

**THE GEORGE WASHINGTON UNIVERSITY  
SCHOOL OF BUSINESS**

The Institute of Brazilian Issues – IBI  
Center for Latin America Issues  
Minerva Program – Spring 2014  
Washington-D.C.

**LONG-TERM SUSTAINABILITY OF RIO DE JANEIRO STATE BUDGET  
CREDIT OPERATIONS**

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Acknowledgments: I would like to thank

My parents for their affection, support, determination and tirelessness

My siblings for their companionship

My nephews for their joyfulness

Rosemary Faria for her complicity

Silvia Steinberg and Pedrão for their friendship

Cecilia Goia and Gerson Ritter for their affection and support

Kykah and Sergio Bernardes (*in memoriam*) for their curiosity

Eduardo Ayrosa and Isabel Cerchiaro for their support

Rita Gabriella and Claudio Lenz for their friendship

Ursula Lima for her companionship

Paulo Tafner for his friendship, guidance and wisdom

Jose Correa da Silva for his support

Sergio Abramovitch for his patience

Rosely de Faria and Nina Mello for their assistance

Luísa Mazer for her alacrity

Liliam Anselmo for her companionship

Reid Click for his help

James Ferrer for mediating

Altamir Santos for his help

Jorge Dantas, Katia Quinelato, José Cruz, Paula Belém, João Maluf Jr. and Erika Buna for their affection, help and friendship



## Table of Contents

|  |    |
|--|----|
| 1. Introduction .....  | 5  |
| 2. Public Budget.....  | 7  |
| 2.1 Law no. 4,320 dated March 17 1964 and the Constitution of the<br>Federative Republic of Brazil ..... | 8  |
| 2.2 Fiscal Responsibility Law .....  | 10 |
| 2.3 Budget Law of Rio de Janeiro State.....  | 11 |
| 2.3.1 Multiannual Plan (PPA).....  | 11 |
| 2.3.2 Budget Guidelines Law (LDO) .....  | 12 |
| 2.3.3 Annual Budget Law (LOA) .....  | 12 |
| 3. State of Rio de Janeiro Debt.....   | 14 |
| 3.1 Debt Composition.....  | 15 |
| 3.2 Related Index.....   | 26 |
| 4. Risks Associated to State of Rio de Janeiro Debt.....   | 30 |
| 4.1 The Exchange Risk .....  | 32 |
| 4.2 The Insolvency Risk .....  | 34 |
| 5. Conclusions .....   | 39 |
| 6. References .....  | 42 |
| 6.1 Related Legislation .....  | 49 |

## 1. Introduction

The Brazilian budgetary process is structured to equalize governmental inter-temporal preferences. Thus, it combines strategic longer-term preferences, with achievements and short-term needs. There are three interrelated tools in the process: The Multiannual Plan (PPA), the Budget Guidelines Law (LDO) and the Annual Budget Law (LOA). These tools are provided in the Federal Constitution (FC) enacted in 1988.

The PPA covers planning for a period of four years, playing a strategic role in budget management. The LDO acts as an intermediary tool connecting PPA and LOA, and is responsible for the tactical level, valid for one year. LOA, on the other hand, refers to the operational level and covers the calendar year (between January 1 and December 31).

The budget allows policy makers to act with discretion to alter the costs through the adoption of credit. They can be of three types: the additional credits may be expressly permitted in the text of the LOA; however, special credits (the creation of new budget allocations) require the approval of the Legislative Branch, while extraordinary credits (unforeseeable and urgent expenditures) dispense with approval and may be opened by means of a decree or interim measure and should be immediately submitted to the Legislative body.

In due course, as a way to crystallize certain past preferences, there has been a continuous growth of mandatory constitutional and legal expenses. This contractual tie reduces the degree of action or discretion on the part of the public officer. In any case, if the Legislative wants to create marked revenue, this should be done through a constitutional amendment, given that the FC itself prohibits earmarking taxes.

The Constitution has been amended over time. Several of these changes have meant that the budget has been passed with an increasing share of their revenues flagged. The earmarking eventually crystallizes allocation preferences, imposes expenditures, limits the control of disbursements and

reduces the investment capacity of the State. As a result, any more ambitious investment programs will now depend increasingly on proceeds from loans. These, in turn, become part of the list of budget constraints for subsequent periods, hence reinforcing the tendency to limit resources for investment.

The increasing occurrence of state investments being supported by credit transactions in domestic and foreign currency, besides increasing the list of restrictions on future budgetary execution, also bring increased risk associated with currency fluctuations and restrictions.

Thus, given the inflexibility of the public budget due to flagged expenses and to the continuous need of conducting credit operations, an in-depth analysis of the social and economic gains of growing budget rigidities and risks associated with state debt that embeds currency risk has become necessary. The analysis herein proposed is expected to produce suggestions for the creation/development of mechanisms to ensure long-term fiscal sustainability of federal entities.

## 2. Public Budget

The public budget is set in a wider context of budget planning and policy. It shows the strategic plan during four years, connecting policy objectives with detailed annual budget plans. The budget has an authoritative character of public expenses. As said before, it is composed of three instruments: the Multiannual Plan (PPA), the Budget Guidelines Law (LDO) and the Annual Budget Law (LOA).

The budget follows certain principles defined by laws<sup>1</sup>, such as<sup>2</sup>:

1. Unity or Totality: Each federal entity should have only one budget, which contains all the projected revenue and expected expenditure in each financial year.
2. Universality: The budget of each federal entity should contain all revenues and expenditures of all powers, of government offices, of entities, of funds and of entities installed and maintained by the public sector.
3. Annularity or Periodicity: These determine the budget period. The budget must begin on January 1 and end on December 31.
4. Exclusivity: The Annual Budget cannot contain anything besides the projected revenue and expected expenditures. There are, however, a few exceptions.
5. Gross Budget: The revenue and expenditures specified in the LOA must be registered by the total value and the gross value without any deduction.
6. Legality: Budgetary instruments must be formalized as a law.
7. Publicity: When the budget is formalized as a law and is made public, the public sector is authorized to execute the expenditures.

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<sup>1</sup> Fiscal Responsibility Law; Law no. 4,320/1964; Constitution of Brazil.

<sup>2</sup> STN – Brazilian National Treasury Secretary. **Manual de Contabilidade Aplicada ao Setor Público da Secretaria do Tesouro Nacional.** Available at: [https://www.tesouro.fazenda.gov.br/images/arquivos/artigos/Parte\\_I\\_-\\_PCO.pdf](https://www.tesouro.fazenda.gov.br/images/arquivos/artigos/Parte_I_-_PCO.pdf) (accessed in March 2014)

8. Transparency: Consists in giving transparency to all citizens with regard to the budget.
9. No allocation of tax revenues: Tax revenues must not be marked to fund government offices or for other expenditures. Nevertheless, there are some exceptions to this principle.

## 2.1 Law no. 4,320 dated March 17 1964 and the Constitution of the Federative Republic of Brazil

The Law of General Rules of Financial Law (Law no. 4,320) outlined the budgetary principles and preceded the period called Economic Action Plan of the Government (PAEG)<sup>3</sup>. One of the goals of this period was the reduction of inflation rates recorded in previous years; this reduction was made possible through a tight monetary policy and fiscal adjustment.

This law establishes general rules governing the Financial Law with respect to preparing and controlling budgets and balance sheets for the Union, the States, the Municipalities and the Federal District. It defines how the budget bill should be elaborated, certain guiding principles and what should be included in the budget - detailing the types of income and expenses.

It is worth noting that Law no. 4,320 predates the Brazilian Constitution and was not revoked by the same. The Federal Constitution of 1988 provides for the so-called golden rule<sup>4</sup>, which is essential for the sustainability of the contraction of loans because it defines that the contracted operation cannot subsidize a current expense.

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<sup>3</sup> Silva, Anderson C.; Carvalho, Lena O.; Medeiros, Otavio L. – organizadores (2009). **Dívida Pública: a experiência brasileira**. – Brasília: Secretaria do Tesouro Nacional: Banco Mundial, 2009. Parte 1, Capítulo 2. Available at: [http://www3.tesouro.gov.br/divida\\_publica/downloads/livro/livro\\_eletronico\\_completo.pdf](http://www3.tesouro.gov.br/divida_publica/downloads/livro/livro_eletronico_completo.pdf) (accessed in March 2014)

<sup>4</sup> Federal Constitution - Article 167. "The following are forbidden: (...) III - the realization of loans that exceed the amount of capital expenditures, except those authorized by supplementary or special credits with specific purpose and approved by the Legislature by an absolute majority;"



Furthermore, the Federal Constitution includes the Multiannual Plan<sup>5</sup> and the Budget Guidelines Law<sup>6</sup> for the Brazilian legal apparatus. The LDO was an innovation in Brazilian legislation and operates in the tactical planning of the public budget while the PPA operates in strategic planning.

With this, Brazil has adopted a System of Integrated Planning known as the Planning-Budget Process, based on the Multiannual Plan (PPA), the Budget Guidelines Law (LDO) and the Annual Budget Law (LOA).

The PPA is composed in the first year of the term of a head of state and is valid for four years, as the term of a head of state lasts four years; a governor plans for three years of his/her term and the first year of the term of his/her successor by means of the PPA.

In Brazilian administrative law, public budgeting is an authorizing law, meaning the Legislature authorizes the Executive to undertake certain expenses. The bill is solely the initiative of the Head of the Executive and must follow the principles listed above. This project is submitted to the Legislature for consideration.

It must be emphasized that the LOA is merely an instrument that authorizes the execution of expenditures that are prepared from estimates. Thus, if the income earned during the year is greater than estimated, the government directs a bill to the Legislative House requesting authorization to allocate the excess. If expenses exceed revenues, the government is unable to implement the budget in its entirety, being forced to cut costs.

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<sup>5</sup> Federal Constitution - Article 165 "Laws of initiative of the executive branch shall establish: (...) Paragraph One. The law instituting a multiannual plan shall establish, by region, guidelines, objectives and targets of the federal public administration for capital expenditures and other such resulting thereof and for those on continuous programs."

<sup>6</sup> Federal Constitution - Article 165 (...) "Paragraph Two. The appropriations bill will understand the goals and priorities of the federal public administration, including capital expenditure for the ensuing financial year, will guide the preparation of the annual budget law, shall provide for the changes in tax laws and establish policy for the official financial agencies."

## 2.2 Fiscal Responsibility Law

The Fiscal Responsibility Act issued on May 4 2000 establishes rules for public finance accountability in fiscal management. This responsibility requires planned and transparent action, in which deviations and risks that could affect the balance of public accounts are prevented and corrected. This is done by complying with goals for results established between revenues and expenses and by obedience to limits and conditions with respect to waiver of revenue, generation of added expenses with staff, social security and others, and consolidated debt securities, loans, including advancement of revenues, concession of guarantees and enrollment in outstanding debts.<sup>7</sup>

Among other goals, it imposes restrictions on raising financing and generating costs, which is an important tool in the sustainability of public finances. One of the most striking aspects of LRF is the extension of compulsory implementation, by states and especially by the municipalities, of many procedures that have been put in practice for some time by the Federal Government, such as:

1. Inclusion in the budget of all expenditures and revenues related to public debt;
2. Highlighting separately in the budget bill the amount of public debt being refinanced;
3. Establishment of a programming and disbursement schedule shortly after the publication of the budget;
4. Obtaining positive primary results for application in reducing debt;
5. Segregation of financial funds pertaining to general and civil servant social security regimes;
6. Bi-monthly publication of the summarized budget execution report.<sup>8</sup>

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<sup>7</sup> Federal Complementary Law no. 101 dated May 4, 2000. Available at: [http://www.planalto.gov.br/ccivil\\_03/leis/LCP/Lcp101.htm](http://www.planalto.gov.br/ccivil_03/leis/LCP/Lcp101.htm) (accessed in March 2014)

<sup>8</sup> The Summarized Budget Execution Reports and the Fiscal Management Reports of the Department of Finance of the State of Rio de Janeiro are available at: [http://www.transparencia.rj.gov.br/sefaz/faces/sitios-transparencia-navigation/menu\\_sitios\\_analiseContas/Analise-](http://www.transparencia.rj.gov.br/sefaz/faces/sitios-transparencia-navigation/menu_sitios_analiseContas/Analise-)

The LRF was considered an unprecedented law in the public finances of Brazil, as it defined criteria, conditions and limits on budgetary, financial and property management, implementing new mechanisms of control of public spending.<sup>9</sup>

## 2.3 Budget Law of Rio de Janeiro State

Certain instruments make up the state budget of Rio de Janeiro and follow the guiding principles of the Brazilian budgetary process. Below is a brief description of each.

### 2.3.1 Multiannual Plan (PPA)

It is a strategic plan which seeks to order government actions that lead to achieving the goals and objectives set for the four-year period (2012 to 2015), as defined by State Law no. 6,379 dated January 9 2013.<sup>10</sup>

The law of the PPA is composed of four Annexes: Annex I – Regional Planning for the State of Rio de Janeiro; Annex II – Sectorial Programming of the Executive Branch; Annex III – Programming of Independent State Enterprises; Annex IV – Programming of Other Powers.

It is noteworthy that no investment whose execution exceeds one fiscal year may be initiated without prior inclusion in the multi-year plan, under penalty of criminal liability.

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Relatorios?\_afrLoop=1266522884799000&datasource=UCMServer%23dDocName%3A1169978&\_adf.ctrl-state=pk165zqcw\_203#topoPagina (accessed in March 2014)

<sup>9</sup> It is worthwhile noting that there is a guidebook on the Fiscal Responsibility Law: **Cartilha de Orientação sobre a Lei de Responsabilidade Fiscal**. Ministério do Orçamento, Planejamento e Gestão). Available at: [http://www.bndes.gov.br/SiteBNDES/export/sites/default/bndes\\_pt/Galerias/Arquivos/bf\\_bancos/cart\\_mp1.pdf](http://www.bndes.gov.br/SiteBNDES/export/sites/default/bndes_pt/Galerias/Arquivos/bf_bancos/cart_mp1.pdf) (accessed in March 2014)

<sup>10</sup> Available at: [http://download.rj.gov.br/documentos/10112/780695/DLFE-58005.pdf/Livro\\_PPA\\_2013\\_VOL\\_II.pdf](http://download.rj.gov.br/documentos/10112/780695/DLFE-58005.pdf/Livro_PPA_2013_VOL_II.pdf) (accessed in March 2014)

We underscore some important events taking place in the State of Rio de Janeiro whose activities are listed in the PPA, such as the World Conference on Sustainable Development, entitled Rio +20 in 2012; the Confederations Cup in 2013; the World Cup in 2014 (the Rio Maracanã stadium will be hosting the World Cup final); and the Olympic Games in 2016.<sup>11</sup>

### **2.3.2 Budget Guidelines Law (LDO)**

It guides the preparation of the budget in order to fit the guidelines and objectives set out in the multiannual plan, defines the goals in terms of programs and is restricted to the year in question. The 2014 LDO is set out in State Law no. 6,485 dated July 9, 2013.

The LDO establishes parameters for the implementation of the annual budget based on the PPA to ensure the end goal without undermining the control of the Treasury. The PPA contains a 3-year breakdown for the current mandate and the first year of the next. The LDO seeks to guide the actions of Internal Revenue as well as specify, by means of sectorial detailing, indicators, actions, and expenditures for the same period.

### **2.3.3 Annual Budget Law (LOA)**

The LOA is defined by State Law no. 6,668 dated January 13 2014 and is composed of the Fiscal Budget, the Investment Budget of State Enterprises and the Federal Social Security Budget.

- a) Fiscal Budget: refers to the three powers and to direct and indirect administrative agencies.
- b) Federal State Enterprise Investment Budget: companies in which the state holds a majority of shares and is entitled to vote.

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<sup>11</sup> Silva, Mauro Osorio da. **Trajetória e Perspectivas do Estado do Rio de Janeiro no Cenário de Mega-Eventos**. Available at: <http://www.ie.ufrj.br/datacenter/ie/pdfs/seminarios/pesquisa/texto2311.pdf> (accessed in March 2014)

c) Social Security budget: entities related therein to funds and foundations maintained by the Government.

It is up to every unit of public administration to set down its priorities with respect to spending, abiding by certain constitutional or statutory limitations.

The Constitution states that the initiatives governing PPA, LDO and LOA should be mandated by the Executive. Thus, the remaining branches refer their budget proposals to be consolidated to those of the Executive, which forwards the bill to the Legislative branch for consideration.

### 3. State of Rio de Janeiro Debt

The public debt of a country is considered sustainable if government budget constraints can be satisfied without rupturing monetary and fiscal policies. This implies that the value of public debt must not exceed the present value of all future primary surpluses.<sup>12</sup>

A given debt is said to be sustainable if future revenues are sufficient to pay for primary expenditures, including interest payment due to the debt stock. Thus, the present value of future primary surpluses is equal or superior to the current public debt stock.<sup>13</sup>

The federal government created certain instruments to control debt by setting limits on debt formation, such as: the Fiscal Restructuring and Adjustment Program (PAF) and an analysis based in certain LRF indicators.

In 1997, Law no. 9,496 was published, which represented the first step towards establishing a sustainable fiscal and debt policy. The Law offered the states an opportunity both to increase the maturity of their debts and to lower their interest and amortization payments.<sup>14</sup>

Improvements in the fiscal situation of the State of Rio de Janeiro made it possible to raise funds from federal banks and multilateral organizations within

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<sup>12</sup> Costa, Carlos Eugênio – **Sustentabilidade da Dívida Pública** – In: Anderson Caputo Silva, Lena Oliveira de Carvalho, Otavio Ladeira de Medeiros (organizadores). – Dívida Pública: a experiência brasileira – Brasília: Secretaria do Tesouro Nacional: Banco Mundial, 2009. p. 81. Available at: [http://www3.tesouro.gov.br/divida\\_publica/downloads/livro/livro\\_eletronico\\_completo.pdf](http://www3.tesouro.gov.br/divida_publica/downloads/livro/livro_eletronico_completo.pdf) (accessed in March 2014)

<sup>13</sup> Pedras, Guilherme (2000). **Public Debt Sustainability in Brazil**. Minerva Program, Spring 2000 – Institute of Brazilian Business and Public Management Issues – The School of Business and Public Management – The George Washington University, Washington D.C.p.13

<sup>14</sup> Barros Filho, Roberto G. (2013). **Rio de Janeiro's Investment Gap – Supporting the Strategic Decision Making Process Regarding the State Financial Needs**. Minerva Program, Spring 2013 – Institute of Brazilian Business and Public Management Issues – The School of Business and Public Management – The George Washington University, Washington D.C. p. 8, 9

the framework set forth by the Fiscal Adjustment Program (FAP), maintained with the Union as a result of the 1999 debt refinancing agreement.<sup>15</sup>

The International Monetary Fund (IMF) and the World Bank (WB) define public debt management as follows:

*“Sovereign debt management is the process of establishing and executing a strategy for managing government debt in order to raise the required amount of funding, achieve its risk and cost objectives, and meet any other sovereign debt management goals the government may have set, such as developing and maintaining an efficient market for government securities.”<sup>16</sup>*

In this chapter the debt of the State of Rio de Janeiro will be analyzed (RJ).

### 3.1 Debt Composition

Transparency in government operations is needed for finance, and governance and fiscal integrity, since it occurs through public access to government information as to its structure and functions, fiscal policy intentions, public sector accounts and tax projects.<sup>17</sup>

Thus, the State of Rio de Janeiro strives to keep the fiscal transparency site updated to allow public access to a series of information pertaining to the State of Rio de Janeiro.<sup>18</sup> The composition analysis of the RJ debt was undertaken on the basis of information extracted from the fiscal transparency website.

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<sup>15</sup> Villela, R. and Tafner, P. S. B. (2009). **“Finanças públicas do estado do Rio de Janeiro: modernização, eficiência e preparação para o desenvolvimento sustentável”**. In: Fabio Giambiagi; André Urani. (Org.). Rio: A hora da virada. 1ª ed. Rio de Janeiro: Campus Elsevier, 2009, v. 1, p. 22, 23.

<sup>16</sup> **Guidelines for Public Debt Management** (IMF and WB) (2003) p. 2. Available at: <http://www.imf.org/external/np/mfd/pdebt/2003/eng/am/120903.pdf> (accessed in March 2014)

<sup>17</sup> Kopits, George; Craig, Jon (1998). **Transparency in Government Operations**. International Monetary Fund (IMF). February 1998. Available at: <http://www.imf.org/external/pubs/ft/op/158/op158.pdf> (accessed in March 2014)

<sup>18</sup> SEFAZ-RJ served as the source of information contained in this work, taken from the fiscal transparency website. Rio de Janeiro State Secretariat of Finance. **Transparency Portal**.

Table 1 shows the financial honored debt of RJ including direct and indirect administration in January 2014. Direct Administration is composed of agencies that are directly linked to the central power while the indirect administration is one composed by organizations with their own legal personality, which were created to conduct government activities in a decentralized manner.<sup>19</sup>

It is worth noting that the limitations imposed on the states by means of article 7 of Federal Senate Resolution no. 43/2001 (RSF 43/2001) should only be considered for the calculation of intra debt limit. There are debts that are not computed when calculating the limits, such as those present in paragraph 3 of article 7 of the above resolution.<sup>20</sup>

In examining table 1 together with figures 1 and 2, we find that 95% of the direct administration's honored debt in January 2014 refers to domestic debts (contracted with Brazilian institutions) while only 5% refers to external debt (incurred with international institutions). Of these, 85% of the honored debt refers to intra limit debt and 15% to extra limit debt. The definition of Real Net

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Available at:  
[http://www.transparencia.rj.gov.br/sefaz/faces/oracle/webcenter/portalapp/pages/sitios/transparencia/homeTransparencia2.jspx?\\_afLoop=253260982692000&\\_afWindowMode=0&\\_adf.ctrl-state=8tyl70lop\\_4](http://www.transparencia.rj.gov.br/sefaz/faces/oracle/webcenter/portalapp/pages/sitios/transparencia/homeTransparencia2.jspx?_afLoop=253260982692000&_afWindowMode=0&_adf.ctrl-state=8tyl70lop_4) (accessed in March 2014).

<sup>19</sup> Di Pietro, Maria Sylvia Zanella (2012). **Direito Administrativo**. 25<sup>a</sup>.ed – São Paulo: Atlas, 2012. p.466

<sup>20</sup> RSF 43/2001 – article 7º (...) "Paragraph 3 are excluded from the limits of the main clause of the following types of loans: (as amended by Resolution No. 19/2003.)  
I – those contracted by the States and Municipalities with the Union, multilateral lending agencies or federal official credit or sponsoring institutions, for the purpose of financing investment projects to improve revenue administration and tax, financial and asset management under the program proposed by the Federal Executive Branch; (Included in Resolution 19/2003)  
II – those contracted under the National Program for Efficient Public Lighting – Reluz, established based on Law No. 9991, of July 24 2000. (Included in Resolution 19/2003)  
III – those contracted directly with the National Bank for Economic and Social Development (BNDES), or with their financial agents authorized under the loan program to states and to the Federal District pursuant to art. N-9 of resolution 2,827, dated March 30 2001, the National Monetary Council (CMN), as amended.(Included in Resolution 29/2009)  
IV – those intended to finance the infrastructure to host the FIFA World Cup 2014 and the Olympics and Paralympics Games in 2016, authorized by the National Monetary Council (CMN) - (Included in Resolution 45/2010)"



Revenue (RLR) and target % Financial Debt / RLR present in PAF, are defined according to Law no. 9,496/1997.<sup>21</sup>

Table 1 – Financial Honored Debt of Rio de Janeiro State including Direct and Indirect Administration – January 2014

| <b>Financial Debt of RJ State (Honored Dir. + Ind. Adm.) – 2014 (BRL)</b> |                          |                         |                    |
|---|--------------------------|-------------------------|--------------------|
|   | <b>January</b>           |                         |                    |
|   | <b>Principal Payment</b> | <b>Interest Payment</b> | <b>Total</b>       |
| <b>DIRECT ADMINISTRATION</b>  | <b>242,343,345</b>       | <b>219,493,683</b>      | <b>461,837,028</b> |
| <b>INTRA LIMIT</b>  | <b>190,766,221</b>       | <b>201,303,965</b>      | <b>392,070,187</b> |
| STN - Refin. Law 9,496/97   | 133,411,910              | 137,637,398             | 271,049,307        |
| STN/BACEN – Debt from BERJ  | 45,364,494               | 63,222,267              | 108,586,761        |
| STN - BONUS/DMLP  | 0                        | 0                       | 0                  |
| STN - Refin. Law 8,727/93 - Estado  | 9,585,938                | 237,022                 | 9,822,960          |
| STN - Refin. Law 8,727/93 - Cehab   | 2,218,974                | 198,056                 | 2,417,030          |
| STN - Refin. Law 8,727/93 - Bank RJS in Liq.                              | 184,906                  | 9,222                   | 194,128            |
| <b>EXTRA LIMIT</b>  | <b>51,577,123</b>        | <b>18,189,718</b>       | <b>69,766,842</b>  |
| <b>DOMESTIC</b>   | <b>40,594,300</b>        | <b>12,671,996</b>       | <b>53,266,296</b>  |
| BNDES – METRO   | 9,946,384                | 3,200,075               | 13,146,460         |
| BNDES – PMAE I & II   | 367,930                  | 77,471                  | 445,401            |
| BNDES – SAFETY  | 1,665,297                | 619,982                 | 2,285,280          |
| BNDES – PROCOPA   | 0                        | 0                       | 0                  |
| BNDES – METRO LINE 4  | 0                        | 0                       | 0                  |
| BNDES – METRO LINE 4 - PHASE II   | 0                        | 0                       | 0                  |
| CEF/PENAF   | 0                        | 0                       | 0                  |
| CEF/SANITATION  | 474,034                  | 1,064,062               | 1,538,096          |
| CEF/COUNTERPART PAC   | 5,941,092                | 2,446,267               | 8,387,359          |
| CEF/PROCOI  | 0                        | 2,276,978               | 2,276,978          |
| BANCO DO BRASIL – PEF I & II  | 1,591,354                | 623,451                 | 2,214,805          |
| BANCO DO BRASIL – SEAPPA A & B  | 210,483                  | 56,808                  | 267,291            |
| BANCO DO BRASIL – PRO CITIES  | 0                        | 0                       | 0                  |

<sup>21</sup> Law no. 9,496 / 1997 - "Art 2 The Program Restructuring and Fiscal Adjustment in addition to the specific objectives for each unit of the Federation, contain obligatorily goals or commitments to:

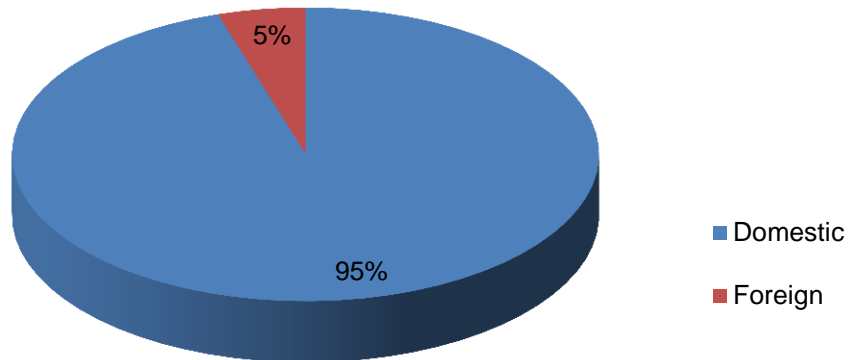
- I – financial debt in relation to the actual net revenue - RLR;
- II – primary outcome, understood as the difference between revenues and non-interest expenses;
- III – expenditures for civil service;
- IV – raising own revenues;
- V – privatization, permit or concession of public services, administrative and property reform;
- VI – investment expenditures in relation to RLR.

Single paragraph: It is understood that real net revenue, for the purposes of this Act, are the revenues realized in the previous twelve months immediately preceding the month in which we are investigating, excluding revenues from credit operations, disposal of assets, or voluntary transfers or of donations received for the specific purpose of meeting capital expenditure and, in the case of states, transfers to municipalities for constitutional and legal investments."

|   |                    |                    |                       |
|---|--------------------|--------------------|-----------------------|
| BANCO DO BRASIL – PRO INVEST                  | 0                  | 0                  | 0                     |
| BANCO DO BRASIL – PRO CITIES II               | 0                  | 0                  | 0                     |
| SRF – Installment PASEP – MP no. 38/02        | 1,576,897          | 0                  | 1,576,897             |
| INSS - Installment – MP no. 2,187/01          | 1,950,181          | 0                  | 1,950,181             |
| Installment Fed. Law 11,941/2009              | 5,755,298          | 2,200,250          | 7,955,548             |
| Installment transf. Municipalities IPVA/ICMS  | 11,115,349         | 0                  | 11,115,349            |
| STN - Refin. Law 9,496/97 – COMMISSION        | 0                  | 106,651            | 106,651               |
| <b>FOREIGN</b>                                | <b>10,982,823</b>  | <b>5,517,722</b>   | <b>16,500,546</b>     |
| BIRD/PET, PET(adit.), PET II e PET II (adit.) |                    |                    | 0                     |
| BID/NOVA BAIXADA                              | 10,982,823         | 5,517,722          | 16,500,546            |
| BID/PDBG-US\$50 million                       |                    |                    | 0                     |
| BID/PDBG-US\$300 million                      |                    |                    | 0                     |
| JBIC/PDBG-US\$294,2 million                   |                    |                    | 0                     |
| BIRD – RIO RURAL and RIO RURAL (adit.)        |                    |                    | 0                     |
| BIRD – PRODESF                                |                    |                    | 0                     |
| BID – PROFAZ                                  |                    |                    | 0                     |
| BIRD – PRO MANAGEMENT                         |                    |                    | 0                     |
| BID – PRODETUR                                |                    |                    | 0                     |
| BIRD – PROHDUMS                               |                    |                    | 0                     |
| BID – PSAM                                    |                    |                    | 0                     |
| CAF – POE                                     |                    |                    | 0                     |
| CAF – PROVIAS                                 |                    |                    | 0                     |
| PMU   |                    |                    | 0                     |
| DPL III – PRODESF II                          |                    |                    | 0                     |
| CAF – PROCOPA II                              |                    |                    | 0                     |
| CAF – ARCO METROPOLITANO                      |                    |                    | 0                     |
| BID – SOCIAL INCLUSION                        |                    |                    | 0                     |
| BIRD – PROMIT                                 |                    |                    | 0                     |
| <b>INDIRECT ADMINISTRATION HONORED</b>        | <b>474,516</b>     | <b>19,559</b>      | <b>494,075</b>        |
| <b>TOTAL</b>                                  | <b>242,817,861</b> | <b>219,513,242</b> | <b>462,331,103</b>    |
| <b>Real Net Revenue (RLR)</b>                 |                    |                    | <b>35,396,297,686</b> |
| <b>% Financial Debt / RLR</b>                 |                    |                    | <b>1.31%</b>          |

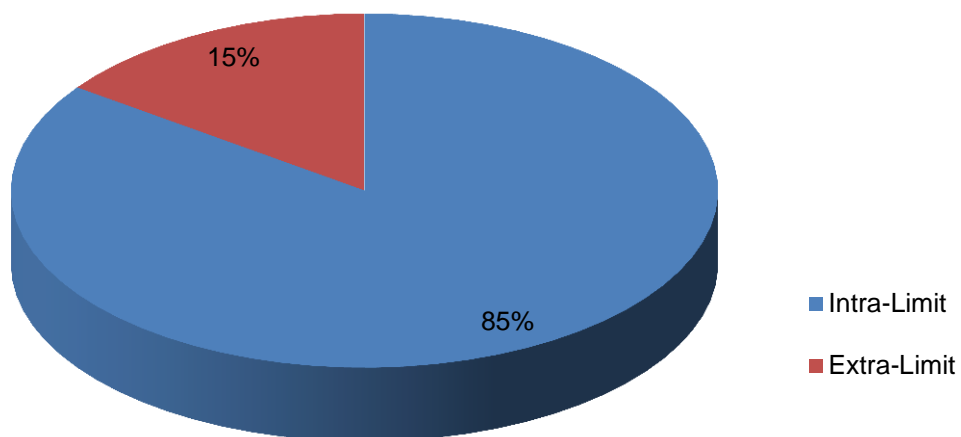
Source: SEFAZ-RJ (Debt Service – January 2014 - xls)

Figure 1: Financial Debt Profile up to Jan 2014 – Domestic vs. Foreign



Source: SEFAZ-RJ (Debt Service – January 2014 - xls)

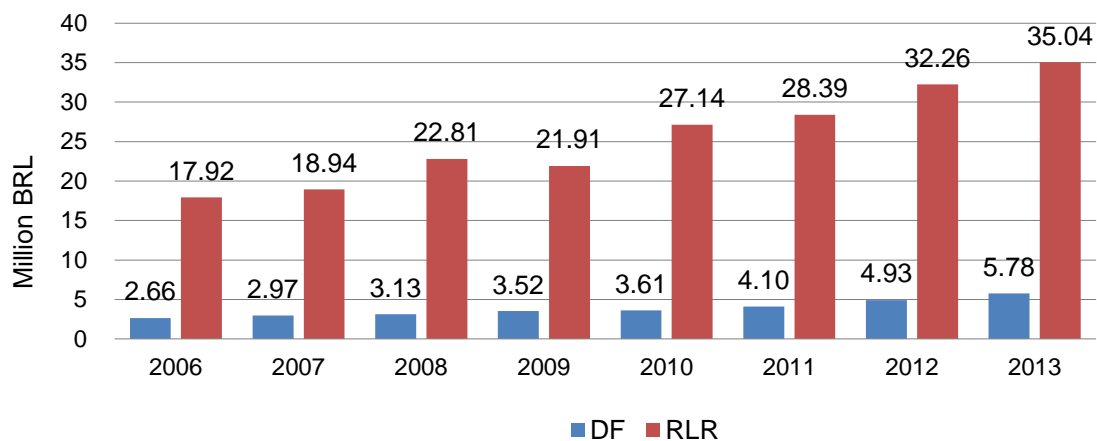
Figure 2: Financial Debt Profile up to Jan 2014 – Intra-Limit vs. Extra-Limit



Source: SEFAZ-RJ (Debt Service–January 2014 - xls)

Graphs 1 and 2 show an increase in RJ Financial Debt (DF) in 2013 in 117.43% since 2006, but the Real Net Revenue (RLR) increases 95.51% in the same period. Thus we have the DF/RLR<sup>22</sup> relation oscillating between 13.29% and 16.49% during the entire period, with greatest variables between 2010 and 2013.

Graph 1: Financial Debt (DF) and Real Net Revenue (RLR) Evolution – 2006 to 2013

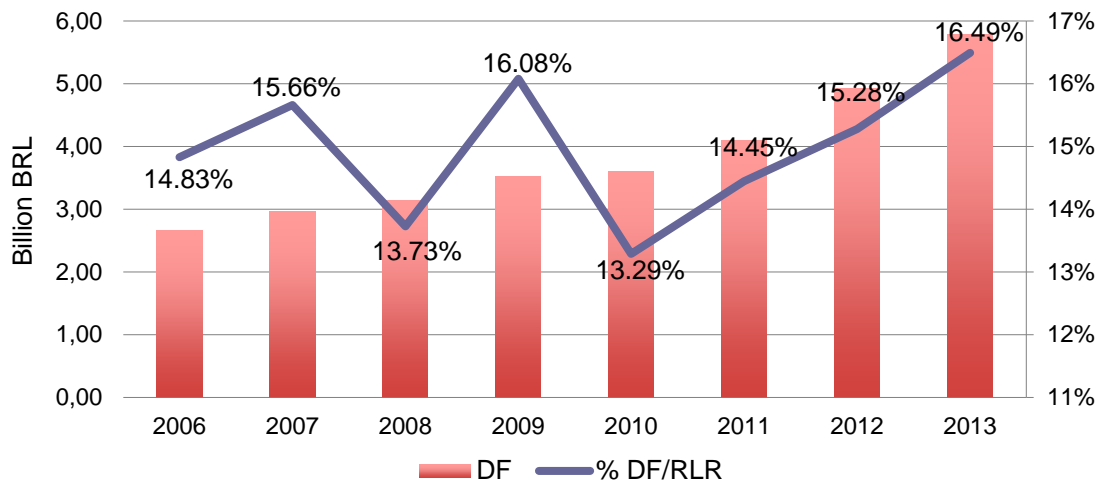


Source: SEFAZ-RJ (Debt Service–January 2014 - xls)

<sup>22</sup> It is of note that the values of Table 1 and Graph 2 deal with financial debt in different periods, but that the RLR comprise the same 12-month period, according to the STN website (available at: [http://www3.tesouro.fazenda.gov.br/estados\\_municipios/receita\\_liquida.asp](http://www3.tesouro.fazenda.gov.br/estados_municipios/receita_liquida.asp) (accessed in March 2014)).

The concept of RLR is found in Law No. 9.496/97 Article 2, Sole Paragraph, thus transcribed: RLR is the realized revenue in the twelve months immediately prior to the month under investigation, excluding revenues from credit operations, asset disposal, voluntary transfers or donations for the specific purpose of meeting capital expenditures and, in the case of states, transfers to municipalities due to constitutional and legal interests. One can see that Table 1 represents the financial debt in Jan 2014 while Graph 2, the Financial Debt in a period of one year for the years from 2000 to 2013.

Graph 2: Percentage of Financial Debt (DF)/ Real Net Revenue (RLR) and Financial Debt (DF) Evolution – 2006 to 2013

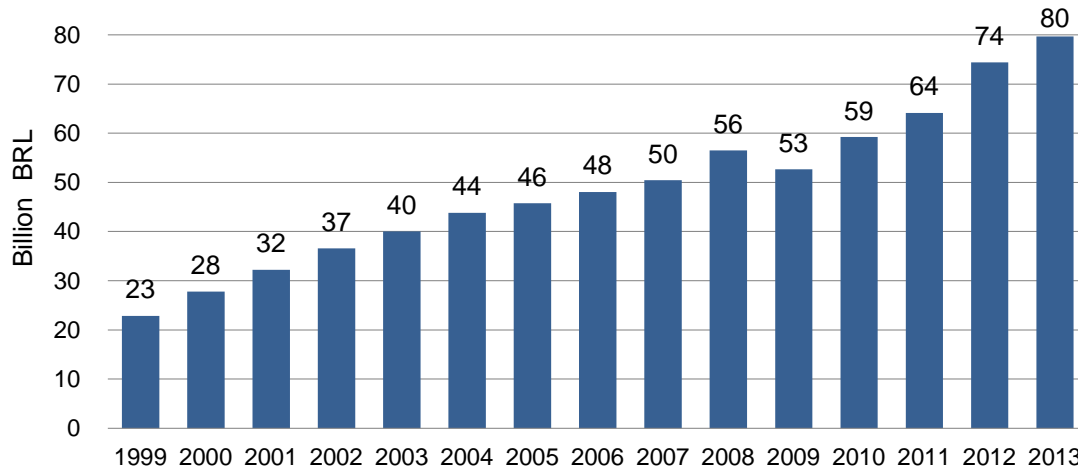


Source: SEFAZ-RJ (Debt Service)

When analyzing Graph 3, one sees that the volume of consolidated debt from 1999 to 2013 increased 249%. One of the reasons for this increase could be related to costs arising from major events that will occur in the state; another reason for increasing the volume of debt arises from the same debt rollover.<sup>23</sup>

<sup>23</sup> Batista, Jorge Luis Dantas (2014). **Public Budgeting and Expenses at Rio de Janeiro State**. Minerva Program, Spring 2014 – Institute of Brazilian Business and Public Management Issues – The School of Business and Public Management – The George Washington University, Washington D.C. p. 20 - 25

Graph 3: Consolidated Debt – 1999 to 2013

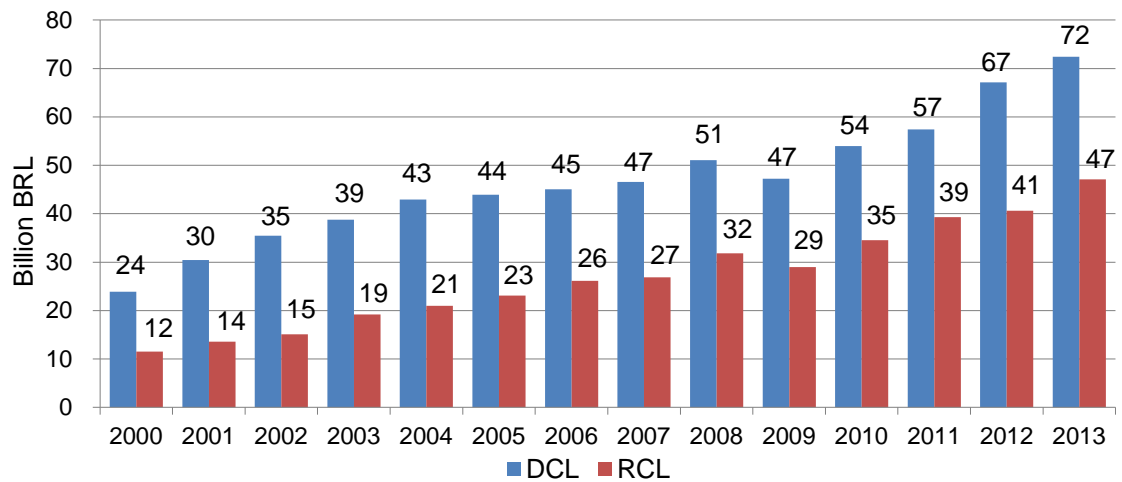


Source: SEFAZ-RJ (Stock of Public Debt for RJ State–January 2014 - xls)

On analyzing graphs 4 and 5, one notices that the State of Rio de Janeiro has been within the legal bounds since 2005, anticipating normative requirements, according to the Resolution of the Federal Senate, which states that the net consolidated debt of the states shall not exceed two times the current revenue from the end of 2001 up to the end of the fifteenth financial period.<sup>24</sup>

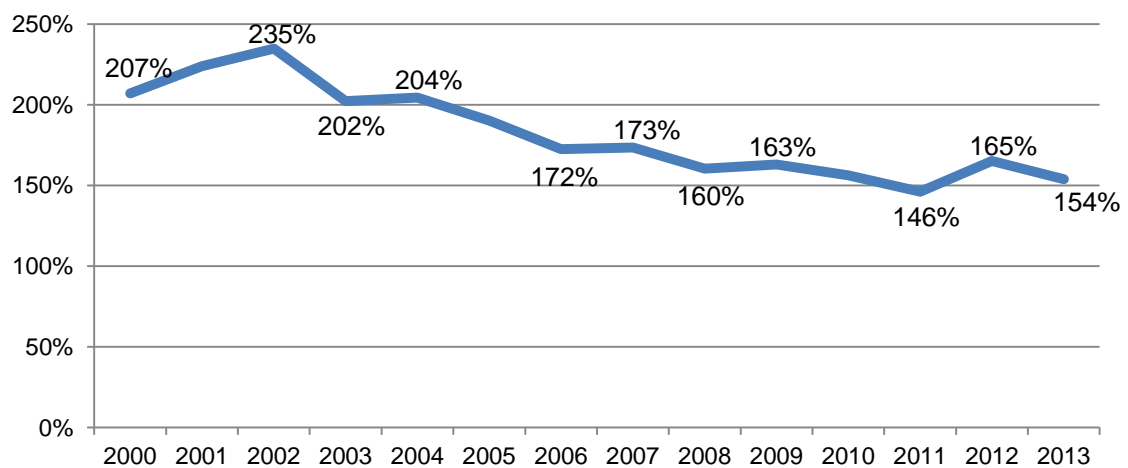
<sup>24</sup> RSF 40/2001 – "Article 3 - The net consolidated debt of the states, the Federal District and the municipalities, counting from the end of the year of publication of this Resolution up to the end of the fifteenth financial period, shall not exceed, respectively:  
I - for the states and the Federal District: 2 (two) times the current net revenue "

**Graph 4: DCL x RCL – Net Consolidated Debt (DCL) vs. Current Net Revenue (RCL) – 2000 to 2013**



Source: SEFAZ-RJ (Stock of Public Debt for RJ State–January 2014 - xls)

**Graph 5: DCL/RCL – Net Consolidated Debt (DCL) / Current Net Revenue (RCL) – 2000 to 2013**



Source: SEFAZ-RJ



Table 2 presents the progress of credit operations and shows that there is still 72.16% of funds to be released up to 2018 and that up to 2013, 27.83% of R\$18,072,860 thousand had been released.



Table 2 – Credit Operations of Rio de Janeiro State

Position: December 31 2013

*Thousand BRL*

|  | 2013 (1)            | 2014                | 2015                | 2016                | 2017              | 2018             | TOTAL                |
|--|---------------------|---------------------|---------------------|---------------------|-------------------|------------------|----------------------|
|  | Released            | To be Released      | To be Released      | To be Released      | To be Released    | To be Released   | To be Released       |
| 1. Contracted Credit Operations (2)                        | 5,030,290.12        | 5,304,542.44        | 4,797,815.32        | 1,238,984.46        | 522,616.86        | 22,976.22        | 11,886,935.30        |
| 2. Credit Operations authorized and in progress            | -                   | 418,800.00          | 32,900.00           | 42,300.00           | 18,800.00         | -                | 512,800.00           |
| 3. Credit Operations to be contracted predicted on PAF (3) | -                   | 585,650.00          | 37,446.44           | 19,738.50           | -                 | -                | 642,834.94           |
| <b>Total</b>   | <b>5,030,290.12</b> | <b>6,308,992.44</b> | <b>4,868,161.76</b> | <b>1,301,022.96</b> | <b>541,416.86</b> | <b>22,976.22</b> | <b>13,042,570.24</b> |

(1) Values attained in 2013 at current prices

(2) Contains the total amount to be released from contracted credit transactions, according to prices in December 2013

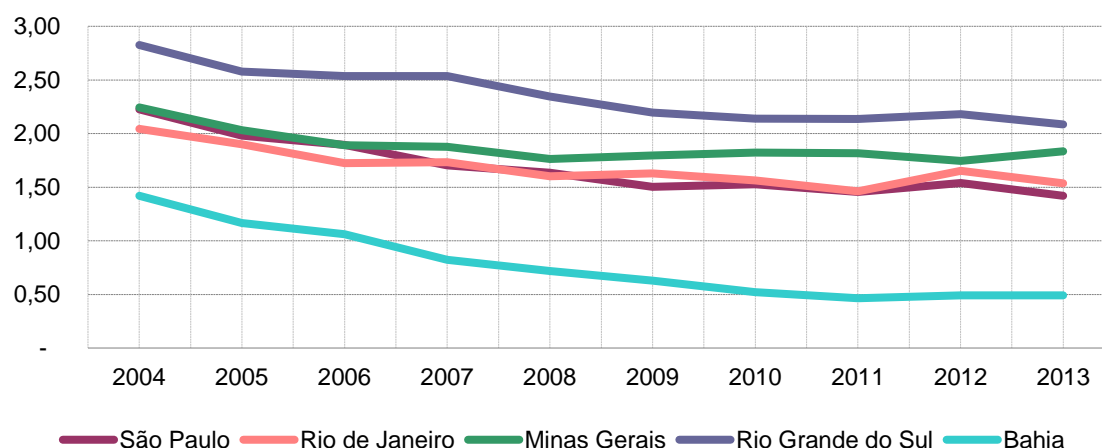
(3) Values redistributed according to the PAF review signed on October 22 2012, updated by the IGP-DI.

Source: SEFAZ-RJ (Current status of Operations.xls)

### 3.2 Related Index

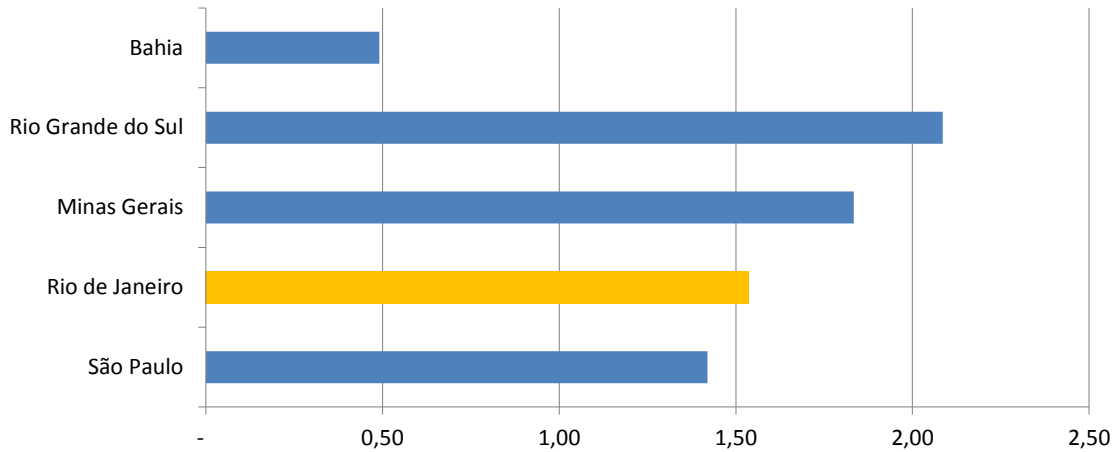
Graph 6 and 7 present the DCL / RCL ratio - Consolidated Net Debt (DCL) / Current Net Revenue (RCL) - of some major states between 2004 and 2013 and shows that the state of Rio de Janeiro ratio is close to that of Minas Gerais and São Paulo. The state of Rio Grande do Sul still needs to reduce its ratio to be able to fit within the legal limits while Bahia has the lowest ratio of the states analyzed. In 2013, DCL / RCL of the states is more focused in Graph 7 and shows that RJ has a good ratio, better than that of Rio Grande do Sul and Minas Gerais. São Paulo is a bit below that of RJ and Bahia, with the lowest ratio among the states analyzed.

Graph 6: Evolution of indebtedness indicators for the States – 2004 to 2013



Source: Evolution of indebtedness indicators for the states - SEFAZ-RJ (Stock of Public Debt for RJ State–January 2014 - xls)

Graph 7: RCL/DCL – Comparative Current Net Revenue (RCL)/ Net Consolidated Debt (DCL) – 2013



Source: SEFAZ-RJ (Stock of Public Debt for RJ State – January 2014 - xls)

Table 3 shows the limit of RJ borrowing according to Resolutions no. 40/2001 and 43/2001 from the Federal Senate. The only issue that the state needs to be concerned about is spending with annual amortization and interest as the consolidated debt service may not exceed 11.5% of the RCL. According to projections, this issue will only fall below the percentage in 2027.

Table 3 – Limits of borrowing in Rio de Janeiro State

POSITION: December 31 2013

Thousand BRL

**LIMIT OF INDEBTEDNESS OF THE STATE OF RIO DE JANEIRO - RESOLUTION NO. 40/2001 AND NO. 43/2001 OF THE FEDERAL SENATE**

| I - TOTAL VALUE OF CREDIT OPERATIONS CANNOT EXCEED CAPITAL EXPENSES   | YEAR | CAPITAL EXPENDITURE   |                    | CREDIT OPERATIONS  | MARGIN      |        |
|---|------|-----------------------|--------------------|--------------------|-------------|--------|
| Executed capital expenditure and revenues of credit transactions exec. cap. exp. and revenues from cred. trans. contained in LOA                          | 2012 | -                     | 7,984,492          | 4,755,173          | 3,229,319   |        |
|   | 2013 | -                     | 11,951,004         | 6,092,358          | 5,858,646   |        |
| II - TOTAL AMOUNT OF OPERATIONS PERFORMED IN A FISCAL YEAR SHALL NOT BE GREATER THAN 16% OF THE RCL - (Art.7, Clause I, RSF 43/2001)                      | YEAR | LAST 12 MONTHS OF RCL | LIMIT 16% OF RCL   | CREDIT OPERATIONS  | MARGIN      | %      |
| 16% of RCL and credit operations performed within the month   | 2013 | 47,064,198            | 7,530,272          | 5,030,290          | 2,499,981   | 10.69% |
| III - SPENDING WITH ANNUAL AMORTIZATION, INTEREST AND CONSOLIDATED DEBT BURDEN MAY NOT EXCEED 11.5% of the RCL - (Art. 7, Clause II and § 4, RSF 43/2001) | YEAR | PROJECTED RCL         | LIMIT 11.5% OF RCL | ANNUAL EXPENDITURE | MARGIN      | %      |
| Annual average between commitment envisaged and the RCL projected year by year, considering alternatively whichever is more beneficial:                   | 2014 | -                     | 5,608,311          | 6,466,911          | (858,600)   | 13.26% |
| I- any years where there are foreseeable payments of the Op. intended; or   | 2015 | 48,767,922            | 5,811,332          | 6,580,243          | (768,911)   | 13.02% |
| II- financial years in which there are payments until Dec 31 2027   | 2016 | 50,533,321            | 6,021,702          | 6,903,863          | (882,161)   | 13.18% |
|   | 2017 | 52,362,627            | 6,239,688          | 7,564,212          | (1,324,524) | 13.94% |
|   | 2018 | 54,258,154            | 6,465,564          | 7,976,556          | (1,510,992) | 14.19% |
|   | 2019 | 56,222,299            | 6,699,618          | 8,038,601          | (1,338,983) | 13.80% |
|   | 2020 | 58,257,546            | 6,942,144          | 8,007,037          | (1,064,893) | 13.26% |
|   | 2021 | 60,366,469            | 7,193,450          | 8,095,535          | (902,085)   | 12.94% |
|   | 2022 | 62,551,735            | 7,453,852          | 8,187,782          | (733,930)   | 12.63% |
|   | 2023 | 64,816,108            | 7,723,682          | 8,298,050          | (574,368)   | 12.36% |
|   | 2024 | 67,162,451            | 8,003,279          | 8,532,139          | (528,860)   | 12.26% |
|   | 2025 | 69,593,732            | 8,292,998          | 8,510,697          | (217,699)   | 11.80% |
|   | 2026 | 72,113,025            | 8,593,204          | 8,648,247          | (55,043)    | 11.57% |
|   | 2026 | 74,723,517            |                    |                    |             |        |

|  |                |  |                                    |                                  |                  |              |
|--|----------------|--|------------------------------------|----------------------------------|------------------|--------------|
|  | 2027           | 77,428,508                                   | 8,904,278                          | 8,780,496                        | 123,782          | 11.34%       |
|  | 2028           | 80,231,420                                   | 9,226,613                          | 8,701,094                        | 525,519          | 10.84%       |
|  | 2029           | 83,135,797                                   | 9,560,617                          | 8,236,797                        | 1,323,820        | 9.91%        |
|  | 2030           | 86,145,313                                   | 9,906,711                          | 4,866,422                        | 5,040,289        | 5.65%        |
|  | 2031           | 89,263,773                                   | 10,265,334                         | 4,724,070                        | 5,541,264        | 5.29%        |
|  | 2032           | 92,495,122                                   | 10,636,939                         | 4,446,225                        | 6,190,714        | 4.81%        |
|  | 2033           | 95,843,445                                   | 11,021,996                         | 3,896,471                        | 7,125,525        | 4.07%        |
|  | 2034           | 99,312,978                                   | 11,420,992                         | 3,686,333                        | 7,734,659        | 3.71%        |
|  | 2035           | 102,908,108                                  | 11,834,432                         | 3,596,157                        | 8,238,275        | 3.49%        |
|  | 2036           | 106,633,382                                  | 12,262,839                         | 3,545,899                        | 8,716,940        | 3.33%        |
|  | 2037           | 110,493,510                                  | 12,706,754                         | 3,456,211                        | 9,250,543        | 3.13%        |
|  | 2038           | 114,493,375                                  | 13,166,738                         | 3,386,149                        | 9,780,589        | 2.96%        |
|  | <b>AVERAGE</b> | <b>77,204,545</b>                            | <b>8,878,523</b>                   | <b>6,525,288</b>                 | <b>2,353,235</b> | <b>8.45%</b> |
| <b>IV - AMOUNT OF CONSOLIDATED NET DEBT CANNOT EXCEED TWICE THE RCL (Art. 7, Clause III, RSF 43/2001 (Art.3, Clause I, RSF 40/2001))</b> | <b>YEAR</b>    | <b><u>FINAL RCL</u><br/><u>12 MONTHS</u></b> | <b>LIMIT<br/>TWICE THE<br/>RCL</b> | <b>CONSOLIDATED<br/>NET DEBT</b> | <b>MARGIN</b>    | <b>%</b>     |
| Twice the RCL and consolidated net debt  | 2013           | 47,064,198                                   | 94,128,395                         | 72,375,122                       | 21,753,273       | 153.78%      |
| <b>V - THE GLOBAL BALANCE OF GUARANTEES GIVEN CANNOT EXCEED 22% OF THE RCL - (Art. 9, RSF 43/2001)</b>                                   | <b>YEAR</b>    | <b><u>FINAL RCL</u><br/><u>12 MONTHS</u></b> | <b>LIMIT 22%<br/>OF THE RCL</b>    | <b>GUARANTEES<br/>GIVEN</b>      | <b>MARGIN</b>    | <b>%</b>     |
| Total guarantees given and 22% of the RCL  | 2013           | 47,064,198                                   | 10,354,123                         | 66,775                           | 10,287,348       | 0.14%        |
| <b>VI - THE DEBT BALANCE OF CREDIT OPERATIONS DUE TO ANTICIPATED REVENUE BUDGET CANNOT EXCEED 7% of the RCL - (Art.10, RSF 43/2001)</b>  | <b>YEAR</b>    | <b><u>FINAL RCL</u><br/><u>12 MONTHS</u></b> | <b>LIMIT 11.5%<br/>OF THE RCL</b>  | <b>DEBT ARO<br/>BALANCE</b>      | <b>MARGIN</b>    | <b>%</b>     |
| 7% of the RCL and ARO debt balance   | 2013           | 47,064,198                                   | 3,294,494                          | -                                | 3,294,494        | 0.00%        |

OBS 1. Current net revenues were projected by applying the update factor disclosed by the Finance Department in the claims guidebook, obtained from the geometric mean of the rates of real National GDP growth in the last 8 years

In calculating the Limit of item III – the average up to the year **2038**, reference is being made to the last year in which there is payment of debt service of operations that are in progress at STN.

This chart is available at the State Treasury sub-portal at the address: <http://www.fazenda.rj.gov.br/sefaz/content/conn/UCMServer/uuid/dDocName%3a2738022>

## 4. Risks Associated to State of Rio de Janeiro Debt

The debate over risk associated to debt is notorious. The World Bank and the International Monetary Fund describe a set of guidelines<sup>25</sup> that are designed to assist policymakers in considering reforms to strengthen the quality of their public debt management and reduce their vulnerability to international financial shocks.<sup>26</sup>

The essence of the debt management objective in many countries, including Brazil, is to ensure that financing needs and payment obligations of the government are met at the lowest possible cost over the medium to long-term, consistent with a prudent degree of risk.<sup>27</sup>

With market integration, there is growing awareness that economic units are exposed to greater financial risk today than in the past. The same can be said of governments, so an efficient strategy to manage assets, and especially liabilities, can make a difference in sustainability. Wise public administration of foreign debt has been growing in significance and the derivatives market has been growing as well as a consequence of hedges on financial risks.<sup>28</sup>

In 1994, with the advent of the Real Plan, Brazil entered into a context of macroeconomic stability, reinforced later by improvement in other economic fundamentals of the country. The necessary prerequisites had then been

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<sup>25</sup> IMF – International Monetary Fund (2001). **Government Finance Statistic Manual**. Available at: <http://www.imf.org/external/pubs/ft/gfs/manual/pdf/all.pdf> (accessed in March 2014).

<sup>26</sup> WB and IMF: World Bank and International Monetary Fund (2001). **Guidelines for Public Debt Management**. Available at: [http://info.worldbank.org/etools/docs/library/156527/africabondmarkets/pdf/guidelines\\_2001\\_final.pdf](http://info.worldbank.org/etools/docs/library/156527/africabondmarkets/pdf/guidelines_2001_final.pdf) (accessed in March 2014).

<sup>27</sup> Alves, Luiz (2009). **Brazilian Public Debt Benchmark: a long-term strategy**. Minerva Program, Spring 2009 – Institute of Brazilian Business and Public Management Issues – The School of Business and Public Management – The George Washington University, Washington D.C. p. 5

<sup>28</sup> Campos, A. (2004). **Using Swaps to Manage the Interest Rate Risk in the Brazilian External Debt**. Minerva Program, Spring 2004 – Institute of Brazilian Business and Public Management Issues – The School of Business and Public Management – The George Washington University, Washington D.C. p.4

established for the adoption of best practices in debt management. Accordingly, with the growing confidence in controlling inflation, the country succeeded in promoting the progressive indexation of its debt and build strategies with the purpose of changing its composition and maturity profile. In July 1995, 79.1% of domestic debt was indexed to overnight rates. Furthermore, the fixed debt represented 8.5% of the total, but with maturation within two months.<sup>29</sup>

Gradually, the Treasury sought to replace the floating debt rate by a fixed debt rate and, as a further step, promoted the lengthening of the average maturity of the debt. This was done through Law no. 9,469/1997 that establishes criteria for the consolidation, assumption and refinancing of the public debt of sub-national governments by the Union.

Refinancing Law no. 9,496/1997 provides a sustainable fiscal and debt policy. The states are not exposed to refinancing risk related to debt, because the payments of states are flagged with a percentage of the net revenue. The federal government assumes the roll over risk, because the share of unpaid debt installment is directly refinanced and accumulated in the residual account. So states were given an opportunity to lower interest and amortization payments and increase the maturity of owned debts; however, the states would be required to serve total original installment of the refinancing law.<sup>30</sup>

The states that had refinanced their debts signed the Fiscal Restructure and Adjustment Program (PAF)<sup>31</sup>, with the exception of Amapá and Tocantins. PAF presents annual goals for a three-year period, and several limitations to creating

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<sup>29</sup> Alves, Luiz Fernando; Silva, Anderson Caputo. **Planejamento estratégico da Dívida Pública Federal** in Silva, Anderson C., Carvalho, Lena O., Medeiros, Otavio L. – organizadores (2009). **Dívida Pública: a experiência brasileira**. – Brasília: Secretaria do Tesouro Nacional: Banco Mundial, 2009. Parte 2, Capítulo 2. p. 150-151. Available at: [http://www3.tesouro.gov.br/divida\\_publica/downloads/livro/livro\\_eletronico\\_completo.pdf](http://www3.tesouro.gov.br/divida_publica/downloads/livro/livro_eletronico_completo.pdf) (accessed in March 2014)

<sup>30</sup> Roncarati, Nelson (2010). **Sustainability and Risk Analyses of Brazilian State Debt Refinancing Law in the State of Rio Grande do Sul**. Minerva Program, Fall 2010 – Institute of Brazilian Business and Public Management Issues – The School of Business and Public Management – The George Washington University, Washington D.C. p. 36

<sup>31</sup> Fiscal Restructure and Adjustment Program (PAF) of RJ state is available at: <http://www.transparencia.rj.gov.br/sefaz/content/conn/UCMServer/uuid/dDocName%3a3804036> (accessed in March 2014)

new debts.<sup>32</sup> Annual goals for a three-year period include the evolution of state finances, macroeconomic indicators for the new period and the fiscal policy adopted by state governments.

Each year the fulfillment of the goals and commitments of the previous year is evaluated. Targets can also be updated annually for a new triennium. It is worth noting that these procedures will be observed as long as the refinancing agreement lasts.<sup>33</sup>

## 4.1 The Exchange Risk

The public debt remained stable until the end of 1997, at which time an upward trend began to appear, coinciding with the Asian crisis that occurred in the same year. Interest rates were increased in Brazil so that the country would not be contaminated by the crisis, influencing in this way the Brazilian debt.

The situation of rising debt became even more apparent when, from 1999 onwards, there was flexibility in the exchange rate. Thus, the growing debt trajectory can be explained by the external shock that affected both the rates and the interest rate, since much of the debt at the time was tied to securities indexed to interest rates and to currency exchange rates.<sup>34</sup>

The process of public debt growth began with the so-called exchange rate entrapment, in which the super valorization of the exchange rate, coupled with trade liberalization, resulted in repeated and growing imbalance in the balance

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<sup>32</sup> Barros Filho, Roberto G. (2013). **Rio de Janeiro's Investment Gap – Supporting the Strategic Decision Making Process Regarding the State Financial Needs**. Minerva Program, Spring 2013 – Institute of Brazilian Business and Public Management Issues – The School of Business and Public Management – The George Washington University, Washington D.C. – p. 9

<sup>33</sup> Explanation about PAF in STN website. Available at: <https://www.tesouro.fazenda.gov.br/pt/responsabilidade-fiscal/prefeituras-e-governos-estaduais/programas-de-ajuste-fiscal> (accessed in March 2014)

<sup>34</sup> Palombo, Paulo Eduardo Moledo (2010). **Fatores Determinantes da Evolução e Sustentabilidade da Dívida Pública**. XXXIV Encontro da ANPAD. p. 7. Available at: [http://www.anpad.org.br/diversos/trabalhos/EnANPAD/enanpad\\_2010/APB/2010\\_APB87.pdf](http://www.anpad.org.br/diversos/trabalhos/EnANPAD/enanpad_2010/APB/2010_APB87.pdf) (accessed in March 2014)



of payment of current transactions. Such transactions were financed by the inflow of foreign capital, which were attracted by high interest rates, which in turn, caused debt increase.<sup>35</sup>

The monetary policy under the fixed exchange rate sought to facilitate the accumulation of international reserves that endorsed the new currency and ensured price stability. Recurrent external crises during that period were overcome by drastic increases in interest rates that provided high arbitrage gains to external capital despite the recessionary effects on the domestic economy. But in late 1998, the interest rate policy and the agreement with the IMF were not able to avoid the attack on the real that resulted in the maxi devaluation in January 1999 and the end of the exchange rate anchor.<sup>36</sup>

The collapse of the Argentine economy in 2001, associated with uncertainties about the course the Brazilian economy would take with the advent of the new government in 2002, caused the exchange rate to depreciate sharply, worsening the debt situation.<sup>37</sup>

The gradual replacement of part of the debt indexed to the Selic<sup>38</sup> rate by index-linked securities prices has been recommended by an extensive series of

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<sup>35</sup> Ferrari Filho, F (2002). **Da tríade mobilidade de capital, flexibilidade cambial e metas de inflação à proposição de uma agenda alternativa: uma estratégia de desenvolvimento para a economia brasileira à luz da teoria Pós Keynesiana**. Porto Alegre, UFRGS (Texto para discussão, 14) p. 19. Available at: [http://www8.ufrgs.br/ppge/pcientifica/2002\\_14.pdf](http://www8.ufrgs.br/ppge/pcientifica/2002_14.pdf) (accessed in March 2014)

<sup>36</sup> Camuri, P. **Dívida Pública, Política Fiscal e Restrição Externa no Brasil: 1994-2004**. Brasília: ESAF, 2005. 1º lugar no X Prêmio Tesouro Nacional – 2005, Ajuste Fiscal e Dívida Pública, Brasília (DF). p. 27. Available at: [http://www.bibliotecadigital.ufmg.br/dspace/bitstream/handle/1843/MCCR-728Q3K/paulo\\_andre\\_camuri.pdf?sequence=1](http://www.bibliotecadigital.ufmg.br/dspace/bitstream/handle/1843/MCCR-728Q3K/paulo_andre_camuri.pdf?sequence=1) (accessed in March 2014)

<sup>37</sup> Palombo, Paulo Eduardo Moledo (2010). **Fatores Determinantes da Evolução e Sustentabilidade da Dívida Pública**. XXXIV Encontro da ANPAD. p. 7. Available at: [http://www.anpad.org.br/diversos/trabalhos/EnANPAD/enanpad\\_2010/APB/2010\\_APB87.pdf](http://www.anpad.org.br/diversos/trabalhos/EnANPAD/enanpad_2010/APB/2010_APB87.pdf) (accessed in March 2014)

<sup>38</sup> "The Selic rate is defined as the average rate of daily financing in the Special System of Clearance and Custody (Selic) for federal bonds. For purposes of calculating the rate, they are considered the daily financial transactions related to operations registered and settled in Selic itself and in systems operated in chambers or by clearing and settlement service providers (Article 1 of Circular No. 2,900, dated June 24 1999, with the amendment introduced by Article 1 of Circular No. 3,119, dated April 18 2002) ". On the Central Bank of Brazil website. Available at: <http://www.bcb.gov.br/?SELICCONCEITO> (accessed in March 2014)

studies.<sup>39</sup> The indexation of debt to price indices is consistent with the objectives of the inflation targeting system, for reasons of credibility and signaling.

The titles provide a natural hedge for institutions with long-term liabilities payable in Brazil. This makes the choice of this instrument contribute to higher average debt maturity and also opens the way for private institutions to raise long-term capital funds in BRL, instead of resorting to foreign markets.<sup>40</sup>

The widespread use of exchange bonds increases the country's vulnerability to external shocks, which leads to a conflict of interest between the Central Bank and the National Treasury with regard to the placing of this type of debt.<sup>41</sup>

It is worthwhile highlighting that the states cannot issue bonds,<sup>42</sup> but, nevertheless, can invest in federal bonds and in future Markets to mitigate currency exchange risks. Furthermore, according to Figure 1 above, noticeably only 5% of the RJ debt is in foreign debt.

## 4.2 The Insolvency Risk

The first agency to assess the credit risk of the Republic of Brazil was Moody's in 1986. In the absence of negotiable debt instruments during such years, this was the only way to evaluate the nation's credit. It was expected that new rating agencies would emerge to assess the credit risk of debt instruments

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<sup>39</sup> Among which may be mentioned Calvo (1988); Calvo e Guidotti (1990); Bevilaqua e Garcia (1999); Bevilaqua e Garcia (2001); Bevilaqua, Afonso S. [et al] (2001); Missale e Giavazzi (2004)

<sup>40</sup> Garcia (2001)

<sup>41</sup> Almeida, Iana Ferrão (2007). **Composição da dívida pública brasileira e a crise de 2002: uma análise contrafactual de estratégias alternativas**. Escola de Pós-Graduação em Economia – Fundação Getulio Vargas – RJ. p. 48

<sup>42</sup> **Governo federal não pretende autorizar que estados e municípios emitam títulos públicos**. Available at: <http://memoria.etc.com.br/agenciabrasil/noticia/2013-02-21/governo-federal-nao-pretende-autorizar-que-estados-e-municipios-emitam-titulos-publicos> (accessed in March 2014)

in the country and, in fact, since 1994, Standard and Poor's and Fitch also began to disclose credit ratings for the country.<sup>43</sup>

The credit rating is crucial for the image of an organization as it shows an independent review with respect to credit risk.<sup>44</sup> Moreover, the rating is a universal language that addresses the degree of risk of any debt security.<sup>45</sup>

Although not as common as corporate and sovereign ratings, the rating agencies Moody's, Fitch, S & P and the Brazilian Austin, are dedicated to assigning grades to Brazilian sub-national governments.

As cities and states in Brazil cannot issue debt securities, the ratings awarded by these agencies aim to present investment conditions for firms interested in settling in those places.<sup>46</sup>

The risk rating agency Standard and Poor's (S & P) granted investment rating to Rio de Janeiro in 2010. RJ was the first Brazilian state to get such a standing. This was largely the result of institutional improvements in managing public state finances.

The "investment grade" affords RJ much more favorable conditions to conduct their investment policies, which provide for great infrastructure projects, including those for major events.<sup>47</sup>

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<sup>43</sup> Pedras, Guilherme B. V. **História da Dívida Pública no Brasil: de 1964 até os dias atuais** in Silva, Anderson C., Carvalho, Lena O., Medeiros, Otavio L. – organizadores (2009). **Dívida Pública: a experiência brasileira**. – Brasília: Secretaria do Tesouro Nacional: Banco Mundial, 2009. Parte 1, Capítulo 2. Available at: [http://www3.tesouro.gov.br/divida\\_publica/downloads/Parte%201\\_2.pdf](http://www3.tesouro.gov.br/divida_publica/downloads/Parte%201_2.pdf) p.76 (accessed in March 2014)

<sup>44</sup> Important news for the finance of the state: **Estado do Rio de Janeiro liquida todas as suas dívidas com precatórios** (news) – Available at: [http://www.transparencia.rj.gov.br/sefaz/faces/oracle/webcenter/portalapp/pages/navigation-renderer.jspx?\\_afLoop=99885668373000&datasource=UCMServer%23dDocName%3AWCC221279&\\_adf.ctrl-state=1d2m536nkk\\_75](http://www.transparencia.rj.gov.br/sefaz/faces/oracle/webcenter/portalapp/pages/navigation-renderer.jspx?_afLoop=99885668373000&datasource=UCMServer%23dDocName%3AWCC221279&_adf.ctrl-state=1d2m536nkk_75) (accessed in March 2014)

<sup>45</sup> **Rating: conceito, forma de cálculo e importância para o mercado** – 30/04/2008. (news) – Available at: <http://economia.uol.com.br/ultnot/infomoney/2008/04/30/ult4040u11480.jhtm> (accessed in March 2014)

<sup>46</sup> **Como 15 estados e municípios são avaliados pelas agências** – 28/05/2013 (news). Available at: <http://exame.abril.com.br/mercados/noticias/como-15-estados-e-municipios-sao-avaliados-pelas-agencias?page=4> (accessed in March 2014)

The state of RJ makes constant improvements in their finances, among which can be highlighted:

1. Transparency Portal:<sup>48</sup> provides information for citizens, such as:
  - a. Financial state program: enables the departments and agencies to know the amount available for spending;
  - b. Internet accessible file with pending payments, ranked by the number of days since payment request was received by Treasury:
    - i. Information about provision for payment is available for suppliers in a restricted area of the site;
    - ii. 93% of payment is performed within less than 10 days;
2. ISO 9001:2008 certification of the RJ Treasury<sup>49</sup> since March 2010;
  - a. Represents a quality management system:
    - i. Optimizes results;
    - ii. Based on PDCA methodology (plan, do, check, act)
3. Focus on Operational Risk;
4. Rio de Janeiro State was the first Brazilian sub-national government to obtain the investment grade:

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<sup>47</sup> **S&P concede grau de investimento ao Rio de Janeiro** – 30/03/2010 (news). Available at: <http://oglobo.globo.com/economia/sp-concede-grau-de-investimento-ao-rio-de-janeiro-3031664> (accessed in March 2014)

<sup>48</sup> **Transparency Portal**. Available at: <http://www.transparencia.rj.gov.br/sefaz> (accessed in March 2014)

<sup>49</sup> **Tesouro do Rio recebe certificação ISO 9001** (news). Available at: <http://www.rj.gov.br/web/imprensa/exibeconteudo?article-id=391711> (accessed in March 2014)

Table 4 - Standards & Poor's Investment Grade for RJ:

| <b>Issuer Credit Rating</b> |                |                    |                               |                                  |
|-----------------------------|----------------|--------------------|-------------------------------|----------------------------------|
|                             | <b>Ratings</b> | <b>Rating Date</b> | <b>Regulatory Identifiers</b> | <b>Credit Watch/Outlook Date</b> |
| Foreign Long Term           | BBB-           | 30-Mar-2010        | EE                            | 30-Mar-2010<br>Outlook STABLE    |
| Local Long Term             | BBB-           | 30-Mar-2010        | EE                            | 30-Mar-2010<br>Outlook STABLE    |

| <b>Brazil National Scale</b> |                |                    |                               |                                  |
|------------------------------|----------------|--------------------|-------------------------------|----------------------------------|
|                              | <b>Ratings</b> | <b>Rating Date</b> | <b>Regulatory Identifiers</b> | <b>Credit Watch/Outlook Date</b> |
| Local Long Term              | brAAA          | 30-Mar-2010        | --                            | 30-Mar-2010<br>Outlook STABLE    |

Source: S&P website<sup>50</sup>

Table 5: Fitch Ratings Investment Grade for RJ:

|  |   |             |              |
|--|---|-------------|--------------|
| <b>Long Term Issuer Default Rating</b>                 | <b>BBB- ◉</b>   | 13-Dec-2013 | Revision IDR |
| <b>Short Term Issuer Default Rating</b>                | <b>F3</b>   | 13-Dec-2013 | Revision IDR |
| <b>Local Currency Long Term Issuer Default Rating</b>  | <b>BBB- ◉</b>   | 13-Dec-2013 | Revision IDR |
| <b>Local Currency Short Term Issuer Default Rating</b> | <b>F3</b>   | 13-Dec-2013 | Revision IDR |
| <b>National Long Term Rating</b>                       | <b>AA(bra) ◉</b>  | 17-Oct-2013 | Affirmed     |
| <b>National Short Term Rating</b>                      | <b>F1+(bra)</b>   | 17-Oct-2013 | Affirmed     |
| <b>Disclosures</b>                                     | EU Endorsed; Solicited by or on behalf of the issuer (sell side)          |             |              |
| <b>Market Sector(s)</b>                                | Local and Regional Governments  |             |              |
| <b>Country</b>   | Brazil  |             |              |
| <b>Analyst(s)</b>                                      | Latin America: Fugulin, Paulo (Primary)<br>Latin America: Ramirez, Carlos |             |              |

Source: Fitch Ratings website<sup>51</sup>

The rating<sup>52</sup> is divided into the foreign and the national rating and into the short-term and the long-term period. The long-term period ratings are opinions

<sup>50</sup> Available at: <http://www.standardandpoors.com/prot/ratings/entity-details/en/us/?entityID=485262&sectorCode=GOVS> (accessed in March 2014)  
Supplementary analysis (03-Dec-2013) - Available at: <http://www.standardandpoors.com/prot/ratings/articles/en/us/?articleType=HTML&assetID=1245361042472> (accessed in March 2014)

<sup>51</sup> Available at: <https://www.fitchratings.com/gws/en/esp/issr/90803890> (accessed in March 2014)

<sup>52</sup> **Guide to Credit Ratings Essential: What are credit ratings and how do they work?** Standards & Poor's. Available at:

of the relative credit risk of fixed-income obligations with an original maturity of 1 year or more.

Both institutions evaluate RJ as BBB- in the issuer credit rating for the long or the short-term, which means that the state is considered to be a low investment grade for market participants. With regard to the national long-term rating, S&P evaluate the state as AAA, the highest rating; while Fitch evaluates it as AA, which means it has very strong capacity to meet financial commitments.

According to the Fitch ratings<sup>53</sup>, the “Short Term Issuer” and the “Local Currency Short Term Issuer Default Rating” is F3, which means that the organization has a fair short-term credit quality, so, the intrinsic capacity for timely payment of financial commitments is adequate. And the national short term rating of F1+ means that the state has the highest short-term credit quality, indicating the strongest intrinsic capacity for timely payment of financial commitments, having some exceptionally strong credit features.

RJ State has an investment grade, and under these ratings, the asset is not considered a risk investment category in which certain important classes of international investors are prohibited from investing resources. In other words, obtaining an investment rating is not only recognition of the market as to the credit quality of the issuer, but it also opens up the market to a significant portion of investors.

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[http://img.en25.com/Web/StandardandPoors/SP\\_CreditRatingsGuide.pdf](http://img.en25.com/Web/StandardandPoors/SP_CreditRatingsGuide.pdf) (accessed in March 2014)

<sup>53</sup> **Definitions of Ratings and Other Forms of Opinion.** Fitch Ratings. Available at: [https://www.fitchratings.com/web\\_content/ratings/fitch\\_ratings\\_definitions\\_and\\_scales.pdf](https://www.fitchratings.com/web_content/ratings/fitch_ratings_definitions_and_scales.pdf) (accessed in March 2014)

## 5. Conclusions

A major concern with loans relates to the quality of the expense and duration of the object. Namely, the public sector invests in the present moment but the debt remains for future generations to pay<sup>54</sup>. The golden rule is enforced in order to avoid taking out loans to pay for current expenses; thus, the purpose of the loans should be to engage in some kind of investment (it is understood that the object of these will be available for future generations to benefit from).

It is observable that the State of Rio de Janeiro remains adjusted to legal requirements,<sup>55</sup> being vulnerable to some risks inherent in the discharge of obligations.

Rio de Janeiro has taken special care with respect to its obligations, such as offering a variety of information to citizens who may wish to accompany the state budget; diversifying the investment portfolio so as to reduce the risk of investment and maintenance of hedge strategies to minimize any exchange differences when settling obligations in foreign currency;<sup>56</sup> obtaining certification of the State Treasury of RJ<sup>57</sup> by ISO 9001<sup>58</sup>, which is a methodology for quality

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<sup>54</sup> “People often express concern that the trillions of dollars of Federal government debt will impose a crushing financial burden on their children and grandchildren, who will someday be taxed to pay off these debts. In this view, high rates of government borrowing amount to “robbing the future“ to pay for government spending that is too high or taxes that are too low in the present“ in Abel, Andrew; Bernanke, Ben and Croushore, Dean (2014). **Macroeconomics** – 8<sup>th</sup> ed. p. 599

<sup>55</sup> Santos, Darcy Francisco Carvalho. **Situação Financeira dos Estados em Dez Anos da Lei de Responsabilidade Fiscal (2000 – 2009)**. Política Fiscal e Sustentabilidade do Crescimento – Menção Honrosa do XV Prêmio do Tesouro Nacional. p. 42. Available at: [http://www3.tesouro.fazenda.gov.br/Premio\\_TN/XVPremio/divida/MHafdpXVPTN/Tema\\_1\\_MH.pdf](http://www3.tesouro.fazenda.gov.br/Premio_TN/XVPremio/divida/MHafdpXVPTN/Tema_1_MH.pdf) (accessed in March 2014)

<sup>56</sup> According to the suggestion of WB and IMF: World Bank and International Monetary Fund (2001). **Guidelines for Public Debt Management**. Available at: [http://info.worldbank.org/etools/docs/library/156527/africabondmarkets/pdf/guidelines\\_2001\\_final.pdf](http://info.worldbank.org/etools/docs/library/156527/africabondmarkets/pdf/guidelines_2001_final.pdf) (accessed in March 2014). p. 8

<sup>57</sup> **Primeiro tesouro de ente público brasileiro a conquistar a certificação de qualidade ISO 9001:2008**. Available at: <http://www.rj.gov.br/web/sefaz/exibeconteudo?article-id=433506> (accessed in March 2014)

<sup>58</sup> Definition: “ISO 9001:2008 sets out the criteria for a quality management system and is the only standard in the family that can be certified to (although this is not a requirement). It can be used by any organization, large or small, regardless of its field of activity. In fact ISO 9001:2008

management systems in which processes are continually reviewed and improved; obtaining ratings for the state prepared by major international rating institutions; and, maintaining and constantly improving the fiscal transparency site. Transparency is widely regarded as an important precondition for macroeconomic fiscal sustainability, good governance, and overall fiscal rectitude<sup>59</sup> and, in Brazil, the rest can be accompanied by society through the transparency website, which is also a legal requirement.

It is worth noting that the rating given to RJ is higher than the national rating, which indicates both greater economic stability and capacity to pay off debts. With these actions RJ can reduce the cost of loans and therefore the cost of the debt - conducting credit operations at relatively low cost and with a more extended profile.

The commitment of future governments to fiscal transparency, to the maintenance of certification, to the maintenance of the ratings and to the legislation in force, will ensure long-term sustainability of state debts.

One notes that the state is currently engaged in a high volume of investments, which were augmented by ongoing major events, and that moreover, it is rolling over its debts, given that the benefits brought by such investments in the present moment will benefit not only the present generation but also future generations.

If the state of RJ had no legal limitation to issue government bonds, this would be a good option for raising funds. An attempt was made by RJ City Hall<sup>60</sup> but was not concluded due to legal limitations. Through public debt, the

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has been implemented by over one million companies and organizations in over 170 countries." Available at: [http://www.iso.org/iso/home/standards/management-standards/iso\\_9000.htm](http://www.iso.org/iso/home/standards/management-standards/iso_9000.htm) (accessed in March 2014)

<sup>59</sup> Kopits, George; Craig, Jon (1998). **Transparency in Government Operations**. International Monetary Fund (IMF). February, 1998. p. 2. Available at: <http://www.imf.org/external/pubs/ft/op/158/op158.pdf> (accessed in March 2014)

<sup>60</sup> **Governo federal não pretende autorizar que estados e municípios emitam títulos públicos** (news). Available at: <http://memoria.ebc.com.br/agenciabrasil/noticia/2013-02-21/governo-federal-nao-pretende-autorizar-que-estados-e-municipios-emitam-titulos-publicos> (accessed in March 2014)



state would issue bonds and borrow money from investors to honor commitments. In exchange, the government would agree to return the funds with some correction that could either be based on the Selic rate, on inflation, on exchange rates or be fixed. With these options for raising funds, the need to obtain credit operations abroad would decrease, thereby reducing the exchange rate risk inherent in foreign currency debts.

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## 6.1 Related Legislation

CRFB/88 – Constitution of the Federative Republic of Brazil dated October 5 1988

LRF – Fiscal Responsibility Law: Federal Complementary Law no. 101 dated May 4 2000

Federal Law no. 9,496 dated September 11 1997

Federal Law no. 4,320 dated March 17 1964

Decree no.41,880 dated May 25 2009

Brazilian Central Bank Resolution no. 3,751 dated June 30 2009

Federal Senate Resolution no. 48 dated December 21 2007

Federal Senate Resolution no. 43 dated December 21 2001

Federal Senate Resolution no. 40 dated December 20 2001

Joint Resolution SESDEC/SEFAZ no.195 dated January 13 2010

Joint Resolution SESDEC/SEFAZ no.155 dated January 21 2009

Joint Resolution SESDEC/SEFAZ no.97 dated January 22 2008

Joint Resolution SESDEC/SEFAZ no.01 dated January 24 2007

Joint Resolution SES/SEF no.316 dated January 10 2006

Joint Resolution SES/SEF no.242 dated January 19 2005

Joint Resolution SES/SEF no.142 dated January 23 2004

Joint Resolution SES/SEF no.120 dated October 10 2003

Administrative rule of the Ministry of Finance no.109 dated March 08 2002

Administrative rule of the Ministry of Finance no.89 dated April 25 1997



Administrative rule of State General Accounting no. 116 dated February 17 2006

Determination of the Court of Auditors of Rio de Janeiro State no. 244 dated December 18 2007

Determination of the Court of Auditors of Rio de Janeiro State no. 233 dated May 09 2006

Internal Rules of the Court of Auditors of Rio de Janeiro State no. 167 dated December 10 1992

Multiannual Plan (PPA): State Law no. 6,126 dated December 28 2011

First Revision of the PPA: State Law no. 6,379 dated January 09 2013

Second Revision of the PPA: State Law no. 6,669 dated January 13 2014

Budget Guidelines Law (LDO): State Law no. 6,485 dated July 09 2013

Annual Budget Law (LOA): State Law no. 6,668 dated Janeiro 13 2014