

PROJECT PERFORMANCE ASSESSMENT REPORT

BRAZIL

Rio State Fiscal Efficiency for Quality of Public Service Delivery Development Policy Loan

DPL III

Report No. 158234

MAY 10, 2021



IEG
INDEPENDENT
EVALUATION GROUP

WORLD BANK GROUP
World Bank • IFC • MIGA

WHATWORKS

© 2021 International Bank for Reconstruction and Development / The World Bank
1818 H Street NW
Washington DC 20433
Telephone: 202-473-1000
Internet: www.worldbank.org

Attribution—Please cite the work as follows:

World Bank. 2021. Brazil—Rio State Fiscal Efficiency for Quality of Public Service Delivery Development Policy Loan DPL III. Independent Evaluation Group, Project Performance Assessment Report 158234. Washington, DC: World Bank.

This work is a product of the staff of The World Bank with external contributions. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of The World Bank, its Board of Executive Directors, or the governments they represent.

The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

RIGHTS AND PERMISSIONS

The material in this work is subject to copyright. Because The World Bank encourages dissemination of its knowledge, this work may be reproduced, in whole or in part, for noncommercial purposes as long as full attribution to this work is given.

Any queries on rights and licenses, including subsidiary rights, should be addressed to World Bank Publications, The World Bank Group, 1818 H Street NW, Washington, DC 20433, USA; fax: 202-522-2625; e-mail: pubrights@worldbank.org.

Report No.: 158234

PROJECT PERFORMANCE ASSESSMENT REPORT

BRAZIL

**RIO STATE FISCAL EFFICIENCY FOR QUALITY OF PUBLIC SERVICE DELIVERY
DEVELOPMENT POLICY LOAN (DPL III)
(IBRD-81910)**

May 10, 2021

Human Development and Economic Management

Independent Evaluation Group

Abbreviations

DPL	development policy loan
GDP	gross domestic product
ICMS	tax on the movement of goods, interstate and intermunicipal transport, and communication services
IDEB	Index of Development of Basic Education
IEG	Independent Evaluation Group
ITD	inheritance, estate, and donations tax
PPAR	Project Performance Assessment Report
SEFAZ	Secretaria de Estado da Fazenda (state Secretariat of Finance)
TADAT	Tax Administration Diagnostic Assessment Tool

All dollar amounts are US dollars unless otherwise indicated.

IEG Management and PPAR Team

Director-General, Independent Evaluation	Ms. Alison Evans
Director, Human Development and Economic Management	Mr. Oscar Calvo-Gonzalez
Manager, Country Programs and Economic Management	Mr. Jeffrey Allen Chelsky
Task Manager	Mr. Konstantin Atanesyan
This report was prepared by Konstantin Atanesyan (Senior Evaluation Officer), Jorge Garcia-Garcia and Sol Garson Braule Pinto (consultants). The report was peer reviewed by Richard Stern and panel reviewed by Basil Kavalsky. Oksana Gryshkevych provided technical support and Dung Thi Kim Chu provided administrative support.	

Contents

Abbreviations	ii
Data.....	v
Summary.....	vii
1. Background, Context, and Design.....	1
World Bank Group Lending to the State of Rio de Janeiro	1
Background and Context.....	1
Objective, Design, and Financing	3
Objective	3
Design	4
Financing.....	4
2. What Worked, What Didn't Work, and Why?	4
Results.....	4
Policy Area I: Tax Administration	4
Policy Area II: Public Financial Management.....	8
Policy Area III: Education and Health	11
Design and Preparation.....	15
Implementation and Supervision.....	17
3. Lessons.....	17
References.....	21

Tables

Table 1.1. World Bank DPL and Technical Assistance Loans to the State and Municipality of Rio de Janeiro, 2010–18.....	1
Table 1.2. Fiscal Balance for the Federal Government, 2010–17	2
Table 2.1. Results Indicators for Strengthening Tax Administration.....	6
Table 2.2. Tax Arrears, 2015–17	8
Table 2.3. Results Indicators for Public Financial Management	10
Table 2.4. State of Rio de Janeiro Investment Budget Execution, 2010–17.....	10
Table 2.5. Results Indicators for Education	13
Table 2.6. Results Indicators for Health	14

Appendixes

Appendix A. Ratings	22
Appendix B. Methods and Evidence.....	39
Appendix C. Policy and Results Matrices.....	40
Appendix D. Fiscal Performance of the State of Rio de Janeiro, 2007–19	44
Appendix E. Borrower Comments	51

Data

This is a Project Performance Assessment Report by the Independent Evaluation Group of the World Bank Group for the Fiscal Efficiency for Quality of Public Service Delivery Development Policy Loan III (P126465) to the state of Rio de Janeiro for \$300 million. Following standard Independent Evaluation Group procedure, copies of the draft Project Performance Assessment Report were shared with relevant government officials for their review and comment. Comments are included in appendix E.

Basic Data

Country	Brazil	Financing source	International Bank for Reconstruction and Development
Global Practice	Governance	World Bank financing commitment	\$300 million
Project name	Fiscal Efficiency for Quality of Public Service Delivery Development Policy Loan	Actual amount disbursed	\$300 million
Project ID	P126465	Programmatic series	No
Financing instrument	Development policy lending		

Dates

Event	Original Date	Actual Date
Approval	08/30/2012	08/30/2012
Effectiveness	11/30/2012	11/16/2012
Closing	01/31/2014	01/31/2014

Key Staff Responsible

Management	Appraisal	Completion
Project Team Leader	Roland N. Clarke	Roland N. Clarke
Practice Manager	Arturo Herrera Gutiérrez	Arturo Herrera Gutiérrez
Sector Director or Senior Global Practice Director	Rodrigo A. Chaves	Mario Marcel Cullel
Country Director	Deborah L. Wetzel	Deborah L. Wetzel

Summary

Background and Description

This is a Project Performance Assessment Report by the Independent Evaluation Group (IEG) of the World Bank Group for the Fiscal Efficiency for Quality of Public Service Delivery Development Policy Loan (DPL) III (P126465) to the state of Rio de Janeiro for \$300 million, approved in August 2012 and closed in January 2014.

Results

The program covered three policy areas: (i) tax administration, (ii) public financial management, and (iii) education and health. It achieved some of its objectives and targets in the short term (in fiscal years 2013–14), but these achievements were not sustained.

On **tax administration**, the Rio state government (the state) established the tax ledger (single account) and introduced performance indicators for tax collection. The state collected more revenue from the goods and services tax (ICMS; Imposto sobre Circulação de Mercadorias e Serviços de Transporte Interestadual e Intermunicipal e de Comunicação) and the inheritance and donations tax than targeted. However, it is not evident that the increase can be attributed directly to these initiatives, as the nominal gross domestic product grew at a faster pace than the nominal increase in tax revenues. On **public financial management**, the state adopted a methodology to assess investment projects, used it to assess three projects out of a targeted five, costed four large public programs, and took some steps to improve internal audit and control. On **education**, the state introduced incentive pay for teachers and selected school authorities based on merit. Student performance improved, according to the Index of Development of Basic Education (IDEB; Índice de Desenvolvimento da Educação Básica), following the trend observed before the reforms were introduced. It is not evident that the changes in student performance can be attributed to the incentive pay for teachers and merit selection of school principals as the performance level had been increasing consistently since 2005, seven years before loan approval. On **health**, the indicator targets were achieved—more social organizations managed emergency room operations, and more hospitals had ombudsman services and infection evaluation committees than before the loan approval.

The medium- and long-term view presents a different picture. On **tax administration**, some aspects of the infrastructure for tax administration improved (such as filing and paying taxes online), but the ledger was not fully operational as a single account, and the quality of tax administration has not improved. On **public financial management**,

the state does not use the methodology developed to evaluate projects, the experiment on costing did not become an effective budget tool, and there is limited evidence of improvement in the auditing function in the state over the past six years. The related technical assistance loan (Rio de Janeiro Renovating and Strengthening Public Management Project, fiscal years 2011–17) that was supposed to help improve public financial management did not achieve its intended results, and IEG rated its overall outcome as highly unsatisfactory. On **education**, overall student performance in the state improved (consistent with a longer-term trend that started in 2005), but performance deteriorated relative to other states. The system of incentive pay was abandoned in 2016 after protests by teachers and students. On **health**, after seven years of operation, a 2019 report from the state’s comptroller general found that the coverage and efficiency of the services provided by social organizations was lower than when the state managed the services.

Design and Preparation

DPL III was one of several in the state of Rio de Janeiro supporting common reforms. However, the loans did not have a clear theory of change and did not constitute a coherent and consistent effort to tackle the targeted problems effectively. The operation did not make a permanent and significant change in the four areas covered because it was a short-term operation without adequate complementary support that sought to solve problems that required deep and sustained change over several years. On **tax administration**, the operation did not frame the issues around a coherent framework, such as the one offered by the Tax Administration Diagnostic Assessment Tool, developed by a group of donors to assess the tax administration systems of countries and subnational units. On **public financial management**, the operation overlooked the potential short- and medium-term feasibility of selecting public investments based on costs and benefits and of costing public expenditure programs. On **education**, the operation did not pay sufficient attention to the political and administrative barriers to establishing a payment system for teachers based on incentives and performance. On **health**, the operation did not examine the risks to the efficiency of expenditure and quality of service when subcontracting service delivery to social organizations.

Implementation and Supervision

This review concurs with the Implementation Completion and Results Report, which stressed that “implementation did not match the ambition of the design” (World Bank 2014, paragraph 48). The operation’s files contain little information about the program’s performance, and key information, such as performance indicators for revenue collection, is missing.

Appendix A describes IEG performance ratings.

Lessons

This assessment offers the following lessons:

- Subnational programs supporting institutional reform in areas such as tax administration, public financial management, education, and health require a long-term strategic vision and sufficient time for implementation. Single-DPL operations at the state level, like the one reviewed in Rio, are unlikely to achieve such objectives without significant and sustained complementary support for capacity building. An investment loan anchored on a longer-term institutional partnership with state implementing agencies could have been a better tool for supporting the underlying reforms.
- It was difficult to achieve fiscal sustainability in Rio state by reforming only a few technical aspects of tax administration without accounting for important issues such as pensions, dependence on unstable oil revenues, weak institutions, and chronic corruption.
- An assessment of the Rio state's fiscal situation, its implementation capacity, and medium-term perspectives could have improved the program's design, since the state was in a dire financial situation and lacked the bandwidth to properly prepare and execute the 12 loans it was simultaneously negotiating with multiple lenders.

Oscar Calvo-Gonzalez
Director, Human Development and Economic Management
Independent Evaluation Group

1. Background, Context, and Design

World Bank Group Lending to the State of Rio de Janeiro

1.1 The World Bank approved five development policy loans (DPLs) and three technical assistance loans totaling \$2.9 billion to the state of Rio de Janeiro and the municipality of Rio de Janeiro during 2009–14. Two loans (one DPL and one technical assistance loan) for \$1.1 billion went to the municipality (see table 1.1). Some of the DPLs covered fiscal issues, and the technical assistance loans supported improvements in public sector management or public service delivery through territorial development and management information systems. The loans did not have continuity in their objectives, instruments, and areas covered, though there was a common implicit goal of improving fiscal management.

Table 1.1. World Bank DPL and Technical Assistance Loans to the State and Municipality of Rio de Janeiro, 2010–18
(\$, millions)

State				Municipality			
DPL I P117244	DPL II P122391	DPL III P126465	DPL IV P147695	TAL I P106768	TAL II P126735	DPL P111665	TAL P127245
Fiscal Sustainability, Human Development and Competitiveness	Metropolitan Urban and Housing	Fiscal Efficiency for Quality of Public Service Delivery	Enhancing Public Management for Service Delivery	Public Sector Modernization	Strengthening Public Management and Integrated Territorial Development	Fiscal Consolidation for Efficiency and Growth	Strengthening Public Sector Management
485	485	300	500	18.6	48	1,045	16.2
FY10	FY11–12	FY12–14	FY13–16	FY10–17	FY14–17	FY10–13	FY13–18

Source: data.worldbank.org.

Note: The bottom row reflects the approval and closing dates. DPL = development policy loan; FY = fiscal year; TAL = technical assistance loan. Text in bold reflects the DPL discussed in this PPAR.

1.2 DPL I supported measures to improve the efficiency of tax administration by strengthening capacity in the Revenue Service of SEFAZ (Secretaria de Estado da Fazenda, State Secretariat of Finance). DPL III aimed to improve tax administration by establishing a synchronized taxpayer registration system and a results-based management system.

Background and Context

1.3 **Overall country context.** The Brazilian economy grew at an uneven pace between 2007 and 2017. By 2013, economic growth was faltering after a decade of rapid

growth and social progress, and the economy fell into a deep recession during 2014–16, when total and real gross domestic product (GDP) per capita fell 6 and 9 percent, respectively. The country had had large fiscal imbalances since 2013 and primary deficits since 2014 (see table 1.2). Large interest payments increased the fiscal deficit and led to high public debt of 93 percent of GDP in 2019 (IMF 2019).

**Table 1.2. Fiscal Balance for the Federal Government, 2010–17
(percent of gross domestic product)**

Indicator	2010	2011	2012	2013	2014	2015	2016	2017
I. Net operating balance	-1.6	-1.4	-0.8	-2.1	-4.9	-8.5	-7.5	-8.0
II. Primary balance	2.1	3.4	3.0	2.0	-0.5	-0.2	-1.3	-1.2

Sources: National Treasury Secretariat; Federal Bureau of Geography and Statistics; Institute of Applied Economic Research; and Central Bank of Brazil.

Note: Revenue recorded on cash basis; expenditures recorded on accrual basis.

1.4 State-level context. The state of Rio de Janeiro had Brazil’s second-largest economy in 2012, with 12 percent of national GDP. Its population of about 16 million was Brazil’s third largest. Extractive industries accounted for 15 percent of the state’s gross value added in 2014; that share fell to 5 percent in 2015–17, and the state’s real output fell 2.9 percent per year.¹ In 2015 and 2016, GDP fell in all states, and in 2017, it fell in Rio de Janeiro, Paraíba, and Sergipe. By 2017, the state of Rio de Janeiro’s GDP was 8.5 percent lower than in 2014, and its share in Brazil’s GDP fell to 10 percent. The unemployment rate reached 14.6 percent in the third quarter of 2018 (Fecomercio 2019, 16).

1.5 The economic crisis of 2014–16 worsened the state’s already-poor fiscal situation (see appendix D). In 2013, current expenses exceeded net current revenue. As the crisis deepened, the state used extraordinary measures (selling assets, taking judicial deposits) to mitigate its cash shortfall and pay for growing personnel expenses,² while a bountiful supply of credit financed its investments. These arrangements stopped in September 2017 when the state entered the Fiscal Recovery Regime (Regime de Recuperação Fiscal, Law 159/2017), which offered financial support to states meeting conditions set by the federal government. The state had an overall positive fiscal balance in 2018–19, but the amount was insufficient to pay its debt with the National Treasury. Its consolidated debt reached 2.85 times its net revenue at the end of 2019. In September 2020, the state governor asked to remain in the Fiscal Recovery Regime until 2023.

1.6 Besides economic and fiscal problems, the state experienced institutional crises dating back to the mid-1980s. In 2018, federal police initiated an investigation of former governor Sergio Cabral (2007–14), state secretaries, members of the state parliament, and some public servants accused of buying political support from parliamentarians in 2007–

18. Governor Cabral was imprisoned, as were all previous governors since 1985. In August 2020, the Supreme Tribunal of Justice (a federal court) suspended the state governor and a former federal judge from office on charges of corruption.

1.7 The state's education system performed poorly between 1990 and 2010. The politicized process for selecting district supervisors and school principals resulted in a decline in accountability and the quality of teaching, administration, and school infrastructure. By 2010, 48 percent of students in upper primary school and 52 percent of students in secondary school were at least two years behind the appropriate grade for their age.

1.8 The coverage of health services is subpar, and services are not provided efficiently. Although the state ranks high in per capita income among the 27 states, its health indicators place it among the lowest in the country (24–25 of 27), according to the federal Family Health Program.³

Objective, Design, and Financing

Objective

1.9 The objective of the operation was “to assist the government of Rio de Janeiro in strengthening its tax administration, improving the efficiency of public financial management, increasing the quality of public service provision in education and health, and ensuring that policies adopted are both consistent with priorities of the state government and with resources likely to be available in the medium term” (World Bank 2012, paragraph 92). The objectives of the stand-alone operation, though wide ranging, were relevant at the time of the operation and remain so today. They were consistent with the state governor's 2007–10 Government Strategic Plan of reforms aimed at regaining control of the state's fiscal position, improving public sector management, and increasing efficiency in the provision of public services.

1.10 The objectives were also consistent with two pillars of the Brazil Country Partnership Strategy for fiscal years 2012–15: increasing the efficiency of public and private investment, and improving the provision of public services for low-income households. The operation was one of several subnational DPLs aimed at promoting fiscal discipline and better public financial management and service delivery.

1.11 At the same time, the objectives of the program were too ambitious given the depth and extent of the problems in the areas supported, and it was unlikely that the targeted progress could have been achieved within the operation's time frame. However, there was optimism within the World Bank team that reform was possible and could last because the state governor at the time had expressed what the team

considered to be a genuine desire to improve the state's performance and had appointed highly qualified professionals to lead key agencies, such as education and tax administration.

Design

1.12 The program supported three policy areas: tax administration (policy area I), public financial management (policy area II), and education and health (policy area III). Policy area I included three prior actions: (i) taking steps required to implement the Integrated Recording System for Taxes (Sistema de Registro Integrado), (ii) adopting standards to improve tax collection, and (iii) establishing a process to implement a results-based management system. Policy area II prior actions included (i) adopting a methodology and procedures for evaluating, selecting, and approving public investment projects; (ii) piloting a methodology for costing four public policy programs; and (iii) restructuring institutional arrangements for internal audits and having an action plan to carry out the restructuring. Policy area III had four prior actions that consisted of adopting (i) a merit-based selection process for regional and school directors, and implementing it; (ii) annual school-level targets for student learning and graduation rates and a bonus pay system for schools that achieved their targets; (iii) a legal and administrative framework to assess social organizations to manage public hospitals and health units; and (iv) regulations defining evaluation mechanisms to transfer bonuses and monetary incentives to municipalities, municipal hospitals, and regional state hospitals.

Financing

1.13 The operation was a single-tranche, stand-alone development policy loan for \$300 million financed entirely by the International Bank for Reconstruction and Development. The operation was approved on August 30, 2012, and closed on January 31, 2014.

2. What Worked, What Didn't Work, and Why?

Results

2.1 This section reviews the program's achievements and shortcomings by policy area.

Policy Area I: Tax Administration

2.2 Overall, the quality of tax administration in the state of Rio de Janeiro did not improve, despite progress on some aspects of its infrastructure (filing and paying taxes

online). The objective of policy area I was to “increase state revenue performance” (World Bank 2012, table 6). To achieve this, the program included three prior actions requiring the state of Rio de Janeiro to (i) strengthen the implementation of the synchronized taxpayer registration system (REGIN, Sistema de Registro Integrado, Integrated Recording System for Taxes); (ii) adopt standards to improve collection of state taxes, including ICMS; and (iii) establish a process to implement a results-based management system for tax administration within SEFAZ. The outcome indicators consisted of (i) revenues from the value-added tax (ICMS); (ii) establishment of a unified general taxpayer ledger that allowed individual taxpayers to access their accounts; and (iii) implementation of performance indicators for tax administration – 10 indicators in 2012 and 20 in 2013. Of these three indicators, one was partially achieved (ledger), and two were achieved (tax revenues and performance indicators). (table 2.1).

The program did not support specific actions on audit, reporting and matching, and withholding, which are important components for efforts to increase tax revenue and improve tax administration and enforcement (Burman and Slemrod 2013, 173). This evaluation goes beyond assessing the achievement of program indicators (which were not sufficient for assessing improvements in tax administration) and examines the program’s impact on the operation of the ledger, SEFAZ audit practices, and paying taxes. To complement its analysis, this report uses the findings of the Tax Administration Diagnostic Assessment Tool (TADAT; prepared for the state of Rio in 2018), an in-depth diagnostic developed by a group of donors (including the World Bank and the International Monetary Fund) to assess the tax administration systems of countries and subnational units.⁴

- Prior action 1: The taxes on value-added (ICMS) and inheritances, estates, and donations (ITD; Imposto de Transmissão Causa Mortis e Doação) exceeded their targets by 7 and 36 percent, respectively. Although the results were achieved, it is unclear how much improvement can be attributed to the measures supported by the program. This is because total nominal revenues from ICMS increased between 2011 and 2017 at the rate of 5.7 percent per year, while nominal GDP increased at 6.1 percent, indicating that nominal GDP growth alone could account for all growth in revenues. Additionally, between 2005 and 2012 and 2013 and 2017, the annual ratio of ICMS revenue to GDP remained essentially unchanged at 4.8 percent.
- Prior action 2: Ledger adoption remained incomplete,⁵ and by 2018, the single account was not yet in place.
- Prior action 3: The performance indicators for tax collection were adopted, but they have not improved the quality of tax administration to date. The indicators

were not used to improve management, analyze employee performance, and guide their compensation. Despite initial improvements, tax administration regressed to earlier practices after 2014. It is difficult to improve fiscal performance without effective incentives: according to Independent Evaluation Group (IEG) interviews, most state auditors either already earn the maximum possible or earn little from the additional effort they would need to exert to increase tax revenues.

Table 2.1. Results Indicators for Strengthening Tax Administration

Indicator	Baseline	Target Value	Actual Value
1. Establish ledger	No unified ledger	Establishment of unified general taxpayer ledger, with access for individual taxpayers to their unified accounts	Unified General Taxpayer Ledger was created. It was working on an experimental phase when the Implementation Completion and Results Report was written. Currently, taxpayers have access to their accounts, but the accounts are not fully unified.
Assessment			Partially achieved
2. ICMS tax revenue (billions of reais)	24.8	28.7	30.74
Assessment			Achieved
3. ITD tax revenue (millions of reais)	418	470	639
Assessment			Achieved
4. Performance indicators adopted	0	20	15 by the end of 2013 20 by March 2014 (World Bank 2014, para 54); more recent data unavailable
Assessment			Achieved ^a

Sources: World Bank 2012, annex 2, 66–69 for baseline and target values; World Bank 2014 for actual values of indicators 1 and 4 in July 2014.

Note: The baseline and target values are for December 31, 2011 and 2013, respectively. The baseline and target values for ICMS tax revenue were modified in the ICR from R\$32.6 billion and R\$37.7 billion because they corresponded to total tax receipts in 2011, not receipts from ICMS. The prior actions and indicators are associated as follows: ledger with prior action 1; tax revenues (indicators 2 and 3) possibly with prior actions 1, 2, and 3 (the program document does not separate possible impact); and performance indicators with prior action 3. ICMS = tax on the movement of goods, interstate and intermunicipal transport, and communication services; ICR = Implementation Completion and Results Report; ITD = inheritance, estate, and donations tax.

a. The ICR states, “The sequenced introduction of performance indicators was carried out as envisaged. The final batch of indicators was done in March of 2014” (World Bank 2014, paragraph 54). The ICR does not present evidence to support the statement.

2.3 Overall, the prior actions for this policy area were broadly relevant for the achievement of the objective of increasing state revenue performance. At the same time, they could have benefited from including additional measures aimed at ensuring their long-term sustainability, such as specific actions on audit and incentives for staff performance and for sustaining the initiated reforms. The following sections of the evaluation provide detailed information on specific prior actions and their impact.

Ledger and Audit

2.4 Establishing the ledger was intended to facilitate tax administration by, among other things, creating a single taxpayer account, which would make it easier to file and pay taxes and to audit taxpayers. Creating the single account required first introducing a unified taxpayer ledger, which would provide a view of taxpayers' debits and credits. The ledger was supposed to help register and number taxpayers, which is essential for filing, paying, assessing, and collecting taxes. The *adequacy and accuracy* (that is, integrity) of the information in the database is essential for effective tax administration. The ledger was to be integrated into a single account to which taxpayers would have access and through which they could file and pay taxes automatically.

2.5 Some of these actions were carried out, but a report on tax administration in Rio de Janeiro state concludes that as of 2018, the taxpayer ledger was incomplete and did not follow good international practices (TADAT 2018). The TADAT report found that the information was *adequate* because registration was robust and businesses could register and modify information online, but was not *accurate* because SEFAZ cross-checks of information with other agencies and with reports on the accuracy of the registration database were not available (TADAT 2018, 18–20).⁶ The ledger did not work as expected, and the net result was that the authorities continued to lack accurate and reliable information about taxpayers. However, the ledger has provided some benefits in that it facilitated the electronic filing and paying of taxes.

2.6 The development policy operation was expected to help reduce errors and losses (discrepancies) through the unified ledger.⁷ However, SEFAZ does not currently evaluate tax revenue losses based on the results of the audit programs and cross-checking of data. Moreover, SEFAZ does not evaluate the ICMS tax compliance gap, use external studies, or monitor revenue losses from inaccurate information in tax returns (TADAT 2018, 31–33).

2.7 A recent report from SEFAZ (2018) points out problems that support this evaluation's findings and conclusions. On *registration and tax information*, the SEFAZ report notes that (i) the procedures for opening, writing, and changing tax registration data are time consuming and excessively bureaucratic; (ii) the procedures in the old tax registration system, known as SICAD, cannot be updated, and the reports (*relatorios gerenciais*) are unavailable in the system; and (iii) SEFAZ data were integrated with the synchronized taxpayer registration system only in 2017, though some operations were not automated immediately. On *audit and inspection*, the report notes that tax auditors emphasize administrative over audit activities. Most of them inspect the smallest portion of tax collection, and the distribution and coverage of audits and fiscal inspections is inadequate. Other shortcomings noted by the report are that SEFAZ has a

highly unstable web portal, does not have requirements for digital certification of the declarations, and does not have a system in place to monitor the extent of inconsistency and inaccuracy of the information in taxpayers' statements.

Paying Taxes

2.8 The DPL envisioned that a unified system would help promote high rates of voluntary tax payments, reduce the accumulation of tax arrears, and address major source of errors and losses in tax administration. That goal was not achieved.

2.9 The experience with the administration of the ICMS tax shows that about 35 percent of all taxpayers and 97 percent of large taxpayers file their taxes on time. For the ICMS tax, about 84 and 74 percent of the number and value of all payments, respectively, were on time in 2017. TADAT assessed the number of on-time payments as fairly good and the value of payments as below good practice (TADAT 2018, 27, 29). However, the lack of baseline data for these indicators makes it impossible to assess improvement over time.

2.10 SEFAZ performance in tax collection was uneven. The agency does not monitor the evolution of the stock and flow of tax arrears systematically. Three indicators of arrears for the years 2015–17 show that the agency performed poorly (see table 2.2). The problem was already present in 2010–12. In 2013, SEFAZ calculated that between the first quarter of 2010 and the third quarter of 2012, the share of *unpaid* infraction notices issued increased from 98 to 100 percent in value terms.

**Table 2.2. Tax Arrears, 2015–17
(percent)**

Indicator	2015	2016	2017
1. Total core tax arrears at year end/total core tax revenue collected	120	118	120
2. Collectible tax arrears/total core tax revenue collected	40	23	22
3. More than 12 months old collectible/total core tax arrears at year end	16	13	10

Source: TADAT 2018, annex III, table 10, p. 55.

Note: Numbers are rounded.

Policy Area II: Public Financial Management

2.11 Policy area II covered three areas (see appendix D). On **public investment management**, the objectives were to (i) improve the quality of investment spending and the investment selection process, and (ii) ensure that investment decisions are consistent with fiscal sustainability. The related prior action 4 consisted of the state adopting a methodology and procedures for evaluating, selecting, and approving proposals for

public investment projects estimated to cost more than 50 million Brazilian reais (R\$). On **costing of public investment programs**, the objective was to ensure that policy commitments are consistent with long-term fiscal sustainability. It was supported by prior action 5 that consisted of the state piloting a methodology for costing its public policy programs on social and economic development and using this methodology to cost four public policy programs. On **internal control**, the objective was to increase the efficiency of public expenditures, supported by prior action 6 that consisted of the state restructuring its internal audit institutional arrangements and, through SEFAZ, approving the action plan of the Internal Audit Department (Auditoria Geral do Estado) for calendar year 2012. These are high-level and ambitious objectives, and meaningful progress toward them would be challenging for a stand-alone operation.

2.12 The expected results for financial management were partially achieved — one indicator target was achieved (for internal control), one was partially achieved (for costing), and one was not achieved (for public investment management), as shown in table 2.3. The review did not find evidence that the state routinely screened public investment projects using evaluation criteria or costed policy programs beyond the pilots.⁸ The state of Rio has a multiannual plan that monitors only the outputs of state actions (for example, hospitals built, teachers trained) and rarely assesses the outcomes of public policies. Frequent adjustments to budget allocations throughout the year make predictability and transparency of public investment programs difficult (see table 2.3).

2.13 Public investment management has been a challenge in the state of Rio de Janeiro. Available data show the fragility of investment planning and implementation (see table 2.4). Budgets increased after the start of the fiscal year, sometimes significantly; by the end of the year, most of the resources had not been used or had been used for projects that were not in the initial plan.

2.14 On costing, the state did not collect information on program costs and benefits (beyond the pilots). Therefore, costing and a cost-benefit analysis were not available as tools for budget preparation. As of 2021, the state of Rio de Janeiro does not have a costing methodology, and the authorities (Secretaria de Estado de Planejamento, State Secretariat of Planning) do not link program costs with the number of beneficiaries.

Table 2.3. Results Indicators for Public Financial Management

Indicator and Associated Prior Action	Baseline	Target Actual Value	
		Value	December 31, 2013
Public investment management (prior action 4)	0	5	3 ex post evaluations
1. Number of screened projects complying with the evaluation criteria established in technical manual			
2. Publish the consolidated information on the portfolio mapping of the five investment projects, showing annual investment commitments of the investments			No published information
Assessment			Not achieved
Costing (prior action 5)	n.a.	n.a.	Costing for three major policy programs prepared but not published
3. State publishes results of costing at least four major policy programs with their key results defined			
Assessment			Partially achieved
Internal control (prior action 6)	n.a.	n.a.	State published the action plan and an annual report on human resource reforms and performance of internal control systems
4. Develop action plan to improve internal control system			
Assessment			Achieved

Sources: World Bank 2012, 2014.

Note: n.a. = not applicable.

2.15 Public investment management has been a challenge in the state of Rio de Janeiro. Available data show the fragility of investment planning and implementation (see table 2.4). Budgets increased after the start of the fiscal year, sometimes significantly; by the end of the year, most of the resources had not been used or had been used for projects that were not in the initial plan.

2.16 On costing, the state did not collect information on program costs and benefits (beyond the pilots). Therefore, costing and a cost-benefit analysis were not available as tools for budget preparation. As of 2021, the state of Rio de Janeiro does not have a costing methodology, and the authorities (Secretaria de Estado de Planejamento, State Secretariat of Planning) do not link program costs with the number of beneficiaries.

Table 2.4. State of Rio de Janeiro Investment Budget Execution, 2010–17

Year	Initial Budget		Final Budget (current R\$, millions)	Budget Allocation Committed		Budget Allocation Verified ^a	
	(current R\$, millions)	Increase or Decrease (current R\$, millions)		(R\$, millions)	(percent)	(R\$, millions)	(percent)
2010	4,946	2,702	7,649	5,166	67.5	5,022	65.7
2011	6,028	2,254	8,283	4,715	56.9	4,676	56.5
2012	6,735	2,632	9,366	5,314	56.7	5,261	56.2
2013	9,413	4,014	13,427	6,928	51.6	6,678	49.7

Year	Initial Budget		Final Budget (current R\$, millions)	Budget Allocation Committed		Budget Allocation Verified ^a	
	(current R\$, millions)	Increase or Decrease (current R\$, millions)		(R\$, millions)	(percent)	(R\$, millions)	(percent)
2014	12,295	-883	11,411	7,666	67.2	7,615	66.7
2015	11,090	1,604	12,695	6,661	52.5	6,603	52.0
2016	7,627	2,437	10,064	2,674	26.6	2,508	24.9
2017	4,717	-120	4,597	1,011	22.0	987	21.5

Source: Portal de Transparência Estado do Rio de Janeiro. <http://www.transparencia.rj.gov.br>

Note: ^a Amount related to goods and services received, but not necessarily paid.

2.17 Better *internal controls* and more effective rules led to improved financial and cash management. In this area, change was possible because of more openness to accepting and adopting new technologies and processes, which facilitated training new and younger officers. Change was also possible because fewer employees were entrenched in their jobs compared with tax administration, which was staffed mainly with employees with few or no skills in information technology.

2.18 Two technical assistance loans (P106768, fiscal year 2011, for the state; P127245, fiscal year 2013, for the municipality of Rio de Janeiro) were expected to help improve the efficiency of expenditures. The loan for the state did not have a lasting impact on its processes to cost and assess programs and allocate budget. The loan for the municipality did not achieve its objectives, and IEG rated its outcome as highly unsatisfactory.^{9, 10}

2.19 Overall, the prior actions for this policy area were broadly relevant for the achievement of the objectives of improving the quality of public investment decisions. They were consistent with fiscal sustainability but limited and insufficient. The proposed methodology for costing the public investment projects never passed the pilot stage and was never adopted as expected, showing (in hindsight) that the prior action could have been strengthened in this regard.

2.20 The problems of public investment management went beyond costing and lack of project evaluation methodology. It is unlikely that the program's prior actions could have introduced some order in the administration of investment expenditures while more pressing fiscal issues (for example, paying for the Olympic Games infrastructure and the FIFA World Cup) demanded the attention of the authorities.

Policy Area III: Education and Health

2.21 The objective was to increase the quality of education through stronger performance incentives and accountability mechanisms and to improve efficiency in the delivery of public health services (World Bank 2012, 36).

Education

2.22 The goal of the reforms supported by DPL III was to improve student learning and reduce repetition and dropout rates by reforming human resources practices and incentive systems in schools. The prior actions supporting the program's objectives consisted of (i) adopting and implementing a merit-based selection process for regional and school directors within a specific territory, and (ii) adopting annual school-level targets for improving student learning and graduation rates and a bonus pay system for schools that achieved their respective targets. The Secretariat of Education set performance targets for schools, and about 30 percent of schools received bonuses for meeting their targets; the bonuses represented 25 percent of the teachers' annual salaries.

2.23 Overall, the prior actions for education, though broadly relevant for the sector in general, did not directly address the objective of improved student learning and attendance and affected only certain aspects of human resources management in the sector. Moreover, the potential longer-term impact of these measures is not clear—they were abandoned shortly after being adopted because of pressure from interest groups.

2.24 The program's results indicators captured processes, not results. Although the indicators were achieved (see table 2.5), it cannot be concluded that the quality of education improved. According to some measurements, student performance improved, but it does not appear to have been a result of the supported reforms. The improvement can be explained instead by a general trend toward improvements in the education system in Brazil and by changes in the number of students enrolled in the state's schools (see box 2.1 for more detail). Indeed, the system of incentives was terminated in 2016, partly because of students' and teachers' opposition to it.

Box 2.1. The Index of Development of Basic Education

An index of the quality of education in Brazil, the Index of Development of Basic Education (Índice de Desenvolvimento da Educação Básica) measures quality based on the approval rate and the average performance of students in evaluation tests. The index has information about actual results and goals for education quality. The information shows that the quality of education in the state improved between 2011 and 2017, but in most years and for most categories of schools, the results achieved fell short of goals. The results for 2011–17 continued a trend of improvement that started in 2005. Of the schools in the system, students in high schools have the worst performance. Between 2010 and 2014, the state government reduced enrollment in all schooling levels. Enrollment also fell because of a decrease in the school-age population and the elimination of "ghost students," a result of better recording of enrollments.

Source: National Institute for Studies and Research on Education (Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira), <http://portal.inep.gov.br/ideb>.

Table 2.5. Results Indicators for Education

Indicator	Baseline	Target	Actual 12/31/2013
Result 1. Number of regional directors selected using new merit-based process	January 2011 = 0	January 2012 and 2013 = 28 (100 percent of total)	35
Result 2. Number of school directors selected using new merit-based process	January 2011 = 0	January 2012 = 82 January 2013 = 164	164
Result 3. Annual bonuses paid to school personnel for achieving 80 percent of improvement targets—bonuses for 2012 paid by June 2013	n.a.	n.a.	Yes
Result 4. School targets for 2013 communicated to schools (intermediate result indicator)	n.a.	Communicated before the end of March 2012	Yes
Result 5. School targets for 2014 communicated to schools (intermediate result indicator)	n.a.	Communicated before the end of March 2013	Yes
Assessment			Achieved

Sources: World Bank 2012, 2014.

Note: n.a. = not applicable.

Health

2.25 The reforms supported by DPL III aimed to improve quality and efficiency in the delivery of public health services by subcontracting the management of public hospitals and health units to social organizations, with the assumption that social organizations would be able to provide better and cheaper services (World Bank 2012, paragraph 134). The prior action consisted of the state of Rio de Janeiro (i) adopting a legal and administrative framework to assess social organizations to manage public hospitals and health units and to establish the terms and conditions for the contracts with such organizations; and (ii) through its Secretariat of Health, adopting regulations defining the evaluation mechanisms to transfer bonuses and monetary incentives to municipalities and municipal hospitals within the state's territory under the Programa de Apoio as Municipalidades I (Program to Support Municipalities I), and to regional state hospitals within the state's territory under the Programa de Apoio aos Hospitais do Interior II (Program to Support Hospitals).

2.26 The reforms permitted the state of Rio de Janeiro to contract social organizations to manage emergency services for 30 emergency care units (Unidade de Pronto Atendimento), exceeding the 22 units planned. The reform changed the way the Secretariat of Health operated from overseeing health services provision to managing contracts with these organizations. The state also achieved the goal of using regional hospitals for complex treatments when patients were outside their immediate jurisdiction. After DPL III closed, regional hospitals handled more than 25 percent of the complex treatments.

2.27 Overall, the prior action for health was partially relevant for the objective of improving quality and efficiency in the delivery of public health services because it assumed that the social organizations would be able to provide better services more efficiently, which turned out not to be the case.

2.28 The program’s targets were achieved (see table 2.6), but because they measured processes rather than results, they are inadequate to measure the quality and value for money of the health services provided by the social health organizations.

Table 2.6. Results Indicators for Health

Area, Indicator, and Prior Action	Baseline (No. of UPAs)	Target	Actual 12/31/2013
Result 1. The state government has signed contract with social organizations to manage 15 health units and strategic services (lab services, imagery services, and so on)	2011 = 0 2012 = 15	22 UPAs	30
Result 2. Number of hospitals under the PAHI program with ombudsman services	2011 = 44 2012 = 53	63	Met (ICR, paragraph 64)
Result 3. Number of hospitals with hospital infection evaluation committees	2011 = 46 2012 = 55	66	Met (ICR, paragraph 64)
Result 4. Supply of complex treatment to patients from other municipalities (percentage of the total)	2011 = 16.78 2012 = 20	24	Met (ICR, paragraph 64) but does not present numbers
Assessment			Achieved

Sources: World Bank 2012, 2014.

Note: ICR = Implementation Completion and Results Report; PAHI = Program to Support Hospitals (Programa de Apoio aos Hospitais do Interior); UPA = 24-hour emergency care unit.

2.29 The reforms and the results achieved did not translate into better value for money or a larger supply of health services, as argued in a report on the health sector by the state comptroller general (CGERJ [Contraloria Geral do Estado de Rio de Janeiro] 2019). The report analyzed the management of state health units during 2012–19, especially the aspects related to their transfer to social organizations. The comptroller general’s report concluded the following:

- Transferring the service to social organizations resulted in higher operational costs for health units and a reduction in the volume of health services supplied compared with before the transfer;
- Irregularities in the management of the social health organizations (Organizações Sociais de Saúde) may have caused losses for the state’s treasury of approximately R\$1,016 billion (\$254 million) during 2012–19; and

- The state comptroller general found serious problems concerning the supervision of services provided by social organizations, despite the large amounts of payments to the social organizations from January to July 2019 (the expenses of social health organizations represent 56 percent of the total budget of the state's health secretariat [Secretaria de Estado de Saúde]). These problems included the absence of inspection criteria, deficiencies in monitoring contracts, and the lack of information systems to help control spending and present accounts.

Design and Preparation

2.30 The loan was part of several independent operations in the state of Rio de Janeiro that supported reforms with common elements and an implicit goal of improving fiscal management. Taken together, these loans did not constitute a coherent and consistent effort to effectively tackle the problems in tax administration, public financial management, health, and education. For example, on tax administration, the operation under review was the only one that made a serious effort to influence the quality of tax administration; two other operations (Rio state DPL I and Rio Municipality DPL) also touched on tax administration, but the issues they addressed were weakly connected. Moreover, the operations had different objectives for the pillars that touched on fiscal aspects (for example, fiscal consolidation in DPL I, creating fiscal space in Rio Municipality DPL, and fiscal efficiency in DPL III). The Municipality DPL (2010) essentially went to restructure debt with the federal government, since the DPL had better financial conditions but higher risk because it was a foreign currency operation. The risk materialized when the *real* depreciated 45 percent providing the motivation for the operation. In sum, there was no sustained effort to improve tax administration and public financial management in the state.

2.31 The DPL addressed relevant problems and selected interventions that could credibly advance reforms in areas managed by competent professionals within an administration interested in improving the state government's performance. The presence of knowledgeable and well-intentioned administrators supported an optimistic outlook within the World Bank for the program's success, but in hindsight, such optimism was misplaced. The favorable conditions at the time of preparing DPL III seem to have overshadowed the state's institutional weaknesses, a risk that materialized and eventually erased some of the gains achieved (tax administration), prevented the advance of some reforms (investment management), reversed other reforms (education), and reduced the efficiency of social expenditures (health).

2.32 Although the World Bank had good knowledge of the areas covered by the loan, the operation did not have a clear theory of change or a realistic plan for how to advance and preserve the reforms, given the political and institutional environment in place at

the time. On tax administration, the operation did not frame the problems adequately (for example, it could have used the principles of TADAT that had been in operation for several years at the time when DPL III was prepared). Although one of the prior actions consisted of putting in place some of the TADAT indicators, it was not clear how they were to be used. On education, the operation paid insufficient attention to the opposition to establishing a payment system based on incentives and performance and to its sustainability, and the system was soon abandoned.¹¹ On financial management, in the end, the Secretariat of Planning showed little interest in changing the way the investment budget was prepared and implemented.

2.33 A stand-alone operation was ill-suited to reform tax administration, public financial management, education, and health in any significant way. The World Bank seriously underestimated the risks to the achievement of objectives. For example, the program document asserted that the program would enhance the state's fiscal sustainability (see appendix D for details on the state's fiscal situation). This was an overoptimistic claim for an operation that lasted 17 months and overlooked other major fiscal challenges, such as pensions, dependence on unstable oil revenues, weak institutions, and chronic corruption.

2.34 **Quality of results indicators.** The quality of results indicators varied across the policy areas. For example, tax collection over a short period is not an adequate indicator of *tax administration* quality because it does not control for the economic cycle or issues of tax composition and equity. The targets set did not account for expected inflation, which was nonnegligible over the period. The DPL supported adopting standards to improve the collection of state taxes (prior action 2) and putting in place a results-based management system (prior action 3). The results-based system consisted of 20 indicators to help guide SEFAZ policies for human resources and the assignment of financial and technological resources. However, the indicators did not have target values, and their purpose was not specified. The state Undersecretariat of Revenue was responsible for producing the quarterly outcome indicators and making them available, but the evaluation team was not able to verify these results.

2.35 On *public investment management*, indicators measured processes and limited actions that never crossed the pilot stage, such as piloting costing methodology and publishing the results of select program costing. On *health and education*, the indicators measured progress in processes such as human resources reforms (hiring procedures for teachers and principals) and subcontracting of services, but they did not measure actual outcomes.

Implementation and Supervision

2.36 The review agrees with the Implementation Completion and Results Report assessment that “implementation did not match the ambition of the design” (World Bank 2014, paragraph 48). IEG staff were unable to obtain information on many aspects of program implementation and monitoring. There was no evidence of World Bank follow-up on implementation of the supported reforms and their impact. Key documents are missing (for example, performance indicators for revenue collection). For example, although SEFAZ did approve several new indicators early on and issued the regulations (through Resolutions No. 584 of January 30, 2013; No. 652 of July 12, 2013; and No. 729 of March 12, 2014), the Implementation Completion and Results Report lacked data to verify that SEFAZ adopted the 10 remaining performance indicators for tax administration envisioned in the program’s results framework.

2.37 The 17-month period between approval and loan closing was too short to produce the targeted results in all three policy areas. The World Bank conducted two supervision missions during this period to gather information on progress. IEG interviews and project files did not provide enough information on the World Bank’s follow-up actions related to the program’s performance, particularly in tax administration and financial management. Tax administration illustrates the gap in effort for preparation and supervision. During preparation, SEFAZ proposed a reform of the performance indicators for collecting taxes and organized a seminar to discuss the indicators and the steps required to put the system in place. The proposal also identified four risks to implementing the system: (i) fragility of the information systems used (old, limited functionality and lack of integrated vision); (ii) dispersion of tax administration functions in different areas; (iii) resistance by the staff of SEFAZ and other agencies to change and to be controlled; and (iv) lack of a culture of using performance indicators. These risks (related to tax administration) are not mentioned in the program document for the DPL, which lists several general (political, economic, external) and sector-specific (public financial management, education) risks. More rigorous supervision could have helped the SEFAZ administration address these risks and enhance the chances of keeping the reforms in place when the new administration took over.

3. Lessons

3.1 DPLs supporting institutional reform at the subnational level in areas such as tax administration, public financial management, education, and health require a long-term strategic vision and sufficient time for implementation, even when government ownership is strong. Stand-alone DPL operations at the state level, like the one reviewed in Rio, are unlikely to achieve such objectives without significant and sustainable

complementary support. Institutional reform is a medium-to-long-term effort that requires continuous support to the executing agencies to build on lessons learned and reduce the chances and costs of mistakes. An investment loan anchored on a longer-term institutional partnership with state implementing agencies could have been a better tool for supporting the underlying reforms.

3.2 It was difficult to achieve fiscal sustainability in Rio state by reforming only a few technical aspects of tax administration without accounting for important issues such as pensions, dependence on unstable oil revenues, weak institutions, and chronic corruption.

3.3 Institutional transformation in tax administration relies in part on fiscal performance. Therefore, an assessment of the state's fiscal situation, its implementation capacity, and medium-term perspectives could have improved the program's design. This would have been particularly relevant in Rio state, which at the time was in a dire financial situation and lacked the bandwidth to properly prepare and execute the 12 loans it was simultaneously negotiating with multiple lenders.

3.4 Interest-group politics in Rio state undermined the progress and impact of the reforms. It would have been ideal to ensure that the associated risks were identified and addressed at the design stage of an operation.

3.5 The following aspects may require additional attention:

- Understand the underlying incentives behind reforms. The experience of Rio state indicates that auditors and inspectors of the tax administration service had little to no incentive to improve performance because most were already at the top of their pay scales.
- Make sure agency staff have the technical capacity to implement reforms. The experience of Rio state shows that the tax administration office staff lacked qualifications in information technology and could not carry out the changes in hardware and software required for reforms to succeed.
- Effective monitoring is essential to enhance the chances of program success. Preparing a joint World Bank–executing agency monitoring plan before loan approval would have improved the chances that the agency had taken the steps needed to execute the program and the World Bank had allocated resources to monitor it.

¹ The Brazilian Institute of Geography and Statistics presents information on value added in nominal terms and on real gross domestic product in index form. The last year for which estimates of the state's gross domestic product and its composition are available is 2017. See <https://www.ibge.gov.br/estatisticas/economicas/contas-nacionais/9054-contas-regionais-do-brasil.html?edicao=26018&t=resultados>. The data were gathered on June 2, 2020. An index volume measures the change in the quantity (volume) of a specified set of goods and services between two periods.

² In some judicial processes, judges can determine that the amount discussed in a lawsuit be deposited into a bank account before they make their final decision. The deposited amount is called a judicial deposit. The practice seeks to guarantee the effectiveness of the judicial decision, and the winning party is paid the amount due. Proceedings involving tax credits, labor disputes, and collection actions are some of the cases in which judicial deposits can be made.

³ All levels of government have responsibility over health services and operate a Unified Health System (Sistema Único de Saúde) that is highly decentralized. Municipalities are responsible for basic health services and states for average and high-complexity services. Municipalities can also operate average and high-complexity health units. For data, see the Brazilian Institute of Geography and Statistics, Pesquisa Nacional de Saúde 2013 and 2019, at <https://www.ibge.gov.br/estatisticas/sociais/saude/>.

⁴ The findings of the Tax Administration Diagnostic Assessment Tool (TADAT) are based on the assessment of the system for the value-added tax (tax on the movement of goods, interstate and intermunicipal transport, and communication services), the state's main source of its own revenue. To assess the tax system, TADAT examines nine performance outcome areas and 28 indicators. It rates each indicator using a four-point scale: A, B, C, and D, where A denotes performance that meets or exceeds international good practices, B represents sound performance (that is, a healthy level of performance somewhat below international good practices), C means weak performance relative to international good practices, and D denotes inadequate performance. D is applied when the requirements for a C or higher rating are not met or when there is no information to assess the level of performance (TADAT 2019, 10).

⁵ Establishing the ledger was intended to facilitate tax administration by, among other things, creating a single taxpayer account that would make it easier to file and pay taxes and to audit taxpayers.

⁶ TADAT rates the adequacy of information with a B rating and accuracy of information with a C. See endnote 4 for an explanation of TADAT ratings.

⁷ The discrepancies are between debts from the tax on the movement of goods, interstate and intermunicipal transport, and communication services and inheritance, estate, and donation tax returns and the payments made by taxpayers through the banking system (see World Bank 2012, paragraphs 100 and 101).

⁸ Most Brazilian states, including Rio de Janeiro state, have poor investment management. Frequent adjustments to budget allocations throughout the year make predictability and

transparency difficult. A survey by Inter-American Development Bank of 20 states showed that (i) only three states define guidelines for the formulation, selection, and execution of investment projects based on methodologies and technical criteria; (ii) five states have an updated investment portfolio; and (iii) four states maintain a bank of projects with georeferenced information, physical and financial schedules, and investment costs.

⁹ One technical assistance loan (P106768, fiscal year 2011) was aimed at helping the state “introduce performance-based management and information technologies to drive service delivery improvements in key public services, including secondary education and hospital care, all in the Borrower’s territory.” The Implementation Completion and Results Report notes that in 2014 the state monitored school completion rates and learning outcomes, but the effort was stopped after conflicts with students and after the merit bonuses for teachers were abolished in 2016.

¹⁰ The technical assistance loan to the Municipality of Rio de Janeiro (P127245) was expected to support some activities on fiscal and public investment management. Little was achieved. The IEG Implementation Completion and Results Report rated the achievements of the component supporting this area as negligible and the overall technical assistance loan’s outcome as highly unsatisfactory.

¹¹ An evaluation system was developed under Secretary Wilson Risolia (October 2010 to December 2014). Under Secretary Antonio Neto (January 2015 to May 2016), the strategy based on evaluation was discontinued.

References

- Burman, Leonard, and Joel Slemrod. 2013. *Taxes in America: What Everyone Needs to Know*. New York: Oxford University Press.
- CGERJ (Comptroller General [Contraloria Geral do Estado de Rio de Janeiro]). 2019. “Relatório de Auditoria N° 51/2019 Tema Relevante: Organizações Sociais de Saúde.” CGERJ, Rio de Janeiro.
- Fecomercio, R. J. 2019. “Rio em Números: Análise de dados socioeconômicos do Estado do Rio de Janeiro.” Ano 1, No. 1, January 2019, Rio de Janeiro. <http://www.fecomercio-rj.org.br/taxonomy/term/533/social-ano-1-numero-1-janeiro-2019>.
- IMF (International Monetary Fund). 2019. “Brazil—2019 Article IV Consultation.” IMF Country Report No. 19/242, International Monetary Fund, Washington, DC.
- SEFAZ (Secretaria de Estado da Fazenda). “Balanço das Principais Ações (2015–2018) e Recomendações para a Próxima Gestão (2019–2022): Contribuições para o Planejamento Estratégico da SEFAZ.” <http://www.fazenda.rj.gov.br>.
- TADAT (Tax Administration Diagnostic Assessment Tool). 2018. “Performance Assessment Report Rio de Janeiro State (June 2018)”. <https://www.tadat.org/>.
- TADAT. 2019. “Subnational Supplement Field Guide Prepared by the TADAT Secretariat: November 2019 Edition.” <https://www.tadat.org/>.
- World Bank. 2012. “Brazil—Third Rio State Fiscal Efficiency for Quality of Public Service Delivery Development Policy Loan.” Program Document 62793-BR, World Bank, Washington, DC.
- World Bank. 2014. “Brazil—Fiscal Efficiency for Quality of Public Service Delivery Development Policy Loan.” Implementation Completion and Results Report ICR3114, World Bank, Washington, DC.

Appendix A. Ratings

Table A.1. Rio State Development Policy Loan III (P126465)

Indicator	ICR	ICR Review	PPAR
Outcome	Moderately satisfactory	Moderately satisfactory	Unsatisfactory
Risk to development outcome	Moderate	Moderate	—
Bank performance	Moderately satisfactory	Moderately satisfactory	Moderately unsatisfactory

Note: The Implementation Completion and Results Report (ICR) is a self-evaluation by the responsible Global Practice. The ICR Review is an intermediate Independent Evaluation Group product that seeks to independently validate the findings of the ICR. PPAR = Project Performance Assessment Report; — = not available.

Relevance of Objectives

The operation’s objective was “to assist the government of Rio de Janeiro in strengthening its tax administration, improving the efficiency of public financial management, increasing the quality of public service provision in education and health, and ensuring that policies adopted are both consistent with priorities of the state government and with resources likely to be available in the medium term” (World Bank 2012, paragraph 92).

The operation was one of several subnational development policy loans (DPLs) aimed at promoting fiscal discipline and better public financial management and service delivery as part of the World Bank Group’s Country Partnership Strategy in Brazil. The objective was consistent with two pillars of the Country Partnership Strategy for fiscal years 2012–15: increasing the efficiency of public and private investment, and improving the provision of public services for low-income households.

The loan’s objectives continue to be highly relevant for improving public administration in the state of Rio. The objectives were consistent with the state’s needs in tax administration, public financial management, education, and health. However, the program objectives (and their associated targets) were too ambitious because the depth and extent of problems in the areas supported could not be achieved in one year, the lifetime of the operation (see discussion on design).

The relevance of objectives is rated **high**.

Relevance of Design

The DPL was part of several operations in the state of Rio de Janeiro that supported reforms, and these operations shared some common elements (see table 1.1). Taken together, the loans did not constitute an effective and coherent effort to tackle the problems in tax administration, public financial management, health, and education. For

example, this DPL was the only one among the World Bank DPLs in the state of Rio that made a serious effort to influence the quality of tax administration. Moreover, the loans had different fiscal objectives (for example, fiscal consolidation in DPL I, creating fiscal space in Rio Municipality DPL, and fiscal efficiency in DPL III). The DPL for the municipality (2010) aimed to restructure debt with the federal government.

The World Bank assisted the state in structuring a Medium-Term Development Framework. The integrated forecasts on revenues, expenses, and debt anticipated the unsustainability of the state fiscal situation, but without the authorities' support, no initiative was taken, and the forecasting model was abandoned.

The operation did not have a clear theory of change. On tax administration, the DPL did not frame the problems in terms of principles developed by the International Monetary Fund with the World Bank, the European Union, and other partners to assess the quality of tax administration in countries and subnational governments. The principles, known as Tax Administration Diagnostic Assessment Tool (TADAT),¹ had been known and available to use for several years before DPL III was prepared and approved. Although one of the prior actions consisted of putting in place some of the indicators used by TADAT, it was not clear for which of the nine performance outcome areas they were to have been applied. On education, the operation did not pay sufficient attention to the political opposition to establishing a payments system based on incentives and performance or to ensuring its sustainability.² On financial management, the operation also overlooked the potential short- and medium-term feasibility of selecting public investments based on costs and benefits and of costing public expenditure programs. These problems suggest that although the World Bank knew about the issues related to tax administration, financial management, and education, the preparation of the operation paid insufficient attention to the institutional conditions in the state and the administrative and managerial actions that would be needed for the reforms to have a lasting impact.

The relevance of design is rated **modest**.

Results Indicators of the Program

The DPL had three results indicators for tax administration (see table 2.1). The ledger, a central element of the reform, was established, but it has taken time to become fully operational. At the time of the Implementation Completion and Results Report (ICR), the ledger was in an experimental phase, and by 2018, the system was operating below the level envisioned when the loan was prepared—specifically, the ledger still had multiple accounts for each taxpayer, with no single account in place. On tax revenues, the value-added (ICMS) and inheritance and donation taxes exceeded their baseline

values by 24 and 53 percent, respectively, and their target values by 7 and 36 percent, respectively.

Tax collection by itself is an inadequate indicator unless a method is in place to monitor changes in its amount and composition. Revenue may vary because of changes in economic activity and in legislation, and because of special programs set to induce the payment of arrears (when this amount is added to fiscal year tax collection as part of setting targets) and other initiatives to improve tax management. Changes in revenue result from the joint effects of these variables and demonstrate the need for a monitoring system, which was not mentioned in the program for this purpose. In addition, the targets were set in nominal terms with a relatively high inflation—6 percent per year in 2011–13—which transforms a tax collection of Brazilian reais (R\$) 24.8 billion in 2011 into about R\$28.0 billion at 2013 prices.

The results reported are unlikely to be related to the actions taken, even if the performance indicators had been adopted and measured by January 2013. The ledger was not working during 2013. In 2014, per a consulting company's recommendation, the tax administration started calculating 250 indicators automatically every month, but that process suffered a setback in 2017–18. The administration now calculates 50 indicators, which are used to allocate personnel within the administration to improve the interaction with supervision (but not fiscal productivity). Fiscal productivity is difficult to improve because of a lack of incentives: 50 percent of auditors earn the maximum pay possible, and for the other 50 percent, the additional earnings are not worth the additional effort they must make.

Furthermore, between 2011 and 2017, total revenues from ICMS increased at 5.7 percent per year, and nominal gross domestic product (GDP) increased at 6.1 percent, suggesting that nominal GDP growth could have accounted for all the growth in nominal revenues. The annual ratio of ICMS revenue over GDP hovered at about 4.8 percent during 2005–12 and about 4.81 percent during 2013–17, with no significant difference between the two periods.

Efficacy

Strengthening Tax Administration

The objective of policy area I was to increase state revenue performance, with results indicators on (i) the establishment of a **unified general taxpayer ledger** that would allow individual taxpayers to access their accounts and (ii) progressive implementation of **performance indicators** for tax administration (10 indicators in 2012 and 20 in 2013).

Any effort to increase tax revenue and improve tax administration and enforcement must pay attention to three components: audits, information reporting and matching, and withholding. The program did not support specific actions on audits, reporting and matching, and withholding, but the goal of the prior actions did affect them (World Bank 2012, paragraphs 49, 99–102).

For the **ledger**, the program supported the state Secretariat of Finance (SEFAZ; Secretaria de Estado da Fazenda) in adopting the standards required to establish a taxpayer ledger, which would provide a view of all taxpayers' debits and credits. Prior action 1 consisted of establishing a committee to manage the system's integration (Decree No. 42.890 of March 21, 2011) and to appoint the principal and deputy members who would be in charge of implementing the synchronized taxpayer registration system (Sistema de Registro Integrado or Integrated Recording System for Taxes). Creating the single account required two phases. In the first phase, the administration would introduce a unified taxpayer ledger that would provide a view of all taxpayers' debits and credits; taxpayers would not have access to the ledger during this phase. In the second phase, the ledger would be integrated into a single account to which taxpayers would have access and through which they could file and pay their taxes automatically.

For the **performance indicators** (prior actions 2 and 3), the program supported the state of Rio de Janeiro, through SEFAZ, to adopt standards to improve collection of state taxes (SEFAZ, Resolution No. 468 of December 27, 2011) and put in place a results-based management system for tax administration (SEFAZ, Resolution No. 498 of June 12, 2012). The action consisted of introducing 20 indicators — 10 by the end of December 2012 and the other 10 by the end of December 2013.

Resolution 498 defined five indicators (and how to calculate them) and the schedule of implementation of the other 15 until the end of 2013. Its article 6 says that the indicators should guide SEFAZ policies for human resources and the assignment of financial and technological resources; it does not identify the criteria to be used for assessing performance. Resolution 498 was modified by Resolution SEFAZ No. 584 of January 30, 2013, and Resolution SEFAZ No. 652 of July 12, 2013, each one defining five new indicators. On March 12, 2014, Resolution SEFAZ No. 729 added the remaining five indicators. The three resolutions listed only the additional indicators of performance. Although the state Undersecretariat of Revenue was responsible for producing and making the quarterly outcome indicators available (Resolution 498), there is no available information about targets and how the indicators would be set. The World Bank funded a report on collecting revenue (a PowerPoint presentation, "A Proposal to Reform Performance Indicators in Revenues Collection") and organized a seminar about the performance indicators to be used. The program document established tax revenues as a

results indicator but did not define indicators for the unified ledger and the results-based management system in tax administration.

To analyze the program's achievements, this evaluation first examines if the results were attained and then assesses whether tax administration improved. To assess the quality of tax administration, the review examines if adopting the ledger and the performance indicators led to a better administration. To do so, the review relies on the information presented in the TADAT "Performance Assessment Report Rio de Janeiro State" of June 2018. TADAT's findings are based on the assessment of the system for the value-added tax (ICMS), the state's main source of its own revenue. To assess the tax system, TADAT examines nine performance outcome areas and 28 indicators. It rates each indicator using a four-point scale—A, B, C, or D, where A denotes performance that meets or exceeds international good practices, B represents sound performance (that is, a healthy level of performance but a bit below international good practices), C means weak performance relative to international good practices, and D denotes inadequate performance. D is applied when the requirements for a C or higher rating are not met or when there is no information to assess the level of performance (TADAT 2019, 10).

Ledger

Establishing the single unified taxpayer ledger by 2013 was the results indicator associated with prior action 1, which the program document considered "one of the major results of the reform supported under this action" (World Bank 2012, paragraph 101). The purpose of the ledger was "to keep individual taxpayer current accounts for various taxes levied by the state (including ICMS and ITD [inheritance and gift tax] returns) as well as for audit assessments" (World Bank 2012, paragraph 100). With the indicator met, the question becomes whether tax administration improved. What was achieved with the ledger in compliance, audit, reporting and matching, and withholding? The following paragraphs answer these questions by looking at whether the ledger works well, if filing and paying taxes is easier, and whether SEFAZ built a better auditing system.

Indicator 1: The ledger introduced and operational: not achieved

According to the TADAT report, the taxpayer ledger is incomplete and does not follow good international practices (disaggregating into payments of main tax, and payments of additional amount, interest, or penalties). When the authorities modify the system, they test it and approve it but do not conduct audits to ensure that the accounting system (Sistema de Gestão do Crédito Tributário) is aligned to the law (for example, the correct application of liabilities, penalties, and interests). TADAT's score for this indicator (P8-23) is C.

The ledger can facilitate the tasks of registering and numbering taxpayers, two fundamental tasks for tax administration. Registering and numbering taxpayers is essential for filing, paying, assessing, and collecting taxes. The integrity of the information in the registered taxpayer database is essential for an effective tax administration. The TADAT overall score for the indicator of accurate and reliable taxpayer information (P1-1) is C.

Indicator 2: Ease of filing and paying taxes: achieved

Facilitating filing and paying taxes should be the aim of a tax administration that seeks to achieve high rates of voluntary, on-time filing and payment. With a single taxpayer ledger in place, filing and paying taxes should be easier than when it was not in place. Looking at whether taxes can be filed and paid electronically is one way to assess whether SEFAZ facilitates the process. Two indicators from the TADAT report can be used for this purpose: filing tax declarations electronically (P4-11) and paying taxes electronically (P-5-12). Both received a score of A, which shows the system meets or exceeds international standards.

Indicator 3: Effective audit: not achieved

If well-designed and managed, tax audit programs can have a far wider impact than simply raising additional revenue. With better information, tax audits should be less expensive. Having the tax ledger should have helped SEFAZ to put a better audit assessment in place. The evidence presented by TADAT on the program of audits for the ICMS tax—the core tax of the state tax system—shows that SEFAZ has a system for cross-checking information to verify the information in tax declarations, but it uses cross-checking sparingly, mainly for credit card information. Moreover, the audit plan is weighted toward the top 100 taxpayers in selected sectors. The TADAT report does not include information about the cost-revenue ratio of this activity. The report gives a score of D to the scope and nature of the audit program (P6-16-1 indicator, page 31) and a score of C to the extent of a large-scale, automated cross-checking system to verify information in tax declarations (P6-16-2 indicator, page 31). The combined score for the indicators is D+. A second indicator is monitoring the extent of accurate reporting (P6-18), which TADAT rates with a D because SEFAZ does not monitor inaccurate reporting.

The DPL III program may have helped collect better information about taxpayers, but it neglected the steps required to build up a technical audit system that applies the best international practices. The low scores suggest that the tax administration maintains outdated audit practices whose persistence may result from a combination of weak managerial practices and the lack of political will to put in place a working audit program with international practices.

Indicator 4: Paying taxes: partially achieved

A good tax administration should try to achieve high rates of voluntary, on-time payment and low incidence of tax arrears (TADAT 2018, 28). To examine whether that is the case, this section examines the timeliness of tax filing and tax payments and the stock and flow of tax arrears.

On-time filing. The TADAT report informs that “the timely submission of declarations of the only core tax, the ICMS, was 34.6 percent for all taxpayers and 97.1 percent for large taxpayers.” For the tax filing indicator (P4-10), TADAT assigns a score of D (TADAT 2018, 27).

On-time payment. The TADAT uses the performance of payments for the ICMS as a proxy for on-time payment for core taxes. To measure performance, TADAT uses the number of ICMS payments made by the statutory due date as a percentage of the total number of payments, and the value of ICMS payments made by the statutory due date as a percentage of the total value of ICMS tax payments due. In 2017, 83.8 percent of the number and 73.6 percent of the value of tax payments were made on time—good in number but below good practice in value (TADAT 2018, 29). For the timely payment indicator, TADAT assigns a combined score of C because value is a more relevant indicator than number of payments (B for P5-14-1 and C for P-5-14-2; TADAT 2018, 29).

Collecting taxes—stock and flow of tax arrears. SEFAZ requested support from the World Bank for preparing a proposal to identify performance indicators for tax administration and to discuss a strategy to implement them. The report recommended generating the indicators systematically and using them regularly to judge SEFAZ’s efficiency and efficacy. SEFAZ did not generate the data but had to collect them in an ad hoc manner for the TADAT report (TADAT 2018, 30). To gauge the size of the inventory of tax arrears, TADAT uses the ratio of end-of-year tax arrears to annual tax collections, and the ratio of end-of-year collectible tax arrears to annual collections.³ A third measure looks at unpaid tax liabilities that are overdue for more than a year. Based on these results (see table A.2), TADAT concludes that monitoring of tax arrears is weak and gives a score of D for the indicator (P5-15).

**Table A.2. Tax Arrears: 2015, 2016, and 2017
(percent)**

Indicator	2015	2016	2017
1. Total core tax arrears at year end/total core tax revenue collected	120	118	120
2. Collectible tax arrears/total core tax revenue collected	40	23	22
3. More than 12-month-old collectible/total core tax arrears at year end	16	13	10

Source: TADAT 2018, annex III, table 10, 55.

Note: Numbers have been rounded.

During the implementation of DPL III, in 2013 the Rio de Janeiro state calculated an indicator for unpaid debts that showed a dismal situation. Between the first quarter of 2010 and the third quarter of 2012, the index of unpaid infraction notices issued divided by the infraction notes issued rose from 60 to 100 percent when measured by volume and from 98 to 100 percent when measured by value.

Indicator 5: Reduction in errors and losses: not achieved

The program document for DPL III identified the reduction in errors and losses and their impact on revenue as one of the benefits of the unified ledger. SEFAZ does not report on its website about any gains from fewer errors and losses. The TADAT report concludes that SEFAZ does not monitor the extent of inaccurate reporting in tax declarations. It also notes that (i) there is no evidence that SEFAZ evaluates losses in tax revenue based on the results of the audit programs and the cross-checking of data; and (ii) SEFAZ does not evaluate the ICMS tax compliance gap, use external studies, and monitor revenue losses from inaccurate information in the tax returns. TADAT gives a score of D for the reporting indicator (P6-18). From the analysis, it can be concluded that although some aspects of the physical infrastructure for tax administration (for example, filing and paying taxes online) may have improved, the quality of tax administration in the state of Rio de Janeiro has not improved. Table A.3 summarizes the ratings for the ledger and tax administration.

Table A.3 Policy Area 1 (Tax Administration) Efficacy

Indicator	Efficacy
1. Ledger introduced and operational	Not achieved
2. Ease of filing and paying taxes	Achieved
3. Effective audit	Not achieved
4. Paying taxes	Partially achieved
5. Reduction in errors and losses	Not achieved
Overall	Not achieved

Public Financial Management

Most Brazilian states have poor investment management, and Rio de Janeiro state is no exception. Frequent adjustments to budget allocations throughout the year make predictability and transparency difficult (see table 2.4). A survey of 20 states by the Inter-American Development Bank showed that only three states define guidelines for the formulation, selection, and execution of investment projects, based on methodologies and technical criteria; five states have an updated investment portfolio; and four states maintain a bank of projects with georeferenced information, physical and financial schedules, and investment costs.⁴ In Rio state, the multiannual plan monitors only the output of state actions (for example, hospitals built, teachers trained) and rarely tracks the outcome of public policies. The state government does not have clear criteria to prioritize actions if revenue is lower than expected.

Policy area II covered three areas, with specific targets for each. For public investment management, the objectives were to (i) improve the quality of investment spending and the investment selection process, and (ii) ensure that investment decisions are consistent with fiscal sustainability. For costing, the objective was to ensure that policy commitments are consistent with long-term fiscal sustainability. For internal control, the objective was to increase the efficiency of public expenditure. Three prior actions supported the objectives. For public investment management, the state would adopt a methodology and procedures for evaluating, selecting, and approving proposals for public investment projects estimated to cost more than R\$50 million. For costing, the state would pilot a methodology for costing its public policy programs on social and economic development and would use this methodology to cost four public policy programs. For internal control, the state would restructure its internal audit institutional arrangements and, through SEFAZ, approve the Internal Audit Department's action plan for calendar year 2012.

The target was achieved for the internal control area, partially achieved for the costing area, and not achieved for the public investment management area. On *public investment*, the state evaluated three investment projects of the planned five and did so ex post, not ex ante as expected. The assessment did not affect the budget process and the methodology developed to evaluate projects was not used for preparing the 2014 budget or later ones. Project Performance Assessment Report (PPAR) Assessment: **not achieved**

On *costing*, the ICR reported that authorities estimated the costs of four large public programs, understood their characteristics better, linked costs to beneficiaries, and identified factors that could affect future expenditures. However, the experiment did not become an effective budget tool, did not collect information on program benefits, and did not make projections of future costs, all of which prevented the authorities from

doing cost-benefit analysis of the state’s programs. Furthermore, the state did not publish its estimates and analysis, undermining the goal of transparency behind the results indicator defined for costing. The tools developed were not used for budget analysis and preparation. From the information gathered in the interviews, the review concludes that it is highly unlikely that the state of Rio de Janeiro has a costing methodology or that the authorities (SEPLAN—Secretariat of Planning, responsible for planning, budget preparation, and monitoring) link the cost of programs with the number of beneficiaries. PPAR assessment: **not achieved**

On *internal audit and controls*, the ICR for DPL III reported that the authorities put in place the processes needed to have a system that could help improve the state’s financial management. For example, the ICR reports that the authorities developed an action plan and reported on their accomplishments, issued key audit regulations, hired new and younger professional auditors, and established new procedures to give less emphasis to ex post reviews and more emphasis to ex ante procedures and oversight based on results. The program files do not include copies of the action plan, the accomplishments of the program, the key regulations issued, or the new procedures that emphasize ex ante procedures and results-based oversight. There is no information on whether the authorities continued and deepened the reforms after the loan closed. PPAR assessment: **partially achieved**

Table A.3. Policy Area II (Public Financial Management) Efficacy
Table A.1.

Areas	Efficacy
1. Public investment management	Not achieved
2. Costing	Not achieved
3. Internal control	Partially achieved
Overall	Not achieved

Source: Independent Evaluation Group.

Education and Health

Policy area III covered education and health. For education, the objective was to increase the quality of education through stronger performance incentives and accountability mechanisms; for health, the objective was to improve the efficiency in the delivery of public health services (World Bank 2012, 36).

Education

For education, prior action 7 supporting the program’s objectives consisted of (i) adopting and implementing a merit-based selection process for regional and school directors within a given territory, and (ii) adopting annual school-level targets for

improving student learning and graduation rates and a bonus pay system for schools that achieved their respective targets. The goal of the reforms was to improve student learning and reduce repetition and dropout rates. The Secretariat of Education set performance targets for schools, and about 30 percent of schools received bonuses for meeting their targets. The bonuses represented 25 percent of the teachers' annual salaries. The targets were met (see table 2.5).

The ICR for DPL III argued that the new incentives encouraged educators and school administrators to deliver better results. However, students' performance on educational tests does not seem to support the ICR conclusion. The results of the tests are reflected in an index known as the Index of Development of Basic Education (Índice de Desenvolvimento da Educação Básica), which measures the quality of education using the approval rate and the average performance of students on evaluation tests. The National Institute for Studies and Research on Education (Instituto Nacional de Estudos e Pesquisas Educacionais), the producer of the index, presents information on goals and actual results that makes it possible to compare performance across states and against goals.⁵ The National Institute for Studies and Research on Education calculates the index for all schools; by categories of private, public (federal, state, and municipal), and by three levels of teaching: primary teaching (fundamental anos iniciais), four initial years; middle (fundamental anos finais), five to eight years; and high school (ensino médio), three years. Table A.4 shows the results for the different schools in the state of Rio de Janeiro.

Table A.4. Rio de Janeiro State Actual and Expected IDEB Results by Schooling Level and Network, 2011–17

Schooling Level/Network		Actual Results				IDEB Goals			
		2011	2013	2015	2017	2011	2013	2015	2017
Primary	All schools	5.1	5.2	5.5	5.8	5.1	5.4	5.6	5.9
	Public	4.8	4.9	5.2	5.3	4.8	5.1	5.4	5.6
	Private	6.3	6.1	6.3	6.9	6.4	6.6	6.8	7.0
	State	4.3	4.7	5.1	4.8	4.5	4.8	5.1	5.4
Middle	All schools	4.2	4.3	4.4	4.7	4.1	4.5	4.9	5.1
	Public	3.7	3.9	4.0	4.2	3.7	4.1	4.4	4.7
	Private	5.7	5.5	5.6	6.2	5.9	6.2	6.5	6.7
	State	3.2	3.6	3.7	3.7	3.3	3.7	4.1	4.4
High school	All schools	3.7	4.0	4.0	3.9	3.6	3.8	4.2	4.6
	Private	5.5	4.8	5.0	5.6	5.4	5.6	6	6.3
	State	3.2	3.6	3.6	3.3	3.1	3.3	3.7	4.1

Source: Brazil Ministry of Education, National Institute of Educational Studies and Research Basic Education Development Index (database), <http://portal.inep.gov.br/ideb>. Accessed on June 24, 2020.

Note: IDEB = Index of Development of Basic Education.

The results show that *all* schools (in aggregate) achieved their goals for quality for all schooling levels in 2011, driven by achievement in all public schools (federal, state, and municipal) and also in private high schools. By 2013, only state high schools achieved their goals.⁶ By 2015, only primary state schools achieved their goals, which suggests that the reforms supported by DPL III may have had some effect. If the reforms indeed had an initial impact on outcomes, that impact disappeared in 2017, when the index for state schools fell to 4.8 for primary schools and 3.3 for high schools.

The improvements in student performance in public schools could be associated with the changes in incentives supported by DPL III, but they could also be attributed to changes carried out in earlier years that may have led to better student performance. For the state of Rio de Janeiro, the scores for middle schools increased from 2.9 in 2005 to 3.2 in 2011 and 3.6 in 2013, stabilized at 3.7 in 2015–17, and increased to 3.9 in 2019, which is still below the target of 4.6. For high schools, the score of 2.8 in 2005–09 rose to 3.2 in 2011 and 3.6 in 2013–15, fell to 3.3 in 2017, and rose to 3.5 in 2019, which is still below the target of 4.4. The trends in the Index of Development of Basic Education scores suggest that DPL III did not influence the quality of education in the state.

Changes in the scores may have been influenced by changes in the number of students enrolled in the state's schools. Between 2010 and 2014, the state government reduced enrollment at all schooling levels, and municipalities had to take charge of the students at state primary and middle schools (some students moved to private schools), a trend that also can be observed in the school networks of other states (but at lower rates). Also, enrollment fell because of the decrease in the school-age population and the elimination of "ghost students," a result of better recording of enrollments.

The Secretariat of Education eliminated the Education Evaluation System of the state of Rio in 2017. The system had been in place since 2008 and annually measured student performance in Portuguese and mathematics. In 2016, the students criticized the evaluation system on the basis that the instruction was geared to good test performance, which guaranteed bonuses to the teachers. The Secretary of Education committed to reformulating the evaluation system and ended up eliminating it. Since the elimination of this assessment, the state's education system is now evaluated every two years through the federal government's Basic Education Assessment System, which is based on a sample, whereas the Rio de Janeiro state evaluation system monitored the development of individual schools every year. In sum, the reforms supported by DPL III lasted a short time, and the state schools have not met the targets set for education quality. PPAR assessment: **not achieved**

Health

For **health**, prior action 8 consisted of the state of Rio de Janeiro (i) adopting a legal and administrative framework to assess social organizations to manage public hospitals and health units and to establish the terms and conditions for the contracts with such organizations, and (ii) through its Secretariat of Health, adopting regulations defining the evaluation mechanisms to transfer bonuses and monetary incentives to municipalities and municipal hospitals within the state's territory (under the Programa de Apoio as Municipalidades I, Program to Support Municipalities) and regional state hospitals within the state's territory (under the Programa de Apoio aos Hospitais do Interior II [Program to Support Hospitals]).

The targets for the program's results indicators were met or exceeded in all but one case (see table 2.6). The reforms permitted the state of Rio de Janeiro to contract social organizations to manage the emergency services for 30 emergency care units (Unidade de Pronto Atendimento), exceeding the 22 units planned. The reform changed the way the Secretariat of Health operated from overseeing health services provision to managing contracts with these organizations. This model was also extended to some local hospitals, which were not in the original plans or in the DPL III results matrix. The state also achieved the goal of using regional hospitals for complex treatments when patients were outside their immediate jurisdiction. After DPL III closed, regional hospitals handled more than 25 percent of the complex treatments.

The state government also put in place a program of support for hospitals in the interior (Programa de Apoio aos Hospitais do Interior II) by which it gives them financial support if they manage patient care according to certain conditions and indicators. The hospitals were to establish a program of ombudsman services to review patient treatment and to establish committees to evaluate infections. The ombudsman target was met. The committees to evaluate infections did not achieve the expected goals, leading the government to include other indicators for the hospitals, such as standards for hygiene and waste disposal.

The state comptroller general analyzed the management of state health units during 2012–19, especially the aspects related to their transfer to social organizations. The state comptroller general's report (CGERJ [Contraloria Geral do Estado de Rio de Janeiro] 2019) concludes the following:

- Transferring the service to social organizations resulted in a reduction in the volume of health services supplied compared with those supplied before the transfer, and it also resulted in higher operational costs for the units.

- The state comptroller general found serious problems concerning the supervision of this public policy, despite the large amounts of payments to the social organizations (the expenses of social health organizations [OSSs; Organizações Sociais de Saúde] represented 56 percent of the total budget of the state’s health secretariat [Secretaria de Estado de Saúde] from January to July 2019). Among the problems that stand out are the lack of information systems to help control spending and present accounts, the absence of inspection criteria, and deficiencies in monitoring contracts.
- There is little transparency in the ombudsman services.
- The state’s health secretariat (Secretaria de Estado de Saúde) does not have administrative and hierarchical control over the health units’ ombudsmen. Among other issues, “ombudsmen do not conclude demands within the established legal deadlines.”
- The state comptroller general calculated that irregularities in the management of OSSs may have caused a loss for the state treasury of approximately R\$1,016 billion (\$254 million) during 2012–19.

The information presented in this section shows that the target indicators were achieved, but they were inadequate to measure the quantity, quality, and value for money of the health services provided by each OSS. In fact, the OSSs overall supplied fewer health services at a higher cost to the treasury and taxpayers and did not deliver better value for money than before the reforms. The management of OSSs presented irregularities that contributed to the estimated loss of \$254 million to the state treasury during 2012–19. PPAR assessment: **not achieved**.

Outcomes

The program showed promising results in the short term, as noted in the ICR and in the Independent Evaluation Group’s review of the ICR, but over the medium and longer term, the results were not sustained and, in most instances, regressed.

- On **tax administration**, taxpayers can access their files and pay their taxes online, but the ledger has not been unified and does not work as expected in the program document. SEFAZ does not use performance indicators to guide its decisions on auditing and has not reduced errors and losses in tax administration or the accumulation of tax arrears. In addition, only about one-third of taxpayers submit their ICMS tax declaration on time.

- On **public financial management**, the state does not apply a methodology to assess and select its investment projects and does not apply costing principles for its social policy programs.
- On **education**, after students and teachers went on strike, the government reversed the reforms on incentive pay to teachers. The quality of education in state schools has improved over time (part of an overall improvement in education in Brazil), but the state has not achieved its goals in quality for middle schools since 2009 and for high schools since 2013, when it attained its best scores.
- On **health**, the state transferred the management of public hospitals and health units to social organizations, but that action has not resulted in better coverage and more value for money according to a state comptroller general’s review of the system.

Table A.5 summarizes the results for each policy area and its respective rating. The review concludes that the outcome of the program is **unsatisfactory**.

Table A.5. Summary Results: Efficacy and Ratings

Policy Area	Efficacy	Rating
1. Tax administration	Not achieved	Unsatisfactory
2. Public financial management	Not achieved	Unsatisfactory
3. Education and health	Not achieved	Unsatisfactory
Overall assessment		Unsatisfactory

Bank Performance

Quality at Entry

The World Bank selected relevant objectives and areas for reform based on a good knowledge of the technical problems in the three policy areas. The objectives, however, were unlikely to be achieved during the program’s duration (17 months). The World Bank overlooked this time constraint, which reflects an optimistic outlook about the likelihood of reforms to gain traction and survive under different administrations. Consequently, the World Bank paid insufficient attention to the monitoring and evaluation arrangements and underestimated the risks of reform failure in a state well-known for its institutional weaknesses. In hindsight, the risks are evident, but they were not evident when the operation was prepared. The review rates the quality of entry **moderately satisfactory**.

Quality of Supervision

The review agrees with the assessment in the ICR that “implementation did not match the ambition of the design,” even if considerable effort was expended to put the program in place, as the ICR asserts. Nonetheless, there is little information in the project files about the program’s performance. Some key documents, like the performance indicators for revenue collection, are not in the files. Also, there is no information on World Bank follow-up on the implementation of the various reforms and their impact, as is the case for revenue collection. The information on revenue was gathered for a workshop organized by the World Bank and SEFAZ in early 2013, six months after the secretariat had issued the regulation listing the performance indicators to be considered for assessing revenue collection (Resolution SEFAZ No. 498 of June 12, 2012). The resolution covered 15 indicators, but there is no information in the project files or in the ICR that permits even verifying whether the state fulfilled at least the formality of issuing five more indicators during 2013 as the loan condition demanded. In sum, the information and analysis available in project files suggests that supervision was subpar. The information about project performance is limited, and the main effort in the two supervision missions seems to have been gathering information for the results indicators. The review rates the quality of supervision **moderately unsatisfactory**.

Quality of Monitoring and Evaluation

The program document did not include a monitoring and evaluation plan for the World Bank. For the state, it said that SEFAZ—together with the state Secretariat of Planning (Secretaria de Estado de Planejamento) and the individual sector monitoring units—would be responsible for implementing the operation, reporting on progress, and coordinating actions. A committee of officials from the agencies involved in the reform agenda were to monitor implementation, including the technical assistance activities. The program document envisioned that the operation would support several evaluation activities to generate data to inform state policies and strengthen a culture of evidence-based policy making.

The government monitored the program mostly with the purpose of meeting the demands for information from the World Bank’s supervision missions. SEFAZ formed an ad hoc committee to monitor the actions agreed to under the loan. There is no evidence that data collection continued after the loan closed, that the state generated data to inform its policies, or that the authorities adopted and strengthened a culture of evidence-based policy making as the program document envisioned.

There is no evidence that the data collected were used to change the course of program implementation. The review concludes that the quality of monitoring and evaluation is **modest**.

References

- CGERJ (Comptroller General [Contraloria Geral do Estado de Rio de Janeiro]). 2019. “Relatório de Auditoria N° 51/2019 Tema Relevante: Organizações Sociais de Saúde.” CGERJ, Rio de Janeiro.
- TADAT (Tax Administration Diagnostic Assessment Tool). 2018. “Performance Assessment Report Rio de Janeiro State (June 2018)”. <https://www.tadat.org/>.
- TADAT. 2019. “Subnational Supplement Field Guide Prepared by the TADAT Secretariat: November 2019 Edition.” <https://www.tadat.org/>.
- World Bank. 2012. “Brazil—Third Rio State Fiscal Efficiency for Quality of Public Service Delivery Development Policy Loan.” Program Document 62793-BR, World Bank, Washington, DC.

¹ See <https://www.tadat.org/home> for more information on the principles.

² An evaluation system was developed under Secretary Wilson Risolia (October 2010 to December 2014). Under Secretary Antonio Neto (January 2015 to May 2016), the strategy based on evaluation was discontinued.

³ To calculate the second ratio, “collectible” tax arrears equal total domestic tax arrears minus (i) amounts formally disputed by the taxpayer and for which collection action has been suspended pending the outcome, (ii) amounts not legally recoverable, and (iii) uncollectible arrears—for example, the debtor has no funds (TADAT 2018, footnote 20).

⁴ Inter-American Development Bank MD GEFIS, <http://www.cogef.ms.gov.br/workshop-boas-praticas-da-gestao-fiscal-11-06-2019-brasilia-df>

⁵ More information about the index can be obtained on the website of the Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira (National Institute for Studies and Research on Education), <http://portal.inep.gov.br/ideb>.

⁶ Public high school is delivered almost entirely by the state. Municipal and federal enrollments are not significant.

Appendix B. Methods and Evidence

This Project Performance Assessment Report (PPAR) evaluated the Fiscal Efficiency for Quality of Public Service Delivery Development Policy Loan (DPL) III to the state of Rio de Janeiro for \$300 million. Independent Evaluation Group (IEG) project ratings are described in appendix A.

This report was prepared using the standard IEG methodology for PPARs and rating scale, available at <https://ieg.worldbankgroup.org/methodology/PPAR>.

This DPL was selected for a PPAR as part of IEG’s effort to cluster several loans focusing on improving tax policy and administration.

The PPAR used a mixed methods approach, including desk review, analyses of macro and socioeconomic indicators, portfolio review analysis, and semistructured stakeholder interviews. The interviews were conducted remotely, as travel restrictions related to coronavirus (COVID-19) were still in place. The findings of this report are based on in-depth reviews of program documents, International Monetary Fund reports, discussions with World Bank staff, and interviews with government officials. The analysis relied on data collected from the Brazil (federal) and state of Rio de Janeiro governments, the World Bank, the International Monetary Fund, the Inter-American Development Bank, and other sources.

Table B.1. People Interviewed

Name	Title
Rafael Amaral	Consultant, World Bank
Antonio Campos Cabral	Secretary of Revenue, SEFAZ
Rafael Chelles Barros	Senior Economist, World Bank
Roland Clarke	Former Task Team Leader for DPL III, World Bank (retired)
Fabiano Colbano	Senior Economist, World Bank
Leandro Lobo Pires	Sub-Secretary of Treasury, state of Rio
Tania Lettieri	Operations Officer, World Bank
Maria Cristina MacDowell	Lead Fiscal Specialist, Interamerican Development Bank and Instituto de Pesquisas Economicas
Yaye Seynabou Sakho	Director, Strategy and Operations, World Bank
George Santoro	Director of Tax Office, Alagoas state, former deputy director of SEFAZ
Renato Villela	President of FUNCEF (Fundação dos Economiários Federais, public pension fund), former director of SEFAZ
Lorena Viñuela	Senior Public Sector Specialist, World Bank
Deborah Wetzel	Director, World Bank

Appendix C. Policy and Results Matrices

Table C.1. Development Policy Loan and Results Matrix

DPL Objectives	Actions Supported by the DPL	Results and Outcome Indicators
Increase state revenue performance	<p>I. Strengthening Tax Administration</p> <p>(i) The state of Rio de Janeiro has strengthened the implementation of the synchronized taxpayer registration system (which integrates the registry of firms to the tax registry for ICMS by</p> <p>(A) Establishing the Comit� Gestor de Integra�o do Registro Empresarial, as evidenced by the borrower's Decree No. 42.890, dated March 21, 2011, published in the borrower's Official Gazette on March 22, 2011; and</p> <p>(B) Appointing the principals and deputy members to the Comit� Gestor de Integra�o do Registro Empresarial, as evidenced by JUCERJA's Portaria No. 1.018/2011, dated April 26, 2011, published in the borrower's Official Gazette on April 29, 2011.</p> <p>(ii) The state of Rio de Janeiro has, through SEFAZ, adopted standards to improve collection of state taxes, including ICMS, as evidenced by Resolution SEFAZ No. 468, dated December 27, 2011, published in the borrower's Official Gazette on December 29, 2011.</p> <p>(iii) The state of Rio de Janeiro has, through SEFAZ, established a process to implement a results-based management system for tax administration within SEFAZ, as evidenced by Resolution SEFAZ No. 498, dated June 12, 2012, published in the borrower's Official Gazette on June 14, 2012.</p> <p>II. Improving the Efficiency of Public Financial Management</p> <p>II.1 Public Investment Management</p>	<p>Targets for 2013 unless otherwise specified</p> <p>Result 1. ICMS and ITD revenues increased by 15.6 and 12.4 percent, respectively, from 2011</p> <p>a. ICMS: Baseline December 31, 2011: R\$24.8 billion Target: R\$28.67 billion</p> <p>b. ITD Baseline 2011: R\$418 million Target: R\$470 million</p> <p>Result 2. Establishment of unified general taxpayer ledger, with individual taxpayer access to their unified accounts. Baseline 2011: no unified general taxpayer ledger</p> <p>Result 3. Progressive implementation of performance indicators for tax administration Baseline 2011 = 0 December 2012 = 10 indicators December 2013 = 20 indicators</p>
<p>Improve the quality of investment spending and the investment selection process.</p> <p>Ensure that investment decisions are consistent with fiscal sustainability</p>	<p>The state of Rio de Janeiro has adopted a methodology and procedures for evaluating, selecting, and approving proposals for public investment projects estimated to cost over R\$50,000,000, as evidenced by the borrower's Decree No. 43.631, dated June 6, 2012, published in the borrower's Official Gazette on June 14, 2012, and Resolution SEPLAG No. 714, dated June 13, 2012, published in the borrower's Official Gazette on June 14, 2012.</p>	<p>Result 1. Projects complying with required criteria have been subject to the screening process, using techniques specified in the technical manual.</p> <p>Result 2. Consolidated information published on the portfolio mapping of the five investment</p>

DPL Objectives	Actions Supported by the DPL	Results and Outcome Indicators
Ensure that policy commitments are consistent with long-term fiscal sustainability	<p>II.2 Costing</p> <p>The state of Rio de Janeiro has:</p> <p>(i) Piloted a methodology for costing the borrower's public policy programs on social and economic development, as evidenced by:</p> <p>(A) The report issued jointly by SEEDUC, SEPLAG, and SEFAZ, in accordance with the joint Resolution SEEDUC/SEPLAG/SEFAZ No. 691, dated January 5, 2012, published in the borrower's Official Gazette on January 9, 2012; and</p> <p>(B) The report issued jointly by SES, SEPLAG and SEFAZ, in accordance with the joint Resolution SES/SEPLAG/SEFAZ No. 31, dated January 6, 2012, published in the borrower's Official Gazette on January 10, 2012; and</p> <p>(ii) Selected four of the borrower's public policy programs for costing in accordance with the piloted methodology mentioned in (i) here, as evidenced by Resolution SEFAZ No. 502, dated June 19, 2012, published in the borrower's Official Gazette on June 25, 2012.</p>	<p>projects, showing annual commitments of these investments</p> <p>Baseline 2011 = 0</p> <p>Target: 5 prior investment projects shown in the annual commitments of investments</p> <p>Result 1. State publishes results of costing at least four major policy programs with their key results defined.</p>
Increase efficiency of public expenditures	<p>II.3 Internal Control</p> <p>The state of Rio de Janeiro has:</p> <p>(i) Restructured its internal audit institutional arrangements, as evidenced by the borrower's Decree No. 43.463, dated February 14, 2012, published in the borrower's Official Gazette on February 15, 2012; and</p> <p>(ii) Through SEFAZ, approved AGE's Action Plan for calendar year 2012, as evidenced by Despacho do Secretário, dated May 3, 2012, published in the borrower's Official Gazette on May 4, 2012, and a copy of AGE's Action Plan.</p> <p>III. Increasing the Quality and Efficiency of Public Education and Health Services</p> <p>III.1 Education</p>	<p>Result 1. Action plan to improve internal control system is developed on the basis of the annual report from AGE to the state government on the performance of internal control systems</p>

DPL Objectives	Actions Supported by the DPL	Results and Outcome Indicators
Increase the quality of education through stronger performance accountability mechanisms	<p>The state of Rio de Janeiro has:</p> <p>(i) Adopted and implemented a merit-based selection process for regional and school directors within its territory, as evidenced by:</p> <p>(A) The borrower's Decree No. 43.451, dated February 3, 2012, published in the borrower's Official Gazette on February 6, 2012; and</p> <p>(B) The borrower's Atos de Designação listing the regional and school directors appointed between February 2011 and February 2012 in accordance with the adopted selection process mentioned in (i) here; and</p> <p>(ii) Adopted annual school-level targets for improving student learning and graduation rates and a bonus pay system for schools that achieved their respective annual school-level targets, as evidenced by:</p> <p>(A) The borrower's Decree No. 43.451, dated February 3, 2012, published in the borrower's Official Gazette dated February 6, 2012;</p> <p>(B) Resolution SEEDUC No. 4.768, dated February 7, 2012, published in the borrower's Official Gazette on February 8, 2012; and</p> <p>(C) Resolution SEEDUC No. 4.771, dated March 1, 2012, published in the borrower's Official Gazette on March 6, 2012.</p>	<p>Result 1. Number of regional directors selected using new merit-based process:</p> <p>Baseline 2010 = 0</p> <p>January 2012 = 28 (100 percent of total)</p> <p>January 2013 = 28</p> <p>Result 2. Number of school directors selected using new merit-based process:</p> <p>Baseline 2010 = 0</p> <p>January 2012 – 82</p> <p>January 2013 – 164</p> <p>Result 3. School targets for 2013 communicated to schools (before the end of March 2012)</p> <p>Result 4. School targets for 2014 communicated to schools (before the end of March 2013)</p> <p>Result 5. Bonuses for 2012 paid by June 2013</p>
Improved efficiency in the delivery of public health services	<p>III.2 Health</p> <p>(i) The state of Rio de Janeiro has adopted a legal and administrative framework to assess social organizations to manage public hospitals and health units and to establish the terms and conditions for the contracts with such organizations, as evidenced by:</p> <p>(A) The borrower's Law No. 6.043, dated September 19, 2011, published in the borrower's Official Gazette on September 20, 2011; and</p> <p>(B) the borrower's Decree No 43.261, dated October 27, 2011, published in the borrower's Official Gazette on October 31, 2011.</p> <p>(ii) The borrower has, through its Secretariat of Health (SES):</p> <p>(A) Adopted regulations defining the evaluation mechanisms to transfer bonuses and monetary incentives to municipalities and municipal hospitals within the borrower's territory, under PAM I, as evidenced by:</p> <p>(1) Resolution SESDEC No. 1.550, dated March 16, 2011 published in the Borrower's Official Gazette on March 17, 2011; and</p>	<p>Result 1. The state government has signed contracts with social organizations to manage 15 health units and strategic services (lab services, imagery services, and so on)</p> <p>Baseline in 2011 = 0</p> <p>2012 = 15 UPAs</p> <p>Target = 22 UPAs</p> <p>Result 2. Number of hospitals under the PAHI program with ombudsman services:</p> <p>Baseline 2011 = 44</p> <p>2012 = 53</p> <p>Target = 63</p> <p>Result 3. Number of hospitals with hospital infection evaluation committees:</p>

DPL Objectives	Actions Supported by the DPL	Results and Outcome Indicators
	(2) Resolution SESDEC No. 1.551 dated March 16, 2011, published in the Borrower's Official Gazette on March 17, 2011; and (B) Adopted regulations defining the evaluation mechanisms to transfer bonuses and monetary incentives to regional state hospitals within the borrower's territory, under PAHI II, as evidenced by Resolution SESDEC No. 1.552, dated March 16, 2011, published in the borrower's Official Gazette on March 17, 2011.	Baseline 2011 = 46 2012 = 55 Target = 66 Result 4. Supply of complex treatment to patients from other municipalities as a percentage of the total: Baseline 2011 = 16.78 percent 2012 = 20 percent Target = 24 percent

Source: Program Document for DPL III, table 6 on pages 35–36

Note: AGE = State General Audit (Auditoria Geral do Estado); ICMS = goods and services tax (Imposto sobre Circulação de Mercadorias e Serviços de Transporte Interestadual e Intermunicipal e de Comunicação); ITD = inheritance, estate, and donations tax (Imposto de Transmissão Causa Mortis e Doação); PAHI = Program to Support Hospitals (Programa de Apoio aos Hospitais do Interior); PAM = Support Program for Municipalities (Programa de Apoio as Municipalidades); R\$ = Brazilian reais; SEEDUC = State Department of Education (Secretaria de Estado de Educação); SEFAZ = State Secretariat of Finance (Secretaria de Estado da Fazenda); SEPLAG = State Secretariat for Planning and Management (Secretaria de Estado de Planejamento e Gestão); SES = State Secretariat of Health (Secretaria de Estado da Saúde); SESDEC = State Secretariat of Health and Public Safety (Secretaria de Estado de Saúde e Segurança Pública); UPA = 24-hour emergency care unit (Unidade de Pronto Atendimento).

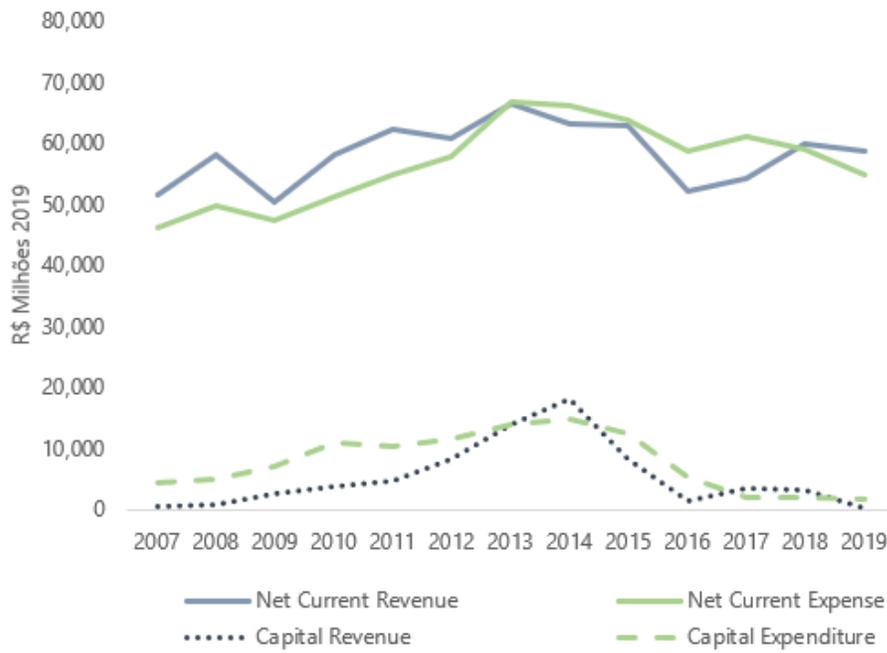
Appendix D. Fiscal Performance of the State of Rio de Janeiro, 2007–19

The fiscal accounts of the government of Rio de Janeiro state (RJS) show imbalances lasting for several years. The present financial distress derives from a weak revenue structure and uncontrolled growth in expenses, mainly because of growing personnel expenses. Since 2017 the state has been under a special fiscal regime, the Fiscal Recovery Regime (FRR; Regime de Recuperação Fiscal). The FRR was approved by Complementary Law n159/2017 with the purpose of helping states in fiscal distress. The states adhering to the FRR, which lasts for three to six years, have relief on debt service payments to the National Treasury.¹ To be admitted to the FRR, the state has to structure a recovery plan including, among other elements, privatizing state-owned enterprises, adopting federal legislation related to running the state's pension system, suspending wage increases and the hiring of new public servants, and revising fiscal incentives to reduce tax expenditures by at least 10 percent.

The evolution of RJS revenues and expenses since 2007 indicates that the fiscal distress deepened in this decade, as shown in figure D.1 and in table D.1. The recent trend of RJS finances indicates that to be financially viable, the state must overhaul its structure of revenues and expenses. The overhaul requires a thorough review of the state's management efficiency (that is, the quantity and quality of services it provides).

Table D.1 shows that tax collection has stabilized since 2011,² following the trend of its main component, the ICMS, which accounts for 86 percent of tax revenue. The second-largest source of state revenue comes from oil royalties transferred by the Union; the transfers represented about 35 percent of tax revenue in 9 out of the 13 years covered. The revenue from oil royalties is volatile for reasons that in most cases are outside the control of the RJS government (for example, changes in the production of oil, international prices, and federal legislation). Despite their unstable nature, oil revenues have been allocated since 2006 to finance the state pension fund (RIOPREVIDENCIA), which pays the pensions of retirees and survivors; pensions have grown rapidly and generated a significant financial and actuarial deficit.

Figure D.1. Evolution of Revenue and Expenditure 2007–19



Source: National Treasury Secretariat, Fiscal Responsibility Law Reports, state Financial statements, state Fiscal Management Reports. *Inflation Index: IPCA/IBGE.

Table D.1. Revenue, Expenditure, and Fiscal Balances 2007–19
(2019 R\$, millions)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total net revenue ^a	52,351	59,212	53,142	61,965	66,920	68,875	80,302	81,307	71,090	53,642	57,795	63,148	59,060
Net current revenue	51,652	58,241	50,512	58,202	62,276	60,665	66,372	63,250	62,829	52,261	54,244	59,802	58,791
Tax revenue	23,759	25,175	25,807	29,311	31,282	31,421	34,156	33,336	31,395	30,493	30,543	33,506	31,630
Intergovernmental transfers	15,940	21,280	17,946	20,632	21,276	22,141	21,889	22,362	16,275	17,104	17,551	23,520	23,938
of which: Oil royalties	8,098	11,851	8,197	10,285	10,454	11,644	10,975	11,161	6,067	3,625	7,288	13,251	12,823
Other current revenue	11,953	11,786	6,759	8,259	9,717	7,102	10,327	7,552	15,159	4,664	6,150	2,777	3,223
Capital revenue	699	971	2,630	3,763	4,644	8,209	13,930	18,057	8,261	1,381	3,551	3,346	270
Loans and capital transfers	504	786	1,590	3,419	3,514	7,857	7,746	10,520	6,559	1,244	2,570	1,266	97
Other capital revenue	196	185	1,039	344	1,131	352	6,184	7,537	1,702	137	981	2,080	173
Total net expenditure ^a	50,827	54,979	54,539	62,338	65,277	69,257	80,947	81,145	76,056	64,093	63,204	61,145	56,775
Net current expense	46,280	49,840	47,323	51,397	54,869	57,726	66,918	66,303	63,666	58,818	61,131	59,022	54,922
Personnel	26,360	27,624	27,796	30,626	32,371	34,935	40,806	39,433	37,464	38,831	40,651	40,375	39,456
Debt Interest	4,629	4,662	4,046	3,918	3,902	3,920	4,121	4,281	4,679	3,070	969	121	128
Other current expense	15,292	17,553	15,481	16,852	18,596	18,871	21,991	22,589	21,523	16,917	19,511	18,527	15,338
Capital expenditure	4,547	5,138	7,215	10,941	10,408	11,531	14,029	14,842	12,391	5,274	2,073	2,123	1,853
Investments ^b	2,908	3,493	5,058	8,881	7,831	8,218	10,046	10,272	8,180	3,040	1,106	1,639	1,056

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Debt	1,639	1,645	2,158	2,061	2,577	3,313	3,983	4,569	4,210	2,235	968	484	797
Amortization													
Overall Fiscal Balance	1,524	4,234	-1,397	-373	1,643	-383	-646	162	-4,967	-10,451	-5,409	2,003	2,285
Current balance	5,372	8,401	3,189	6,805	7,407	2,939	-547	-3,054	-837	-6,557	-6,887	780	3,868
Primary balance	6,783	9,132	2,552	2,375	4,098	-1,353	-6,650	-9,721	-4,839	-7,114	-6,653	-1,045	2,181

Sources: National Treasury Secretariat, Fiscal Responsibility Law Reports, state Financial statements, state Fiscal Management Reports. *

Note: Inflation Index: IPCA/IBGE. Bold text indicates negative balances.

a. Tax Revenue and Intergovernmental Transfers are net of the state contribution to the Fund for Education and of mandatory transfers to municipalities. Current Expenses are net of mandatory transfers to municipalities. Current Revenue and Current Expenses (on Personnel) are net of Employees Contributions to the Pension Fund.

b. Includes the acquisition of nonfinancial assets and of financial assets.

The rapid growth of personnel and debt service expenditures, plus mandatory minimum expenditures on health and education, were large contributors to the fiscal imbalances. Short of revenues to meet its pension payments and other expenses, the state resorted to using advances over its oil royalties and other nonrecurring sources of funds, such as withdrawing judicial deposits, selling to financial institutions the right to pay the state payroll, receiving discretionary transfer from the Union (in 2016, allegedly for the security of the Olympic Games), and borrowing from BNP Paribas in anticipation of the sale of CEDAE (Companhia Estadual de Águas e Esgoto; the state water treatment facility). The arrangements made nonrecurring revenues a major source of funds for RJS. Except for 2012, nonrecurring revenues fed the state coffers every year during 2011–2018, most of the time increasing the state’s current net revenue (Receita Corrente Líquida). The arrangement was insufficient to control the fiscal imbalances.

As personnel (table D.2) and other current expenses grew, current savings eroded or became negative, as seen in 2013–2017. To finance its investments, the state used credit, in abundant supply since 2009 when the federal government–owned banks opened new credit lines to states and municipalities.³ To amplify the fiscal problems, the federal government guaranteed the states foreign borrowing. Loans became the main source of financing for state investments. The resources flowing to the state, though, were insufficient to pay its suppliers, which led to substantial accumulation of short-term debts.⁴ The growing debt did not prevent state authorities from increasing salaries and hiring more civil servants, particularly for public order and safety; simultaneously, the financial deficit of the state pension fund mounted. Personnel expenses rose from 51 percent of net current revenue (table D.2) in 2007 to 56 and 64 percent in 2012 and 2019, respectively.

Table D.2. Personnel Expenses and Net Current Revenue, 2007–19 (percent)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Personnel expenses/ net current revenue (percent)	50.5	46.7	53.9	51.3	51.0	56.2	55.6	60.7	58.6	73.8	74.4	62.8	64.3
Personnel expenses	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Assets	67.7	66.7	64.6	62.9	62.4	62.5	58.8	64.3	67.9	61.7	55.7	57.0	57.9
Retired and survivors' expenses backed by state Treasury Resources ^b	26.8	27.1	28.1	29.4	30.8	30.3	28.4	30.4	28.0	34.2	39.6	32.1	33.6
Other personnel expenses	5.5	6.2	7.3	7.7	6.8	7.2	12.8	5.3	4.1	4.1	4.7	10.9	8.5

Sources: STN/Finbra (Finances of Brazil - Account Data of Municipalities), fiscal responsibility law report, state financial statements.

Note: IBGE = Brazilian Institute of Geography and Statistics (Instituto Brasileiro de Geografia e Estatística); IPCA = National Consumer Price Index (Índice Nacional de Preços ao Consumidor Amplo).

a. Inflation Index: IPCA/IBGE.

b. Retired and survivors' expenses are also financed by state and employee contributions to the pension fund.

The large amount of borrowing increased the ratio of gross debt to net current revenue from 171 percent in 2010 to 183 percent in 2012 (see table D.3). Although the ratio fluctuated because of nonrecurring revenues, its upward trend is evident. In 2016 and the first semester of 2017, debt service payments to the National Treasury were temporarily reduced because of federal Law 156/2016, which rescheduled the state's debts to the National Treasury, suspended debt service payments from July to December 2016, and distributed the payments until June 2018. In the second semester of 2017, the state entered into the FRR and obtained a grace period of 36 months to pay the debt administered by the National Treasury. As the unpaid amounts were capitalized, the state's debt grew; by the end of 2019, the debt was almost three times the state's net current revenue.

Table D.3. Gross Consolidated Debt and Debt Service/Net Current Revenue, 2010–2019 (percent)

Indicator	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross consolidated debt/net current revenue	171.4	163.3	183.3	169.3	190.2	210.0	233.8	273.5	265.4	284.9
Debt service/net current revenue	10.3	10.4	11.9	12.2	14.0	14.1	10.2	3.6	1.0	1.6

Sources: STN/Finbra (Finances of Brazil - Account Data of Municipalities), fiscal responsibility law reports, state financial statements.

The grace period to pay the interest and amortize the debt explains the state's overall surpluses in 2018 and 2019, but the surplus will fade away once the state starts repaying its debt. On the primary (what does it mean?) side, the surplus in 2019 was obtained from reductions in maintenance costs, voluntary transfers to municipalities, and investment expenses; however, the investment expenses are far below the needs to maintain existing services and infrastructure.

¹ By the end of 2017, RJS debt administered by the National Treasury accounted for 68 percent of total state debt.

² Tax Revenue and intergovernmental transfers are net of constitutional transfers to municipalities and mandatory contributions to the Education Fund (Fundeb).

³ Caixa Econômica Federal, Banco do Brasil, and Banco Nacional do Desenvolvimento Econômico e Social.

⁴ Those amounts are not computed as consolidated debt.

Appendix E. Borrower Comments



Governo do Estado do Rio de Janeiro
Secretaria de Estado de Fazenda
Gabinete do Secretário

Of.SEFAZ/GABSEC SEI N°252

Rio de Janeiro, April 30th, 2021

His Excellence

MR. JEFF CHELSKY

Manager of Economic Management and Country Program Evaluations of Independent Evaluation Group

1818 H Street NW, Washington, DC 20433

United States of America

E-mail: jchelsky@worldbank.org

Subject: comments on the report "Brazil Rio State Third Development Policy Loan DPL III (2012-14) (IBRD-81910)"

Dear Mr. Chelsky,

First of all, thank you very much for sending this document.

Despite the short time available for analysis, since the preparation of the report until the date that we must pronounce, we will have an interval of only 14 (fourteen) days. We understand that the data reported need to be analyzed in greater depth since we are portraying facts that have occurred in almost a decade.

However, in order to promote a response to the report, especially with regard to the use of financing provided by the World Bank, we have set up a task force to elucidate some of the statements presented here.

As stated on page 10 of the document, the World Bank, through the Fiscal Efficiency Program for the Quality of Public Service Delivery for Development Policies (DPL III), granted a loan to the State of Rio de Janeiro in the amount of US \$ 300 million, which was approved in August 2012 and ended in January 2014.

The text also teaches that the program covered three policy areas: (i) tax administration; (ii) public finance management and (iii) education and health.

Aware of the division, and complementary, including addressing aspects of the 2018 TADAT report, this institution will only respond to aspects related to the first area, tax administration.

As described in item 1.12 (Design) of the report, the program aimed to support tax administration (Policy Area I) in the following initiatives: (a) take the necessary measures to implement the Integrated Tax Registration System (REGIN); (b) standards to be adopted to improve tax collection; and (c) establish a process to implement a results-based management system.

In the same vein, the document approved in item 2.3, the result indicators were: (a) revenue from Value Added Tax (ICMS); (b) establishment of a Unified Taxpayer General Ledger, allowing individual taxpayers access to their accounts; and (c) implementation of performance indicators for tax administration - 10 indicators in 2012 and 20 in 2013.

Item 2.4 warned that the program did not support specific auditing, reporting and correspondence and retention actions, which are important components of efforts to increase tax revenue and improve tax administration and enforcement (Burman and Slemrod, 2013, p. 173).

Having made these references in the text, we now objectively respond to the information contained in this document.

As shown in our reports, the World Bank, from 2012 to 2021, only financed in the scope of the Tax Administration of the State of Rio de Janeiro the amount of approximately US \$ 3.4 million, this through 6 (six) initiatives and carried out in the scope of the RIO METRÓPOLE/PRÓGESTÃO II Program. Below are the names and values assigned to each action:

- Consultancy for Tax Management Processes - Diagnosis;
- Individual Consultant Tax Integration Program - Planning;
- Individual Oil and Gas Consultant;
- Software License, Customization and Training for Implementation of the Medium Term Tax Management Model;
- PPP modeling for the Fiscal Barrier Project;
- Integrated Solution for the Lifecycle Management of IT Applications;

Distribuição de Desembolso por	Orçamento		2016 por TRIMESTRES						2017 por TRIMESTRES					2018 por TRIMESTRES					
	US	%	1º	2º	3º	4º	2016	1º	2º	3º	4º	2017	%	1º	2º	3º	4º	2018	
TOTAL CARTEIRA	3.394.315,66	-	0,00	19.075,00	72.950,00	188.789,12	280.814,12	%	2.327.934,91	257.906,49	316.773,42	210.886,71	3.113.501,53	%	0,00	0,00	0,00	0,00	0,00
3.1.1. Consultoria para Processos Gestão Tributária - Diagnóstico	234.040,71	6,90				105.318,32	105.318,32	37,50	128.722,39				128.722,39	4,13					0,00
3.1.4. Consultor Individual Programa Integração Tributária - Planejamento	46.250,00	1,36		4.625,00	18.500,00	23.125,00	46.250,00	16,47					0,00	0,00					0,00
3.1.7. Consultor Individual Óleo e Gás	72.250,00	2,13		14.450,00	14.450,00	21.675,00	50.575,00	18,01	10.837,50	10.837,50			21.675,00	0,70					0,00
3.1.8. Licença de Software, Customização e Treinamento para Implementação do Modelo de Gestão Fiscal de Médio Prazo	78.670,80	2,32			40.000,00	38.670,80	78.670,80	28,02					0,00	0,00					0,00
3.1.9. Modelagem de PPP para o Projeto de Barreira Fiscal	705.911,41	20,80					0,00	0,00	141.182,28	247.068,99	211.773,42	105.886,71	705.911,40	22,67					0,00
3.1.10. Solução Integrada para Gerenciamento do Ciclo de Vida das Aplicações de TI	2.257.192,74	66,50					0,00	0,00	2.047.192,74		105.000,00	105.000,00	2.257.192,74	72,50					0,00

Based on these figures, we can prove that only 1.13% of the resources provided by the World Bank to the Government of the State of Rio de Janeiro (US \$ 300 million) were directed towards the modernization of the Tax Administration.

In this sense, we can affirm that the measures and actions to increase the collection and modernization of the Tax Administration of the State of Rio de Janeiro almost entirely did not originate from the World Bank.

Unlike what is defended in this report, we believe that we have achieved great achievements in the last decade with a focus on transparency and efficiency in the Fluminense Tax Administration. We will list some of them:

- **Integrated Taxpayer Registration System (SINCAD):** it is used exclusively by SEFAZ-RJ's servers to process orders made in REGIN - Integrated Registry (which allowed the integration of registration bodies with SEFAZ-RJ and the Federal Revenue of Brazil - RFB. It is used for requests for state registration and changes to registration data through Electronic Forms) and the SEC - Electronic Registration Services (system accessed by users exclusively enabled by means of a digital certificate that provides the following services: Low, Shutdown, Reactivation, Change of Accountant, Consultations to Complete Registration Data).
- **Taxpayer's Electronic Domicile (DeC):** aims to implement a virtual environment, authenticated with digital certification, which provides a secure means of communication for sending messages from the Fluminense Tax Administration to the Taxpayer.
- **Fisco-Fácil System:** it is a portal of transparency and services, with a focus on Self-regulation (where the taxpayer can check the issues that are being monitored by SEFAZ-RJ) and on offering automated tax services;
- **ITD Declaration System (SD-ITD):** allows the taxpayers of the State of Rio de Janeiro to complete the electronic ITD Declaration for the taxable events that occurred from March 1, 1989 onwards from the Nature of Inheritance, Donation, Assignment, Usufruct, Trust and Marital Dissolution.
- **Implementation of the e-Process (SEI-RJ):** it is a tool that allows the production, edition, signature and processing of documents within the system itself, providing the virtualization of processes and documents, allowing simultaneous performance of several units at the same time. the same process, even if physically distant, reducing the time to carry out the activities.
- **Incentive to spontaneous tax collection (Collection pole and Friendly Notice):** the Tax Administration of the State of Rio de Janeiro after the legal deadline for payment of the tax credit, declared spontaneously or officially released, sends it for enrollment in Active Debt at the Attorney's Office General of the State. The Administrative Collection Pole has the objective of carrying out collection procedures after the expiration of the legal term and before enrollment in Active Debt, thus increasing administrative tax collection. The idealized collection model is not a mere contact to inform about the debt with the State, but an opportunity to inform about the existence of the debt and its values, the possibilities for payment, even in installments, and the increase that the debt will suffer if payment is not made at that moment.
- **Implementation and Management of electronic tax documents and books with a focus on simplifying bureaucracy and increasing collection** (Ex: Digital Tax Bookkeeping - EFD, Digital Accounting Bookkeeping -ECD, Electronic Invoice - NFe, Electronic Consumer Invoice - NFCE, Nota Electronic Loan Tax - NFAe, etc.);
- **Creation of the Monitoring Area for Major Taxpayers:** considering that the State tax collection is highly concentrated in a small number of companies (about 200 state registrations are responsible for 60% of all ICMS collected), this sector focuses on continuously observing several indicators of these main contributors and study each movement of their collections and economic-fiscal information, aiming to detect inconsistencies, possible evasion and the need for legislative changes, among others.
- **Creation of the Tax Planning Superintendence, which has within its competences the focus on creating "tax networks".** Fiscal meshes are the recent opportunity of the State so that with little recourse it can increase the sense of risk for tax evaders, being relatively precise in the choice of establishments subject to inspections and identifying the signs of irregularity in their birth, allowing the plowing of the infraction notice does not mean the end of that economic activity, but a realignment with the legal norms and an entry of the tax due in the public coffers.

- **Result Indicator System:** in 2014, in partnership with the company FALCONI CONSULTORES DE RESULTADO, the Tax Administration of the State of Rio de Janeiro, in the course of implementing its strategic management, and aiming to improve the collection of the State of Rio de Janeiro, created several indicators that, at the time, fully mapped all the important parameters for controlling the results of this house. The current management, using this knowledge, created a System of Result Indicators that is in the process of being implemented by the agency.
- **Extinction of the Unique Tax Benefits Document - DUB:** following the direction of simplifying tax legislation, as well as improving the business environment in the State of Rio de Janeiro, we were able to extinguish this document and incorporate all the necessary data in the Digital Tax Bookkeeping for inspection purposes.

It should be noted that these initiatives were implemented almost massively with their own resources, coming from the Fund for the Administration of Farms - FAF.

It is important to emphasize that the current management is completely committed to expanding the collection base, as well as strengthening ties with the main stakeholders, with a priority focus on the relationship with the taxpayer.

Following the objective of modernizing the Tax Administration of the State of Rio de Janeiro, we list below the projects that are currently underway:

- Tax Compliance Project;
- ICMS Simplification Project;
- Professional Training (PACT 2021 and LNT 2021);
- Digitization (collection in spreadsheet);
- Tax Benefit System;
- Indicators and reports;
- Digital Service of the State of Rio de Janeiro (ADRJ);
- Automatic Notice of Infringement for non-compliance with accessory obligations delivered after the deadline;
- batch infraction notice;
- Special Tax Credit Installment Program (PEP - ICMS);
- Analytical intelligence project;
- Link analysis project;
- Forensic laboratory project;
- Project to modernize the fiscal barrier;
- PIX project;
- New data project (signing of agreements);
- MEI registration project;

It proves that these actions are already being reflected in the expressive increase of the collection in the year of 2020, as we can see the report below:

TAX COLLECTION (SEFAZ-RJ)			
	2019	2020	%
January	5,42	5,38	-0,9%
February	4,15	3,94	-4,9%
March	3,58	3,84	7,2%
April	3,92	3,31	-15,6%
May	3,56	2,60	-26,8%
June	3,24	2,95	-9,0%
July	3,27	3,32	1,3%
August	3,46	3,72	7,6%
September	3,59	3,87	7,7%
October	3,62	5,13	41,8%
November	3,60	4,42	23,0%
December	4,01	4,86	21,1%
Total	45,43	47,35	4,2%
Note 1: values in billions of reais			
Note 2: report extracted on 01/01/2021			

Analyzing only the year 2021, we observe that the trend persists, with a significant increase in the tax collection of the State of Rio de Janeiro:

TAX COLLECTION (SEFAZ-RJ)			
	2020	2021	%
January	5,23	5,30	1,3%
February	3,82	4,61	20,5%
March	3,73	4,03	8,1%
April (Partial)	2,72	3,85	41,5%
Total	15,50	17,78	14,7%
Note 1: values in billions of reais			
Note 2: report extracted on 28/04/2021			

In this sense, we understand that we are focused on improving and modernizing the Tax Administration of the State of Rio de Janeiro, with a focus on increasing revenue and proximity to the taxpayer / citizen.

We understand that TADAT is an excellent tool to help our Tax Administration in this process. We hope to soon request a new visit from the World Bank team with a focus on proving the advances we are making.

As previously stated, unfortunately due to the short time required for this answer to be carried out, we have not been able to deepen the issues discussed above. In this sense, we are available to schedule a meeting with a focus on clarifying in detail any doubts that the World Bank team may have.

Yours sincerely,

GUILHERME MERCÊS
Secretary of Finance of the State of Rio de Janeiro



Documento assinado eletronicamente por **Guilherme Mercês, Secretário de Estado**, em 30/04/2021, às 18:53, conforme horário oficial de Brasília, com fundamento nos art. 21º e 22º do [Decreto nº 46.730, de 9 de agosto de 2019](#).



A autenticidade deste documento pode ser conferida no site http://sei.fazenda.rj.gov.br/sei/controlador_externo.php?acao=documento_conferir&id_orgao_acesso_externo=6, informando o código verificador **16444952** e o código CRC **063BB4FA**.

Referência: Caso responda este Ofício, indicar expressamente o Processo nº SEI-040083/000430/2021 SEI nº 16444952

Av. Presidente Vargas, nº 670, - Bairro Centro, Rio de Janeiro/RJ, CEP 20071-001
Telefone: - www.fazenda.rj.gov.br