

# Subnational Sovereign Wealth Funds in Brasil: the Cases of Maricá and Niterói in Comparative Perspective

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**ABSTRACT:** This study conducts a comparative analysis of two subnational sovereign wealth funds in Brasil: the Sovereign Wealth Fund of Maricá (FSM) and the Revenue Equalization Fund of Niterói (FER). Both municipalities are significant recipients of oil royalties in the state of Rio de Janeiro. While both funds aim to mitigate the fiscal volatility and finite nature of oil revenues, they operate under distinct institutional designs and governance models. Through a systematic review of legal frameworks, official reports, and operational practices, this paper investigates how institutional differences shape the effective function of these funds. The analysis reveals that the FSM was designed as a flexible "savings-development" fund, closely aligned with the municipal government's political agenda to finance social and economic development programs. In contrast, the FER was structured as a rigid "stabilization-savings" fund, governed by technical criteria and strict withdrawal rules aimed at ensuring long-term fiscal prudence. The study identifies four causal mechanisms explaining this divergence: (i) formal constraints embedded in their legal instruments; (ii) the degree of autonomy and technicality of their governance bodies; (iii) the nature of their transparency and accountability mechanisms; and (iv) the pre-existing political and institutional context of each municipality. The findings suggest that the design of governance rules is a critical determinant of whether subnational sovereign wealth funds function primarily as instruments of intergenerational savings or as tools for current public policy.

**KEYWORDS** - Sovereign Wealth Funds; Subnational Government; Oil Royalties; Fiscal Governance; Maricá; Niterói.

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## I. INTRODUCTION

Oil and gas exploration has long been an ambiguous pairing for subnational territories: while it substantially expands fiscal capacity and investment margins, it also tends to generate forms of budgetary dependence and volatility that can undermine the sustainability of public spending and the quality of local services. In the State of Rio de Janeiro, there is evidence that this dilemma intensified over the last decade due to changes in the spatial distribution of petroleum revenues, which shifted significant amounts to municipalities such as Maricá and Niterói and, consequently, increased those entities' budgetary exposure.

Against this backdrop, relatively novel institutional initiatives have emerged in Brasil at the municipal level: the establishment of instruments that adopt the language — and part of the functions — of so-called sovereign wealth funds, with declared goals of building public savings, mitigating volatility and financing long-term programs. The cases of the Sovereign Wealth Fund of Maricá (FSM) and the Revenue Equalization Fund of Niterói (FER) are particularly informative for thinking about the transfer and adaptation of instruments conceived for the national level to the municipal scale. Their legislation and regulation combine intergenerational goals with explicit exceptions that allow countercyclical or emergency uses, which points to a hybrid institutional design subject to practical tensions.

Specialized literature warns that the mere existence of a fund does not, by itself, guarantee fiscal discipline or protection against political capture: features such as the composition and autonomy of the deliberative body, explicit withdrawal rules, the investment profile and transparency commitments strongly mediate a fund's practical outcomes (Machado, 2018). Thus, it is plausible that the ultimate function of these instruments — whether they operate predominantly as intergenerational savings vehicles or as ongoing sources for social policy financing — depends largely on the coherence among declared objectives, the legal framework and concrete administrative arrangements.

This study is motivated by empirical and normative concerns. Empirically, the recent creation of these municipal funds provides a window to observe a process of “institutional innovation” within an arena — the royalties economy — that in Brasil has been marked by high spatial concentration and marked distributive effects. Theoretically, the investigation can help problematize the transferability of normative principles developed for national sovereign funds (for example, the “Santiago Principles” [IFSWF, 2014]) to the subnational context, highlighting which regulatory and procedural elements tend to be decisive for patrimonial preservation and for the social legitimacy of such funds. In that regard, governance reports and case studies suggest that practices of self-monitoring, transparency and collegial decision-making can be adapted to the local level, albeit with important limits (IFSWF, 2016).

Methodologically, the paper adopts a comparative case-study design centered on documentary analysis — municipal laws, decrees, statutes, resolutions and public reports — complemented by a critical literature review and, where available, secondary data on municipal revenues. This strategy favors an in-depth understanding of institutional design and political intentions, while acknowledging its limits for assessing long-term socioeconomic impacts, which would likely require time series and supplementary empirical evaluations. The inferences offered here are therefore presented as plausible and testable, not as incontestable conclusions.

The section that follows lays out the theoretical framework that guides the reading (linkages between sovereign funds, financialization and public governance); next the institutional context of the cases and the relevant legal instruments are described; the central section carries out a comparative analysis of governance rules, permitted uses and transparency practices; finally, theoretical implications and policy recommendations aimed at reducing dependence risks and improving coherence between declared objectives and operational instruments are discussed.

## **II. HISTORICAL-ECONOMIC AND INSTITUTIONAL CONTEXT (BRASIL AND THE STATE OF RIO DE JANEIRO)**

This chapter places the reader in the background necessary to understand why municipalities such as Maricá and Niterói became relevant actors in the field of petroleum rents and why the creation of municipal instruments with the appearance of “sovereign funds” can be read as an institutional response to a concrete political-fiscal problem. First, the legal and technical-operational architecture of petroleum revenue distribution in Brasil is summarized; next, the recent dynamics of royalties and special participations and their spatial distribution are discussed, with emphasis on the State of Rio de Janeiro; finally, the local institutional trajectories that preceded the creation of the Sovereign Wealth Fund of Maricá (FSM) and the Revenue Equalization Fund of Niterói (FER) are described, stressing analytical implications for the comparative study.

### **Legal and technical-operational architecture of petroleum revenue distribution in Brasil**

The distribution of revenues arising from petroleum exploration in Brasil rests on a set of norms that operate on two complementary planes: (i) royalties — a regular compensation calculated over the value of each field's production — and (ii) special participation — an extraordinary compensation tied to fields of high profitability or output (BRASIL, 1989; BRASIL, 1997). The operationalization of these transfers is largely

administered by agencies and regulatory instruments that define the tax base, rates and sharing criteria, with the National Agency of Petroleum, Natural Gas and Biofuels (ANP) playing a central role in this process (ANP, 2024).

Two analytical consequences of this architecture deserve emphasis. First, the combination of steady parcels (royalties) and extraordinary parcels (special participations) tends to produce cash-flow profiles with distinct volatilities: special participations, by their nature, can cause revenue spikes that temporarily expand the budgetary capacity of subnational entities. Second, the spatial distribution of these resources is not neutral: legal and operational criteria (for instance, being located near production or shipping facilities) — together with local dynamics of appropriation and governance — strongly influence which municipalities come to receive substantial amounts (BRASIL, 1988; BRASIL, 1989; BRASIL, 1997; ANP, 2024).

### **Recent evolution of royalties and special participations — fiscal implications**

Over the last two decades there has been an absolute — and in many cases real — increase in transfers classified as royalties and special participations, particularly during phases of production expansion and periods of higher international prices (LEÃO, 2024). Institutional reports and technical analyses indicate that these increases have raised the relative importance of such revenues within certain municipal budgets, conditioning local spending and investment decisions (LEÃO, 2024; ARAUJO; NAZARETH; OLIVEIRA, 2018).

For the State of Rio de Janeiro, the confluence between geographical proximity to productive blocks, the intensity of special participations and trajectories of municipal administrative capacity helps explain why some municipalities began to receive significant extraordinary revenues. This pattern is ambivalent: on the one hand, it opens windows of opportunity for investments and the expansion of public policies; on the other, it tends to deepen revenue vulnerabilities when flows retract, which points to the need for institutional protection mechanisms and prudent management (TRAMANSOLI; SIQUEIRA, 2024; LEÃO, 2024).

### **Spatial concentration of revenues and the emergence of local funds: why Maricá and Niterói?**

The spatialization of petroleum revenues in Brasil does not mechanically reproduce the geography of the fields; rather, it results from an interaction between distribution rules and local contexts of political appropriation. In Rio de Janeiro, the combination of sizeable special participations and particular political trajectories appears to have stimulated the adoption of local patrimonial-management instruments — among them Maricá's FSM and Niterói's FER (TRAMANSOLI; SIQUEIRA, 2024).

Maricá began to figure among relevant recipient municipalities after redistributions of revenues linked to nearby productive blocks, and the municipal legislation that created the Sovereign Wealth Fund of Maricá (Law No. 2.785/2017) sets objectives of saving and revenue protection while simultaneously allowing uses for social purposes and local investment. This hybrid institutional design — articulating patrimonial preservation and operational flexibility — becomes useful to analyze tensions between intergenerational goals and current needs (MARICÁ, 2017; TRAMANSOLI; SIQUEIRA, 2024).

In Niterói, the formalization of the Revenue Equalization Fund (FER) took place through an amendment to the municipal Organic Law (Amendment No. 41/2019) and subsequent regulatory acts, including decrees and complementary laws that detail governance and operational criteria. The FER's normative discourse emphasizes fiscal stabilization and the construction of intergenerational savings, but the legal framework also foresees devices for use in exceptional situations, reproducing the ambivalence observed in Maricá and placing emphasis on the analysis of withdrawal rules and governance mechanisms (NITERÓI, 2019; TRAMANSOLI; SIQUEIRA, 2024).

### **Local institutional trajectories: decision processes, actors and political narratives**

The emergence of municipally-level funds with sovereign-like features can be understood through three interdependent vectors: (i) the sudden or growing availability of extraordinary resources; (ii) the presence of political and technical actors capable of designing and instituting relatively sophisticated financial mechanisms; and (iii) legitimizing narratives that mobilize the language of “intergenerational savings,” “fiscal autonomy” and “preparation for the post-royalties era” (TRAMANSOLI; SIQUEIRA, 2024).

In both municipalities, the legislative processes and official documents that gave rise to FSM and FER make these motivations explicit and, at the same time, configure arenas of conflict over spending priorities (for example, current expenditure versus productive investment). Analytically, the statutory instruments that institute the funds contain relevant clues: the composition of deliberative bodies, withdrawal rules (percentages, triggers, conditions), investment policies and transparency requirements are elements likely to condition a fund’s propensity either to function as a patrimonial reserve or, alternatively, as a source for financing ongoing programs (MARICÁ, 2017; NITERÓI, 2019; TRAMANSOLI; SIQUEIRA, 2024).

Formal trajectories also diverge in their degree of technical institutionalization: while Maricá’s normative history records successive updates that redefined FSM’s duties and mechanisms, in Niterói the institutionalization of FER involved an amendment to the Organic Law followed by decrees and complementary laws, indicating an effort at regulatory detail that, in principle, can increase predictability and technical management capacity. These formal differences are relevant as plausible explanatory variables for divergences in practice between the funds (MARICÁ, 2017; NITERÓI, 2019).

### **Implications for the comparative research (summary and data sources)**

The synthesis above yields three analytical implications that will guide the empirical chapters. First, the national legal structure conditions but does not determine local responses: federal laws define distribution frameworks, yet the choice to convert revenues into savings or to spend them depends on municipal institutional choices (BRASIL, 1988; BRASIL, 1989; BRASIL, 1997). Second, the volatility associated with special participations makes the analysis of withdrawal rules and governance devices particularly relevant, since revenue spikes tend to create political pressures that can be mitigated (or amplified) by legal norms and local administrative routines (LEÃO, 2024). Third, formal differences in institutionalization (laws, decrees, transparency instruments) constitute plausible explanatory variables for differences in practice across funds, justifying the systematic coding of legal devices in the following sections (MARICÁ, 2017; NITERÓI, 2019; TRAMANSOLI; SIQUEIRA, 2024).

To operationalize the empirical investigation, the datasets to be mobilized include: (a) municipal legislation and decrees (full texts of FSM and FER); (b) public reports and investment policies; (c) time series of municipal revenues (royalties and special participations) obtained from official databases; and (d) secondary literature on the royalties economy in the State of Rio de Janeiro (ANP, 2024; LEÃO, 2024; TRAMANSOLI; SIQUEIRA, 2024). It is also recommended to construct appendices containing the complete legal texts and a spreadsheet with annual transfer series to allow replicability and preliminary correlation tests between flows and spending decisions.

### **III. THE SOVEREIGN WEALTH FUND OF MARICÁ (FSM)**

This chapter offers an in-depth empirical description of the Sovereign Wealth Fund of Maricá (FSM), confronting its normative objectives with evidence on its operational practice. The analysis is structured along five axes: (i) the history of its creation and successive changes to its regulatory framework; (ii) the governance architecture, including the composition of its bodies and decision procedures; (iii) the actual uses of its resources, emphasizing illustrative withdrawals and the profile of its investment portfolio; (iv) transparency and accountability practices; and (v) a preliminary analysis of the institutional mechanisms that help explain the observed pattern of activity.

### **Historical background and regulatory changes**

The Sovereign Wealth Fund of Maricá was established by Municipal Law No. 2.785 of 14 December 2017 as a direct institutional response to the marked increase in revenues from royalties and special participations (MARICÁ, 2017). Its regulatory framework, however, proved to be dynamic: successive revisions refined and, in some cases, reoriented its objectives and mechanisms. On 3 December 2019 the original legislation was revoked and replaced by Law No. 2.902, which deepened provisions on the fund's aims, restrictions on resource use and the functions of its deliberative body (MARICÁ, 2019; TRAMANSOLI & SIQUEIRA, 2024).

The FSM's institutional design was adapted again in 2020 and 2021 through Laws No. 2.961/2020 and No. 3.042/2021, which introduced addenda to adjust resource-use rules in response to the COVID-19 health crisis. Those amendments relaxed withdrawal rules to allow countercyclical policies and the financing of emergency programs (MARICÁ, 2020). More recently, Law No. 3.341 of 15 June 2023 revoked the 2019 statute and substantially broadened the fund's list of objectives, explicitly including the creation of economic infrastructure to attract investment and the sponsorship of research and technological innovation projects (MARICÁ, 2023a). This trajectory of successive regulatory updates suggests that the FSM operates as an adaptive political-administrative instrument, whose design is continuously adjusted to the municipality's political and economic conjuncture.

### **Governance: composition and decision procedures**

FSM governance is organized around two central instances: an executive secretariat and a deliberative council. The fund is linked to the Secretariat of Planning, Budget and Finance, which performs the executive secretariat role. The highest decision-making body is the Directive and Deliberative Council of the FSM (CDDFSM), formally instituted by Municipal Decree No. 120 in March 2018; its composition was later altered by Decree No. 752 in October 2021 (MARICÁ, 2018; 2021). The council is composed of the Secretaries of Planning, Budget and Finance; Economic Development, Trade, Industry, Petroleum and Ports; and Government.

This collegiate body is responsible for defining the policy for applying resources, approving the nature and terms of investments, and establishing return and risk criteria (TRAMANSOLI & SIQUEIRA, 2024). The CDDFSM's composition — restricted to high-level members of the municipal executive — indicates centralized decision-making and limited administrative independence from the incumbent government. Such an arrangement tends to align fund decisions with the administration's strategic priorities, but it also exposes the fund to pressures for short-term use, which can create tensions with the aim of building intergenerational savings.

### **Uses and investment profile**

FSM's operational practice reflects the hybrid design signaled by its legislation. On one hand, the fund has been used to finance countercyclical policies: for example, in 2020 a withdrawal of R\$20 million financed the "Fomenta Maricá" program, an emergency credit initiative that reached over 700 local firms during the COVID-19 pandemic (MARICÁ, 2023a, p. 7). This episode illustrates the fund's role as a fiscal and economic stabilizer, mobilized in crisis moments.

On the other hand, FSM's investment portfolio follows a capital-preservation strategy aimed at secure returns, consistent with a conservative profile. By July 2023 the fund's assets — exceeding R\$1.5 billion — were allocated mainly to fixed-income investment funds managed by public banks (Caixa Econômica Federal and Banco do Brasil), with holdings predominantly in federal government securities and repurchase agreements (MARICÁ, 2023a). The portfolio composition — roughly 34% in Caixa FIC TOP Renda Fixa, 22% in Caixa FI Brasil Títulos Públicos, 14% in Caixa FI Brasil Matriz and 30% in BB RF Ref DI TP FI — shows low exposure to private securities and high liquidity (MARICÁ, 2023a, p. 19). Portfolio returns have closely tracked CDI movements, indicating asset management that prioritizes safety and adherence to a conservative benchmark.

### **Transparency and accountability**

FSM adopts transparency mechanisms that allow public scrutiny of its activities. The municipality maintains an official website ([fundosoberano.marica.rj.gov.br](http://fundosoberano.marica.rj.gov.br)) where the fund's history, relevant legislation and council decisions are published (TRAMANSOLI & SIQUEIRA, 2024). The main accountability instrument for financial performance is the publication of periodic reports. For instance, Technical Note No. 30 (FSM) details asset performance for June and July 2023, showing portfolio composition, monthly and cumulative returns for each fund and comparisons with indicators such as CDI and IPCA (MARICÁ, 2023a).

The practice of preparing such technical reports was institutionalized by Law No. 3.341/2023, which mandates the production of "managerial reports monitoring the Fund's performance" (MARICÁ, 2023a, p. 5). The regularity and technical detail of these documents constitute a robust transparency mechanism, enabling oversight by control agencies and civil society over the financial management of resources.

#### **Analysis of institutional mechanisms**

The FSM's pattern of action can be explained by the interaction of three institutional mechanisms. First, a flexible regulatory framework that has been successively modified to balance the long-term saving objective with the need to respond to economic shocks and finance current strategic policies. The legal regime allows countercyclical uses, which distinguishes FSM from sovereign funds strictly focused on intergenerational saving.

Second, centralized governance: the deliberative body (CDDFSM) is composed exclusively of municipal secretaries. This arrangement ensures alignment with government priorities but reduces fund autonomy and makes it vulnerable to instrumentalization for short-term political ends, a risk to long-term patrimonial sustainability.

Third, the combination of a conservative investment policy with robust transparency mechanisms. While the portfolio seeks capital preservation, the regular publication of detailed technical reports confers legitimacy and enables social control over financial management. In sum, FSM operates as a hybrid instrument whose function oscillates between a savings vehicle and a stabilization-and-development fund, with practical orientation strongly mediated by political conjuncture and decisions of a council directly linked to the executive.

#### **IV. THE REVENUE EQUALIZATION FUND (FER) OF NITERÓI**

This chapter analyses the Revenue Equalization Fund (FER) of Niterói, mirroring the structure used for Maricá to enable a systematic contrast. It examines: (i) the political-legal history and motivation for the fund's creation; (ii) its operational rules and governing bodies; (iii) evidence on resource use, with emphasis on crisis exceptions; (iv) transparency mechanisms and the relationship with the municipal executive; and (v) a preliminary analysis of the institutional arrangements that explain the observed operational choices.

##### **Political-legal history and motivation for creating the FER**

The Revenue Equalization Fund (FER) was created through Amendment No. 041/2019 to the municipal Organic Law, which inserted Article 149-A into the city's charter. Choosing an amendment to the Organic Law, rather than an ordinary statute, signals an intention to give the fund greater legal rigidity and institutional stability, making ad hoc changes harder. Decree No. 13.215/2019 regulated the FER, detailing its objectives, revenue sources and operating rules.

The declared motivation for establishing the FER is twofold: to promote fiscal stabilization and to build intergenerational savings for future generations. The decree's Article 2 lists five formal objectives: (i) promote intergenerational equity; (ii) mitigate volatility in revenue flows; (iii) ensure fiscal sustainability in the short, medium and long term; (iv) increase transparency in resource use; and (v) strengthen financial autonomy and mitigate economic cycle effects. Like Maricá's initiative, FER responds to growing dependence on petroleum revenues, but its entrenchment in the Organic Law indicates a bet on a regulatory framework more resilient to short-term political pressure.



### **Operational rules and composition of governing bodies**

FER's operational design is markedly more restrictive than FSM's. Its main revenue source is fixed: 10% of each transfer received as special participation. Resource use is conditional on explicit triggers: withdrawals are allowed only if actual special-participation receipts fall below ANP estimates and below amounts projected in the Annual Budget Law (LOA). Even then, withdrawals are capped at 50% of the estimated shortfall and at 20% of the Fund's total balance.

Governance also differs substantially. Initially, management was assigned to the existing Financial Programming and Fiscal Management Commission (CPFGF). In 2021, Law No. 3.633 created a Management Council for the FER (NITERÓI, 2021), charged with formulating application and management policy. The Council comprises six members with a predominantly technical profile: the Secretaries of Finance and of Planning, the subsecretaries of Finance and of Budget, an appointed public servant, and a representative from the Municipal Comptroller's Office.

Subordinate to the Management Council, an Investment Committee was established to analyse and assess portfolio allocation strategies. Composed of five civil servants who may not sit on the Management Council, committee members must hold professional certification for portfolio administration. This separation between strategic decision-making (Council) and tactical investment functions (Committee), together with qualification requirements, embodies an effort to professionalize and depoliticize asset management, contrasting with FSM's more centralized and politically aligned governance.

### **Evidence of use and investment profile**

As of November 2023, FER's assets amounted to R\$945.6 million. The fund's portfolio, consistent with a conservative policy, consists mainly of fixed-income instruments placed across funds managed by public and private financial institutions.

FER's withdrawal rules were stress-tested during the COVID-19 pandemic. To allow the use of resources for socio-economic mitigation policies, a new amendment to the Organic Law (No. 43/2020) was required (NITERÓI, 2020); it exceptionally authorized the use of up to 70% of the fund's resources for that purpose. Between 2020 and 2021 some R\$198 million from the FER were used to finance emergency policies. This episode is informative in two ways: it shows the effectiveness of restrictive rules in preventing discretionary use, and it demonstrates that even a robust legal framework can be relaxed through new normative acts when political will mobilizes to respond to extreme crises.

### **Transparency and relations with the municipal executive**

FER has a structured and multifaceted transparency system, with information published on its official website. Accountability is formalized through three distinct reporting instruments with different periodicities: (i) a monthly Performance Report, detailing executed operations; (ii) a quadrimestral Compliance Report, which verifies portfolio adherence to policy and law; and (iii) an annual Accountability Report, containing financial statements and an assessment of compliance with investment parameters. This reporting architecture is more detailed and varied than FSM's and reinforces control and accountability mechanisms.

Although the relationship with the executive remains close—since the Management Council is chaired by the Secretary of Finance—the presence of technical members and the Comptroller's Office, together with

certification requirements for the Investment Committee, creates institutional checks that tend to raise the quality of decisions.

### **Preliminary causal analysis: explanatory arrangements**

Three institutional arrangements help explain FER's observed operational choices and distinguish it from Maricá's model. First, normative rigidity: establishing the fund via an Organic Law amendment and fixing explicit quantitative triggers for resource use creates higher formal barriers to discretionary withdrawals, steering the fund toward a stabilization role.

Second, governance with a technical bias: the Management Council's composition and, notably, the creation of a professionalized, functionally autonomous Investment Committee indicate a deliberate attempt to insulate allocation choices from immediate political pressure. This arrangement favours adherence to long-term investment policies and reduces capture risk.

Third, multifaceted transparency: the periodic reports with distinct focuses (performance, compliance, annual accountability) amplify monitoring capacity by control agencies and civil society. Together, these mechanisms position FER as an instrument more prone to patrimonial preservation and fiscal discipline, where uses for current expenditure are exceptional and conditioned to clear rules—contrasting with FSM's more flexible and politically responsive model.

## **V. COMPARATIVE ANALYSIS AND CAUSAL INFERENCES**

The individual analysis of Maricá's Sovereign Wealth Fund (FSM) and Niterói's Revenue Equalization Fund (FER) reveals two distinct institutional models designed to manage a common problem: the volatility and finiteness of petroleum revenues. This chapter confronts the cases to identify regularities and divergences in their designs and practices, aiming to infer the causal mechanisms that explain their different effective functions. The analysis seeks to answer two central questions: (i) Which institutional differences explain divergences in the funds' use and final function? and (ii) To what extent do contextual variables — such as local politics and royalty dependence — condition their effects?

### **Comparative Matrix: Rules versus Practices**

To systematize the contrast, Table 1 presents a comparative matrix that confronts the main institutional and operational attributes of FSM and FER.

Table 1 — Comparative matrix between FSM (Maricá) and FER (Niterói)

| <b>Institutional Attribute</b> | <b>Sovereign Wealth Fund of Maricá (FSM)</b>   | <b>Revenue Equalization Fund (FER) – Niterói</b>   |
|--------------------------------|--|--|
| <b>Instrument of Creation</b>  | Ordinary municipal law (subject to successive amendments).                               | Amendment to the Municipal Organic Law (greater legal rigidity).                             |
| <b>Declared Objectives</b>     | Hybrid: savings, stabilization, funding of strategic projects, regional development, and | Focused: fiscal stabilization, intergenerational savings, and mitigation of economic cycles. |



|                                      |   |   |
|--------------------------------------|---|---|
|                                      | innovation.   |   |
| <b>Governance (Body)</b>             | Centralized and political: Board composed exclusively of municipal secretaries.                   | Segregated and technical: Management Council with technical profile plus a separate certified Investment Committee. |
| <b>Decision-making Autonomy</b>      | Low: directly aligned with the incumbent executive's political priorities.                        | Moderate to high: investment decisions isolated by a technical committee; strategic decisions collegial.            |
| <b>Withdrawal Rules</b>              | Flexible: allow use (e.g., up to ~30% of revenue) for projects by discretionary council decision. | Rigid: conditioned on quantitative triggers (revenue shortfall) with explicit withdrawal ceilings.                  |
| <b>Usage Practices (Withdrawals)</b> | Used to finance countercyclical programs (e.g., Fomenta Maricá) under ordinary rules.             | Used for emergency needs (COVID-19) only after a new Organic Law amendment relaxing restrictions.                   |
| <b>Effective Function</b>            | Hybrid: operates as a savings-development fund with strong stabilization component.               | Focused: operates primarily as a stabilization-savings fund.  |
| <b>Transparency</b>                  | High: periodic technical reports and official website.  | Very high: multifaceted reporting system (performance, compliance, annual accountability).                          |

### Causal mechanisms

Four interdependent mechanisms appear to explain the divergences observed in the funds' practices and functions:

(a) Formal constraint (Withdrawal rules). This is the most direct mechanism. FER's rigidity, embedded in the Organic Law, imposes very high political transaction costs for using resources outside the established triggers. The need for a new constitutional-level municipal amendment to release funds during the pandemic demonstrates the strength of this constraint. By contrast, FSM's more flexible rules, set by ordinary law, allow its (political) council to authorize withdrawals for development or countercyclical policies with greater discretion, making it a more agile — but also more exposed — instrument for recurring spending pressures.

(b) Collegiality and autonomy (Governance design). Governance modulates how formal rules are applied. FSM's politically composed CDDFSM ensures the fund's function aligns with the municipal government's political project — the fund often operates as a financial arm of the administration. In Niterói, the functional separation between a Management Council and a certified Investment Committee creates bureaucratic insulation that filters allocation decisions from direct political influence, reinforcing patrimonial preservation logic.

(c) Transparency and accountability. Although both funds adopt transparency practices, FER's model — with compliance reports that verify adherence to the rules — generates a stronger accountability mechanism oriented to legal conformity. That increases the credibility of formal constraints because any deviation would be quickly detected and publicized. FSM's transparency is more performance-oriented, consistent with its role as a large investment portfolio.

(d) Political context and institutional trajectory. Institutional designs do not emerge in a vacuum. Maricá's trajectory — a government that implemented a robust and innovative set of social policies (for example, the Mumbuca currency and free public transport) before FSM's consolidation — likely favored a flexible fund

capable of sustaining and expanding that project. Niterói's context appears to have favored a more orthodox approach to fiscal prudence, reflecting a different political coalition or administrative culture that prioritized building a stabilization "cushion" rather than an engine for current development.

#### **Possible causal process: a historical sequence**

A simplified process-tracing exercise links institutional devices to observed usage decisions:

Antecedent conditions: Both municipalities face a substantial and volatile increase in royalty revenues, generating a governance challenge.

Divergent institutional choices: Niterói chooses high restriction — embedding FER in the Organic Law with rigid withdrawal rules and technical governance. Maricá opts for controlled flexibility — creating FSM by ordinary law with broader usage rules and governance aligned with the executive.

Critical test (COVID-19): The health and economic crisis creates an urgent demand for resources to fund emergency policies in both municipalities.

Divergent responses: In Maricá, the CDDFSM uses its legal prerogative to authorize withdrawals for the Fomenta Maricá program; the decision flows through existing governance channels. In Niterói, FER's rules block a similar automatic withdrawal; a complex legislative intervention (a new Organic Law amendment) is required to permit exceptional use.

Consolidated effective function: The sequence confirms that initial institutional design strongly conditioned each fund's effective function — FER as a last-resort stabilization fund; FSM as a hybrid savings-and-development instrument.

#### **Robustness of inferences and limitations**

The robustness of this analysis can be examined through counterfactuals. Had Niterói adopted Maricá's flexible model, FER resources would likely have been mobilized faster for pandemic response via executive decision, without the need for an Organic Law amendment. Conversely, had Maricá adopted Niterói's strict rules, financing Fomenta Maricá via FSM would have been unfeasible without complex legal changes or alternative budgetary sources.

However, the inferences have limits. This document-based analysis does not capture the internal deliberative nuances (the "black boxes" of council meetings). Also, since the funds are relatively recent, their long-term impacts on fiscal sustainability, economic diversification and intergenerational equity cannot yet be fully assessed. Therefore, conclusions refer to the funds' effective functions during their early years of operation, indicating plausible tendencies rather than inevitable outcomes.

## **VI. CONCLUSION**

The emergence of sovereign fund-like instruments in Brazilian municipalities that receive petroleum royalties represents a significant institutional innovation, born out of the need to manage the volatility and finitude of extraordinary wealth. Examining the cases of Maricá's Sovereign Wealth Fund (FSM) and Niterói's Revenue Equalization Fund (FER), this study has shown that while both instruments share the aim of mitigating the risks of a "Dutch disease" dynamic at the local level, they do so through fundamentally distinct institutional designs and operational logics.

The comparative analysis reveals that Maricá and Niterói did not merely create funds; they materialized two contrasting visions of how oil wealth should be governed. FSM operates as a savings-development fund, flexible and aligned with a political project of social transformation, whereas FER functions as a stabilization-savings fund, rigid and oriented by fiscal prudence.

In addressing the core research question, these funds reconfigure the governance of petroleum revenues by formalizing decision-making arenas and explicit rules that mediate the conversion of volatile income into public spending. In Maricá, this reconfiguration expanded the executive's autonomy to finance an ambitious and continuous set of social policies, turning FSM into a financial engine sustaining its development model. In Niterói, FER's governance was designed to restrict executive discretion, prioritizing budgetary protection against revenue

shocks and the accumulation of long-term patrimonial reserves. The consequences are therefore ambivalent: while Maricá's model enhances immediate capacity for social investment, Niterói's strengthens intertemporal fiscal resilience.

The causal analysis suggests that this functional divergence is not accidental but the direct outcome of deliberate institutional choices. Four mechanisms proved central: (i) formal restriction, with Niterói's Organic Law amendment imposing higher political costs for fund usage than Maricá's ordinary law; (ii) governance autonomy, with FER's segregated technical structure insulating it from short-term political pressures, in contrast to FSM's politically aligned council; (iii) accountability logics, with Niterói's reporting emphasizing rule compliance, while Maricá's emphasizes investment performance; and (iv) pre-existing political-institutional context, which in Maricá favored creating a flexible instrument to sustain ongoing social policies, and in Niterói fostered a more orthodox approach to fiscal management.

The inferences presented here, while robust within the scope of documentary analysis, face limitations. The study does not delve deeply into the political dynamics and actor coalitions that shaped each model's adoption, nor can it, given the short time horizon, evaluate long-term socioeconomic impacts. These gaps open a promising research agenda. Future studies might investigate, through longitudinal analyses, whether the effective function of these funds shifts with changes in political leadership. Additionally, quantitative impact evaluations will be crucial to assess the extent to which each model contributes to economic diversification, inequality reduction, and intergenerational justice.

Ultimately, the cases of Maricá and Niterói offer valuable lessons for other subnational territories confronted with natural resource abundance. They demonstrate that creating a sovereign fund is, in itself, less decisive than its institutional design. Governance rules, withdrawal criteria, and transparency mechanisms are not technical details but central political choices that determine whether oil's transitory wealth will be converted into a legacy of sustainable development or merely postpone an inevitable fiscal adjustment. The experience of these two municipalities in Rio de Janeiro thus constitutes a living laboratory for reflecting on the challenges of resource governance in the 21st century.

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