Chart 6.2.1 shows the grants signed by the state of Rio de Janeiro with the central government, subnational government, private institutions and multilateral organisms.

Chart 6.2.1



6.3 – Public Private Partnerships (PPP)

The State Law nº 5,068/2007 states that "PPP" is an administrative agreement of concession, which can be constituted in two modalities, administrative and sponsored concessions.

- **Sponsored Concession**: The concession of public services or structures in which apart from the user fee the private partner will receive complementary transfers from the public partner.
- **Administrative Concession**: A contract for service provision, in which the public administration is a direct or indirect user, even if it involves construction, goods install or supply.

The legal framework and market climate in Brazil, and therefore in Rio de Janeiro, allow projects with the following characteristics to be eligible for PPP:

- Project value superior than R$ 20,000,000 (twenty million reais);
- Timeframe superior to five years but shorter than thirty five years;
- Public transfers to the private partner can only start after the beginning of the services provision;
- Variable payments to the private partner linked to its performance;
- Risk sharing between the public and private sectors; and
- The payments from the public to the private partner should be warranted by a PPP fund.

The presence of these characteristics does not mean that PPP is the best financial option for the project in question. Nevertheless if they exist, the possibility should be properly analyzed.

Mechanisms for attracting, appraising and managing public/private co-investment vary significantly. PPPs are most successful, in those countries where there is a political will and a sound legal and regulatory framework has been created to support and simplify co-investment[21].

For the public administration and the private financial providers, the cooperation in city development programs can provide some important contributions to business strategy, such as:

- Utilize public sector support to help develop new business and markets sectors that would otherwise not be easily accessed;
- Contribute to diversification of the asset classes over which investment is spread.
- Provide some predictable returns in periods of instability.
- Build relationships with a wider set of partners[22], from which other business might evolve;
- Strengthen local and regional economies in ways, which can safeguard or improve other investments, or expand the market for other financial services;
- Allows the innovation capacity of the private sector to be transferred to the public sector, reducing costs and improving efficiency; and
- Allocate to public services the market standards of provision, supplying constituents with better quality and lower costs services.

Although the PPP financial model presents several advantages, case studies shows some disadvantages, such as:

- Due to its complexity, a larger planning period is required to elaborate the conditions by which the private sector must abide;
- The lack of public assets to guarantee the future payments and the considerable risks that the private sector must share with the public partner are usually reflected in higher interest rates than ones offered by international and multilateral financial institutions; and
- The adjustment of the contract over time is much more complex due to the several responsibilities and variables faced by the model.

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[21] (IDB n.d.) - http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=37447865

[22] When more than one private partner is necessary to execute the project.

7.0 – Decision Making Process

After the approval of the multiannual plan law, both policy makers and public managers have at their disposal a document, which contains intended state capital expenditures for the next four years. Therefore, based on the goals that policy makers want to achieve, a priority list can be set.

Once the priorities are set, public managers can start to analyze each investments' characteristics and evaluate the financial tools at their disposal in order to acquire the necessary funds, in time, to bridge the difference between the tax collection revenue and its investment needs.

7.1 - Criteria for financial tools evaluation

The public sector faces a much more complicated problem when deciding over different investments; it cannot follow the private sector rules and let its decision be driven by monetary results (Jr., Johnson and Joyce 2013).

Public capital project analysis is very different from private analysis; while the latter can base its decision only in terms of cash flow, the first should take into consideration a broad range of variables besides costs and returns.

Capital expenditures affect peoples' lives in many ways, e.g., there are direct and indirect beneficiaries when another airport is constructed, and for instance, high costs or over investment can generate higher taxes in the future.

Many studies suggest that in order to achieve a better social result, public managers should identify at least the following elements of the investments.

- Costs;
- Beneficiaries/Affected;
- Time; and
- Accountability.

7.1.1 – Costs

The public sector faces the same problem as any actor in a capitalism scenario, which is scarcity of inputs or in this case funds to invest. Denying this problem can leave the State in a very complicated position in the future, thus credit implies trust, which is not a good in the sense that it is not possible to buy it, and the institution shall deserve it, through good governance, governability, and management.

That is the reason why policymakers, and therefore public managers, must be very careful when choosing between financial instruments, since its obligations will burden the state for many years to come.

It is possible though to understand, how the costs will affect the state's financial health in the future through a cost-benefit and cost-effectiveness analysis, a financial and economic analysis and a extensive debt sustainability analysis that will allow the public administration to simulate how the debt will evolve with different revenues, exchange rates, interest rates and inflation scenarios.

7.1.1.1 – Cost-benefit and Cost-effectiveness

A capital project can be analyzed by its cost-benefit and its cost-effectiveness. Both measurements quantify cost in monetary terms, and relate them to the project's performance; they differ, however, in the way they measure the outcomes.

A cost-effectiveness analysis will quantify outcomes in a non-monetary form, e.g., the increase of number of families receiving potable water after a construction of a new water distribution system. A cost-benefit analysis measures programs outcomes in monetary form, e.g., state's savings with health care due to non-potable water diseases; it would then compare the benefits with the cost of construction (assuming there is no user fee).

7.1.1.2 – Economical x Financial Analysis

A government cannot easily make the tradeoff, for example, between a new Metro line and the pacification of a community through the construction of one or more police departments in the area. Even if the financial returns of a new Metro line are greater than the ones generated by freeing a community from drug dealers, the economic returns may stimulate the state to provide for both investments or even only for the latter if monetary restraint is the case.

It is important to emphasize that there are differences between economic analysis and financial analysis[23], thus a project may be valuable generating returns for economic reasons, without generating direct financial returns.

The first basic issue in an economic or financial analysis of a capital project is the decision as to what counts as cost and what count as benefit. A financial analysis will absorb the cost of buying houses from citizens to construct a new road, but an economic analysis must take into consideration the monetary and psychological costs of moving, the additional cost to purchase a new house, and even the future lawsuits from property owners.

Another problem in establishing an economic and financial analysis is that several public investments and programs do not have market prices, but in order to evaluate them, public managers must impute the prices. One method of doing it is known as shadow pricing[24] (Chase 1968).

Imagine a public manager trying to analyze the benefits, in monetary terms, of a new community soccer facility. The monthly value (shadow price) to a person using the new facility could be the value paid by individuals utilizing similar private facilities. This amount, times the monthly users number will yield an estimated value of the recreational opportunities created by the proposed new facility.

Shadow pricing becomes highly complicated when the goods and services under analysis have few or no similarities with private goods, e.g., defense and public safety.

7.1.2 – Beneficiaries/Affected

State investments are mainly driven to benefit its constituents; therefore, the population/generation that will enjoy the biggest net gain should be identified. A construction of a new port, to flow off a country production, will benefit the state population, but it will also lower the waiting time faced by the suppliers reducing their

[23] A financial analysis is limited to the direct revenue and cash flow the project will generate while the economic analysis takes into consideration the financial benefits and others such as amount saved in health care by a construction of a new sewing system.

[24] The monetary value assigned to a good or service when the market price is unavailable or incomplete. For example, the shadow price of electricity takes into account environmental costs such as air and water pollution as well as direct production costs.

costs and enabling them to produce at a higher level, thereby increasing demand in the labor market, generating a good systemic consequence in the economic, with clear desirable spillovers beyond state borders.

This example, for instance can justify a high maturity loan, because the investment will in fact benefit future generations as well. But the state does not need to finance the project alone, thus the positive effects that it will provide to other states make it appealing to the central government to co-invest through discretionary grants. Once the beneficiaries have been identified, and if the project has some private good characteristics (rivalry and exclusion), it may be possible to calculate a suitable user fee and internal rate of return, which could make the project attractive to the private sector in such way that it would share some risks with the state through a public-private partnership.

7.1.2.1 - Externalities

Government expenditures can indirectly affect thousands of individuals, business, and other governments; these costs and benefits are called externalities. Some argue that there is no distinction between second and third parties and the people/public sector tried to deliver the improvements in the first place. But economic models rarely can absorb all affected individuals and organizations, considering them all as beneficiaries. Since they are based in a rational decision assumption, it is very difficult to quantify the costs and benefits for the parties, which were indirectly affected. Therefore, the positive or negative externalities analysis will rely upon subjective information, e.g., psychological cost of moving because of a new road construction.

Related to the costs and benefits of externalities - if the project is large enough relative to the population - are the redistributive effects, which will affect the Gini index[25] for the entire jurisdiction, distancing even more a financial from an economic evaluation of the project.

[25] The Gini index concept is illustrated graphically in what is called a Lorenz curve as the area between a line that depicts perfect equality (F(x) = x) and a line that depicts the actual measured distribution in a specific population.

Table 7.1.2.1.1 (Brazilian Institute of Geography and Statistics 2010)

Gini Index - National and Subnational Governments 2010

Position	Federation Units	Gini index of nominal monthly income for individuals (10 years and older) distribution								
		Total	Men	Women	Region, Gender, and Total					
					Urban			Rural		
					Total	Men	Women	Total	Men	Women
	Brasil	**0,525**	**0,530**	**0,504**	**0,520**	**0,525**	**0,498**	**0,450**	**0,446**	**0,434**
1	Santa Catarina	0,454	0,463	0,416	0,454	0,461	0,419	0,406	0,426	0,348
2	Mato Grosso	0,485	0,486	0,465	0,489	0,491	0,465	0,431	0,423	0,400
3	Paraná	0,486	0,495	0,454	0,485	0,493	0,453	0,422	0,431	0,383
4	Rondônia	0,489	0,489	0,474	0,487	0,489	0,466	0,453	0,442	0,436
5	Rio Grande do Sul	0,489	0,499	0,460	0,489	0,497	0,463	0,439	0,463	0,382
6	Minas Gerais	0,494	0,505	0,461	0,494	0,505	0,460	0,407	0,410	0,373
7	Goiás	0,495	0,501	0,465	0,497	0,505	0,464	0,449	0,440	0,415
8	São Paulo	0,502	0,506	0,476	0,502	0,506	0,476	0,422	0,424	0,390
9	Espírito Santo	0,506	0,515	0,477	0,505	0,513	0,476	0,400	0,402	0,377
10	Mato Grosso do Sul	0,508	0,510	0,486	0,510	0,515	0,483	0,438	0,415	0,437
11	Pará	0,518	0,513	0,517	0,513	0,509	0,509	0,462	0,451	0,459
12	Maranhão	0,521	0,517	0,513	0,522	0,522	0,510	0,451	0,436	0,452
13	Acre	0,524	0,525	0,516	0,521	0,523	0,509	0,454	0,440	0,461
14	Bahia	0,526	0,528	0,513	0,526	0,529	0,508	0,405	0,385	0,417
15	Ceará	0,528	0,532	0,514	0,526	0,532	0,509	0,413	0,387	0,429
16	Tocantins	0,529	0,531	0,513	0,530	0,536	0,508	0,447	0,424	0,451
17	Alagoas	0,529	0,517	0,533	0,530	0,522	0,529	0,411	0,375	0,433
18	Paraíba	0,530	0,532	0,519	0,535	0,539	0,520	0,397	0,368	0,418
19	Pernambuco	0,530	0,531	0,519	0,531	0,534	0,518	0,387	0,359	0,409
20	Rio de Janeiro	0,530	0,534	0,514	0,530	0,534	0,514	0,374	0,375	0,356
21	Rio Grande do Norte	0,531	0,531	0,519	0,534	0,538	0,516	0,389	0,345	0,424
22	Roraima	0,535	0,539	0,525	0,532	0,538	0,518	0,481	0,460	0,502
23	Amapá	0,536	0,535	0,534	0,536	0,536	0,532	0,442	0,422	0,467
24	Piauí	0,536	0,536	0,527	0,535	0,538	0,522	0,434	0,412	0,445
25	Amazonas	0,538	0,538	0,530	0,531	0,532	0,521	0,450	0,436	0,449
26	Sergipe	0,543	0,545	0,534	0,540	0,543	0,527	0,407	0,380	0,431
27	Distrito Federal	0,591	0,592	0,581	0,590	0,591	0,580	0,521	0,511	0,535

Identifying who will receive the benefits of the project and what externalities it may generate is a substantial task, but one that will allow public managers to establish fairer user fees, tax increases, and internal rates of return, thereby diminishing the pricing system failure.

7.1.3 – Time

Of course the project timeframe cannot be dismissed. Sometimes, the political, social and even financial costs of not doing something when it is necessary are higher then the opportunity cost of not financing it through other existing options with lower interests rates, e.g., natural disaster. This is why it is critical to know on average how long it usually takes for the state to acquire funds by each available tool.

Another aspect of the variable time is how long it will take the state to yield a return on its investment. A period greater than thirty-five years takes PPP off the table, but could be perfect for a loan depending on the maturity and the grace period offered by the financial institution.

7.1.4 – Accountability

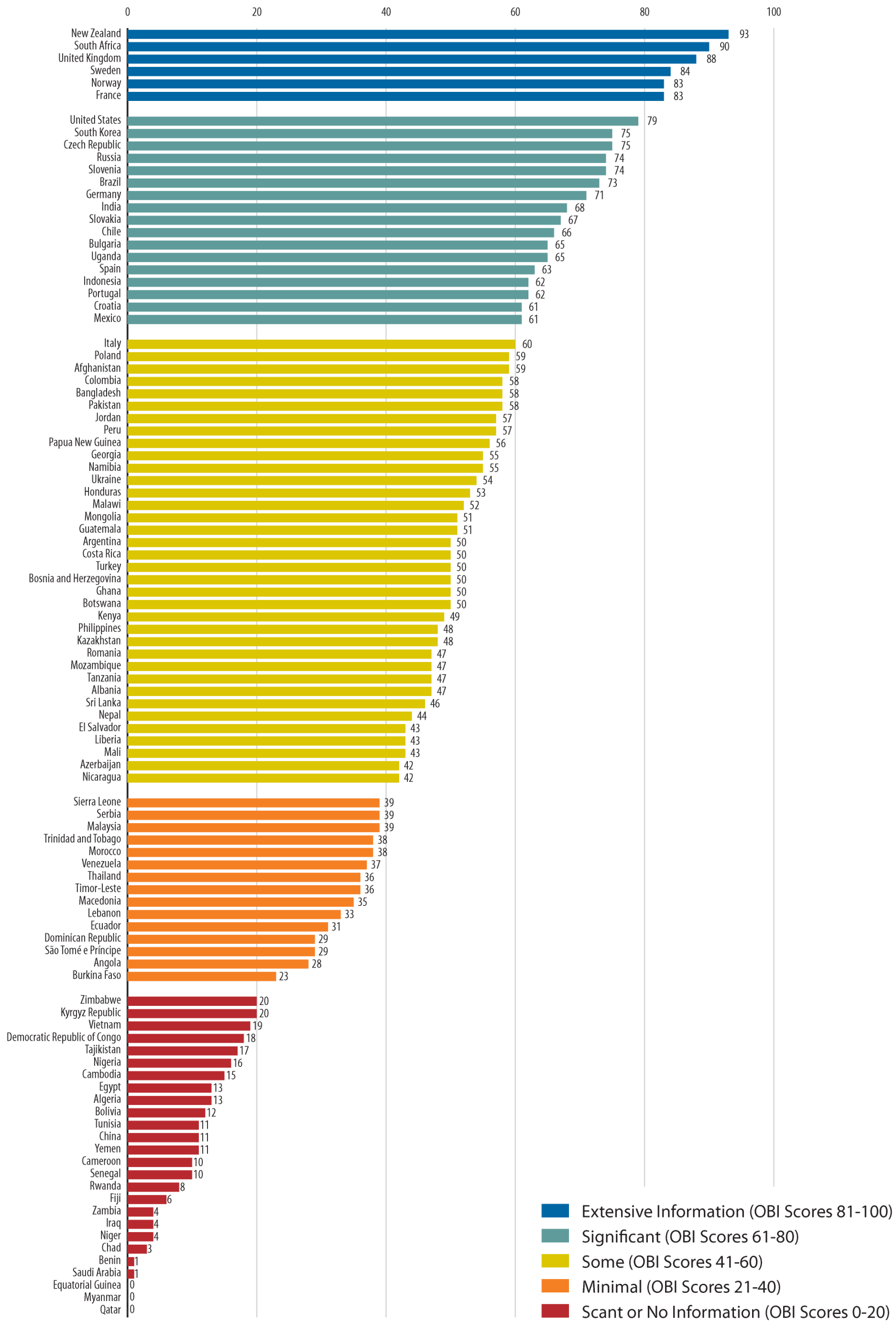
It is a fundamental principle of a democratic government to be able to identify who is the responsible for both good and bad decisions. When public funds are involved, taxpayers must be able to track the expenditures, identify who is receiving the payments and hold the right authorities responsible, whether it is for overspending or low quality service provision.

Transparency is an effective way to provide accountability to a financed investment. The last available data (chart 7.1.3.1) shows that the Brazilian budget transparency level is ranked twelfth among a hundred countries surveyed (International Budget Partnership 2012); it is clear then that both central and subnational governments are committed to transparency and it is a “no turning back” path.

When taxes or user fees can be directly linked to the investment beneficiaries, the latter can decide if the benefits generated by the service are worth its price and therefore apply pressure on the politicians to improve the efficiency and quality of the results.

If a project could be financed by more than one tool, everything else being constant, choosing the most transparent one is generally the soundest budgetary and political decision.

Chart 7.1.3.1



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8.0 – Conclusion

It is clear then, that it is no easy task to choose between the different types of financial tools at a state's disposal. Policy makers must deal with a variety of factors such as social and political pressure, cost management, economic crises and limited resources.

In order to bridge the investment gap in an effective and efficient manner, the government should address all aspects of its investment gap, with periodic and high quality training of its employees, continuous improvement of its institutional and legal framework, and strengthening the relationship with the private sector as well as other government organizations at both federal and subnational levels.

Effective and legitimate planning is also an important task because when short, medium, and long terms strategies are planned in a solid and thorough way, it will be possible to assemble a realistic priority list of investments. Consequently, public managers will have a relative stable set of projects to analyze, spurring administrative efficiency.

Once the costs, beneficiaries, time, optimum level of accountability and the expected relationship among them are defined for a specific project, it will be much more clear what financial tool is the best for the current scenario the state is going through. As a result, public managers will be able to provide policy makers with a better assessment, thus improving the investment decision-making process.

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