



Fiscal condition of the public sector in Brazil: an analysis with an emphasis on the states in the North and Northeast regions of the country and on financing for rural development



**Fiscal condition of the public sector in Brazil: an analysis with an emphasis on the states in the North and Northeast regions of the country and on financing for rural development**

Rodrigo Octávio Orair; Sergio Wulf Gobetti; André Amorim Alencar and João Marcelo

This publication is a result of a partnership between the International Policy Centre for Inclusive Growth (IPC-IG), the United Nations Development Programme (UNDP), the Institute for Applied Economic Research (Ipea) and the International Fund for Agricultural Development (IFAD).

Copyright© 2016

International Policy Centre for Inclusive Growth  
United Nations Development Programme

**International Policy Centre for Inclusive Growth (IPC - IG)**

United Nations Development Programme

SBS, Quadra 1, Bloco J, Ed. BNDES, 13º andar

70076-900 Brasília, DF - Brazil

Telephone: +55 61 21055000

[ipc@ipc-undp.org](mailto:ipc@ipc-undp.org) ▪ [www.ipc-undp.org](http://www.ipc-undp.org)

*The International Policy Centre for Inclusive Growth is jointly supported by the United Nations Development Programme and the Government of Brazil.*

**Rights and Permissions**

All rights reserved.

The text and data in this publication may be reproduced as long as the source is cited. Reproductions for commercial purposes are forbidden.

The International Policy Centre for Inclusive Growth disseminates the findings of its work in progress to encourage the exchange of ideas about development issues. The papers are signed by the authors and should be cited accordingly. The findings, interpretations, and conclusions that they express are those of the authors and not necessarily those of the United Nations Development Programme or the Government of Brazil.

---

IPC-IG/UNDP Director: Niky Fabiancic

IPC-IG/UNDP Research Coordinators:

Diana Sawyer, Fábio Veras Soares,

Rafael Guerreiro Osorio (Ipea) and

Luis Henrique Paiva.

Ipea President: Jessé Souza

International Fund for Agricultural Development (IFAD)

Country Programme Manager in Brazil: Paolo Silveri

IFAD:

Leonardo Bichara Rocha, Country Programme

Officer of the IFAD Brazil Country Office

Hardi Vieira, IFAD Programme Officer for Brazil

Octavio Damiani and Arilson Favareto, Consultants  
and Adenike Ajagunna, Administrative Assistant.

SEMEAR:

Dirce Ostroski, Coordinator

Elisa Tavares, Administrative Support

# **FISCAL CONDITION OF THE PUBLIC SECTOR IN BRAZIL: AN ANALYSIS WITH AN EMPHASIS ON THE STATES IN THE NORTH AND NORTHEAST REGIONS OF THE COUNTRY AND ON FINANCING FOR RURAL DEVELOPMENT**

Rodrigo Octávio Orair;<sup>1</sup> Sergio Wulf Gobetti;<sup>2</sup>  
André Amorim Alencar<sup>3</sup> and João Marcelo<sup>4</sup>

## **1 INTRODUCTION**

The goal of this study is to evaluate the fiscal condition of the Brazilian public sector, focusing on the situation of state governments in the North and Northeast regions of the country and on international financing for rural development. The paper comprises six sections, including this introduction. Section 2 presents a broader view of the fiscal condition of the public sector, featuring consolidated fiscal indicators from each of the three government levels (central, state and municipal). The analysis allows for the identification of tendencies in public finances from an aggregate and, therefore, non-detailed perspective.

Sections 3, 4 and 5 narrow the focus on an evaluation of the fiscal condition of state governments, especially in the North and Northeast regions of Brazil, with individual analyses of the indicators of degree of indebtedness and payment capacity, the evolution of bank and external credits (including financing for rural development), the determining factors of indebtedness and the evolution of the main categories of revenue and expenditure. Finally, the last section presents a summary of the results and some comments on the fiscal condition of the public sector, tendencies looming on the horizon and potential future scenarios.

---

1. International Policy Centre for Inclusive Growth (IPC-IG) and Institute for Applied Economic Research (Ipea).

2. Institute for Applied Economic Research (Ipea).

3. Consultant.

4. Statistical consultant.

## 2 FISCAL CONDITION OF THE CONSOLIDATED PUBLIC SECTOR

The accounts of the Brazilian public sector have undergone significant changes over the past 30 years. This period goes back to the foreign debt crisis of the 1980s, monetary stabilisation with the Real Plan in the first half of the 1990s and a cycle of fiscal policy, characterised by adjustments during 1999–2005 and a greater fiscal flexibility after 2005. Therefore, it is fitting that some of this history is recounted, to enable a better understanding of the institutional framework that governs Brazilian public finances today.

This section aims to present an overview of the evolution of the fiscal situation of the Brazilian public sector, from a historical perspective that is clearly inspired by studies such as by Varsano (1996), Mora and Giambiagi (2005), Serra and Afonso (2007), Piancastelli and Boueri (2008), Giambiagi (2008), Giambiagi and Além (2008), and Rezende, Oliveira and Araújo (2008). In particular, we seek to contextualise and characterise the variation in fiscal policy towards a period of more flexibility after 2006 and its effects on the current fiscal situation of the public sector, following studies that analysed the recent shift towards greater fiscal flexibility such as Barbosa (2013), Lopreato (2014), and Gobetti and Orair (2015).

The starting point is to verify that voluntary capital flows to the majority of countries in Latin America were interrupted after the excessive external indebtedness of the 1970s, in conjunction with unfavourable international developments at the turn of the next decade (interest rate and oil price shocks, and the 1982 Mexican moratorium). The Brazilian foreign debt reached a peak of 33.2 per cent of Gross Domestic Product (GDP) in 1984 and represented the main component of the public debt. A downward spiral then began, until the recent conversion of the public sector into a net external creditor (see Figure 1).<sup>5</sup>

During the ‘foreign debt crisis’, new loans were practically restricted to renegotiations with multilateral organisms, mainly the International Monetary Fund (IMF), aiming at rescaling commitments and/or closing the balance of payments. Operations featured typical conditionalities, such as the implementation of fiscal adjustment measures; during the same period a series of efforts to equalise fiscal imbalances were made, although still erratically. By virtue of the difficulty of accessing new credit and rescaling financial commitments, foreign debt was reduced by approximately 28 per cent of GDP in a little over a decade (1984–1995) and came to represent a small portion of total indebtedness.

At the same time, the public sector was exhibiting positive primary results (see Table 1), and the net domestic debt remained relatively stable at close to 22 per cent of GDP. Total debt reached 28 per cent of GDP in 1995, which is the lowest level for the historic series depicted in Figure 1, a year after the introduction of the monetary stabilisation policy (Plano Real), which represented the end of the hyperinflationary period. However, such positive results were precarious because the public sector used inflationary mechanisms to reach fiscal goals through monetary seigniorage or the corrosion of the real value of expenditure by delaying payments. Moreover, they were influenced by stabilisation plans that had led to the devaluation of securities and the artificial decrease of debt stock.

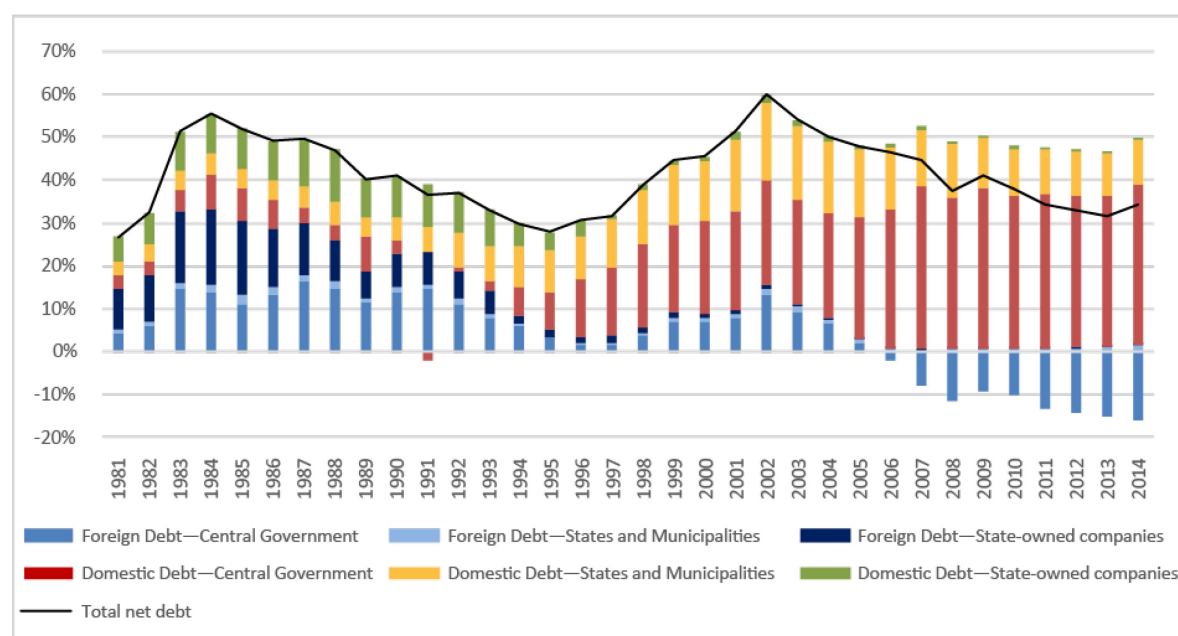
This scenario changed in the early 1990s. First, a cycle of international liquidity began, with a return of capital flows to Latin American countries after the balancing out of foreign debt and its restructuring according to the moulds of the Brady Plan (1989/1994). Brazil took advantage of this period to implement its plan to combat inflation, based on a stable, overvalued exchange rate that would lead to competitive pressure on prices and constrain

inflationary expectations. High domestic interest rates were one of the requirements of the macroeconomic regime, aiming at restricting domestic liquidity and stimulating capital injection to accumulate reserves and protect the exchange rate regime. Furthermore, the repressed character of the public deficit was evidenced after the end of the inflation mechanism and under additional pressures from social expenditures, resulting from the renewal of the social contract during redemocratisation (1985–1990).

FIGURE 1

**Public sector net debt (1981–2014) as a percentage of GDP**

Gráfico 1



Note: Information on state-owned companies from 2001 onwards does not include Petrobras and Eletrobras.

Source: Authors' elaboration, based on data from Giambiagi and Além (2008) for 1981–2000 and from the Central Bank for 2001–2014.

The Real Plan was unequivocally successful in terms of fighting inflation, but, on the other hand, it created a series of fiscal and external imbalances, which in turn led to the speculative attack on the Brazilian currency and the abandonment of the semi-fixed exchange rate during late 1998/early 1999. Suffering the impacts of high interest rates and declining fiscal results (see Table 1), public debt started an uphill climb from 1995 onwards and reached 38.9 per cent of GDP on the brink of change to the flexible exchange rate system in January 1999. At the time, a significant portion of the public debt comprised domestic securities indexed to the interest rate. Predicting the effect that exchange devaluation would have on debt, the Brazilian government made a new deal with the IMF, which predicted a primary surplus goal of 2.75 per cent of GDP for 1999.

The period between 1999 and 2002 was marked by profound changes in fiscal policy. The imperative of fiscal adjustment precipitated a series of initiatives for institutional reform that included formal primary surplus goals, as stated in the Budget Guidelines Law from 2000 onwards, and the Law of Fiscal Responsibility (2000), which established stricter control over public indebtedness and expenditure, as well as principles that guided the conduct of fiscal

authorities. Under the new fiscal regime, the public sector was able to increase its primary surplus to an average of 3.18 per cent of GDP between 1999 and 2002—following an average deficit of 0.18 per cent of GDP between 1995 and 1998 (see Table 1 and Figure 2).

TABLE 1

**Fiscal indicators by government period (1985–2014)—annual averages as a percentage of GDP**

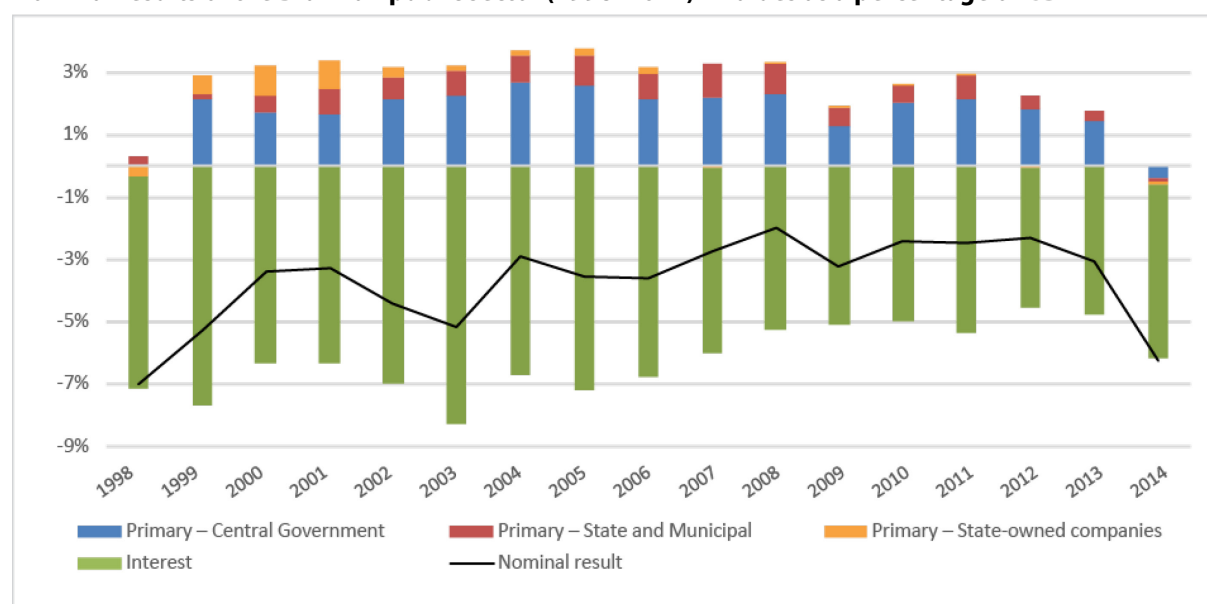
	1985/89	1990/94	1995/98	1999/02	2003/06	2007/10	2011/14	2014
Primary Result (I)	0.65	2.80	-0.18	3.18	3.45	2.78	1.59	-0.59
Central government	-0.45	1.53	0.16	1.92	2.41	1.95	1.26	-0.37
Regional governments	0.06	0.64	-0.27	0.56	0.87	0.81	0.35	-0.14
State-owned companies	1.04	0.63	-0.07	0.70	0.17	0.03	-0.02	-0.08
Interest (II)	5.80	2.84	5.91	7.27	7.24	5.37	5.10	5.64
Nominal result (III) = (I) + (II)	-5.15	-0.04	-6.09	-4.09	-3.79	-2.58	-3.52	-6.23
Exchange rate adjustment (IV)	-	-	-	5.06	-1.47	0.29	-1.58	-1.74
Other conditioning factors of net indebtedness (V)	-	-	-	0.39	0.40	-0.19	0.00	0.16
GDP growth effect (VI)	-	-	-	-4.43	-6.05	-4.81	-2.91	-2.08
Net debt variation (VII) = (IV) + (V) + (VI) – (III)	-	-	-	5.11	-3.34	-2.13	-0.97	2.57
Memo: Public sector net debt	-	-	-	51.71	49.68	40.27	33.25	34.11

Note: Data for the inflation period (before 1995) consider real interest and operating income.

Information on state-owned companies does not include Petrobras and Eletrobras from 2002 onwards.

Source: Authors' elaboration, with data from the Central Bank for 1996–2014 and from Giambiagi and Além (2008) for 1985–1995.

FIGURE 2

**Nominal results of the Brazilian public sector (1998–2014)—values as a percentage of GDP**

Note: Interest is presented as negative values. Information on state-owned companies does not include Petrobras and Eletrobras from 2002 onwards.

Source: Authors' elaboration with data from the Central Bank.

Paradoxically, the fiscal adjustment efforts did not translate directly into control over indebtedness. Net debt reached its peak of 59.8 per cent of GDP at the end of 2002 (Figure 1), an increase of over 20 percentage points in only four years, which might be attributed to the financial component of public indebtedness and the economic downturn.<sup>6</sup> The country went through a turbulent scenario of successive crises of emerging economies, including two

Brazilian exchange rate crises (1998/1999 and 2002/2003). First, interest rates were kept high to stimulate the entry of foreign capital and form a cushion of reserves, necessary for the protection of the exchange rate regime. Meanwhile, restrictive monetary policy—meant to fight inflation—demanded that money inflows be sterilised through the issuance of public bonds, to avoid the expansion of liquidity in the domestic economy.

With the deterioration of the foreign macroeconomic scenario, the high interest rates turned into a defensive mechanism to stem the flight of capital and loss of reserves, as well as to stop excessive devaluation and exchange rate volatility. The financial component became a crucial part of the ascending trajectory of public debt: rollover operations of public securities at high interest rates and impacts from exchange rate devaluations on domestic debt indexed to the exchange rate and on foreign debt. On average, interest payments were around 7.3 per cent of GDP per year, and exchange rate adjustments represented 5.1 per cent of GDP per year between 1999 and 2002.

Local governments made an important contribution to the process of fiscal adjustment with a growing indebtedness. A significant portion of the increased debt originated from states and municipalities (+6.3 percentage points, from 13.3 per cent of GDP in 1998 to 19.6 per cent in 2002). This happened even with the conversion of average deficits of 0.27 per cent of GDP between 1995 and 1998 into primary surpluses from 1998 onwards—of an average of 0.56 per cent of GDP between 1999 and 2002 (see Table 1 and Figure 2). During this last period, an institutional framework was consolidated, aimed at controlling indebtedness in regional governments and shifting their relationship with the central government.

The financial fragility of the regional level was evidenced by the end of the inflation mechanism, followed by an economic downturn by the second half of the 1990s, difficulty in debt rollover with private creditors and a worsening of the fiscal war, which restricted states' tax revenues. Demanding the rescheduling of state debts (except for the states of Amapá and Tocantins) and those of large municipalities between 1997 and 1999, the central government harnessed the precarious situation to take steps towards ensuring the contribution of the regional level to the generation of primary surpluses. The renegotiation comprised an operation whereby the Federal Government assumed the debts of regional governments in exchange for long-term loans (30 years). The regional governments committed to monthly instalments subject to a fixed ceiling of a portion of their income (13 per cent of net current revenue). This process was complemented in 2000 with the approval of the Fiscal Responsibility Law, which, in addition to the limits imposed on expenditure and indebtedness, conditioned new credit operations to prior authorisation by the Ministry of Finance.<sup>7</sup>

In practice, the financial engineering stemmed the process of debt rollover by regional governments and made them generate a primary surplus equal to what they owed the Federal Government. With the continuing indebtedness of 1999–2002, the net debt of local governments reached its peak of 19.6 per cent of GDP in 2002, composed almost entirely of federal debts. Debt rescheduling with the Federal Government was based on a general price index (IGP-DI), more susceptible to fluctuations in exchange rates and wholesale prices, plus a real interest rate of 6–9 per cent per year. On the one hand, a high level of debt stock correction was established, although inferior to market rates at the time. On the other hand, the low tax collection performance during the economic downturn meant that the payment instalments, subject to a ceiling proportional to current revenue, were often below what was necessary to ameliorate the debt.

From 2003 onwards, under the rule of Luis Inácio Lula da Silva, the Brazilian government implemented a new fiscal adjustment, with an increase in primary surplus goals, after public indebtedness reached nearly 60 per cent of GDP during the exchange rate crisis of the 2002 election period. The early Lula administration kept the same essential characteristics of the previous macroeconomic regime, such as relatively high levels of primary surplus and interest rates to control inflation. This resulted in average yearly surpluses of 3.45 per cent of GDP between 2003 and 2006, the highest in Table 1, and nominal interest rates of 7.2 per cent of GDP, which were very close to the 7.3 per cent of GDP in 1999–2002.

The main distinction was a consequence of the new cycle of liquidity and commodity prices on international markets. The country presented a primary surplus in its payment balance once again and a tendency for exchange rate valuation over the medium term. Parallel to this fact, the government undertook a change in the composition of public debt: not only substituting foreign debt and internal exchange-indexed securities with fixed-rate and inflation-linked securities, but also aggressively acquiring foreign exchange reserves, which transformed the public sector into a net creditor of foreign currency.

Therefore, at the end of 2006, through the combination of fiscal efforts and the resumption of growth, the net debt fell to 46.5 per cent of GDP, as can be seen in Figure 1. These transformations are important because they reduced the financial vulnerability of the public sector with a decrease in the level of indebtedness and a shift in its composition, because exchange rate devaluations began to reduce (and no longer increase) debt.

It is in this scenario of less vulnerability and greater economic growth that a change occurs in Brazilian fiscal policy towards a phase of fiscal expansion, starting in 2006. This phase was characterised by the progressive reduction of primary results in structural terms, which culminated in a deficit of 0.59 per cent of GDP in 2014—the first deficit of the inflation target regime.<sup>8</sup>

Initially, and in fact for most of the period, fiscal flexibility did not stop indebtedness from continuing to decrease. Between 2006 and 2010, net debt decreased by 8.5 percentage points of GDP and, between 2010 and 2013, by a further 6.4 percentage points. This decrease occurred even with the country traversing the most acute period of the 2008 international financial crisis, in which the government implemented a broad package of anticyclical fiscal measures, and the new economic downturn after 2011, when many of these measures were renewed or broadened in scope. Only in 2014, following a strong economic retraction and the aforementioned primary deficit, did indebtedness rise again, from 31.5 per cent to 34.1 per cent of GDP.

From a longer-term perspective and compared to the start of the primary surplus target regime, the net indebtedness of the Brazilian public sector decreased significantly. In 2014, it reached a relatively low level, comparable to those observed in the first half of the 1990s, and with a composition that was less vulnerable to external shocks. The problem was that the cost of debt stabilisation—that is, the primary surplus required to avoid its growth—became excessively high over the preceding years due to another factor, related to the composition of indebtedness, namely the simultaneous accumulation of public assets and liabilities with an enormous interest differential between them. In other words, Brazilian indebtedness has decreased significantly in net terms but has in fact increased in gross terms (or at least remained stable), as can be seen in Table 2. The liabilities of the public sector grew by about 5 percentage points between 2006 and 2014, for two main reasons: the accumulation of foreign exchange reserves (from 7.6 per cent to 17.8 per cent of GDP) and the capitalisation of official financial institutions (from 0.5 per cent to 9.9 per cent of GDP), such as the Brazilian Development Bank (BNDES)—used before and after the crisis to subsidise public and private investments.



TABLE 2

**Public sector net and gross debt (2006–2014)—values as a percentage of GDP**

	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>Public sector net debt</b>									
<b>(I) = (II) + (VI) + (IX) + (XI) + (XVI)</b>	<b>46.5</b>	<b>44.6</b>	<b>37.6</b>	<b>40.9</b>	<b>38.0</b>	<b>34.5</b>	<b>32.9</b>	<b>31.5</b>	<b>34.1</b>
<b>Federal Government (II) = (III) + (IV) + (V)</b>	<b>30.2</b>	<b>29.8</b>	<b>24.5</b>	<b>29.2</b>	<b>26.9</b>	<b>24.3</b>	<b>22.5</b>	<b>21.2</b>	<b>23.1</b>
<b>Debt* (III)</b>	<b>51.3</b>	<b>49.0</b>	<b>44.6</b>	<b>44.6</b>	<b>43.1</b>	<b>42.1</b>	<b>41.9</b>	<b>40.6</b>	<b>40.9</b>
Security debt	44.6	44.3	39.8	41.1	40.4	39.9	39.7	38.6	38.8
Bank debt	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Debt assumed by the Federal Government (Law No. 8.727)	1.0	0.8	0.7	0.5	0.4	0.2	0.1	0.0	0.0
Foreign debt	5.6	3.8	4.1	2.9	2.3	1.8	1.9	1.7	1.9
<b>Credits** (IV)</b>	<b>-24.0</b>	<b>-22.3</b>	<b>-22.3</b>	<b>-23.9</b>	<b>-25.2</b>	<b>-24.4</b>	<b>-25.6</b>	<b>-25.2</b>	<b>-26.0</b>
Official financial institutions	-0.5	-0.5	-1.4	-4.4	-6.6	-7.3	-8.6	-9.1	-9.9
Worker's Aid Funds (FAT) in the banking network	-5.1	-4.7	-4.4	-4.2	-3.8	-3.6	-3.6	-3.6	-3.7
Debts with subnational governments	-15.2	-14.2	-13.7	-12.4	-11.6	-10.7	-10.5	-9.9	-9.5
Other internal credits	-3.1	-2.9	-2.8	-2.9	-3.2	-2.8	-2.9	-2.6	-2.9
Foreign credits	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Relationship with the Central Bank (V)</b>	<b>3.0</b>	<b>3.1</b>	<b>2.2</b>	<b>8.5</b>	<b>8.9</b>	<b>6.6</b>	<b>6.3</b>	<b>5.8</b>	<b>8.1</b>
<b>State government (VI) = (VII) + (VIII)</b>	<b>13.1</b>	<b>11.9</b>	<b>11.6</b>	<b>10.5</b>	<b>10.0</b>	<b>9.2</b>	<b>9.4</b>	<b>9.4</b>	<b>10.0</b>
<b>Debt (VII)</b>	<b>14.2</b>	<b>13.1</b>	<b>12.7</b>	<b>11.7</b>	<b>11.1</b>	<b>10.4</b>	<b>10.6</b>	<b>10.6</b>	<b>11.1</b>
Securities debt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bank debt	0.3	0.2	0.2	0.4	0.5	0.5	0.7	1.1	1.6
Debt with the Federal Government	13.4	12.4	12.0	10.9	10.1	9.3	9.1	8.5	8.2
Foreign debt	0.5	0.4	0.5	0.4	0.5	0.5	0.8	1.0	1.3
<b>Credits (VIII)</b>	<b>-1.0</b>	<b>-1.2</b>	<b>-1.2</b>	<b>-1.1</b>	<b>-1.1</b>	<b>-1.1</b>	<b>-1.2</b>	<b>-1.3</b>	<b>-1.1</b>
<b>Municipal government (IX) = (X) + (XI)</b>	<b>1.9</b>	<b>1.8</b>	<b>1.8</b>	<b>1.7</b>	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>	<b>1.7</b>	<b>1.6</b>
<b>Debt (X)</b>	<b>2.0</b>	<b>1.8</b>	<b>1.8</b>	<b>1.7</b>	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>
Securities debt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bank debt	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3
Debt with the Federal Government	1.8	1.7	1.7	1.6	1.5	1.4	1.4	1.4	1.4
Foreign debt	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
<b>Credits (XI)</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.2</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.1</b>	<b>-0.1</b>
<b>Central Bank (XII) = (XIII) + (XIV) + (XV)</b>	<b>0.4</b>	<b>0.3</b>	<b>-1.0</b>	<b>-1.2</b>	<b>-1.1</b>	<b>-1.2</b>	<b>-1.3</b>	<b>-1.3</b>	<b>-1.3</b>
<b>Liabilities (XIII)</b>	<b>11.7</b>	<b>16.1</b>	<b>17.0</b>	<b>20.6</b>	<b>20.9</b>	<b>21.2</b>	<b>21.9</b>	<b>21.1</b>	<b>24.6</b>
Monetary base	5.0	5.4	4.7	5.0	5.3	4.9	5.0	4.8	4.8
Securities debt	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Repo operations	3.2	6.9	10.5	13.7	7.4	7.8	11.1	10.3	14.7
Deposits in the Central Bank	3.5	3.8	1.8	1.9	8.1	8.5	5.8	6.1	5.1
<b>Credits (XIV)</b>	<b>-8.4</b>	<b>-12.7</b>	<b>-15.9</b>	<b>-13.2</b>	<b>-13.0</b>	<b>-15.8</b>	<b>-16.9</b>	<b>-16.6</b>	<b>-17.8</b>
Other accounts in the Central Bank	-0.8	-0.9	-0.9	-0.9	-0.8	-0.8	-0.8	-0.5	-0.4
Central Bank credits to financial institutions	0.0	-0.1	0.6	-0.1	-0.1	-0.1	-0.1	0.7	0.5
International reserves	-7.6	-11.7	-15.5	-12.3	-12.2	-14.9	-16.0	-16.9	-17.8
<b>Relationship with the Federal Government (XV)</b>	<b>-3.0</b>	<b>-3.1</b>	<b>-2.2</b>	<b>-8.5</b>	<b>-8.9</b>	<b>-6.6</b>	<b>-6.3</b>	<b>-5.8</b>	<b>-8.1</b>
Treasury Account	9.4	10.1	8.2	12.2	10.4	10.9	13.2	12.7	11.0
Federal security debt in the Central Bank's portfolio	-12.3	-13.2	-15.9	-19.2	-18.1	-17.2	-19.2	-18.6	-20.2
Exchange rate equalisation	0.0	0.0	5.5	-1.6	-1.3	-0.3	-0.2	0.1	1.2
<b>State-owned companies (XVI)</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0.7</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.7</b>
<b>Memo: General government gross debt</b>	<b>55.5</b>	<b>56.8</b>	<b>56.0</b>	<b>59.3</b>	<b>51.8</b>	<b>51.3</b>	<b>54.8</b>	<b>53.3</b>	<b>58.9</b>
<b>Memo: Public sector liabilities</b>	<b>63.9</b>	<b>65.9</b>	<b>62.6</b>	<b>66.2</b>	<b>65.2</b>	<b>64.7</b>	<b>65.6</b>	<b>64.2</b>	<b>68.8</b>

Note: \*Repurchase agreements not included. \*\*Does not include the balance of the Treasury Account and repurchase agreements.

Source: Authors' elaboration, with data from the Central Bank.

The accumulation of low-profitability assets—predominantly BNDES credits based on the Long-Term Interest Rate (TJLP) and fixed income securities issued by the US government with close to zero rates—totalling nearly 20 percentage points of GDP, was counterweighted by an

increase in public indebtedness. This happened through the issuance of federal government securities, whose average cost is much higher, or because, by virtue of the way that monetary policy functions when it is too focused on short-term liquidity control, it demanded repo operations with federal government securities by the Central Bank, based on the short-term basic interest rate (Selic). This explains not only the divergent trajectory between the two debts (net and gross) but also the high rate of nominal interest, which, despite the reduction in the net debt stock, reached an average of 5.1 per cent of GDP between 2011 and 2014.

In this context, allied to low economic growth and increased interest rates to fight inflation, the level of public indebtedness once again depends on significant improvements in primary results. This will involve—at least in the medium term—strong restrictions by the Federal Government on the clearance of credit operations for states and municipalities, more control over expenditures and a revision of tax exemptions and subsidies instituted during the previous period. The fiscal adjustment under way since 2015 is interrupting the flexibility that characterised the period between 2006 and 2014.

Another aspect of this period of fiscal expansion was the increased flexibility regarding restrictions to the indebtedness of regional governments. As can be seen in Table 2, approval by the Federal Government allowed for the banking debt of states and municipalities to increase by 1.4 percentage points of GDP, and foreign debt by another 0.9 percentage points. Although a portion of the loans was used in the restructuring of liabilities, substituting debt with the Federal Government by cheaper loans, the main purpose was to finance capital investments, taking credit from the public banking sector or multilateral organisms, which will be analysed further in Section 4.

It is important to note that the net debt of regional governments had been decreasing between 2002 and 2008, while credit taking was still subject to rigid control. Fundamental to this process were the acceleration of economic growth, which drove state revenues, and the tendencies of exchange rate valuation and inflation control, which positively influenced the index of the rescheduled debt with the Federal Government (IGP-DI).

This picture changed, however, from 2008 onwards, with not only a deterioration of the macroeconomic scenery but mainly through the resumption of external and banking credit. Debt with the Federal Government maintained its downward trajectory, falling a further 4.2 percentage points of GDP in 2008–2014 (from 13.7 per cent to 9.5 per cent of GDP) and, at first sight, more than made up for the new operations. Only after 2011 did the volume of the contraction of credit surpass the discharge of commitments with the Federal Government, causing an increase in indebtedness. The regional governments' net debt fell by 2.5 percentage points of GDP in 2008–2011 and rose by 0.8 percentage points in 2011–2014, reaching 11.6 per cent of GDP in 2014, a level similar to the early 1990s.

In other words, the resumption of foreign and bank indebtedness by regional governments indicates a change in the composition of the debt rather than a trajectory of increasing indebtedness. Even so, it is a very expressive phenomenon. At the state level, which concentrated credit taking, foreign and bank credit leapt from BRL23.3 billion to BRL160 billion between 2008 and 2014, and its weight relative to the total debt increased from 6 per cent to 26 per cent. The debt with the Federal Government remains the main liability of state governments, but it has lost importance somewhat in relation to the total debt. As will be seen in the next section, it is now secondary in many states. New, previously repressed sources of expenditure financing partially explain why the states' primary results shrunk from a surplus

level of slightly under 1 per cent of GDP up to 2008 to a deficit of 0.24 per cent of GDP in 2014. Other factors responsible for the deterioration of fiscal results are related to the impacts of economic slowdown on tax revenue and, indirectly, on the volume of transfers by the Federal Government. These factors will be analysed in more detail in Section 5.

For now, what is important is to understand the broader characteristics of fiscal policy that are crucial in sustainability evaluation. Reducing primary results and increasing indebtedness are not necessarily undesirable, as long as the fiscal space is channelled towards public expenditures that boost the development process. For a better evaluation of the determinants of fiscal deterioration, we present Table 3 from Gobetti and Orair's study (2015), which details the components of the primary result of the three levels of the government between 2009 and 2014.

The numbers show that the reduction in the primary result of the general government (Federal Government, states and municipalities) as a proportion of GDP between 2009 and 2014 is almost entirely explained by the increase in expenditure, given that revenues were stable, even with tax exemptions at the federal level. That is, the process of greater fiscal flexibility that started in 2006 did not directly result in significantly worse fiscal results during most of the period, because revenues were driven by high growth rates in product and wages.<sup>9</sup> From 2011 onwards, continuing expansion of expenditures in a scenario of low economic growth and slowing tax revenues led to a rapid deterioration of fiscal results.

An analysis of the expenditures, however, shows that they grew according to different determinants in the federal and regional levels. In the federal level, growth is explained mainly by expenditures for social benefits, subsidies and costing, while in the regional level, both for states and municipalities, the main determinants are expenditures on the wages and retirement pensions of public servants.

Public investment, which presumably would be the main target of increased fiscal flexibility, remained relatively stable between 2009 and 2014, excluding the years of presidential and state governor elections (2010 and 2014), when the political cycle influences the amount of expenditures. Apart from that, the data indicate that there was an interruption in the tendency of increasing investments that prevailed during the early fiscal expansion phase. This was observed across all spheres—federal, state and municipal.<sup>10</sup>

Analysing the series of capital investments from a middle-term perspective, such as in Table 4, we can see that the main increase, across all spheres of the government, occurred between 2006 and 2010. In addition, in this phase, the clearance of credit operations had just started. In contrast, between 2011 and 2014, when a great volume of loans was contracted, total public investment—state investment in particular—stopped growing. This situation, revealed by aggregate data, suggests caution, insofar as it shows that states would have utilised the fiscal space opened by credit operations to cover their increased personnel costs. In other words, although a significant part of the operations were tied to investments, state governments seem to have promoted a substitution of sources of financing, freeing up funds previously tied up in investments to cover expenses on wages and retirement pensions. This analysis will be deepened in Section 5.

TABLE 3

**Primary result of the general government (2009–2014)—values as a percentage of GDP**

Description	2009	2010	2011	2012	2013	2014	2009–2014	
Central government	Primary revenue	22.18	21.71	22.59	22.45	22.68	21.80	-0.38
	Taxes	13.70	13.69	14.30	13.96	14.16	13.56	-0.14
	Social contributions	5.47	5.45	5.62	5.81	5.78	5.79	0.32
	Others	3.01	2.57	2.67	2.68	2.75	2.45	-0.56
	Legal grants	3.84	3.62	3.94	3.85	3.68	3.81	-0.03
	Net revenue	18.34	18.09	18.65	18.60	19.00	17.99	-0.35
	Total expenditure	17.16	16.88	16.51	16.99	17.51	18.30	1.15
	Personnel	4.61	4.33	4.14	3.99	3.97	4.02	-0.59
	Social benefits	8.49	8.24	8.16	8.61	8.89	9.29	0.80
	Subsidies	0.18	0.23	0.41	0.46	0.62	0.65	0.46
	Costing	2.78	2.84	2.73	2.87	3.00	3.22	0.44
	d/q grants	1.36	1.37	1.29	1.36	1.24	1.26	-0.10
	Capital investments	0.97	1.15	0.96	0.99	0.92	1.04	0.07
	d/q grants	0.36	0.38	0.31	0.42	0.28	0.30	-0.06
	Financial investments	0.14	0.08	0.10	0.07	0.10	0.09	-0.05
Primary result	1.18	1.21	2.14	1.61	1.49	-0.31	-1.50	
State governments	Primary revenue	11.66	11.47	11.32	11.45	11.60	11.50	-0.16
	Taxes	8.73	8.74	8.62	8.90	9.16	9.13	0.40
	Social contributions	2.22	2.09	2.08	1.96	1.82	1.77	-0.45
	Others	0.71	0.64	0.61	0.60	0.62	0.60	-0.11
	Grants	2.23	2.25	2.16	2.25	2.23	2.20	-0.03
	Net revenue	9.43	9.21	9.16	9.20	9.37	9.30	-0.13
	Total expenditure	8.77	8.64	8.23	8.62	9.07	9.53	0.77
	Personnel	5.45	5.29	5.29	5.56	5.70	6.00	0.56
	Social benefits	0.03	0.03	0.03	0.04	0.04	0.04	0.02
	Subsidies	0.01	0.01	0.00	0.00	0.01	0.01	0.00
	Costing	1.91	1.82	1.75	1.87	1.96	1.95	0.04
	Capital investments	0.92	1.04	0.70	0.70	0.91	1.08	0.16
	Others	0.46	0.46	0.44	0.45	0.45	0.45	-0.01
	Primary result	0.66	0.57	0.93	0.57	0.29	-0.24	-0.90
	Municipal governments	Primary revenue	7.80	7.78	7.91	8.21	8.07	8.27
Taxes		1.96	1.98	2.05	2.16	2.20	2.30	0.33
Social contributions		5.42	5.34	5.44	5.61	5.48	5.58	0.16
Others		0.41	0.45	0.42	0.44	0.39	0.39	-0.02
Grants		0.04	0.05	0.04	0.04	0.06	0.07	0.03
Net revenue		7.76	7.73	7.88	8.17	8.01	8.21	0.45
Total expenditure		7.59	7.58	7.75	8.16	7.88	8.28	0.69
Personnel		3.79	3.66	3.72	3.96	4.08	4.39	0.60
Social benefits		0.03	0.03	0.03	0.03	0.03	0.04	0.01
Subsidies		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Costing		2.73	2.64	2.72	2.73	2.65	2.72	-0.02
Capital investments		0.76	0.90	0.92	1.01	0.73	0.81	0.05
Others		0.27	0.35	0.36	0.42	0.38	0.33	0.05
Primary result		0.17	0.15	0.12	0.01	0.13	-0.07	-0.25
General government		Primary revenue	33.82	33.27	34.09	34.18	34.86	33.93
	d/q non-recurring	0.71	0.07	0.38	0.27	0.68	0.50	-0.20
	Total expenditure	31.80	31.35	30.89	31.99	32.94	34.56	2.76
	Personnel	13.85	13.28	13.16	13.51	13.74	14.41	0.57
	Social benefits	8.54	8.30	8.22	8.68	8.97	9.37	0.83
	Subsidies	0.19	0.25	0.41	0.47	0.64	0.66	0.47
	Costing	6.06	5.93	5.91	6.10	6.38	6.62	0.57
	Capital investments	2.29	2.71	2.27	2.28	2.28	2.63	0.34
	Others	0.87	0.89	0.91	0.95	0.93	0.87	0.00
	Primary result	2.02	1.92	3.19	2.20	1.92	-0.63	-2.65
Statistic discrepancy	-0.11	-0.18	-0.31	-0.18	-0.14	0.12	0.23	

Source: Gobetti and Orair (2015).

TABLE 4

**Gross fixed capital formation of the public administration (1996–2014)—  
values as a percentage of GDP**

Year	Central government	State government	Municipal government	Public administration	Federal state-owned companies	Public sector
1996	0.35	0.67	1.12	2.14	0.58	2.72
1997	0.39	0.82	0.68	1.88	0.69	2.57
1998	0.41	1.14	0.80	2.34	0.80	3.15
1999	0.26	0.61	0.65	1.52	0.76	2.28
2000	0.23	0.74	0.72	1.69	0.77	2.46
2001	0.41	0.83	0.63	1.87	0.85	2.72
2002	0.45	0.78	0.95	2.18	1.11	3.29
2003	0.20	0.53	0.75	1.47	1.08	2.55
2004	0.21	0.58	0.79	1.59	1.01	2.60
2005	0.33	0.65	0.61	1.59	1.00	2.60
2006	0.38	0.74	0.83	1.95	0.97	2.92
2007	0.42	0.50	0.82	1.74	1.08	2.82
2008	0.44	0.70	1.01	2.15	1.38	3.53
2009	0.60	0.91	0.75	2.26	1.79	4.04
2010	0.79	1.04	0.88	2.71	1.87	4.58
2011	0.60	0.69	0.90	2.19	1.62	3.81
2012	0.55	0.70	0.98	2.23	1.84	4.07
2013	0.65	0.91	0.73	2.28	1.98	4.27
2014	0.73	1.07	0.80	2.61	1.60	4.21
2002–2006	0.28	0.62	0.75	1.65	1.02	2.67
2007–2010	0.56	0.79	0.87	2.22	1.53	3.74
2011–2014	0.64	0.84	0.85	2.33	1.76	4.09

Source: Authors' elaboration.

### 3 FISCAL CONDITION OF STATE GOVERNMENTS: DEGREE OF INDEBTEDNESS AND PAYMENT CAPACITY

In this section, we present an analysis of the indicators of indebtedness and payment capacity, centred on the states of the North and Northeast regions of Brazil over the most recent period (2008–2014), together with the result of the application of a methodology for the classification of credit risk. The objective is to qualify the analysis of the trajectory of the public debt of state entities, which, as was seen in the previous section, was characterised by a profound alteration of its composition, whereby new bank and foreign credit operations took the place of declining debt with the Federal Government.<sup>11</sup>

Starting with regional comparisons, Figure 3 shows the evolution of net debt as a proportion of regional GDP (ND/GDP) and allows for the identification of a unique pattern of change in the composition of indebtedness, which occurred more pointedly in the North and Northeast regions of the country (in addition to the Centre-West).<sup>12, 13</sup> In the North region, the debt with the Federal Government fell more significantly (-2.3 percentage points of regional GDP) and was converted into a residual share (from 73 per cent to 21 per cent of the total debt). The counterpart was the increase in bank and foreign debts (+3.2 percentage points and +1.2 percentage points, respectively), which turned into the largest components of indebtedness. The North also has the distinction of being the only region exhibiting an increase in its level of indebtedness: the ND/GDP indicator increased from 2 per cent to 3.7 per cent; however, this should be put into perspective: it has the lowest degree of indebtedness as a proportion of GDP.

A similar phenomenon was observed in the Northeast region: the debt with the Federal Government fell by 5.5 percentage points of GDP and became less relevant (from 84 per cent to 34 per cent of the total debt), while bank and foreign debts became increasingly important (respectively, +2.1 percentage points and +1.8 percentage points of GDP). There was a slight reduction in the ND/GDP indicator in the Northeast region between 2007 and 2014 (-1.5 percentage points of GDP), with a tendency to expand from 2011 onwards.

Therefore, it can be concluded that the change in net debt composition, through an increase in the significance of bank and foreign debts, occurred more intensively in the North and Northeast regions of Brazil. This was partly because the level of indebtedness in these regions was relatively low compared to others, and the proportion of debt with the Federal Government decreased more rapidly. Even so, the uptake of new credits was significant, and, from the point of view of fiscal sustainability, it is interesting to know whether it compromised the capacity of states to honour their prior commitments.

FIGURE 3

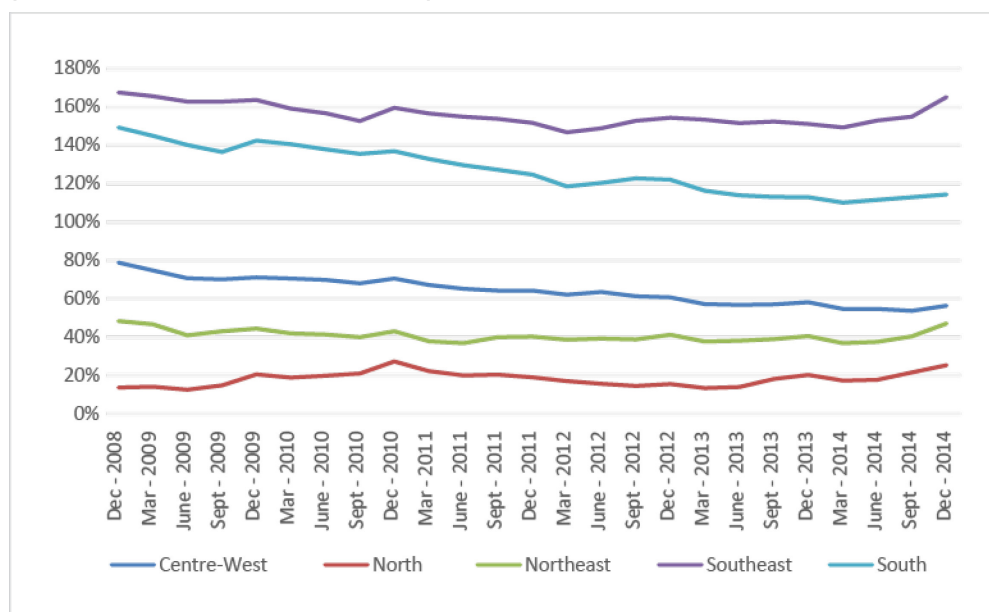
### Net debt of subnational entities by region—December 2007 to December 2014; values as a percentage of regional GDP



Source: Authors' elaboration based on regional fiscal statistics from the Central Bank.

FIGURE 4

**ND/CLD (DL/RCL) indicator determined by the Central Bank, by region (December 2007 to December 2014)**



Source: Authors' elaboration based on regional fiscal statistics of the Central Bank.

FIGURE 5

**CLD/CLR (DL/RCL) for purposes of determining the limit of LRF indebtedness in states of the North/Northeast regions (2000–2014)**



Source: Authors' elaboration from information from Fiscal Management Reports.

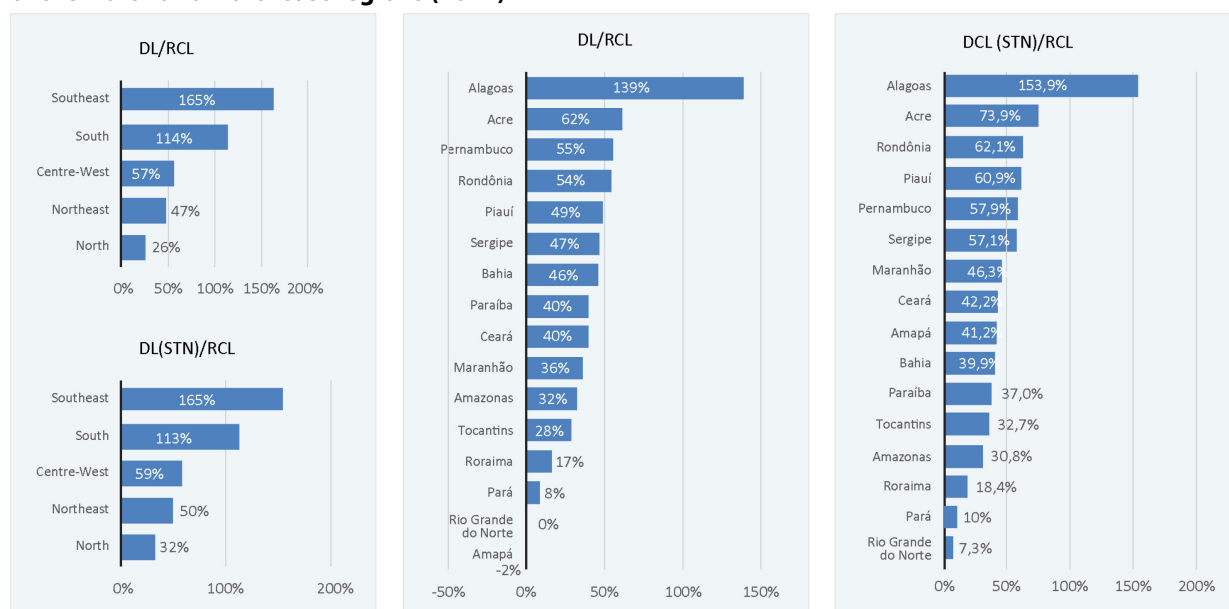
To analyse the capacity for payment, the ratio between net debt and Current Net Revenue (CNR/RCL) will be used as an indicator. It measures the size of debt stock relative to the available budgetary resources. The higher the indicator, the less the capacity of entities to honour their financial commitments. The indicators are presented in Figures 4 to 7 and ponder two alternative concepts to net debt: 1) Net Debt (ND/DL), ascertained by the Central Bank alongside the financial institutions; and 2) Consolidated Net Debt (CND/DCL), which is declared by entities in the Fiscal Management Reports and which follows the Law of Fiscal Responsibility (LFR/LRF).<sup>14</sup> In Figure 6, despite some changes in the order of states, there are two indicators that exhibit similar results.

In general, it can be observed that states in the North and Northeast regions are below the other regions and have shown tendencies towards stability for the greater part of 2008–2013, and a slight deterioration since early 2013. Moreover, the analysis reveals that the main exception is the state of Alagoas, the only state in the North or Northeast region with a net debt surpassing 100 per cent of the CNR/RCL during 2014. Among the remaining states, the highest indicators were found in Acre, Rondônia, Piauí and Pernambuco (close to or over 50 per cent).

The CND/CNR (DCL/RCL) indicator serves as reference for ascertaining the indebtedness limit of two times the CNR/RCL established by the Federal Senate Resolution No. 40 of 20 December 2001. As can be observed in Figures 5 and 6, all the states in the North and Northeast regions are framed by this criterion.<sup>15</sup> Figure 5 also shows that, at the start of the implementation of the LRF, Piauí and Bahia came close to the limit, and the states of Alagoas and Maranhão actually exceeded it. Since then, almost all of the states have converged to lesser values, and even Alagoas, which has a greater CND/DCL than CLD (RCL), demonstrates a downward trend. However, the same figures point to an inflection since early 2013, with traces of deterioration in the indicators in the North and Northeast regions (in addition to the Southeast).

FIGURE 6

**Indicators of public debt/RCL based on the Central Bank's concept of net debt (ND) and the LRF's concept of consolidated net debt (CND)—regions of the country and states of the North and Northeast regions (2014)**



Source: Authors' elaboration based on information from Fiscal Management Reports and the Central Bank's regional statistics.

Such findings are corroborated by individual analysis, as evidenced in Figure 7 by the separation of states between North and Northeast regions (left side) and other regions (right side) and by brackets according to CND/CNR (DL/RCL) at the end of the period: up to 0.4; between 0.4 and 1.0; and over 1.0; representing low, medium and high degrees of indebtedness, respectively. In the North/Northeast set, there is a higher concentration in the low bracket, whereas the other regions exhibit a more even distribution. Among the states in the low bracket, Tocantins, Amazonas, Ceará and Paraíba have exhibited more significant

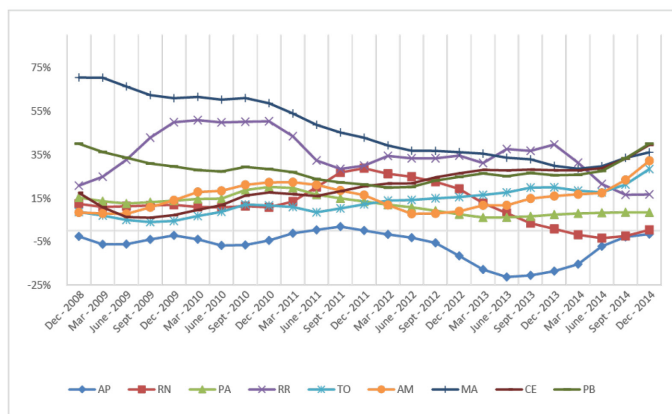


deterioration from 2013 onwards. In the middle bracket, six states in the North or Northeast have exhibited an ascending trajectory over the same period (Bahia, Piauí, Rondônia, Pernambuco and Acre, with the single exception of Sergipe).

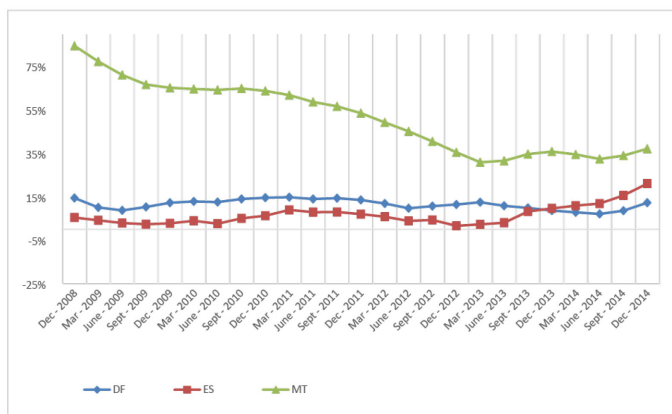
FIGURE 7

**Net debt/RCL indicator evaluated by the Central Bank—state governments (December 2007 to December 2014); rolling average over three quarters**

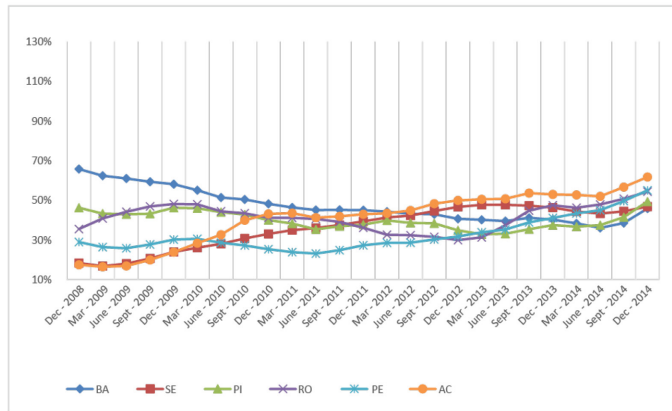
Low degree - North and Northeast regions



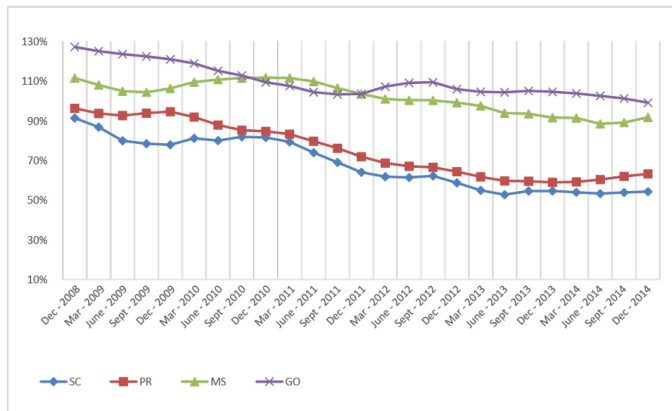
Low degree - Centre-West, Southeast and South regions



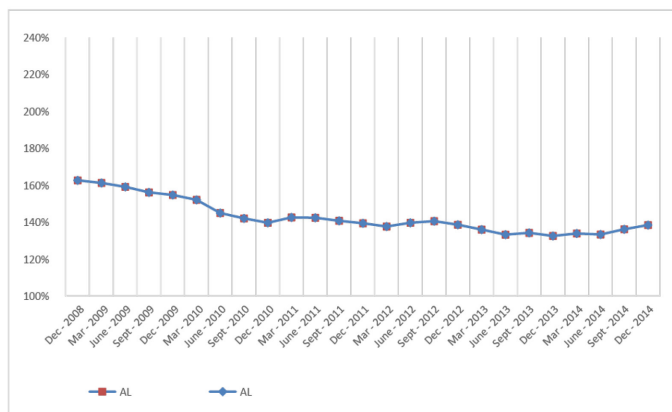
Medium degree - North and Northeast regions



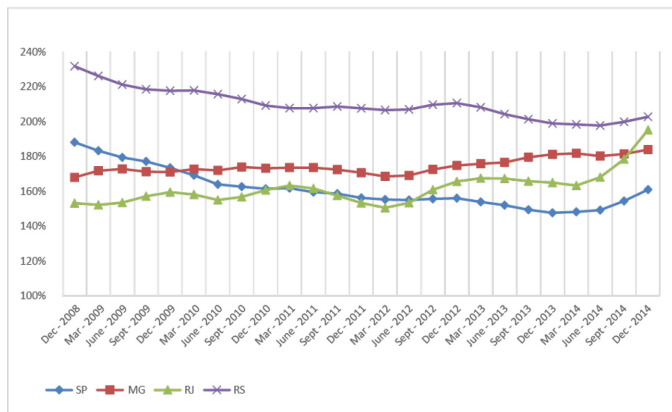
Medium degree - Centre-West, Southeast and South regions



High degree - North and Northeast regions



High degree - Centre-West, Southeast and South regions



Source: Authors' elaboration, with regional statistics from the Central Bank.

To deepen the analysis, we have implemented an adaptation of the methodology for classification of credit risk employed by the National Treasury Secretariat to guarantee credit operations to individual states. The methodology is described in Ordinance No. 306/2012 of the Ministry of Finance, which establishes two steps for granting the guarantee. The first refers to the fiscal situation, which will be applicable to states in the North and Northeast regions, and a second one, which depends on the type of operation to be guaranteed, which will be excluded from this discussion.

Since the Ordinance is not specific about fiscal concepts, and even less so regarding data sources, we have opted to use data from the states' Annual Balances, complemented by the RCL and DCL from the Fiscal Management Reports and by the primary result and interest expenditures from the Central Bank. The evaluation is a composite of eight indicators that point to degree of indebtedness, debt service and fiscal effort in service of the debt, expenditures on personnel, investment, costing and social security, as well as savings capacity. Table 5 presents this set of indicators.

Following the methodology, grades from 0 to 6 are attributed according to the values of the indicators. The higher the grade, the worse the fiscal situation for the item. Grades are attributed for each of the last three years, and then a weighted average is applied: 0.5 for 2014, 0.3 for 2013 and 0.2 for 2012. Finally, as described in Table 6, a final grade for the states is obtained, and we arrive at a classification of their fiscal situation in Table 7.

The classification of states in the North and Northeast regions, generally speaking, is of low or very low credit risk. The only state with a high credit risk is Alagoas; it has a high degree of indebtedness, combined with more favourable fiscal results. With the second worst grade, Pernambuco is in an opposite situation, combining a low degree of indebtedness with worrisome fiscal results (high and rising primary deficit, low savings capacity and high and rising commitment of revenue to personnel costs).

The analysis undertaken in this section suggests that the fiscal condition of most states in the North and Northeast regions is relatively healthy in the short term, considering the indicators of degree of indebtedness and payment capacity, and the classification of credit risk. However, such a statement must be made cautiously because the degree of indebtedness stopped improving in 2011, payment capacity has been deteriorating for a large number of states since early 2013, and, as seen in Section 5, all of them have recorded worsening fiscal results, with poor short-term prospects.

The most credible scenario is a downgrading in the classifications of credit risk over the next few years, inasmuch as they more appropriately capture recent trends of fiscal deterioration. However, this does not seem to point towards explosive indebtedness behaviour. First, because the Federal Government has been promoting a reorientation of fiscal policy through the fiscal adjustment starting in 2015, which will imply, at least in the short term, the tightening of restrictions regarding the approval of new credit operations.

TABLE 5

**Indicators of the fiscal situation of the states in the North and Northeast regions of Brazil**

Indicator	Acronym	Year	AC	AL	AM	AP	BA	CE	MA	PA	PB	PE	PI	RN	RO	RR	SE	TO
Indebtedness	Ind	2012	0.6	1.4	0.3	0.0	0.5	0.4	0.4	0.1	0.4	0.5	0.5	0.0	0.5	0.2	0.5	0.3
		2013	0.6	1.4	0.2	-0.2	0.4	0.3	0.3	0.1	0.3	0.4	0.4	0.0	0.5	0.3	0.5	0.2
		2014	0.5	1.4	0.1	-0.1	0.4	0.3	0.4	0.1	0.3	0.3	0.3	0.4	0.2	0.3	0.3	0.5
Debt service in RCL	SDrcl	2012	4.8%	13.3%	2.4%	1.3%	3.0%	2.7%	2.6%	1.3%	1.8%	4.2%	2.2%	0.6%	3.4%	3.4%	3.1%	1.7%
		2013	4.6%	15.1%	1.9%	-0.1%	3.3%	2.4%	3.3%	1.3%	1.7%	3.7%	1.8%	0.7%	3.8%	4.3%	3.5%	1.6%
		2014	4.1%	24.0%	4.5%	-0.1%	3.9%	2.5%	7.9%	1.6%	4.2%	4.4%	2.0%	1.3%	3.7%	3.0%	3.8%	1.0%
Primary result debt servicing	RPsd	2012	-0.8	0.2	-3.6	-10.6	-0.8	-2.5	-1.3	0.1	-2.4	-1.7	-3.5	2.3	1.7	4.7	0.6	-3.2
		2013	-1.2	0.6	-2.1	-136.8	1.1	0.8	2.9	0.5	-1.3	-1.9	-1.0	2.2	-4.0	0.9	0.7	-2.7
		2014	-2.0	0.5	1.0	-104.5	2.1	-2.1	1.2	4.1	-0.2	-0.7	4.4	6.4	0.9	1.4	-1.6	-2.9
Expenditure on personnel in RCL	DPrcl	2012	50%	63%	51%	54%	61%	57%	57%	62%	62%	61%	64%	74%	53%	41%	69%	52%
		2013	53%	60%	49%	56%	62%	56%	56%	62%	58%	60%	41%	74%	58%	50%	68%	62%
		2014	62%	60%	51%	56%	59%	56%	52%	59%	68%	66%	54%	65%	59%	45%	70%	58%
Savings capacity	CGPP	2012	21%	18%	16%	26%	17%	18%	19%	23%	30%	12%	31%	19%	23%	37%	24%	26%
		2013	18%	20%	19%	23%	15%	22%	19%	22%	30%	15%	33%	20%	17%	15%	24%	23%
		2014	16%	21%	23%	28%	17%	22%	25%	25%	28%	9%	36%	20%	20%	26%	23%	26%
Investments as a proportion of expenditure	Pidt	2012	20%	16%	15%	9%	7%	17%	13%	8%	13%	10%	13%	4%	8%	13%	7%	14%
		2013	18%	12%	17%	11%	6%	13%	12%	8%	12%	12%	17%	4%	12%	15%	4%	11%
		2014	18%	11%	13%	7%	6%	13%	10%	6%	9%	10%	11%	5%	8%	14%	6%	10%
RPPS contributions as a proportion of social security expenditures	PCRdp	2012	87%	0%	57%	957%	64%	56%	74%	67%	45%	104%	63%	52%	198%	2629%	61%	358%
		2013	69%	0%	56%	508%	66%	54%	30%	55%	48%	91%	80%	57%	127%	8958%	64%	306%
		2014	63%	0%	57%	1409%	65%	56%	123%	65%	52%	63%	63%	65%	175%	3187%	69%	411%
Tax revenue as a proportion of costing expenditures	RTdc	2012	28%	56%	69%	29%	67%	69%	51%	67%	71%	66%	63%	62%	61%	37%	54%	44%
		2013	27%	58%	72%	28%	67%	71%	53%	66%	69%	67%	63%	61%	58%	26%	54%	43%
		2014	28%	56%	73%	29%	64%	69%	53%	62%	65%	63%	62%	61%	60%	27%	51%	41%

Source: Authors' elaboration based on information from Annual Balances, Fiscal Management Reports and regional statistics of the Central Bank.

TABLE 6

**Average grades according to criteria from Ministry of Finance Ordinance No. 306/3012**

Indicator	Weight	AC	AL	AM	AP	BA	CE	MA	PA	PB	PE	PI	RN	RO	RR	SE	TO
Ind	10	0.7	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0
SDrcl	9	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RPsd	8	6.0	3.8	4.8	6.0	3.0	4.5	3.0	3.7	6.0	6.0	4.8	0.0	2.0	0.2	2.9	6.0
DPrcl	7	2.7	4.3	2.1	3.0	4.2	3.3	3.1	4.3	4.4	4.3	3.0	5.8	3.1	0.9	5.7	3.2
CGPP	4	1.8	1.7	1.9	0.2	2.6	1.5	1.4	0.6	0.0	3.8	0.0	1.7	1.3	0.9	0.4	0.1
Pidt	3	0.5	2.6	2.1	4.2	5.3	2.1	3.2	4.9	3.2	3.9	2.4	6.0	4.3	2.5	5.5	3.2
PCRdp	2	1.6	6.0	4.0	0.0	3.1	4.1	2.8	3.2	5.1	0.6	2.6	4.1	0.0	0.0	3.2	0.0
RTdc	1	6.0	2.8	1.1	6.0	1.6	1.2	3.3	1.7	1.3	1.7	2.1	2.2	2.4	5.6	3.2	4.5
Weighted average		2.1	4.5	1.7	2.0	2.0	1.8	1.6	1.9	2.3	2.5	1.7	1.7	1.4	0.6	2.1	1.9

Source: Authors' elaboration.

TABLE 7

**Classification of fiscal situation according to Ministry of Finance Ordinance No. 306/2012**

State	Grade	Fiscal situation
AL	C-	Very weak fiscal situation, very high credit risk
PE	B	Strong fiscal situation, low credit risk
PB	B	Strong fiscal situation, low credit risk
AC	B	Strong fiscal situation, low credit risk
SE	B	Strong fiscal situation, low credit risk
AP	B	Strong fiscal situation, low credit risk
BA	B+	Strong fiscal situation, low credit risk
TO	B+	Strong fiscal situation, low credit risk
PA	B+	Strong fiscal situation, low credit risk
CE	B+	Strong fiscal situation, low credit risk
AM	B+	Strong fiscal situation, low credit risk
RN	B+	Strong fiscal situation, low credit risk
PI	B+	Strong fiscal situation, low credit risk
MA	B+	Strong fiscal situation, low credit risk
RO	A-	Very strong fiscal situation, very low credit risk
RR	A	Very strong fiscal situation, very low credit risk

Source: Authors' elaboration.

Furthermore, the debt with the Federal Government, by far the largest proportion of indebtedness in the South and Southeast regions and secondary yet significant in the North and Northeast regions, is being restructured. Since the period of decreases in basic interest rates after 2003, governors and mayors have been fiercely resistant to the index used to adjust the debt with the Federal Government (IGP-DI plus 6–9 per cent interest), which is highly susceptible to volatility in exchange rates and retail prices. After substantial negotiations, the Federal Government made a deal in 2014 to replace it with a new index, defined as the lowest rate per year between the basic interest rate (Selic) and a tax composed of the consumer price index (IPCA) plus a 4 per cent yearly interest.

Grounded in a draft bill approved by Congress, the deal stated that until the start of 2015, new contracts were to be signed between the Federal Government and regional entities, featuring the new index and retroactive correction of outstanding balances since the signing date of previous contracts. Within the scope of fiscal adjustment, Congress approved a draft bill in June 2015 that postpones the deadline for the Federal Government to sign the new contracts until January 2016. In short, the combination of hardening control over the authorisation of new credit operations together with a restructuring and reduction of Federal Government debt stock, set for 2016, will contribute to restrict an eventually untenable trajectory of indebtedness, despite significant fiscal deterioration.

#### **4 FISCAL CONDITION OF STATE GOVERNMENTS: FOREIGN AND BANK FINANCING**

The purpose of this section is to deepen the analysis of the process of change in the composition of indebtedness of state governments and the role of international financing for rural development. To that end, we will conduct an analysis of information from creditor institutions and the purpose of credit, which is available in the Credit Operations Registries (COCs) of state governments, for 2008–2013. <sup>16</sup>

State credit registries show a significant reduction in outstanding balances for debt refinancing operations, which comprise the restructured/renegotiated debt with the Federal Government. These operations conform to the analysis of the previous section based on information from the Central Bank, despite conceptual differences and differences in accounting criteria. Table 8 presents outstanding balances at the end of each year according to the purpose of the credit, differentiating the North and Northeast regions from the others. It reaches the same conclusion as seen in the previous section: refinanced debt decreased more intensely in the North and Northeast regions, nominally from BRL39.4 billion to BRL32.9 billion. This space was occupied by the other purposes of the credit. The subtotal, after excluding the refinancing of the debt, increased from BRL9.5 billion in 2008 to BRL39.6 billion in 2013 in the North and Northeast regions.

In analysing the composition of the other purposes of credit, the first four categories in Table 8 are related to the financing of rural development projects. The first encompasses the financing of projects strictly destined for rural development. The remaining three categories are related to rural development more broadly, consolidating projects destined for the promotion of: i) fighting rural poverty; ii) sustainable development; and iii) environmental development, which includes environmental preservation, irrigation and water resources.

In the stricter context of financing rural development, credit operations amounted to, on average, BRL209.6 million in 2008–2013, and about half, BRL94.3 million on average, was destined for the North and Northeast regions. It is a limited and relatively stable proportion of total debt. The amounts become more significant and are rising when the other three categories related to rural development more broadly are added—from BRL2.3 billion to BRL7.4 billion. The North and Northeast regions were the main destination for the funds, which grew from BRL1.9 billion to BRL6.4 billion.

It is worth noting that this growth has only followed the same trends observable for all purposes of credit in Table 8. When considered in relation to the subtotal, which excludes debt refinancing, the proportion for financing rural development more broadly remained fairly stable at 10 per cent of the outstanding balance. More precisely, the subtotal of state debts increased, driven by operations connected to urban infrastructure and to new programmes supporting state investments, which grew almost fourfold (from BRL16.3 billion to BRL61.2 billion).<sup>17</sup> In the North and Northeast regions, this growth was even larger: the outstanding balance of urban infrastructure operations and new programmes supporting investment grew almost fivefold (from BRL5.7 billion to BRL26.2 billion).

Tables 9 to 11 detail the same information on debts by main creditors, excluding the parcel of the Federal Government. In the tabulation of these data, it was necessary to add an additional 'undetermined' category by virtue of the 'creditor' field not being filled out in registries. This problem is significant for the pre-2011 period and was recently minimised. In 2013 it was possible to obtain information regarding creditors for 93.5 per cent of the total amount of credit operations. Taking this last year as a base, it can be verified that the main creditors are public banks, representing about half of the state debts (48 per cent in the North and Northeast regions and 51 per cent of the country as a whole): the Brazilian Development Bank (BNDES), Banco do Brasil (BB), Caixa Econômica Federal (CEF), Banco do Nordeste (BNB) and the Banco da Amazônia (BASA). They are followed, in terms of relevance, by multilateral organisations (41 per cent in the North and Northeast and 38 per cent of the total of state debts): the International Bank for Reconstruction and Development (IBRD), the Inter-American

Development Bank (IDB), the Andean Development Corporation (CAF) and the International Fund for Agricultural Development (IFAD). A number of other banks and development funds from developed countries represent under 4 per cent of the total debt: the French Development Agency (AFD), Japan International Cooperation Agency (JICA), Japan Bank for International Cooperation (JBIC) and the German bank Kreditanstalt für Wiederaufbau (KfW).

The problem with classification of creditors prior to 2011 makes it somewhat difficult to analyse the evolution of indebtedness. Even so, recent numbers show a remarkable growth in public banks (BRL17 billion in 2011 to BRL41.7 billion in 2013). Funds were destined mainly for financing investments, under the scope of greater fiscal flexibility promoted by the Federal Government, and directed towards the Centre-West, Southeast and South regions. The volume of public bank credit operations in the North and Northeast regions grew less intensely (BRL10.8 billion to BRL19.0 billion between 2011 and 2013). The opposite occurred with multilateral organisations: funds destined for the North and Northeast regions grew more intensely, from BRL6.4 billion to BRL16.1 billion, while the total in the country went from BRL14.2 billion to BRL31.2 billion. For that reason, the North and Northeast regions have assumed a larger share of the debt with multilateral organisations compared to the other regions (52 per cent) and a smaller share of the debt with public banks (45 per cent).

The highest concentration of credit operations of multilateral organisations in the North and Northeast regions becomes even clearer with the analysis of financing for rural development in Tables 10 and 11. The specific rural development projects are entirely financed by the IBRD and IFAD, and the latter activities are concentrated in the Northeast region. On average, approximately 86 per cent of credit operations related to projects for financing rural development are concentrated in the North and Northeast regions, and these operations grew from BRL1.9 billion to BRL6.3 billion. An expansion of BNDES activities in sustainable/environmental development is also notable, as it is the only public bank with significant funds to participate in these activities.

In short, between 2008 and 2014, as seen in Section 2, the endorsement of the Federal Government allowed bank and foreign debts to increase considerably. Although some of these loans were used to promote a restructuring of liabilities, replacing debt contracted with the Federal Government with cheaper loans, the main reason was to finance investments.

TABLE 8

**Outstanding balance of credit operations by resource purpose—North and Northeast regions and Brazil as a whole (2008–2013); values in BRL millions**

Purpose	2008	2009	2010	2011	2012	2013	2008	2009	2010	2011	2012	2013
	North/Northeast											
Rural development	112.2	41.4	44.5	76.3	108.1	183.2	0.2%	0.1%	0.1%	0.1%	0.2%	0.3%
Fighting rural poverty	921.7	631.4	531.3	540.8	561.9	569.2	1.9%	1.3%	1.0%	1.0%	0.9%	0.8%
Sustainable development	305.6	702.6	1,416.3	1,927.8	3,087.1	3,890.2	0.6%	1.5%	2.7%	3.5%	5.0%	5.4%
Environmental development	518.8	533.9	724.7	1,030.3	1,310.7	1,701.0	1.1%	1.1%	1.4%	1.9%	2.1%	2.3%
Development of the public machinery	322.6	1,329.3	1,434.9	1,645.8	3,418.6	5,069.5	0.7%	2.8%	2.7%	3.0%	5.6%	7.0%
Technological development	-	-	31.5	31.5	30.4	181.6	0.0%	0.0%	0.1%	0.1%	0.0%	0.3%
Tourism	605.4	452.5	569.8	676.0	665.4	572.7	1.2%	0.9%	1.1%	1.2%	1.1%	0.8%
Health	174.2	154.0	175.0	223.0	233.4	261.7	0.4%	0.3%	0.3%	0.4%	0.4%	0.4%
Education	492.7	430.2	420.3	518.5	505.6	618.7	1.0%	0.9%	0.8%	0.9%	0.8%	0.9%
Public security	137.9	93.4	72.6	62.4	47.0	33.3	0.3%	0.2%	0.1%	0.1%	0.1%	0.0%
Urban infrastructure	5,678.2	5,842.8	7,627.9	8,432.4	10,865.0	14,488.1	11.6%	12.1%	14.3%	15.4%	17.7%	20.0%
Support to investment	-	2,151.6	4,936.5	5,913.9	7,972.9	11,665.4	0.0%	4.5%	9.3%	10.8%	13.0%	16.1%
Others	178.4	171.6	166.4	143.7	143.3	325.8	0.4%	0.4%	0.3%	0.3%	0.2%	0.4%
<b>Subtotal</b>	<b>9,447.6</b>	<b>12,534.5</b>	<b>18,151.6</b>	<b>21,222.2</b>	<b>28,949.2</b>	<b>39,560.3</b>	<b>19.3%</b>	<b>26.0%</b>	<b>34.1%</b>	<b>38.6%</b>	<b>47.1%</b>	<b>54.6%</b>
Debt refinancing	39,394.2	35,687.1	35,083.5	33,693.8	32,558.6	32,933.5	80.7%	74.0%	65.9%	61.4%	52.9%	45.4%
<b>Total</b>	<b>48,841.8</b>	<b>48,221.6</b>	<b>53,235.1</b>	<b>54,916.0</b>	<b>61,507.8</b>	<b>72,493.8</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
	Brazil											
Rural development	305.4	176.6	143.1	153.2	183.2	296.3	0.1%	0.1%	0.0%	0.0%	0.0%	0.1%
Fighting rural poverty	1,014.9	673.2	544.9	540.9	561.9	569.3	0.3%	0.2%	0.1%	0.1%	0.1%	0.1%
Sustainable development	305.6	702.6	1,495.8	2,400.3	3,692.7	4,584.5	0.1%	0.2%	0.4%	0.6%	0.9%	1.0%
Environmental development	678.0	691.0	807.9	1,113.9	1,439.0	1,911.5	0.2%	0.2%	0.2%	0.3%	0.3%	0.4%
Development of the public machinery	930.3	1,825.9	1,868.0	2,228.9	5,479.4	10,661.8	0.3%	0.5%	0.5%	0.6%	1.3%	2.2%
Technological development	-	-	31.5	31.5	30.4	181.6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tourism	608.2	456.8	578.4	687.6	693.5	643.9	0.2%	0.1%	0.2%	0.2%	0.2%	0.1%
Health	221.5	221.5	256.0	366.6	375.5	392.3	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Education	747.9	586.8	551.0	672.5	639.0	738.4	0.2%	0.2%	0.1%	0.2%	0.1%	0.2%
Public security	137.9	125.4	179.3	268.8	318.5	312.9	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
Urban infrastructure	16,296.9	15,594.5	19,450.1	23,049.1	30,412.3	44,644.5	4.7%	4.6%	5.2%	5.8%	7.0%	9.4%
Support to investment	-	2,441.0	5,732.8	7,654.1	10,871.6	16,594.9	0.0%	0.7%	1.5%	1.9%	2.5%	3.5%
Others	296.2	244.1	238.9	234.5	295.6	521.3	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
<b>Subtotal</b>	<b>21,542.8</b>	<b>23,739.2</b>	<b>31,877.6</b>	<b>39,401.8</b>	<b>54,992.6</b>	<b>82,052.9</b>	<b>6.2%</b>	<b>7.0%</b>	<b>8.5%</b>	<b>9.9%</b>	<b>12.7%</b>	<b>17.3%</b>
Debt refinancing	326,608.3	313,822.7	342,454.4	360,291.8	378,669.4	392,806.5	93.8%	93.0%	91.5%	90.1%	87.3%	82.7%
<b>Total</b>	<b>348,151.1</b>	<b>337,561.9</b>	<b>374,332.0</b>	<b>399,693.6</b>	<b>433,662.0</b>	<b>474,859.3</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Source: Authors' elaboration based on COC data from state governments.

TABLE 9

**Outstanding balance of credit operations by main creditor institutions—North and Northeast regions and Brazil as a whole (2008–2013); values in BRL millions**

Creditor	2008	2009	2010	2011	2012	2013	2008	2009	2010	2011	2012	2013
	North/Northeast											
BNDES	591.1	2,649.9	4,453.7	7,683.5	10,165.3	12,760.1	6.3%	21.1%	24.5%	36.2%	35.1%	32.3%
BB	137.9	189.2	416.7	619.5	711.3	2,026.5	1.5%	1.5%	2.3%	2.9%	2.5%	5.1%
CEF	529.1	482.4	440.7	1,768.0	2,298.7	3,334.4	5.6%	3.8%	2.4%	8.3%	7.9%	8.4%
BNB	113.9	80.6	149.9	628.4	691.8	749.3	1.2%	0.6%	0.8%	3.0%	2.4%	1.9%
BASA	-	-	134.7	136.9	119.3	101.6	0.0%	0.0%	0.7%	0.6%	0.4%	0.3%
IBRD	1,453.9	1,017.3	1,024.7	2,843.7	5,651.7	9,458.2	15.4%	8.1%	5.6%	13.4%	19.5%	23.9%
IDB	1,288.7	1,436.1	1,529.6	3,253.7	4,418.4	6,189.5	13.6%	11.5%	8.4%	15.3%	15.3%	15.6%
CAF	-	26.7	18.2	217.2	263.9	436.6	0.0%	0.2%	0.1%	1.0%	0.9%	1.1%
IFAD	35.1	24.9	29.9	43.5	48.7	64.2	0.4%	0.2%	0.2%	0.2%	0.2%	0.2%
JICA/JBIC - Japan	-	-	-	110.0	97.1	82.1	0.0%	0.0%	0.0%	0.5%	0.3%	0.2%
KFW - Germany	-	-	-	20.5	19.0	25.0	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
BBVA	-	-	-	-	-	112.3	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Others	-	-	-	15.0	412.7	564.3	0.0%	0.0%	0.0%	0.1%	1.4%	1.4%
Undeclared	5,297.7	6,627.4	9,953.7	3,882.4	4,051.2	3,656.3	56.1%	52.9%	54.8%	18.3%	14.0%	9.2%
<b>Total</b>	<b>9,447.6</b>	<b>12,534.5</b>	<b>18,151.6</b>	<b>21,222.2</b>	<b>28,949.2</b>	<b>39,560.3</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
	Brazil											
BNDES	695.5	3,045.9	4,723.4	11,834.7	16,288.9	24,673.0	3.2%	12.8%	14.8%	30.0%	29.6%	30.1%
BB	138.0	189.3	416.8	1,232.1	3,443.6	9,547.4	0.6%	0.8%	1.3%	3.1%	6.3%	11.6%
CEF	1,367.8	916.0	841.9	3,192.7	4,073.9	6,650.3	6.3%	3.9%	2.6%	8.1%	7.4%	8.1%
BNB	113.9	80.6	149.9	628.4	691.8	749.3	0.5%	0.3%	0.5%	1.6%	1.3%	0.9%
BASA	-	-	134.7	136.9	119.3	101.6	0.0%	0.0%	0.4%	0.3%	0.2%	0.1%
IBRD	1,681.6	1,183.4	1,105.1	7,892.9	12,414.3	18,592.0	7.8%	5.0%	3.5%	20.0%	22.6%	22.7%
IDB	1,640.3	1,703.1	1,651.2	6,051.4	8,008.5	11,229.0	7.6%	7.2%	5.2%	15.4%	14.6%	13.7%
CAF	-	26.7	18.2	240.2	741.7	1,374.8	0.0%	0.1%	0.1%	0.6%	1.3%	1.7%
IFAD	35.1	24.9	29.9	43.5	48.7	64.2	0.2%	0.1%	0.1%	0.1%	0.1%	0.1%
JICA/JBIC - Japan	-	-	-	2,402.3	2,324.0	2,066.2	0.0%	0.0%	0.0%	6.1%	4.2%	2.5%
KFW - Germany	-	-	-	23.0	20.4	25.0	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
AFD - France	-	-	-	-	806.2	924.2	0.0%	0.0%	0.0%	0.0%	1.5%	1.1%
BBVA	-	-	-	-	-	112.3	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Others	33.9	-	3,405.1	15.0	630.7	751.8	0.2%	0.0%	10.7%	0.0%	1.1%	0.9%
Undeclared	15,836.7	16,569.3	19,401.4	5,708.7	5,380.7	5,191.9	73.5%	69.8%	60.9%	14.5%	9.8%	6.3%
<b>Total</b>	<b>21,542.8</b>	<b>23,739.2</b>	<b>31,877.6</b>	<b>39,401.8</b>	<b>54,992.6</b>	<b>82,052.9</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Source: Authors' elaboration based on COC data from state governments.



TABLE 10

**Outstanding balances of credit operations in financing rural development—  
North and Northeast regions (2008–2013); values in BRL millions**

Purpose/Creditor	2008	2009	2010	2011	2012	2013
<b>Rural development</b>	<b>112.2</b>	<b>41.4</b>	<b>44.5</b>	<b>76.3</b>	<b>108.1</b>	<b>183.2</b>
IBRD	0.0	0.0	0.0	4.7	24.7	70.7
IFAD	35.1	24.9	29.9	43.5	48.7	64.2
Undeclared	77.1	16.5	14.6	28.0	34.7	48.3
<b>Fighting rural poverty</b>	<b>921.7</b>	<b>631.4</b>	<b>531.3</b>	<b>540.8</b>	<b>561.9</b>	<b>569.2</b>
IBRD	921.7	631.4	531.3	540.8	561.9	569.2
<b>Sustainable development</b>	<b>305.6</b>	<b>702.6</b>	<b>1,416.3</b>	<b>1,927.8</b>	<b>3,087.1</b>	<b>3,890.2</b>
BNDES	224.4	386.2	572.6	1,150.0	1,506.0	1,688.4
BNB	0.0	0.0	0.0	0.0	0.0	137.8
IBRD	0.0	27.9	52.5	527.4	1,326.3	1,826.7
IDB	3.2	4.3	5.5	0.0	0.0	3.5
Undeclared	78.0	284.2	785.8	250.4	254.7	233.9
<b>Environmental development</b>	<b>518.8</b>	<b>533.9</b>	<b>724.7</b>	<b>1,030.3</b>	<b>1,310.7</b>	<b>1,701.0</b>
BNDES	0.0	0.0	1.7	23.7	21.4	87.9
CEF	0.0	0.0	0.0	9.0	0.0	0.0
IBRD	9.0	10.1	26.2	196.8	299.8	415.8
IDB	0.0	0.0	0.0	800.8	989.5	1,197.3
Undeclared	509.8	523.8	696.8	0.0	0.0	0.0
<b>Total</b>	<b>1,858.2</b>	<b>1,909.2</b>	<b>2,716.9</b>	<b>3,575.2</b>	<b>5,067.7</b>	<b>6,343.6</b>

Source: Authors' elaboration based on COC data from state governments.

TABLE 11

**Outstanding debt of credit operations in financing rural development—  
Brazil (2008–2013); values in BRL millions**

Purpose/Creditor	2008	2009	2010	2011	2012	2013
<b>Rural development</b>	<b>305.4</b>	<b>176.6</b>	<b>143.1</b>	<b>153.2</b>	<b>183.2</b>	<b>296.3</b>
IBRD	0.0	0.0	0.0	70.4	99.8	183.7
IDB	0.0	0.0	0.0	0.0	0.0	0.0
IFAD	35.1	24.9	29.9	43.5	48.7	64.2
Undeclared	270.3	151.7	113.2	39.3	34.7	48.3
<b>Fighting rural poverty</b>	<b>1,014.9</b>	<b>673.2</b>	<b>544.9</b>	<b>540.9</b>	<b>561.9</b>	<b>569.3</b>
IBRD	1,014.9	673.2	544.9	540.9	561.9	569.3
<b>Sustainable development</b>	<b>305.6</b>	<b>702.6</b>	<b>1,495.8</b>	<b>2,400.3</b>	<b>3,692.7</b>	<b>4,584.5</b>
BNDES	224.4	386.2	572.6	1,150.0	1,506.0	1,688.4
BNB	0.0	0.0	0.0	0.0	0.0	137.8
IBRD	0.0	27.9	52.5	527.4	1,326.3	1,826.7
IDB	3.2	4.3	5.5	0.0	0.0	3.5
Undeclared	78.0	284.2	865.3	722.9	860.4	928.3
<b>Environmental development</b>	<b>678.0</b>	<b>691.0</b>	<b>807.9</b>	<b>1,113.9</b>	<b>1,439.0</b>	<b>1,911.5</b>
BNDES	0.0	0.0	1.7	25.3	26.0	94.8
CEF	0.0	0.0	0.0	9.0	0.0	0.0
IBRD	9.0	10.1	26.2	234.7	350.3	499.3
IDB	0.0	0.0	0.0	842.3	1,061.3	1,317.3
KFW - Germany	0.0	0.0	0.0	2.5	1.4	0.0
Others	0.0	0.0	4.9	0.0	0.0	0.0
Undeclared	669.0	681.0	775.1	0.1	0.1	0.1
<b>Total</b>	<b>2,303.9</b>	<b>2,243.4</b>	<b>2,991.7</b>	<b>4,208.2</b>	<b>5,876.9</b>	<b>7,361.5</b>

Source: Authors' elaboration based on COC data from state governments.

## 5 FISCAL CONDITION OF STATE GOVERNMENTS: NOMINAL RESULTS AND EVOLUTION OF REVENUES AND EXPENDITURES

The purpose of this section is to evaluate the recent fiscal deterioration in state governments from the perspective of determining factors of indebtedness, detailing asset adjustments, interest expenses and the main components of primary revenues and expenditures.<sup>18</sup> Tables 12 to 15 show that the main determinant for state indebtedness dynamics — characterised by an interruption of the decline from 2011 onwards, remaining stable during 2011 and growing in 2014—was the deterioration in the primary result.

If the period 2008–2014 is considered as a whole, asset adjustments were not very significant, and the slight decrease in interest rates was partially offset by the economic downturn after 2011. The exception was 2014, when the sharp economic downturn and asset adjustment prompted by the devaluation of the exchange rate was responsible for a little over half of the increase in net debt of 0.7 percentage points of GDP. In other words, these determining factors nullify each other and contribute very little towards explaining the dynamics of net debt.

In turn, the primary results in Table 12 fell gradually, except during the year of post-election fiscal adjustment in 2011, converting the significant surplus of slightly under 1 per cent of GDP in 2008 to a deficit in 2014. The North and Northeast regions caused slightly over a quarter of the decrease in the primary result.

TABLE 12

### Determining factors of the evolution of state governments' net debt—Brazil (2008–2014); values as a percentage of GDP

	2008	2009	2010	2011	2012	2013	2014	2008–2014
<b>1. Primary revenues</b>	<b>12.03</b>	<b>11.70</b>	<b>11.52</b>	<b>11.35</b>	<b>11.51</b>	<b>11.62</b>	<b>11.61</b>	<b>-0.42</b>
2. Tax revenues	9.06	8.78	8.79	8.67	8.92	9.13	9.11	0.05
3. ICMS	7.21	6.91	6.97	6.87	6.99	7.16	7.04	-0.18
4. IPVA	0.56	0.62	0.56	0.56	0.59	0.58	0.60	0.04
5. ITCMD	0.05	0.05	0.07	0.07	0.08	0.09	0.09	0.04
6. IRRF	0.43	0.39	0.42	0.42	0.45	0.49	0.53	0.10
7. Fees	0.27	0.29	0.27	0.27	0.30	0.31	0.31	0.05
8. Social contributions	0.49	0.47	0.45	0.44	0.47	0.46	0.49	0.00
9. Other taxes	0.04	0.05	0.04	0.04	0.05	0.05	0.05	0.00
10. Transfers	2.38	2.23	2.10	2.08	2.00	1.88	1.94	-0.45
11. Other revenues	0.59	0.69	0.63	0.59	0.59	0.61	0.57	-0.02
<b>12. Primary expenses</b>	<b>10.73</b>	<b>11.03</b>	<b>10.95</b>	<b>10.42</b>	<b>10.93</b>	<b>11.31</b>	<b>11.81</b>	<b>1.08</b>
13. Salaries and wages	3.82	3.88	3.74	3.76	3.91	4.05	4.14	0.33
14. Goods and services	1.71	1.78	1.69	1.62	1.72	1.77	1.78	0.06
15. Transfers	2.29	2.24	2.27	2.16	2.27	2.23	2.30	0.01
16. Social benefits	1.76	1.77	1.75	1.74	1.87	1.89	2.05	0.29
17. Other expenses	0.45	0.47	0.47	0.45	0.46	0.46	0.49	0.04
18. Investments	0.69	0.90	1.03	0.69	0.70	0.91	1.05	0.35
<b>19. 'Above-the-line' primary result</b>	<b>1.30</b>	<b>0.66</b>	<b>0.57</b>	<b>0.93</b>	<b>0.58</b>	<b>0.31</b>	<b>-0.19</b>	<b>-1.50</b>
20. Discrepancy	-0.37	-0.29	-0.21	-0.27	-0.19	-0.08	-0.09	0.28
<b>21. 'Below-the-line' primary result</b>	<b>0.93</b>	<b>0.37</b>	<b>0.36</b>	<b>0.66</b>	<b>0.39</b>	<b>0.23</b>	<b>-0.28</b>	<b>-1.21</b>
22. Nominal interest	1.72	0.38	1.46	0.94	1.16	0.97	0.87	-0.85
23. Nominal result	-0.78	-0.01	-1.10	-0.28	-0.77	-0.73	-1.15	-0.36
24. Asset adjustments	-	-0.17	0.09	0.07	0.00	0.00	0.19	-
<b>25. Variation of net debt</b>	<b>-</b>	<b>-0.95</b>	<b>-0.39</b>	<b>-0.83</b>	<b>0.07</b>	<b>-0.11</b>	<b>0.70</b>	<b>-</b>
26. GDP growth effect	-	-0.79	-1.57	-1.18	-0.70	-0.85	-0.64	-
<b>27. Net debt</b>	<b>11.91</b>	<b>10.96</b>	<b>10.57</b>	<b>9.74</b>	<b>9.81</b>	<b>9.70</b>	<b>10.41</b>	<b>-1.50</b>

Source: Authors' elaboration with data from state Annual Balances and regional statistics from the Central Bank.

According to the 'above-the-line' statistics, the deterioration of the primary result was observed across all states.<sup>19</sup> Only five states in the North and Northeast regions exhibited a primary surplus in 2014, as can be seen in Table 15 (Pará, Rondônia, Roraima, Sergipe and Rio Grande do Norte). This reflects a general phenomenon across all regions of the country and a very different fiscal scenario from the one before the 2008 crisis, when all states had primary surpluses.

TABLE 13

**Determining factors of the evolution of state governments' net debt—  
North and Northeast regions (2008–2014); values as a percentage of GDP**

	2008	2009	2010	2011	2012	2013	2014	2008-2014
<b>1. Primary revenues</b>	<b>3.28</b>	<b>3.20</b>	<b>3.20</b>	<b>3.15</b>	<b>3.26</b>	<b>3.22</b>	<b>3.29</b>	<b>0.01</b>
2. Tax revenues	1.81	1.79	1.83	1.80	1.91	1.96	2.01	0.19
3. ICMS	1.42	1.39	1.43	1.41	1.48	1.53	1.56	0.14
4. IPVA	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.02
5. ITCMD	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00
6. IRRF	0.10	0.09	0.10	0.11	0.11	0.12	0.13	0.03
7. Taxes	0.05	0.05	0.05	0.05	0.07	0.06	0.06	0.02
8. Social contributions	0.18	0.18	0.17	0.16	0.17	0.16	0.17	-0.01
9. Other taxes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10. Transfers	1.36	1.27	1.23	1.23	1.21	1.16	1.17	-0.19
11. Other revenues	0.11	0.14	0.14	0.12	0.14	0.11	0.12	0.01
<b>12. Primary expenses</b>	<b>2.94</b>	<b>3.14</b>	<b>3.16</b>	<b>2.93</b>	<b>3.12</b>	<b>3.19</b>	<b>3.38</b>	<b>0.43</b>
13. Salaries and wages	1.20	1.28	1.24	1.20	1.26	1.26	1.31	0.11
14. Goods and services	0.56	0.58	0.56	0.51	0.56	0.56	0.58	0.02
15. Transfers	0.44	0.43	0.45	0.41	0.46	0.46	0.50	0.06
16. Social benefits	0.38	0.40	0.38	0.39	0.43	0.44	0.47	0.09
17. Other expenses	0.11	0.12	0.13	0.14	0.15	0.15	0.16	0.05
18. Investments	0.26	0.34	0.39	0.27	0.27	0.32	0.37	0.11
<b>19. 'Above-the-line' primary result</b>	<b>0.33</b>	<b>0.06</b>	<b>0.04</b>	<b>0.23</b>	<b>0.14</b>	<b>0.03</b>	<b>-0.09</b>	<b>-0.42</b>
20. Discrepancy	-0.09	-0.08	-0.05	-0.09	-0.05	-0.03	0.00	0.08
<b>21. 'Below-the-line' primary result</b>	<b>0.25</b>	<b>-0.02</b>	<b>-0.01</b>	<b>0.14</b>	<b>0.09</b>	<b>0.00</b>	<b>-0.09</b>	<b>-0.34</b>
22. Nominal interest	0.15	0.04	0.13	0.06	0.12	0.08	0.08	-0.06
23. Nominal result	0.10	-0.06	-0.14	0.08	-0.02	-0.08	-0.17	-0.27
24. Asset adjustments	-	-0.03	0.02	0.08	0.05	0.01	0.08	-
<b>25. Variation of net debt</b>	<b>-</b>	<b>-0.05</b>	<b>0.02</b>	<b>-0.11</b>	<b>0.01</b>	<b>0.01</b>	<b>0.19</b>	<b>-</b>
26. GDP growth effect	-	-0.07	-0.14	-0.11	-0.06	-0.08	-0.06	-
<b>27. Net debt</b>	<b>1.03</b>	<b>0.99</b>	<b>1.00</b>	<b>0.90</b>	<b>0.90</b>	<b>0.92</b>	<b>1.11</b>	<b>0.07</b>

Source: Authors' elaboration with data from state Annual Balances and regional statistics from the Central Bank.

TABLE 14

**Determining factors of the evolution of state governments' net debt—  
Centre-West/Southeast/South regions (2008–2014); values as a percentage of GDP**

	2008	2009	2010	2011	2012	2013	2014	2008-2014
<b>1. Primary revenues</b>	<b>8.75</b>	<b>8.50</b>	<b>8.32</b>	<b>8.20</b>	<b>8.25</b>	<b>8.40</b>	<b>8.32</b>	<b>-0.43</b>
2. Tax revenues	7.24	6.99	6.97	6.87	7.00	7.18	7.10	-0.14
3. ICMS	5.80	5.52	5.54	5.46	5.51	5.63	5.48	-0.31
4. IPVA	0.49	0.54	0.49	0.49	0.51	0.50	0.51	0.02
5. ITCMD	0.05	0.05	0.07	0.06	0.07	0.08	0.08	0.04
6. IRRF	0.33	0.29	0.33	0.31	0.33	0.36	0.40	0.07
7. Taxes	0.22	0.24	0.22	0.22	0.23	0.25	0.25	0.03
8. Social contributions	0.32	0.29	0.28	0.28	0.31	0.30	0.32	0.01
9. Other taxes	0.04	0.05	0.04	0.04	0.05	0.05	0.05	0.00
10. Transfers	1.03	0.96	0.87	0.85	0.80	0.72	0.77	-0.26
11. Other revenues	0.48	0.54	0.48	0.47	0.45	0.50	0.46	-0.03
<b>12. Primary expenses</b>	<b>7.78</b>	<b>7.90</b>	<b>7.79</b>	<b>7.49</b>	<b>7.81</b>	<b>8.12</b>	<b>8.43</b>	<b>0.65</b>
13. Salaries and wages	2.62	2.60	2.50	2.56	2.66	2.79	2.84	0.21
14. Goods and services	1.16	1.20	1.13	1.11	1.16	1.21	1.20	0.04
15. Transfers	1.85	1.81	1.81	1.75	1.81	1.77	1.80	-0.05
16. Social benefits	1.38	1.37	1.37	1.35	1.45	1.45	1.58	0.20
17. Other expenses	0.34	0.35	0.34	0.31	0.31	0.31	0.33	-0.01
18. Investments	0.43	0.56	0.64	0.42	0.43	0.59	0.68	0.25
<b>19. 'Above-the-line' primary result</b>	<b>0.97</b>	<b>0.60</b>	<b>0.53</b>	<b>0.71</b>	<b>0.44</b>	<b>0.29</b>	<b>-0.11</b>	<b>-1.08</b>
20. Discrepancy	-0.28	-0.21	-0.16	-0.18	-0.14	-0.06	-0.09	0.20
<b>21. 'Below-the-line' primary result</b>	<b>0.69</b>	<b>0.39</b>	<b>0.37</b>	<b>0.53</b>	<b>0.30</b>	<b>0.23</b>	<b>-0.19</b>	<b>-0.88</b>
22. Nominal interest	1.57	0.34	1.33	0.88	1.04	0.88	0.78	-0.79
23. Nominal result	-0.89	0.05	-0.96	-0.35	-0.74	-0.65	-0.98	-0.09
24. Asset adjustments	-	-0.14	0.07	-0.01	-0.05	-0.01	0.11	-
<b>25. Variation of net debt</b>	<b>-</b>	<b>-0.91</b>	<b>-0.40</b>	<b>-0.72</b>	<b>0.06</b>	<b>-0.12</b>	<b>0.51</b>	<b>-</b>
26. GDP growth effect	-	-0.72	-1.43	-1.07	-0.63	-0.77	-0.58	-
<b>27. Net debt</b>	<b>10.88</b>	<b>9.97</b>	<b>9.57</b>	<b>8.84</b>	<b>8.91</b>	<b>8.79</b>	<b>9.30</b>	<b>-1.58</b>

Source: Authors' elaboration with data from state Annual Balances and regional statistics from the Central Bank.

Therefore, we must identify the main components of primary revenues and expenses responsible for the deterioration of fiscal results observed in the states. Table 15 and Figure 8 suggest that the most common pattern of fiscal behaviour combined accelerated growth of expenses at rates close to or above the national annual GDP growth of 4.1 per cent, with primary revenues growing below that level.<sup>20</sup> Such a pattern was observed in 11 out of the 16 states in the North and Northeast regions. The only exception, on the expenditure side, was Roraima, which exhibited a more moderate growth (2.6 per cent per year), which was even then superior to the growth of primary revenues (1.8 per cent per year). However, the deterioration of fiscal results occurred with a more pronounced growth of primary revenues—above national GDP growth levels—in four states: Bahia, Sergipe, Pernambuco and Pará.

Figures 9 and 10 suggest that the low performance of primary revenues across states in the North and Northeast regions is directly related to their high degree of dependency on transfers from the Federal Government and the sharp slowing down of such transfers after 2008.<sup>21</sup> The states with lower primary revenue growth exhibit a higher dependency on transfers (Roraima, Piauí and Tocantins), whereas those with higher primary revenue growth are less dependent (Bahia, Pernambuco and Pará).

Transfers are the component of primary revenue that increased the least, with lower rates in the remaining regions of the country compared with the North and Northeast regions and exhibiting negative growth in many cases. However, the relationship between the behaviour of transfers and primary revenues was more explicit in the North and Northeast regions due to the higher importance of transfers relative to the budget and due to their better tax collection performance.

TABLE 15

**Select fiscal indicators: net debt as a proportion of GDP (ND/GDP), 'above-the-line' primary result as a proportion of GDP (PR/GDP), variation of PR/GDP between 2008 and 2014 and actual rates of growth (per cent per year) of the main components of primary revenues and expenses from 2008 to 2014.**

	ND/GDP	PR/GDP	PR/GDP variation 2008–2014	Primary revenues	ICMS	Other taxes	Transfers	Primary expenditures	Personnel	Investments	Costing
<b>North/Northeast</b>	<b>1.106</b>	<b>-0.0852</b>	<b>-0.420</b>	<b>3.9</b>	<b>5.7</b>	<b>8.9</b>	<b>1.5</b>	<b>6.5</b>	<b>6.2</b>	<b>1.4</b>	<b>5.9</b>
Acre	0.048	-0.0063	-0.014	3.9	6.4	7.8	-0.5	6.8	6.3	-4.9	8.5
Amazonas	0.064	-0.0135	-0.025	3.2	3.2	7.8	2.8	6.3	6.4	-1.2	6.8
Amapá	-0.001	-0.0001	-0.009	3.0	9.7	3.2	0.8	4.4	6.0	12.7	-0.8
Pará	0.023	0.0121	-0.012	5.3	7.7	14.8	0.8	6.7	8.1	-1.9	2.5
Tocantins	0.031	-0.0009	-0.005	2.8	6.9	12.2	-0.3	4.0	9.3	-1.0	0.1
Rondônia	0.054	0.0042	-0.014	2.8	4.3	7.9	1.5	6.1	7.4	-13.9	5.8
Roraima	0.008	0.0074	-0.003	1.8	6.3	7.3	-0.2	2.6	4.8	1.4	-3.4
Alagoas	0.150	-0.0065	-0.028	3.8	4.4	7.5	2.9	7.4	2.8	17.9	12.4
Bahia	0.214	-0.0113	-0.066	4.3	4.4	8.1	3.6	6.9	5.9	3.8	8.0
Ceará	0.104	-0.0290	-0.072	3.6	6.1	10.3	3.1	7.3	4.3	-3.0	8.1
Maranhão	0.066	-0.0191	-0.054	4.1	6.2	9.1	1.6	9.0	7.0	15.6	9.6
Paraíba	0.054	-0.0057	-0.005	4.1	8.4	8.0	1.1	4.6	5.6	15.8	0.8
Pernambuco	0.184	-0.0212	-0.057	4.5	6.5	7.2	1.5	7.7	6.3	3.5	8.2
Piauí	0.055	-0.0043	-0.021	2.1	7.2	8.5	-0.3	5.4	6.8	0.8	0.3
Sergipe	0.051	0.0053	-0.022	4.3	6.0	9.0	1.3	6.3	5.5	-6.5	7.9
Rio Grande do Norte	0.001	0.0037	-0.013	3.2	5.3	7.1	0.4	4.8	6.4	-13.8	0.2
<b>Southeast</b>	<b>7.207</b>	<b>-0.1152</b>	<b>-0.770</b>	<b>2.4</b>	<b>2.4</b>	<b>5.9</b>	<b>-0.3</b>	<b>5.6</b>	<b>5.3</b>	<b>2.6</b>	<b>4.3</b>
<b>South</b>	<b>1.547</b>	<b>0.0174</b>	<b>-0.189</b>	<b>4.1</b>	<b>5.0</b>	<b>7.8</b>	<b>-3.2</b>	<b>6.8</b>	<b>6.9</b>	<b>-0.7</b>	<b>5.2</b>
<b>Centre-West</b>	<b>0.545</b>	<b>-0.0094</b>	<b>-0.117</b>	<b>4.4</b>	<b>4.4</b>	<b>7.0</b>	<b>-0.1</b>	<b>6.7</b>	<b>6.6</b>	<b>16.4</b>	<b>3.8</b>
<b>Brazil</b>	<b>10.405</b>	<b>-0.1924</b>	<b>-1.497</b>	<b>3.3</b>	<b>3.6</b>	<b>6.8</b>	<b>0.5</b>	<b>6.2</b>	<b>5.9</b>	<b>3.3</b>	<b>4.9</b>

Notes: Costing expenditures comprise assets, services and other expenses. Investment growth rates consider the period 2010–2014 to control for the influence of the political election period.

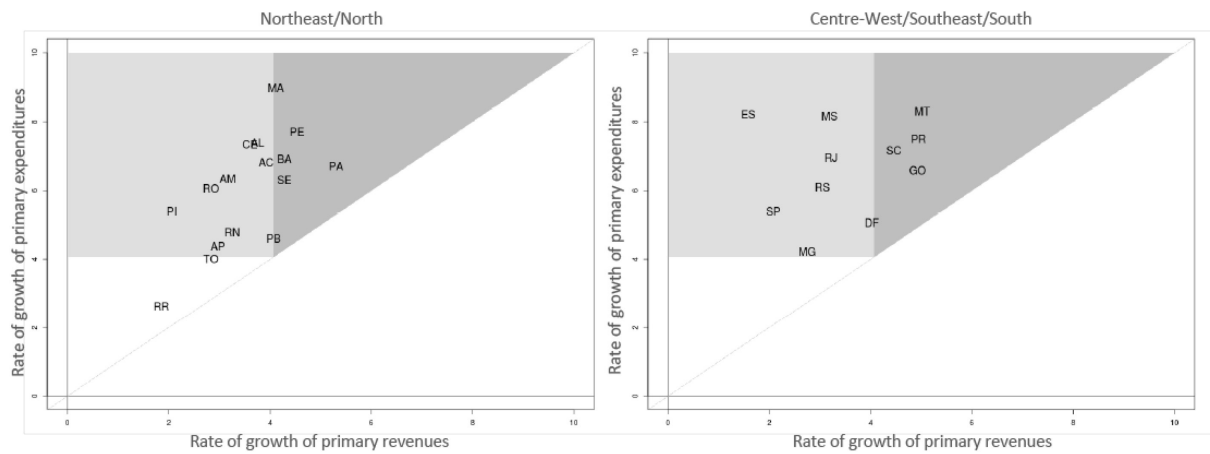
Source: Authors' elaboration.

Tax collection and GDP in the North and Northeast regions, save for a few exceptions, rose above those of the South and Southeast regions both in the preceding period and the downturn period following the 2008 crisis (Figures 11 and 12). This performance differential becomes even more evident when considering the case of value-added taxes (ICMS), which in almost all states in the North and Northeast regions grew at rates superior to national GDP rates. The main exception is the state of Amazonas, which is a particular case because, due to the Manaus Industrial Park, it features a high participation of the processing industry on added value and this was the most impacted sector in the aftermath of the 2008 economic downturn.<sup>22</sup> On the other hand, the remaining taxes, which are less sensitive to economic

cycles—mainly on property (vehicles and inheritances) and labour income of state civil servants—maintained a high dynamism, with growth rates above GDP growth levels across almost all states (except for Amapá). That is the reason why primary revenues in the North and Northeast regions were kept stable as a proportion of GDP from 2008 to 2014, with tax revenues (+0.19 percentage points) taking the place of transfers (-0.19 percentage points).<sup>23</sup>

FIGURE 8

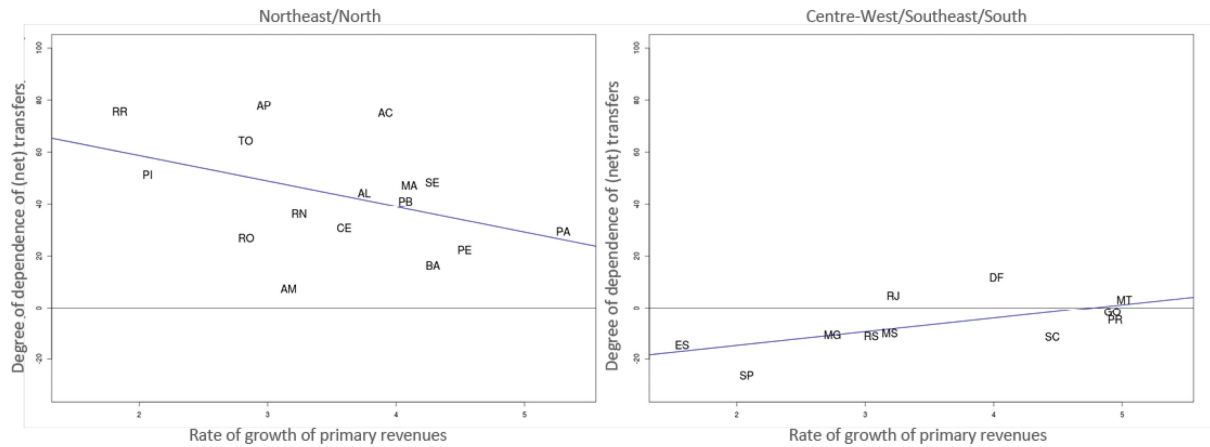
**Actual (annual) growth rates of primary revenues and expenditures (2008–2014)**



Source: Authors' elaboration.

FIGURE 9

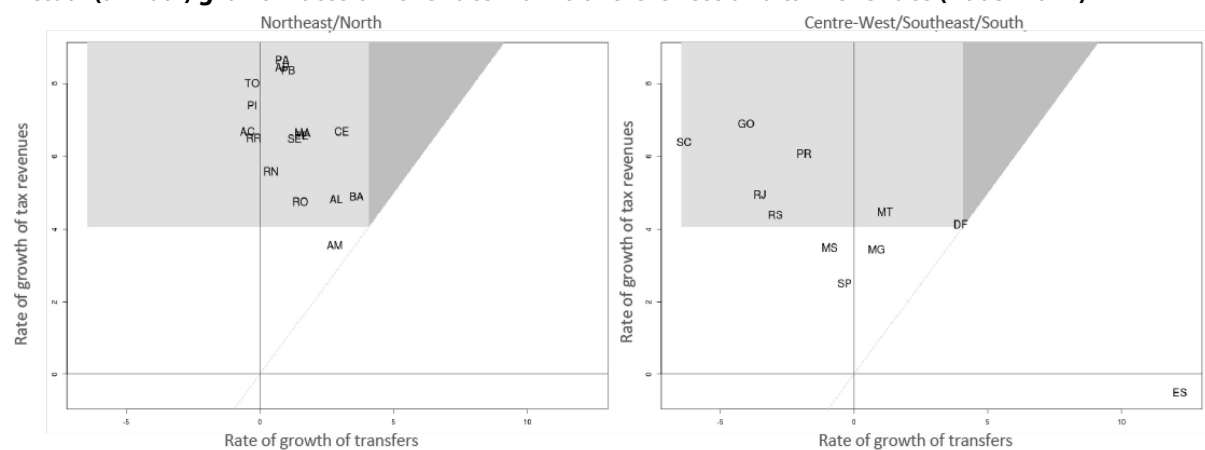
**Degree of dependence of (net) transfers in 2008 and actual (annual) rate of growth of primary revenues between 2008 and 2014**



Source: Authors' elaboration.

FIGURE 10

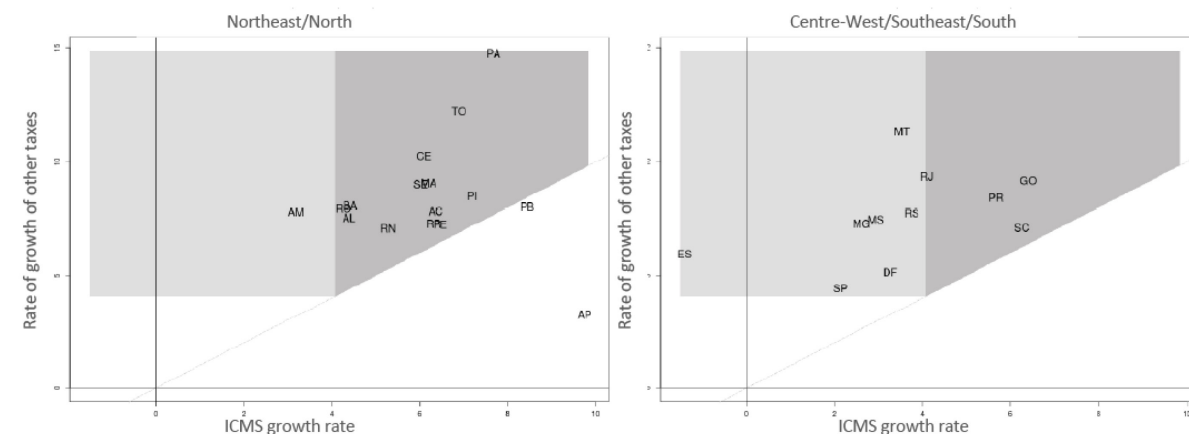
**Actual (annual) growth rates of revenues from transferences and tax revenues (2008–2014)**



Source: Authors' elaboration.

FIGURE 11

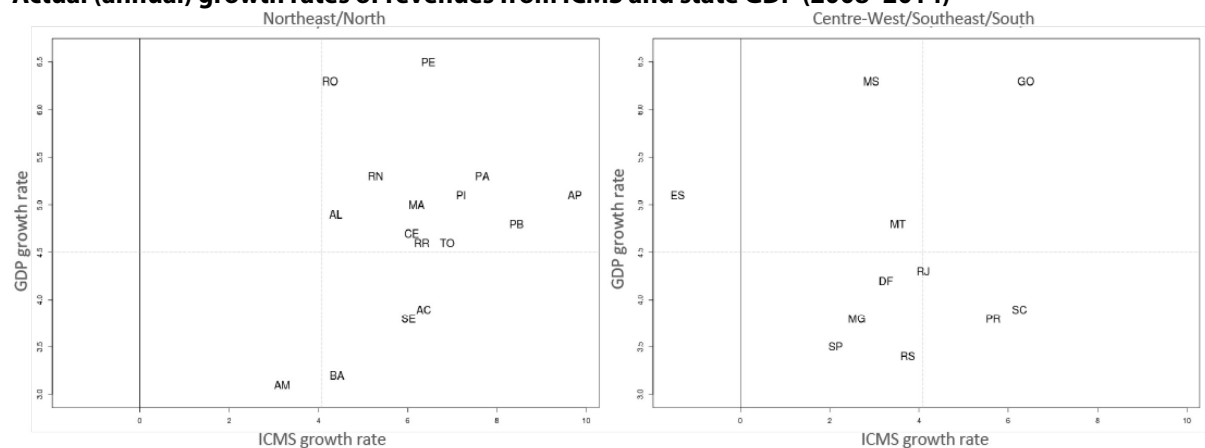
**Actual (annual) growth rates of revenues from ICMS and other taxes (2008–2014)**



Source: Authors' elaboration.

FIGURE 12

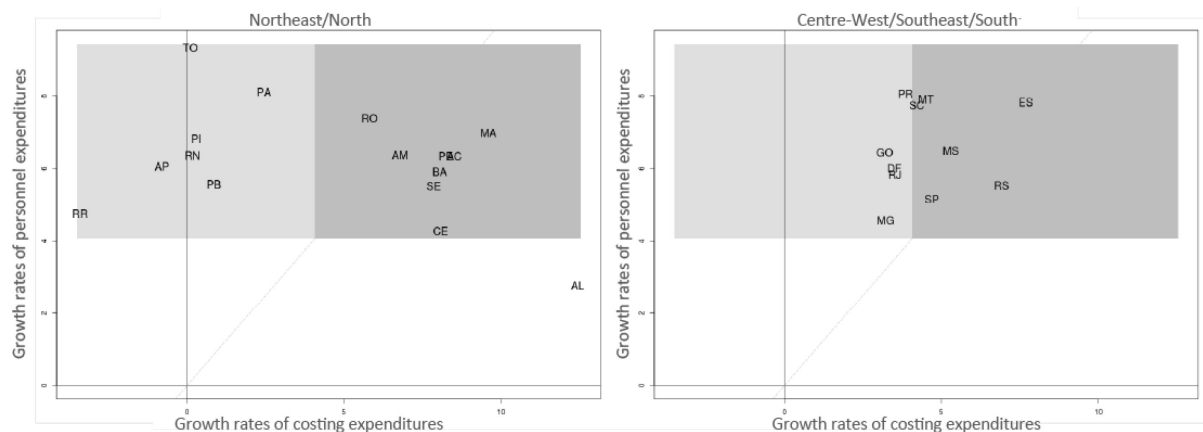
**Actual (annual) growth rates of revenues from ICMS and state GDP (2008–2014)**



Source: Authors' elaboration.

FIGURE 13

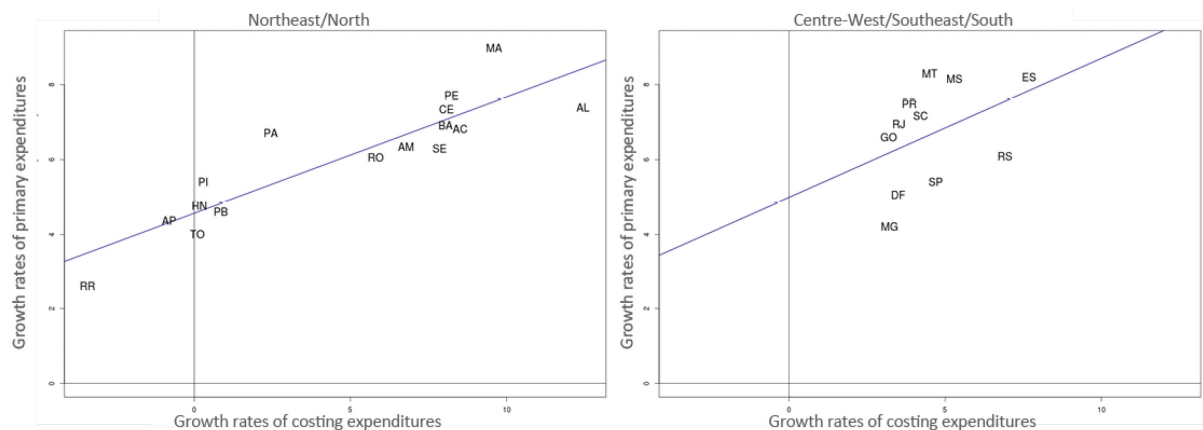
**Actual (annual) growth rates of costing and personnel expenditures (2008–2014)**



Source: Authors' elaboration.

FIGURE 14

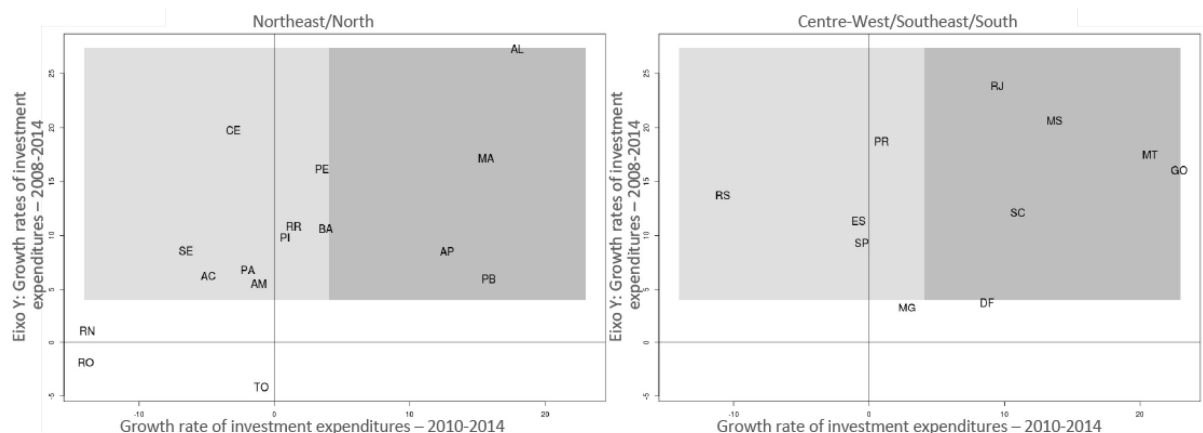
**Actual (annual) growth rates of primary and costing expenditures (2008–2014)**



Source: Authors' elaboration.

FIGURE 15

**Actual (annual) growth rates of investment expenditures (2008–2014 and 2010–2014)**



Source: Authors' elaboration.



Moving on to the analysis of expenditures, it can be concluded that personnel expenses are responsible for the accelerated growth of primary expenditure. Figure 13 shows that personnel expenses grew at rates of over 4.3 per cent per year in almost all states in Brazil, with the exception of Alagoas.<sup>24</sup> The addition of personnel expenses, whether in the North and Northeast regions or the other regions of the country, is responsible for the largest proportion of growth in primary expenditures.

The trajectory of costing expenses has proved more diverse, whether in the comparative analysis among regions or within the same region. Nine of the 16 states in the North and Northeast regions exhibited growth in costing expenses surpassing national GDP growth rates. This makes a difference in the analysis of the differential in primary expenditure growth rates as presented in Figure 14: states with less growth in primary expenditure are those that better controlled their costing expenses (Roraima, Amapá, Tocantins, Paraíba and Rio Grande do Norte). The more pronounced growth in primary expenditure was seen mainly in states where costing expenses grew more (Bahia, Alagoas, Pernambuco and Maranhão).

It was not possible to identify a general growth trend among investments. Comparing equivalent periods in election cycles (2008–2012 and 2010–2014) to control for their influences over expenditures, it can be seen in Tables 12 to 14 that public investment rates did not change significantly, whether in the North and Northeast regions (0.39 per cent of GDP in 2010 and 0.37 per cent in 2014) or in the other regions of the country (0.64 per cent of GDP in 2010 and 0.68 per cent in 2014). Disaggregated data in Figure 15 show that only 10 states increased investments as a proportion of domestic GDP between 2010 and 2014: Alagoas, Maranhão, Paraíba and Amapá in the North and Northeast regions; and the Federal District, Rio de Janeiro, Santa Catarina, Mato Grosso do Sul, Mato Grosso and Goiás in the other regions. Most states (except for those in the Centre-West region) decreased investments as a proportion of GDP.

In short, the most common fiscal behaviour pattern in states combined accelerated growth of primary expenditure, consistently above GDP levels, with slowing primary revenues following the economic downturn after 2008. In the North and Northeast regions, the decrease in primary revenues is more closely connected to transfers from the Federal Government, not only due to the higher degree of dependency but also because the regions maintained a certain vigour in local tax revenues.

The high degree of growth in primary expenditure, in turn, is explained mainly by personnel expenses, which generally grew in practically all states. In addition, costing expenses also increased primary expenditure in certain states. Costing expenses do not so much explain the high rate of growth of primary expenditure but, rather, the differences between states: those that managed to control costing expenses showed lower rates of growth of expenditure.

Furthermore, it is possible to list some of the factors responsible for the deterioration in fiscal results of state governments. The first is the economic downturn after 2008, which affected state finances in two ways: directly, by slowing tax collection, mainly of value-added taxes (ICMS), which are more susceptible to economic cycles; and indirectly, by slowing down transfers, which are mostly shares of the Federal Government's revenues. This indirect effect of transfers was greater in the states of the North and Northeast regions.

Second, the greater fiscal flexibility. The Federal Government implemented a set of tax exemptions that, by reducing the reserve bases of taxes shared with regional governments, partially explain the slowing down of transfers and primary revenues of states. In addition,

controls for state indebtedness were relaxed, which resulted in a large volume of loans, as analysed in Sections 2 and 4. The main goal of these measures was to leverage investments; however, as discussed before, this did not happen because the fiscal space was channelled towards personnel expenses and, in many cases, costing expenses. This is cause for some concern, because investment expenditures have a greater capacity to stimulate economic growth because they are able to clear infrastructure bottlenecks and increase the productivity of the economic system.

Finally, there are structural pressures on the current expenditures of state governments, including redistributive pressures favouring the expansion of basic social services (i.e. health and education); the policy of increasing the value of the minimum wage, whose impact is larger in the less developed regions of the country where it represents a large portion of the payroll; and demographic pressure on social security benefits, with a greater impact in more developed regions. These represent exogenous pressures on state fiscal authorities, constituting the main vectors of the expansion of public expenditure (personnel and costing expenses) and responsible for a high degree of the rigidity of expenses, considerably restricting the degree of freedom to promote fiscal adjustment from the expenditure side.

From the revenue side, governors also face difficulties in increasing the collection of their main tax (ICMS), whose tax bases have been eroded during the long period of fiscal war, especially in the current unfavourable situation of low economic growth. Fiscal adjustment at the federal level, from 2015 onwards, should restrict the voluntary transfers of funds to subnational entities, which will partly be compensated by the tearing down of tax exemptions, which increases the volumes of shared revenues with states and municipalities. Under this scenario, there is little wiggle room for effective fiscal adjustment, in the short or medium term.

Furthermore, regional governments are subject to stricter indebtedness control, despite the crisis affecting all levels of the government, which leads to more restrictions on the execution of their budgets. It follows, then, that the 2015 fiscal adjustment seemed forced, as argued by Maciel (2015), because it has been underpinned by delays in payments or one-off revenues (reclassification of judicial bonds or of social security funds), which artificially inflate short-term primary results. In the medium term, the evolution of the fiscal results of state governments will depend mainly on the continuation (or reversal) of the depressive scenario of the Brazilian economy and on fiscal reforms. The current unfavourable scenario heralds primary structural results that are close to zero—or even negative—over the next few years.

## 6 FINAL REMARKS

The analysis undertaken in this paper has shown that the Brazilian public sector is in a much less fragile fiscal condition than during other periods of turbulent international scenarios, such as the foreign debt crisis of 1980 or the exchange rate crises of developing countries in the second half of the 1990s. Net indebtedness has been considerably pared down after 2003 and now has a composition that is much less vulnerable to external shocks.

The decreased financial vulnerability of the public sector, allied with the resumption of economic growth, afforded some room for change in Brazilian fiscal policy; a growth phase began in 2006. This change resulted in the loosening of the restrictions on state and municipal indebtedness and in the reduction of primary results across the three spheres of government, peaking with the primary deficit of 0.59 per cent of GDP in 2014—the first deficit in 16 years.

Initially and, in fact, for most of the period, the deterioration in fiscal results did not prevent the net indebtedness of the public sector from continuing to fall, until it reached 31.5 per cent of GDP in 2013. It was only in 2014, facing a sharp economic downturn and the aforementioned primary deficit, that indebtedness increased to 34.1 per cent of GDP, which is low in historical terms and similar to what was seen in the first half of the 1990s.

The problem is that the cost of stabilising this debt—that is, the primary surplus required to maintain its stability as a proportion of GDP—became excessively high over the past few years due to another factor related to the composition of indebtedness: the public sector's simultaneous accumulation of assets and liabilities, with a large interest differential between them. Brazilian indebtedness decreased in net terms, but in gross terms it grew due to the accumulation of low-profitability assets (international reserves and BNDES credits), and the increase in expensive liabilities (security debt bonds and repo operations).

This explains a considerable part of the public sector's high level of interest expenditures, which, together with the unfavourable macroeconomic scenario and high interest rates, demanded a significant increase in the primary result to control the level of indebtedness. The answer from the fiscal authorities came in the form of a fiscal adjustment, which has been under way since 2015, interrupting the period of greater fiscal flexibility. This will involve, at least in the medium term, strong restrictions by the Federal Government on the release of new credit operations for states and municipalities, stricter control of expenses and a review of a series of tax exemptions and subsidies implemented during the previous period.

Similar situations were observed among regional entities. Net debt for states and municipalities fell by 6.3 per cent of GDP between 2002 and 2008, under rigid credit control. Instrumental to this process were the increased rate of economic growth, which boosted state revenues, and the trends of exchange rate appreciation and inflation control, which had a positive influence on the indicator that adjusts the debt renegotiated with the Federal Government. This scenario changed from 2008 onwards, due not only to the deterioration of the macroeconomic scenario but also to the resumption of foreign and bank credit acquisition, with the backing of the Federal Government.

Between 2008 and 2014, the renegotiated debt with the Federal Government maintained its downward trend, falling by 4.2 per cent of GDP and, at first, surpassed the acquisition of credit. Only after 2011 was there an interruption in the trend of decreasing net indebtedness, when new credits evened out or surpassed the settling of debts with the Federal Government. The net debt of regional entities, which had fallen by 2.5 percentage points between 2008 and 2011 to 10.8 per cent of GDP, showed stability between 2011 and 2013 and increased to 11.6 per cent of GDP in 2014. This level can also be considered relatively low in historical terms and goes back to those observed in the period before the growth of indebtedness during the second half of the 1990s.

Therefore, the resumption of regional governments' foreign and bank indebtedness should be characterised much more as a change in debt composition than a trajectory of increasing indebtedness. Even so, it represented a considerable phenomenon: at the state level, which concentrated credit taking, bank and foreign debt went from BRL23.3 billion to BRL160 billion between 2008 and 2014, increasing its share of the total debt from 6 per cent to 26 per cent and taking the place of the decreasing debt with the Federal Government. This phenomenon was more pronounced in the North and Northeast regions of the country,

where the share of foreign and bank debts became predominant (79 per cent of debt in the North region and 66 per cent in the Northeast region), and the share of Federal Government debt became secondary.

Analysis by creditor institution showed that this phenomenon was driven mainly by state credit operations together with public banks (BNDES, BB and CEF), in addition to multilateral organisations (IBRD and IDB). We have also shown that, although a portion of the loans was used to promote a restructuring of liabilities, replacing debt contracted with the Federal Government with cheaper loans, the main destination of funds was to finance urban development projects and new Federal Government programmes to support investment.

The evaluation of the indicators for degree of indebtedness and payment capacity, as well as the classification of credit risk, have shown that the fiscal condition of the majority of states in the North and Northeast regions is still not a cause for concern. However, this statement must be interpreted cautiously, because the improvement in the degree of indebtedness stopped in 2011, payment capacity has deteriorated since early 2013, and all states have exhibited worsening fiscal results, with not exactly favourable prospects for the near future. The indicators should evolve negatively insofar as they capture the most recent trends of fiscal deterioration. However, this might not point to an explosive behaviour of indebtedness because the ongoing fiscal adjustment by the Federal Government will involve tighter control over new credit operations. A reduction of the debt stock with the Federal Government is also expected in 2016. These factors should contribute to contain a potential trajectory of untenable indebtedness, despite the marked fiscal deterioration.

Without a doubt, the most preoccupying aspect from a fiscal condition point of view is the deterioration of the primary results of the general government (Federal Government, states and municipalities), between 2008 and 2014, a period during which the surplus of 3.33 per cent of GDP became a 0.59 per cent deficit. In the 'above-the-line' regional statistics, the deterioration of primary results happened across all state governments and totalled 1.5 percentage points of GDP, with the 1.3 per cent surplus becoming a 0.2 per cent deficit.

The detailing of the primary result by its main components allowed us to verify that the deterioration in primary results, as a proportion of GDP, is due almost entirely to an increase in expenditure. Primary revenues remained relatively stable, even under federal incentives. That is, the process of greater fiscal flexibility that began in 2006 did not translate into significantly worse fiscal results during most of the period, because revenues were boosted by high rates of GDP growth and by an increase in the degree of formalisation of the labour market and corporations. However, from 2011 onwards, the continuing growth of expenditures in a scenario of low economic growth and slowing revenues led to a rapid deterioration of fiscal results. The individual analysis of states supported these findings, showing that the most common pattern of fiscal behaviour in the North and Northeast regions combined accelerated growth of primary expenditure, consistently superior to GDP, with a decrease in the rate of growth of primary revenues.

The slowing of primary revenues was attributed to different causes in the states of the North and Northeast regions from those for the other regions of the country. In the North and Northeast regions, we could verify a closer relationship with the slowing of transfers from the Federal Government, not only due to the higher degree of budget dependence but also due to better economic performance and tax collection performance. That is to say that the slowing of primary revenues in the North and Northeast regions mainly reflects the indirect

impacts of economic slowdown and greater fiscal flexibility (tax exemptions) over federal tax collection shared with regional governments. This was different from the South and Southeast regions, which are less dependent on transfers, and where the direct impacts on local tax revenue were more decisive.

The analysis of expenditures, on the other hand, showed that they grew due to different factors in the federal and regional levels. In the federal level, growth was explained mainly by expenses for social benefits, subsidies and costing, while in the regional level, both in states and municipalities, the main factor for the increase in expenditure was personnel expenses. Personnel expenses have risen across all state governments in the country and are mainly responsible for the high rate of growth of primary expenditure. In addition, costing expenses can be considered a secondary determinant, restricted to specific states, explaining not so much the high rate of growth as the differences between states: those that best controlled costing expenses showed smaller rates of growth for primary expenditure.

Paradoxically, capital investment, which was the main target of greater fiscal flexibility and a priority destination for the credit operations of states and municipalities, remained relatively stable from 2008 onwards, interrupting the upward trajectory. This was verified in all levels of the government. State governments promoted a substitution of sources of financing, freeing up resources that were previously tied up in investments to meet expenses for personnel and, in many cases, costing. The channelling of fiscal space for these current expenses is a cause for concern, because expenses for investment usually have greater capacity to stimulate economic growth.

Ultimately, the general tendency of increasing current expenses reflects pressures of a more structural character over state budgets, such as redistributive pressures towards the expansion of basic social services (health and education), the impact of the policy of increasing the value of the minimum wage on the payroll, and demographic pressures on social security benefits. In large part, it is about pressures exogenous to fiscal authorities, which constitute the main vectors of increasing public expenditures and restrict the degree of freedom to promote an effective fiscal adjustment from the expenditure side.

On the revenue side, governors also face difficulties in increasing the collection of the main tax (ICMS), whose bases were eroded during the long process of fiscal war, especially in the current situation of low economic growth. Fiscal adjustment at the federal level, from 2015 onwards, should restrict the voluntary transfers of funds to subnational entities.

In this scenario, there is little wiggle room for effective fiscal adjustment by states, which in 2015 assumed a forced character, strongly underpinned by payment delays and one-off revenues. In the medium term, the evolution of the fiscal results of state governments will depend mainly on the continuation (or reversal) of the depressive scenario of the Brazilian economy and on fiscal reforms. The current unfavourable scenario heralds primary structural results that are close to zero—or even negative—over the next few years.

## REFERENCES

- Afonso, J.R., and S.W. Gobetti. 2015. "Impactos das reformas tributárias e do gasto público sobre o crescimento e os investimentos: o caso do Brasil." *Serie Macroeconomía del Desarrollo* No 167. Santiago do Chile: Economic Commission for Latin America and the Caribbean.
- Barbosa-Filho, N. 2013. "Dez anos de política econômica." In *10 anos de governos pós-neoliberais no Brasil: Lula e Dilma*, edited by E. Sader. São Paulo: Boitempo.
- Giambiagi, F. 2008. "18 anos de política fiscal no Brasil: 1991/2008." *Economia Aplicada* 12(4): 535–580.
- Giambiagi, F., and A.C.D. Além. 2008. *Finanças públicas: teoria e prática no Brasil*. Rio de Janeiro: Elsevier Brasil.
- Gobetti, S.W., and A.M. Amado. 2011. "Ajuste fiscal no Brasil: algumas considerações de caráter pós-keynesiano." *Revista de Economia Política* 31(1)121: 139–159.
- Gobetti, S.W., and L. Klering. 2007. "Índice de Responsabilidade Fiscal e Qualidade de Gestão: Uma Análise Combinada Baseada em Indicadores de Estados e Municípios." ESAF XII Prêmio Tesouro Nacional, Brasília.
- Gobetti, S.W., and R.O. Orair. 2015. "Flexibilização Fiscal: novas evidências e desafios." *Texto para Discussão* No. 2132. Brasília: Ipea.
- Godoy, D.V. 2007. "Análise de Sustentabilidade das Dívidas Estaduais: uma abordagem estocástica." ESAF XII Prêmio Tesouro Nacional, Brasília.
- Lopreato, F.L.C. 2014. "Aspectos da atuação estatal de FHC a Dilma." In *Presente e futuro do desenvolvimento brasileiro*, edited by A.B. Calixtre, A. Biancarelli, and M.A.M. Cintra. Brasília: Ipea.
- Maciel, P.J. 2015. "Esforço Fiscal do Setor Público e Comportamento das Finanças Públicas Regionais." Accessed March 9, 2016. <<http://pedrojucomacieli.com/?p=184>>.
- Mora, M., and F. Giambiagi. 2005. "Federalismo e Endividamento Subnacional: Uma Discussão Sobre a Sustentabilidade da Dívida Estadual e Municipal." *Texto para Discussão* No. 1.142. Rio de Janeiro: Ipea.
- Mora, M., and F. Santos. 2015. "Limites ao Endividamento e Sustentabilidade Fiscal: o caso dos governos estaduais." ESAF XX Prêmio Tesouro Nacional, Brasília.
- Orair, R.O. 2015. "Desonerações em alta com rigidez da carga tributária: o que explica o paradoxo do decênio 2005–2014?" *Texto para Discussão* No. 2.117. Brasília: Ipea.
- Piancastelli, M., and R. Boueri. 2008. "Dívida dos estados 10 anos depois." *Texto para Discussão* No. 1.366. Brasília: Ipea.
- Rezende, F., F.A.De Oliveira, and E.A. Araujo. 2008. *O dilema fiscal: remendar ou reformar?* Rio de Janeiro: Editora FGV.
- Serra, J., and J.R. Afonso. 2007. "El federalismo fiscal em Brasil: una visión panorámica." *Revista de la Cepal* 91, April.
- Varsano, R. 1996. "A evolução do sistema tributário brasileiro ao longo do século: anotações e reflexões para futuras reformas." *Texto para Discussão* No. 405. Rio de Janeiro: Ipea.

## NOTES

5. Despite exceptions such as the period of increasing foreign debt between 1997 and 2002 and a more recent subnational government movement of recovering external credit (2008–2014).
6. See Gobetti and Amado (2011) for a critical analysis of the target regime and its consequences.
7. Gobetti and Klering (2007) show how these measures initially served to control the indebtedness of state governments and elevate their primary surplus, but with consequences for the level of capital investment.
8. Barbosa Filho (2013) and Gobetti and Orair (2015) offer a more detailed view of this change in fiscal policy.
9. Orair (2015) analyses the paradox of tax burden stability under the predominance of tax exemptions.
10. This is also the conclusion reached by Afonso and Gobetti (2015), who show how capital investment not only stopped growing for public administrations but also for state-owned companies (i.e. Petrobras). Gobetti and Orair (2015) attribute this fact to a change in the fiscal policy mix, transitioning from an expansion via investments to one via subsidies and benefits for the private sector, starting from 2011.
11. The evaluation of state indebtedness in this and the following two sections will focus on the analysis of fiscal indicators. More in-depth evaluations can be seen in Godoy (2012) and Mora and Santos (2015).
12. Regional fiscal statistics from the Central Bank are used, which exhibit small discrepancies regarding consolidated data, due to differences in scope (sample data), conceptual differences and gaps in accounting books. On average, between 2008 and 2014, the gap in the net debt of and primary results of subnational entities was BRL6 billion and BRL2.2 billion, respectively. Information from Figure 3 contemplates states, 26 capitals and a sample of 370 of the most populous municipalities in the country, capturing mainly what happened at the state level, since changes at the municipal level were not very significant.
13. The Brazilian Institute of Geography and Statistics (IBGE) promoted an update in the structural framework of national accounts (ref. 2010) and released a new GDP series in 2015. Unfortunately, the series of regional GDP had still not been updated as of the conclusion of this study. Regional information was obtained by applying the regional percentages of the delayed series over the most recent value of domestic GDP. For the years of 2013 and 2014, where regional GDP information was not available, 2012 regional proportions were applied.
14. The consolidated net debt is determined based on information from entities' balance sheets and includes, in addition to the usual instruments of debt, other obligations such as judiciary bonds or debts with suppliers that bypass the financial system.
15. In 2014, only the government of Rio Grande do Sul was slightly above the limit (2.09).
16. It was not possible to count on complete information from states in 2014; therefore, data were restricted to the period up until 2013. Moreover, it was not possible to count on registry information from Mato Grosso for a number of years (2008–2011), and we have opted to exclude this state from the base. It is important to note that COC data are declaratory and that there are no harmonised standards for filling out the 'purpose of credit' or 'creditor' fields. For that reason, the data presented required the creation of a simplified classification, in addition to the correction of inconsistencies. These procedures are always arbitrary to some degree.
17. Among the new Federal Government programmes are the Emergency Financing Programme, the Growth Acceleration Programme (PAC) and ProCopa, for the construction of sports venues.
18. The primary 'above-the-line' result, detailing primary revenues and expenditures, is derived from a calculation by the authors based on Annual Balances and complementary sources of information. This calculation exhibits discrepancies that, on average, overshoot the primary 'below-the-line' result calculated by the Central Bank by BRL8.4 billion.
19. Unlike the 'below-the-line' calculation, which presented a slight increase in the primary result in the state of Roraima.
20. The actual values of revenues and expenses presented in this section were obtained by deflating by the yearly IPCA arithmetical average, based on 2014 and, in the interest of uniformity, the same procedure was adopted for the GDP. The actual rate of GDP growth during 2008–2014 (4.1 per cent per year) is different from its growth in volume, due to the different behaviour of the deflator agent in national accounts.
21. We adopt the concept of net transfers, which are mainly transfers received from the Federal Government and deducted from the transfers of state governments to their municipalities.
22. Another peculiar case is the state of Espírito Santo, which exhibited an actual ICMS decrease and accelerated growth of transfers. The state benefited from an oil exploration frontier that led to an extraordinary 476.4 per cent increase in financial transfers for the exploration of natural resources, while at the same time being undermined by a change in legislation that restricted the fiscal war (fiscal benefits for imports) and caused a sharp decrease in ICMS revenues after 2012.
23. Differently from the other regions where there was a decrease, as a proportion of national GDP, in transfers and tax revenues, accompanying a worse economic performance.
24. The reduced growth rate in Alagoas (2.8 per cent per year), which includes wages for active civil servants and social benefits for inactive ones, is possibly related to the way expenses are tracked for inactive personnel in its social security fund, which underestimates personnel expenses—something that might be also influencing costing expenditures in the state.



Empowered lives.  
Resilient nations.



Ministry of  
Planning

