



COLEÇÃO
ESTUDOS
CARIOCAS

Economic Development of Rio: 2021-2028

Desenvolvimento Econômico do Rio: 2021-2028

Desarrollo Económico de Río: 2021-2028

Osmar Carneiro Guimarães de Lima¹, Marcel Grillo Balassiano², Carina de Castro Quirino³ and Márcio Menezes Lopes⁴

¹ Secretaria Municipal de Desenvolvimento Econômico do Rio de Janeiro, Rua Sacadura Cabral, 133, Saúde, Rio de Janeiro, RJ, ORCID: 0009-0006-1472-1652, osmarlima@ccpar.com.br

² Secretaria Municipal de Desenvolvimento Econômico do Rio de Janeiro, Rua Sacadura Cabral, 133, Saúde, Rio de Janeiro, RJ, ORCID: 0009-0001-3716-3036, marcel.balassiano@fgv.br

³ Secretaria Municipal de Desenvolvimento Econômico do Rio de Janeiro, Rua Sacadura Cabral, 133, Saúde, Rio de Janeiro, RJ, ORCID: 0000-0002-9916-4077, carina.quirino@prefeitura.rio

⁴ Secretaria Municipal de Desenvolvimento Econômico do Rio de Janeiro, Rua Sacadura Cabral, 133, Saúde, Rio de Janeiro, RJ, ORCID: 0009-0008-2369-4718, marcio.lopes@prefeitura.rio

Abstract

The economic development of the city of Rio, between 2021 and 2028, must be analyzed in light of a context of great challenges and transformations. After a period marked by the economic and social effects of the pandemic, in 2021 the city began a recovery process that combined public policies to generate employment and strengthen strategic sectors, such as innovation, green economy, financial sector, tourism and creative economy. The article aims to examine the axes and foundations that support Rio's economic development, considering the recovery already observed (2021-2024) and the guidelines established in the Strategic Plan 2025-2028.

Keywords: Rio de Janeiro; regional economy; economic development.

Resumo

O desenvolvimento econômico do Rio, entre 2021 e 2028, deve ser analisado à luz de um contexto de grandes desafios e transformações. Após um período marcado pelos efeitos econômicos e sociais da pandemia, a cidade iniciou, em 2021, um processo de retomada que combinou políticas públicas de geração de emprego e fortalecimento de setores estratégicos, como inovação, economia verde, setor financeiro, turismo e economia criativa. O artigo tem como objetivo examinar os eixos e fundamentos que sustentam o desenvolvimento econômico carioca, considerando a recuperação já observada (2021-2024) e as diretrizes estabelecidas no Plano Estratégico 2025-2028.

Palavras-chave: Rio de Janeiro; economia regional; desenvolvimento econômico.

Resumen

El desarrollo económico de Río, entre 2021 y 2028, debe analizarse a la luz de un contexto de grandes desafíos y transformaciones. Tras un período marcado por los efectos económicos y sociales de la pandemia, la ciudad inició, en 2021, un proceso de recuperación que combinó políticas públicas de estímulo a la generación de empleo y el fortalecimiento de sectores estratégicos, como la innovación, la economía verde, el sector financiero, el turismo y la economía creativa. El artículo tiene como objetivo examinar los ejes y fundamentos que sustentan el desarrollo económico carioca, considerando la recuperación ya observada (2021-2024) y las directrices establecidas en el Plan Estratégico 2025-2028.

Palabras clave: Río de Janeiro; economía regional; desarrollo económico.

Volume

14

Issue

1

*Corresponding author

osmarlima@ccpar.com.br

Submitted 02 Feb 2026

Accepted 01 Apr 2026

Published 26 May 2026

Citation

LIMA, O. C. G. et al.

Economic Development of

Rio: 2021-2028. *Coleção*

Estudos Cariocas, v. 14, n.

1, 2026.

DOI: 10.71256/19847203.14.1.214.2026

The article was originally

submitted in

PORTUGUESE.

Translations into other

languages were reviewed

and validated by the

authors and the editorial

team. Nevertheless, for

the most accurate

representation of the

subject matter, readers

are encouraged to

consult the article in its

original language.



1 Introduction

The economic development of the municipality of Rio de Janeiro, between 2021 and 2028, must be analyzed in light of a context of major challenges and transformations, marked both by national macroeconomic constraints and by institutional choices at the local level. After a period strongly impacted by the economic and social effects of the Covid-19 pandemic, the city began, in 2021, a recovery process that combined public policies to stimulate productive activity, job creation and the strengthening of strategic sectors, such as innovation, green economy, financial sector, tourism and creative economy.

The present study aims to examine the axes and foundations that support the economic development of Rio de Janeiro during this period, considering the recovery observed between 2021 and 2024 and the guidelines established in the Strategic Plan 2025–2028.

The analysis is based on the understanding that municipal economic development policies neither operate in isolation nor have full capacity to determine growth trajectories. Their effects occur, to a large extent, through the ability to organize, enhance or anticipate broader trends, reducing institutional costs, coordinating economic agents and creating favorable conditions for attracting investments, formalizing labor and diversifying production. In this sense, the article does not seek to establish strict causal relationships between specific public policies and economic indicators, but rather to identify patterns, strategies and institutional choices that help understand the recent trajectory of Rio de Janeiro's economy in comparison with the national context.

Based on recent evidence on Rio de Janeiro's economy, the study discusses how the city has been seeking to strengthen its institutional and productive structure, recognizing the limits imposed by the federal pact and the national economic cycle, but also exploring the margins of action specific to the municipal sphere. The case of Rio de Janeiro is particularly relevant because it reflects, at the local scale, typical dilemmas of large Latin American metropolises: reconciling economic growth with reducing inequalities, stimulating labor formalization, expanding opportunities for vulnerable groups and promoting diversification of the productive base in a complex and socially heterogeneous urban context.

Thus, this work aims to contribute to the understanding of the policies and strategies that have been transforming Rio de Janeiro's economy in the recent period, highlighting both its structural constraints and its institutional specificities, as well as providing perspectives for the next municipal planning cycle (2025–2028).

2 Literature Review

The present literature review does not aim to exhaust the theoretical debates on economic development, but to organize a set of contributions that help in the interpretation of public policies aimed at promoting development at the local level. The dimensions addressed — inclusive growth, labor market, small and medium-sized enterprises and urban planning — are treated in a complementary manner, insofar as they represent different channels through which municipal governments can influence economic trajectories, within the limits imposed by the broader macroeconomic and institutional context.

2.1 Inclusive Growth

Inclusive growth is understood as the process by which an economy develops in such a way as to broadly diffuse the benefits of its growth, generating productive jobs for the workforce as a whole, offering more equitable opportunities in access to markets and resources, and protecting the most vulnerable groups. Economic growth is the basis for inclusion; however, while some degree of inequality of outcomes is inherent to market economies, high and persistent levels of inequality of

opportunity can undermine the sustainability of growth in the long term.

Although the relationship between inequality and growth has a strong idiosyncratic component, dependent on the social and institutional structures of each country, empirical evidence suggests that high levels of inequality tend, on average, to be negatively associated with sustainable growth. In this context, the International Monetary Fund, within the scope of its agenda on inclusive growth, systematized empirical evidence and policy recommendations in the study "Inclusive Growth" (IMF, 2017), widely disseminated in technical reports and the World Economic Outlook. The work is based on the diagnosis that sustained economic growth tends to be more robust when accompanied by a reduction in inequalities, rejecting the idea of an inevitable trade-off between efficiency and equity. The study identifies a set of policies capable of combining productivity gains with social inclusion, highlighting investments in human capital, strengthening the labor market, expanding access to credit, progressive fiscal policies and well-targeted social protection mechanisms. At the subnational level, the report also emphasizes the importance of active local economic development policies, capable of articulating productive dynamism, job creation and inclusion, especially in large urban centers marked by high socioeconomic heterogeneity.

In the Brazilian context, the literature has also produced analyses that relate inclusion policies to economic dynamism and inequality. A recent example is the study by Fonseca and Matray (2022), which investigates the effects of financial inclusion policies in Brazilian cities with low banking presence. The authors show that the expansion of access to financial services increased both deposits and credit, stimulating entrepreneurship, employment and wage growth in the analyzed municipalities — although the gains tend to concentrate among more qualified workers, reflecting persistent inequality challenges. This evidence indicates that, in Brazil, policies that facilitate access to credit and financial inclusion can contribute to urban economic growth, but the distribution of benefits depends on factors such as human capital and local productive structure, highlighting the complexity of combinations between growth and inclusion.

The urban economics literature highlights that economic recovery processes in large cities tend to be strongly conditioned by local public policies capable of articulating investments, institutional coordination and stimuli to productive activity. Since the classic works of Jacobs (1969), urban growth is understood as a result of economic diversification, the density of productive interactions and the ability of cities to generate new economic uses from existing structures. More recently, authors such as Glaeser (2011) emphasize that cities that manage to align economic development policies with investments in infrastructure, human capital and business environment show greater resilience to adverse shocks and more sustainable growth trajectories.

2.2 Economic Development

The concept of economic development has been the subject of intense debate throughout the twentieth century, especially in the context of peripheral economies. Beyond more general definitions, such as those associated with the improvement of economic and social conditions, different theoretical strands have sought to understand the structural mechanisms that explain distinct development trajectories.

Schumpeter (1984, 1985) highlighted the role of innovation and entrepreneurship as central drivers of economic development, introducing the concept of creative destruction. In contrast to this approach more centered on business dynamics, authors linked to Latin American structuralism, such as Celso Furtado, emphasized structural heterogeneity and the constraints imposed on late industrialization in peripheral economies, marked by persistent productive and technological asymmetries. This perspective was deepened by Brazilian authors such as Maria da Conceição Tavares and Ignácio Rangel, who emphasized the centrality of investment, infrastructure and state action in overcoming structural blockages to

growth. Complementarily, dependency theory, associated with Fernando Henrique Cardoso, drew attention to the limits imposed by the subordinate insertion of these economies in the international system. In critical dialogue with this tradition, authors such as Bresser-Pereira argue that development strategies — including at the subnational level — can mitigate such constraints through macroeconomic and institutional policies aimed at productive competitiveness, suggesting that development results from the interaction between structural constraints and economic policy choices.

More recently, the institutional literature, represented by authors such as North (1991) and Acemoglu and Robinson (2012), emphasized the role of institutions in defining incentives for investment, innovation and human capital accumulation. According to this approach, inclusive institutions — characterized by clear, predictable and widely accessible rules — are fundamental for sustainable long-term growth. Although these works focus mainly on the national scale, their implications are relevant for the local level, insofar as municipal policies can contribute to improving the institutional environment, reducing transaction costs, encouraging entrepreneurship and promoting coordination among economic agents.

2.3 Labor Market

The Brazilian labor market is characterized by high informality, a phenomenon that, although it attenuates unemployment in times of crisis, exposes workers to greater vulnerability and limits human capital accumulation. The literature on productive restructuring and labor precariousness, developed from the end of the twentieth century, highlights how processes of outsourcing and flexibilization of labor relations affected both formal and informal employment, including in complex urban economies (Antunes, 2011).

Empirical studies indicate that institutional quality is a key factor in reducing informality. Dabla-Norris, Gradstein and Inchauste (2008) and Chong and Gradstein (2007) show that more robust legal systems reduce incentives for informality, even in contexts of high regulatory burden. Furthermore, workforce qualification emerges as a central determinant of formalization, as evidenced by Dabla-Norris *et al.* (2020) and La Porta and Shleifer (2014). These results suggest that regulatory simplification policies should be complemented by local professional training programs, especially in urban environments marked by a high concentration of micro and small entrepreneurs.

The literature also points to the importance of female and youth inclusion in the labor market, with positive effects on growth, poverty reduction and social indicators. In this sense, local policies aimed at expanding access to daycare centers, professional qualification and productive insertion of young people play a relevant role in promoting a more inclusive labor market.

The critical literature on the labor market highlights that the transformations observed since the end of the twentieth century are associated with a broader process of productive restructuring, marked by the fragmentation of production chains, outsourcing and flexibilization of labor relations. Authors such as Hardt and Negri (2001) interpret these changes as part of the transition to an accumulation regime in which labor becomes more diffuse and precarious, even within the formal market. In a complementary perspective, Dardot and Laval (2016) analyze the diffusion of neoliberal rationality as a process that redefines labor relations by promoting the individualization of risk and the erosion of collective protection mechanisms. In the Brazilian case, Antunes (2018) shows that the expansion of formal employment in recent decades coexisted with heterogeneous forms of precariousness, such as high turnover, outsourcing and even informality within formality, suggesting that the analysis of the labor market should consider not only the volume of jobs generated, but also their quality and stability.

2.4 Small and Medium Enterprises

Small and Medium Enterprises (SMEs) play a central role in job creation and the economic dynamics of developing countries. Studies such as those by Ayyagari, Demirgüç-Kunt and Maksimovic show that these enterprises account for a significant share of formal employment and contribute to poverty reduction, despite facing structural limitations, such as reduced access to economies of scale and financing.

The international and national literature recognizes that restricted access to credit constitutes one of the main obstacles to the development of small and medium enterprises. The World Bank systematizes this diagnosis in the report *SME Finance: Improving Access to Finance for Small and Medium Enterprises* (World Bank, 2018), which, based on evidence from several countries, points out that information asymmetries, high transaction costs and institutional weaknesses limit the supply of credit to SMEs, especially in emerging economies. Similar results emerge from the World Bank Enterprise Surveys, in which access to financing frequently appears among the main barriers to the growth of smaller firms. In this context, the report highlights that public policies aimed at micro and small entrepreneurs — such as credit guarantees, microfinance programs and institutional support instruments — can mitigate these restrictions, especially when implemented at the local level and articulated with knowledge of territorial specificities. However, their effects depend heavily on the targeting capacity, reach and institutional coordination of the programs.

The literature on territorial economic development highlights the strategic role of SMEs in job creation, productive dynamism and local economic resilience. One of the classic references of this approach is the experience of the so-called "Third Italy", analyzed by authors such as Becattini (1990) and Piore and Sabel (1984), which show how agglomerations of smaller firms, organized in industrial districts, can achieve high levels of productivity and competitiveness through flexible specialization, inter-firm cooperation and strong territorial embeddedness. This theoretical tradition emphasizes that SME performance depends not only on economies of scale, but on the articulation between local institutions, specialized labor markets and public support policies. In urban contexts and emerging economies, this perspective has been mobilized to analyze development strategies based on strengthening the local productive fabric, especially in labor-intensive sectors with a strong capacity to absorb labor.

2.5 Urban Planning

Urban planning is widely recognized as a central instrument for sustainable local economic development. Bulhões et al. (2024) emphasize that cities with efficient planning tend to have more dynamic labor markets, better access to services and higher productivity, while disorderly urban expansion accentuates inequalities and undermines long-term growth.

The urban economics literature highlights the positive effects of density on productivity and innovation (Duranton and Puga, 2020), although causal identification of these effects is challenging. For cities like Rio de Janeiro, these theoretical contributions reinforce the importance of integrated policies on land use, transport, housing and economic development, often implemented at the municipal level, but dependent on inter-federative articulation for their effectiveness.

In this context, in the 2021-2024 administration, the then Municipal Secretariat for Urban and Economic Development (SMDUE) assumed a strategic role in articulating urban planning policies with initiatives aimed at boosting productive activity. By acting to promote more connected urban environments, attract investments, support knowledge-intensive sectors and coordinate with innovation, labor and entrepreneurship policies, these secretariats help align the use of urban space with the dynamics of the local labor market. In the case of large metropolises,

such as Rio de Janeiro, this action is particularly relevant to integrate urban planning instruments with strategies for productive diversification, territorial requalification and strengthening of local economies, enhancing the productivity gains associated with urban density and economic agglomeration highlighted by the literature.

Initiatives such as Porto Maravalley, aimed at attracting technology and creative economy companies to the port region, and Sandbox.Rio, which creates an experimental regulatory environment for innovation, illustrate territorial requalification strategies associated with the diversification of the local economic base. These projects dialogue with urban revitalization policies, by stimulating the productive occupation of central areas, generating skilled jobs and strengthening innovation ecosystems. By reducing institutional barriers, fostering new business models and encouraging the spatial concentration of knowledge-intensive activities, such initiatives tend to produce agglomeration effects, with positive impacts on productivity, labor formalization and the dynamization of the real estate market and urban services.

Together, these theoretical contributions offer an analytical framework for understanding municipal economic development policies as institutional strategies that operate within broader structural limits. By articulating dimensions such as inclusive growth, labor market, small and medium enterprises and urban planning, the literature allows us to analyze how local governments can influence economic trajectories through the coordination of public policies, the reduction of institutional barriers and the organization of urban space, albeit conditioned by the macroeconomic context and the federal pact. This framework guides the analysis of policies implemented in the municipality of Rio de Janeiro in the recent period, allowing us to discuss their results, specificities and limits in light of the theoretical contributions presented here.

3 Strengthening of Rio's Economy since 2021

The recent development of the economy of the municipality of Rio de Janeiro must be understood in light of the economic recovery observed in the country after the Covid-19 pandemic, as well as the institutional and public policy choices made at the local level. In this context, the reelection of Mayor Eduardo Paes for his fourth term in the 2024 elections occurred in a context of economic recovery of the city, although this trajectory was influenced both by national factors and by municipal initiatives (Lima; Balassiano, 2025).

According to the Rio Economic Activity Indicator (IAE-Rio), prepared by the City Hall through the Municipal Secretariat for Economic Development (SMDE), Rio's economy showed growth in the recent period, based on an indicator developed to monitor local economic dynamics and published monthly in the Rio Economic Bulletin (Lima; Balassiano, 2025). In the same period, the average inflation rate in Rio de Janeiro was lower than the national average, according to the IBGE's IPCA.

In the labor market, the employed population — which includes formal and informal workers — reached its highest historical level in 2024, with approximately 3.4 million employed people. This represented an increase of more than 640,000 jobs compared to 2020¹, according to IBGE data. In the same period, the unemployment rate fell from 15.0% to 8.0%², a reduction of 7.0 percentage points, which corresponds to about 210,000 people leaving unemployment.

Furthermore, there is a significant reduction in labor market vulnerability, a category that includes discouraged workers, unavailable workers, unemployed and underemployed. Approximately 300,000³ residents of Rio de Janeiro left this condition between 2021 and 2024, indicating improvement not only in employment levels but also in the quality of productive insertion (Lima; Balassiano, 2025).

¹ Difference between the fourth quarter of 2024 and the same period of 2020.

² Annual averages

³ 291.7 thousand, in the difference between 2024 (annual average) and 2020 (annual average).

Considering exclusively formal employment, data from CAGED (Ministry of Labor and Employment) indicate the creation of more than 330,000 formal jobs with a labor card in the municipality in the 2021-2024 four-year period, positioning Rio de Janeiro as the second capital that generated the most formal jobs in the country, behind only São Paulo. This performance contrasts with that observed between 2017 and 2020, when the municipality had a negative net balance of more than 100,000 formal jobs, and approaches the results seen in the previous terms of Mayor Eduardo Paes (2009–2016), when Rio was also the second capital with the highest generation of formal jobs in Brazil.

The set of these indicators suggests a strengthening of economic activity and the labor market in the municipality in the post-pandemic period. Although part of this trajectory is associated with the cyclical recovery of the Brazilian economy and more favorable macroeconomic conditions at certain times, the results observed in Rio indicate the role of local factors, such as sectoral stimulus policies, regulatory simplification initiatives and support programs for formalization and entrepreneurship, coordinated by the SMDE in articulation with other spheres of government.

For the period 2025–2028, corresponding to the new municipal planning cycle, the expectation is that the recovery trajectory will be maintained, conditioned both on the continuity of local policies and on the national economic environment. The analysis suggests that the consolidation of results will depend on the municipality's ability to deepen institutional reforms, expand inter-federative coordination and sustain policies aimed at job creation, productive diversification and the reduction of inequalities in the labor market.

4 Economic Development of Rio: 2021-2024

In the administration of the Rio de Janeiro City Hall for the period 2021–2024, the projects and actions aimed at the city's economic development were structured around four main strands: innovation, sustainability, regulatory simplification and attraction of new businesses. These guidelines guided the formulation of municipal public policies in a context marked both by the effects of the health crisis and by the need to reposition Rio de Janeiro's economy on more diversified and resilient bases.

In recent years, the advancement of methods and technologies for collecting and analyzing large volumes of data, combined with the expansion of public access to information databases, has given centrality to evidence-based public policies in the conduct of government action. Through technical rigor and the use of appropriate analytical methodologies, the aim is to reduce the space for discretion, intuition and opinion in decision-making in the public sphere, supporting managers with qualified information and empirical evidence. In addition to qualifying the decision-making process, this approach contributes to making it more transparent and communicable, since the data, analyses and studies used are, in general, open and subject to scrutiny. In this sense, the public policies implemented by the Municipal Secretariat for Economic Development in the 2021–2024 four-year period were guided by the systematic use of data and empirical diagnoses.

This set of initiatives was conceived and implemented in an exceptional context. The Covid-19 pandemic arrived in Brazil in March 2020 and extended until part of 2022, when the country observed a sharp decline in death and infection indicators, largely due to the success of the vaccination campaign. Beyond the human losses, the health crisis aggravated social inequalities and deepened pre-existing socioeconomic problems, imposing additional challenges on urban economies and local governments. In this scenario, municipal action began to combine emergency measures to mitigate the impacts of the crisis with medium and long-term strategies aimed at economic recovery, job creation and the creation of new productive vocations.

It is in this context that the axes of municipal economic⁴ development policy in the 2021–2024 period are inserted. The adopted strategy was organized in an integrated manner around the mitigation of the socioeconomic impacts of the pandemic, the strengthening of innovation and the knowledge economy, the promotion of sustainability and the transition to a low-carbon economy, regulatory simplification and improvement of the business environment, urban revitalization and the strengthening of strategic sectors.

Table 1 summarizes the main initiatives and programs implemented by the Secretariat for Economic Development of the Rio de Janeiro City Hall in the 2021–2024 period, according to the structuring axes.

Table 1: SMDE initiatives and programs (2021-2024)

Project/Public Policy	Central Objective	Main Results/Impacts
Emergency measures – Covid 19		
Auxílio Empresa Carioca (Carioca Business Aid)	Support micro and small enterprises forced to interrupt in-person activities	More than 5,000 enterprises benefited; approximate cost of R\$ 7 million; maintenance of about 18,000 jobs.
Crédito Carioca (Carioca Credit)	Provide credit to MSMEs, in partnership with the private sector	Approximately R\$ 5 million in private credit; 110 enterprises benefited.
Auxílio Ambulante Carnaval de Rua (Street Carnival Vendor Aid)	Compensate for loss of income of street vendors due to cancellation of the street Carnival in 2022	5,440 beneficiaries (59% of those eligible); total cost of R\$ 2.7 million.
Innovation and technology		
Porto Maravalley / IMPA Tech	Transform the port region into an innovation and technology hub	Estimated education of 700 students in 10 years; potential payroll of R\$ 220,1 million in 10 years; hub startups raised more than R\$ 150 million in the first year.
Web Summit Rio	Attract a major international technology and innovation event	Planned permanence until at least 2030; estimated audience of approximately 1 million (8 editions); potential economic impact of R\$ 1.8 billion (8 editions).
Programadores Cariocas (Carioca Programmers)	Train young people in programming and insert labor into the technology sector	750 young people trained (2022–2023), of which 70% Black, 40% women and approximately half live in favelas; about 50% insertion into the market; many students also chose to continue their studies in the programming area.
ISS Tech	Encourage the technology sector in the port region through tax incentives	Estimated annual payroll of R\$ 62.7 million.
Sandbox.Rio	Create an experimental regulatory environment for innovation	Regulatory tests with real customers; data generation to improve public policies.

⁴ Municipal Secretariat for Economic Development, Innovation and Simplification (SMDEIS), from 2021 to October 2023; and the Municipal Secretariat for Urban and Economic Development (SMDUE), from October 2023 to December 2024.

Green economy		
ISS Neutro (Neutral ISS)	Stimulate the voluntary carbon credit market	Reduction of ISS (from 5% to 2%); attraction of carbon market companies; approximately 250 thousand tCO ₂ eq of mitigation projects present in the national territory were neutralized, with a total value of R\$ 5.5 million in tax credit.
Carbon credit platform (B3/ACX)	Operationalize the voluntary carbon market in Brazil	platform for trading carbon credits, bonds issued for neutralization of greenhouse gases, from the partnership between ACX and B3.
Regulatory simplification		
Lei da Liberdade Econômica (Economic Freedom Law)	Facilitate business opening and operation	Potential impact: R\$ 3.8 thousand in GDP per capita annually (10 years); 130 thousand jobs.
LICIN – Licenciamento Integrado (Integrated Licensing)	Reduce license analysis time	Average time reduced from approximately 9 months to about 30 days.
Digitalization of processes	Migrate urban and environmental licensing to digital media	100% of new digital processes; end of physical processes in Jan/2022.
Revitalization of the City Center		
Reviver Centro	Attract residents and reoccupy idle properties in the Center	Integrated urban requalification (housing, mobility and public space).
Reviver Cultural	Attract cultural activities to the central area	43 signed contracts for approved projects;
Rua da Cerveja / Reviver Rua da Carioca	Create a tourist, cultural and gastronomic hub	Potential of 500 jobs; payroll (four years) of R\$ 41,8 million; economic impact of R\$ 222 million in four years.
Infrastructure and logistics		
Coordination of the Airport Sector	Strengthen the strategic role of the airport sector	Potential impact in RJ: R\$ 50.6 billion in the GDP of the State of Rio de Janeiro and more than 684 thousand jobs (10 years).
Financial sector		
Nova Bolsa de Valores (BASE / ATG) (New Stock Exchange)	Reposition Rio as a national financial hub	Law 8.467/2024; ISS reduction to 2%; stock exchange and clearing house based in Rio.
Financial sector		
Santa Cruz Industrial District	Improve infrastructure of the municipality's largest industrial hub	Paving and drainage works in a strategic area.

Source: Municipal Secretariat for Economic Development of Rio de Janeiro

In the context of the health crisis, a first axis focused on mitigating the socioeconomic impacts of the pandemic on businesses and workers, especially during periods of greatest restriction on in-person activity. The initiatives adopted sought to preserve local productive capacity, prevent the permanent closure of small businesses and reduce job losses, through instruments of direct financial support, credit and temporary income compensation. Programs such as Auxílio Empresa Carioca, Crédito Carioca and Auxílio Ambulante Carnaval de Rua exemplify this emergency action, which reached approximately 70 thousand residents of Rio de

Janeiro and contributed to the maintenance of businesses, jobs and income during the most acute period of the crisis.

A second structuring axis of municipal policy was the strengthening of innovation, the knowledge economy and the attraction of technology-intensive activities, synthesized in the strategy "Rio: Capital of Innovation". This agenda combined investments in physical and institutional infrastructure, human capital formation and promotion of innovation ecosystems. Initiatives such as Porto Maravally, articulated with the implementation of IMPA Tech, the attraction of international technology events, such as Web Summit Rio, and professional qualification programs aimed at the sector, such as Programadores Cariocas, reflect this orientation. Complementarily, regulatory and fiscal instruments, such as ISS Tech and Sandbox.Rio, sought to reduce barriers to innovation, test new business models and create an institutional environment more receptive to technological transformations.

The economic development policy also incorporated, in a cross-cutting manner, the sustainability agenda and the transition to a low-carbon economy, aligned with Rio de Janeiro's historical leadership in the climate debate. This axis sought simultaneously to stimulate new markets, attract innovative companies and encourage more sustainable productive practices. The creation of ISS Neutro, with tax incentives aimed at the voluntary carbon credit market, and the attraction of trading platforms for this type of asset to the city exemplify the attempt to position Rio as an emerging hub of the green economy, articulating economic development and climate change mitigation.

Another central axis of the municipal strategy was regulatory simplification and the reduction of bureaucracy as instruments to stimulate entrepreneurship, formalization and job creation. The adoption of the Economic Freedom Law, the implementation of Integrated Licensing (LICIN) and the complete digitalization of urban and environmental licensing processes aimed to make the business environment more predictable, transparent and efficient. These measures sought to reduce transaction costs, accelerate private investments and increase the city's attractiveness for new ventures, with relevant potential impacts on economic growth and the labor market.

The requalification of urban territory, especially the city's central area, constituted another relevant axis of economic development policy. The revitalization strategy for Rio's Center articulated urban, cultural and economic policies, with the objective of attracting residents, productive activities and investments to a region endowed with ample infrastructure, but marked by decades of emptying. Programs such as Reviver Centro, Reviver Cultural and Reviver Rua da Carioca illustrate this approach, which seeks to activate urban space through culture, tourism, creative economy and the productive occupation of historic buildings, generating positive effects on employment, income and local economic dynamism.

Finally, municipal policy included structural actions aimed at sectors considered strategic for long-term economic development. The coordination of the airport sector, recognized as a fundamental vector for Rio de Janeiro's insertion into national and international flows of people and business, and the interventions in the Santa Cruz Industrial District, the municipality's main industrial hub, reflect this concern with infrastructure, logistics and productive competitiveness. Added to this axis is the institutional articulation for the installation of a new stock exchange in Brazil, based in Rio de Janeiro, with the objective of repositioning the city in the national financial system and expanding its capacity to attract investments.

Together, the axes of action adopted between 2021 and 2024 reveal an economic development strategy based on the combination of emergency responses, institutional reforms and structural projects, articulating innovation, sustainability, regulatory simplification and territorial requalification. By operating on multiple fronts, municipal policy sought not only to mitigate the effects of the recent crisis, but also to create conditions for a more diversified, resilient and inclusive growth trajectory in the medium and long term.

5 Economic Development in Rio: Strategic Planning 2025-2028

The Rio de Janeiro City Hall presented the Strategic Plan 2025–2028, entitled "Rio Legado e Futuro" (Rio Legacy and Future), on August 2, 2025, during a meeting of the City Council. The plan establishes 88 goals and 134 projects, organized into 30 strategic initiatives that guide the municipal government's actions throughout the four-year period. This is a central planning instrument, which seeks to continue the economic and social development strategies adopted in previous years, while incorporating new challenges and opportunities.

Within the scope of this plan, the initiative "Future, Economy and Happiness" is structured around four major themes — Economy and Innovation, Tourism, Human Capital and Employability, and Culture — which guide the formulation of initiatives, goals and projects associated with this thematic axis. The general guidelines of the initiative include stimulating economic development with a focus on innovation, digital transition and job creation; consolidating Rio de Janeiro as a national and international tourist destination, through the attraction of major events, the valorization of local culture and the economic dynamization of territories; integrating the supply of professional qualification opportunities, expanding population access and improving employability outcomes; strengthening access to culture, recognizing its role in well-being, the creative economy and the city's identity; and valuing construction as a vector for urban development, job creation and strengthening the local economy.

These guidelines materialize in 16 specific goals, which combine objectives of economic growth, job creation, productive diversification and strengthening of the cultural and tourism sectors. In the field of economic activity and the labor market, the plan establishes as goals a 10% increase in the municipality's economic activity level, measured by the IAE-Rio, accumulated from 2025 to 2028, and the generation of 35,000 new formal jobs in the construction sector by 2028, through the stimulation of public and private works. Also within this axis, the goal stands out of starting, by 2026, the operation of Brazil's new stock exchange, based in Rio de Janeiro, as well as the implementation of the Hub Favela Empreendedora (Entrepreneurial Favela Hub) program by 2028, aimed at supporting and training entrepreneurs in favelas and communities of the city. Added to these initiatives is the objective of achieving 1 gigawatt (GW) of operational installed capacity of data centers in the municipality by 2028, reinforcing the strategy of attracting technology-intensive activities.

In the tourism and creative economy sector, the plan foresees a 15% increase in the number of national and international tourists visiting the city by 2028, the attraction of at least eight new mega-events with an estimated audience of 50 thousand participants each, and an annual increase of at least 10% in the number of passengers on national and international flights at the Galeão International Airport, strengthening Rio de Janeiro's positioning as a global tourist destination. Also included are goals related to a 30% increase in the volume of authorized filming days in the city, including for major foreign productions, and the creation of the Carioca Arts Week, with an estimated audience of over 600 thousand people by 2028, in addition to the establishment of a complementary network of cultural spaces, with at least 100 accredited facilities in the same period.

In the human capital, inclusion and employability axis, the plan establishes goals aimed at professional qualification and the reduction of socioeconomic vulnerability. Among them, the creation of an integrated digital platform for managing, registering and providing information on professional training, employment and income generation stands out; the training of 15 thousand people with disabilities (PWDs) and their family members through professional qualification and entrepreneurship programs; and the training of 12 thousand young leaders by 2028. Complementing this set of actions are the implementation of the Terra Prometida (Promised Land) Park in Santa Cruz by 2028, and the contracting of the executive project for the Biblioteca do Saber (Library of Knowledge) in 2025, with launch scheduled for 2026.

Together, the goals and guidelines of the "Future, Economy and Happiness" initiative reveal an economic development strategy guided by the articulation between growth, innovation, social inclusion and the valorization of the city's cultural and territorial assets. By combining short and medium-term objectives with structural investments, the Strategic Plan 2025–2028 seeks to consolidate the advances observed in the post-pandemic period and expand the municipality's capacity to sustain more diversified and inclusive economic development trajectories.

Among the strategic projects associated with the municipality's economic planning, two initiatives aimed at repositioning Rio de Janeiro in capital, knowledge and innovation-intensive sectors stand out: the strengthening of Rio's financial sector and the development of the so-called Rio AI City.

With regard to the financial sector, Rio de Janeiro has lost, over recent decades, a significant part of its institutional and symbolic centrality in the national financial ecosystem. The transfer of corporate headquarters, operations and investment flows to other cities — especially São Paulo — has reduced the sector's presence in Rio's territory and weakened the city's image as a strategic hub for economic decision-making. In this context, the installation of a new Brazilian stock exchange, based in Rio de Janeiro, represents a historic opportunity for institutional and productive repositioning. Although the City Hall does not have direct governance over this enterprise, its role as political articulator, institutional promoter and economic inducer is central. The project structures the municipal public authorities' action to expand the city's capacity to attract strategic investments, boost financial innovation and foster new urban economic vocations. Among the foreseen areas of action are articulation with national regulators, such as the Securities and Exchange Commission (CVM) and the Central Bank (BCB), the establishment of partnerships with representative entities of the financial sector, such as ANBIMA and asset management associations, the construction of a favorable institutional environment through specific incentives, and the promotion of an agenda of events and actions for national and international positioning of Rio de Janeiro as a financial hub. Additionally, the implementation of a monitoring system for the economic impacts of the initiative is planned, with the objective of tracking its effects on investment, employment and productive dynamism.

Complementarily, the Rio AI City project is part of the broader strategy of consolidating Rio de Janeiro as the innovation capital of Latin America. Given the rapid diffusion of technologies based on artificial intelligence, data centers become critical infrastructure for economic competitiveness on a global scale. Recent estimates from the investment bank Goldman Sachs, released in 2024, indicate that the demand for electricity associated with data centers could grow by about 160% by 2030, driven by the expansion of artificial intelligence applications. In this scenario, the project seeks to strengthen the urban innovation ecosystem through public policies and collaborative initiatives that integrate government, academia, the private sector and civil society. The objective is to create institutional, regulatory and infrastructural conditions for attracting and installing data centers in the municipality, positioning Rio de Janeiro as the largest hub of this type of infrastructure in Latin America and one of the ten largest in the world. By articulating technological innovation, urban planning and economic development, the initiative aims to expand the city's productive diversification and reinforce its insertion into knowledge-intensive global chains.

6 Conclusion

From the perspective of the economic development literature, the recent experience of the municipality of Rio de Janeiro dialogues with different analytical traditions. The centrality attributed to innovation and entrepreneurship approximates the Schumpeterian tradition (Schumpeter, 1984; 1985), while the integration between urban policies, territorial requalification and economic dynamism converges with urban economics, which emphasizes the gains associated with agglomeration and

density (Duranton and Puga, 2020). Additionally, the focus on regulatory simplification and institutional predictability aligns with the institutionalist literature, which highlights the role of institutions in creating incentives for investment, innovation and sustainable growth (North, 1991; Acemoglu and Robinson, 2012).

The 2021–2024 cycle marked a stage of reorganization and modernization of the economic development policies of the municipality of Rio de Janeiro. Faced with the effects of the pandemic, the City Hall concentrated efforts on measures to support businesses and workers and on creating bases for a more dynamic and innovative business environment. Programs such as Auxílio Empresa Carioca, Crédito Carioca and Auxílio Ambulante were aimed at emergency support for entrepreneurs and microenterprises. At the same time, initiatives such as Porto Maravalley, ISS Tech, Programadores Cariocas and Web Summit Rio boosted the innovation and technology agenda. Structuring projects, such as Reviver Centro and ISS Neutro, integrated urban requalification and sustainability into local development policies.

In light of the discussed literature, this set of policies can be interpreted as a strategy relatively coherent with the theoretical frameworks discussed. From a Schumpeterian perspective, initiatives aimed at innovation, entrepreneurship and the attraction of technology-intensive sectors indicate an attempt to stimulate productive diversification and the introduction of new economic activities. From the perspective of urban economics, policies of territorial requalification and revitalization of the center seek to exploit agglomeration economies and energize the productive use of urban space. At the institutional level, measures of regulatory simplification and improvement of the business environment dialogue with the literature that emphasizes the reduction of transaction costs and the strengthening of investment incentives. However, the evidence presented suggests that such initiatives still face challenges regarding the expansion of their effects on the productive structure as a whole and the promotion of more inclusive growth, especially in a context marked by territorial inequalities and heterogeneity in the labor market.

These actions were added to institutional and regulatory modernization, with emphasis on the Economic Freedom Law, LICIN and the expansion of process digitalization, which contributed to reducing barriers and simplifying the licensing of economic activities. Action in strategic territories, such as the Santa Cruz Industrial District and the city's central area, sought to decentralize opportunities and strengthen already consolidated productive hubs.

The new Strategic Plan 2025–2028 – "Rio Legado e Futuro" extends this trajectory, with 88 goals and 134 projects aimed at promoting sustainable economic development, job creation and productive inclusion. The "Future, Economy and Happiness" axis reaffirms the city's commitment to innovation, the creative economy and professional qualification, in addition to prioritizing the attraction of investments in technology and service sectors. Among the notable projects are the Setor Financeiro Carioca (Rio's Financial Sector), which seeks to reposition Rio as a financial intermediation center, and Rio AI City, aimed at consolidating an artificial intelligence and data center ecosystem.

The continuity between the actions of 2021–2024 and the planning of 2025–2028 expresses a long-term strategy, centered on innovation, productive diversification and sustainability. By articulating policies to support entrepreneurship, regulatory simplification and incentives for new technologies, the municipality advances in building a more integrated, inclusive urban economy prepared for the challenges of the future. In summary, the case of Rio de Janeiro shows that municipal policies can play a relevant role in inducing local economic development, by organizing and enhancing existing productive dynamics. At the same time, it reinforces that their results depend on the interaction with broader structural constraints and on the capacity to sustain, over time, integrated strategies that articulate innovation, institutional environment and economic inclusion.

References

- ABEL, J.; DEY, I.; GABE, T. Productivity and the density of human capital. **Journal of Regional Science**, v. 52, n. 4, p. 562–586, 2012. DOI: 10.1111/j.1467-9787.2011.00742.x
- ACEMOGLU, Daron; ROBINSON, James A. **Por que as nações fracassam: As Origens do Poder, da Prosperidade e da Pobreza**. Rio de Janeiro: Elsevier, 2012.
- ANTUNES, Ricardo. **Os sentidos do trabalho**. São Paulo: Boitempo, 2009.
- ANTUNES, R.. Os modos de ser da informalidade: rumo a uma nova era da precarização estrutural do trabalho?. **Serviço Social & Sociedade**, n. 107, p. 405–419, jul. 2011. DOI: 10.1590/S0101-66282011000300002
- ANTUNES, Ricardo. **O privilégio da servidão: o novo proletariado de serviços na era digital**. São Paulo: Boitempo, 2018.
- AYYAGARI, Meghana; DEMIRGÜÇ-KUNT, Asli; MAKSIMOVIC, Vojislav. **Small vs. young firms across the world: contribution to employment, job creation, and growth**. World Bank Policy Research Working Paper, n. 5631. Washington, DC: World Bank, 2011.
- AYYAGARI, Meghana; DEMIRGÜÇ-KUNT, Asli; MAKSIMOVIC, Vojislav. Who creates jobs in developing countries?. **Small Business Economics**, v. 43, n. 1, p. 75–99, 2014.
- BANERJEE, Abhijit; KARLAN, Dean; ZINMAN, Jonathan. Six randomized evaluations of microcredit. **American Economic Journal: Applied Economics**, v. 7, n. 1, p. 1–21, 2015.
- BECATTINI, Giacomo. The Marshallian industrial district as a socio-economic notion. In: PYKE, Frank; BECATTINI, Giacomo; SENGENBERGER, Werner (org.). **Industrial districts and inter-firm co-operation in Italy**. Geneva: International Labour Organization, 1990.
- BRESSER-PEREIRA, Luiz Carlos. **Desenvolvimento e crise no Brasil: história, economia e política de Getúlio Vargas a Lula**. 5. ed. São Paulo: Editora 34, 2014.
- BULHÕES, Chicão *et al.* **Cidade em ordem, economia em crescimento**. Blog do Ibre/FGV. 2024. Available at: <https://blogdoibre.fgv.br/posts/cidade-em-ordem-economia-em-crescimento>
- CARDOSO, Fernando Henrique; FALETTO, Enzo. Dependência e desenvolvimento na América Latina: ensaio de interpretação sociológica. 9. ed. Rio de Janeiro: Civilização Brasileira, 2010.
- CARNEIRO, Pedro; HECKMAN, James J. Human capital policy. In: HECKMAN, James J.; KRUEGER, Alan (org.). **Inequality in America**. Cambridge: MIT Press, 2003.
- CHONG, Alberto; GRADSTEIN, Mark. Inequality and institutions. **The Review of Economics and Statistics**, v. 89, n. 3, p. 454–465, 2007.
- COLLIER, Paul *et al.* **Economics meets urban planning**. International Growth Centre, 2023. Available at: <https://www.theigc.org/publications/economics-meets-urban-planning-developing-effective-land-use-plans-fast-growing-cities>
- CORSEUIL, Carlos Henrique Leite; FOGUEL, Miguel Nathan; TOMELIN, Leon Faceira. Uma avaliação de impacto de um programa de qualificação profissional na empresa sobre a inserção dos jovens no mercado de trabalho formal. **Economia Aplicada**, São Paulo, Brasil, v. 23, n. 1, p. 161–184, 2019. DOI: 10.11606/1980-5330/ea141238.
- DABLA-NORRIS, Era; GRADSTEIN, Mark; INCHAUSTE, Gabriela. What causes firms to hide output? The determinants of informality. **Journal of Development Economics**, v. 85, n. 1–2, p. 1–27, 2008.

- DABLA-NORRIS, E., GANELLI, G., & NGUYEN, A. T. N. "Role of Individual Characteristics and Policies in Driving Labor Informality in Vietnam." IMF Working Paper, v. 273, 2020. Available at: <https://www.elibrary.imf.org/view/journals/001/2020/273/001.2020.issue-273-en.xml>
- DARDOT, Pierre; LAVAL, Christian. **A nova razão do mundo**: ensaio sobre a sociedade neoliberal. São Paulo: Boitempo, 2016.
- DURANTON, Gilles; PUGA, Diego. The economics of urban density. **Journal of Economic Perspectives**, v. 34, n. 3, p. 3–26, 2020.
- FONSECA, Julia; MATRAY, Adrien. Financial inclusion, economic development, and inequality: Evidence from Brazil. **Journal of Financial Economics**, v. 156, 103854. (2024). Available at: <https://www.sciencedirect.com/science/article/pii/S0304405X24000771>
- FUNDO MONETÁRIO INTERNACIONAL. Fiscal policy and development. Washington, DC: IMF, 2017.
- FUNDO MONETÁRIO INTERNACIONAL (Org.). **Fostering inclusive growth**. G20 Notes. Washington, DC: IMF, 2017. Available at: <https://www.imf.org/external/np/g20/pdf/2017/062617.pdf>
- FURTADO, Celso. **Formação econômica do Brasil**. São Paulo: Companhia das Letras, 2007.
- FURTADO, Celso. **Desenvolvimento e subdesenvolvimento**. Rio de Janeiro: Contraponto, 2009.
- GLAESER, Edward L. **Triumph of the city**: how our greatest invention makes us richer, smarter, greener, healthier, and happier. New York: Penguin Press, 2011.
- GOLDMAN SACHS. **AI is poised to drive 160% increase in data center power demand**. Goldman Sachs, 2024. Available at: <https://www.goldmansachs.com/insights/articles/AI-poised-to-drive-160-increase-in-power-demand>
- GRIGOLI, Francesco; KAPSOLI, Joseph. Waste not, want not: the efficiency of health and education spending in emerging and developing economies. IMF Working Paper, n. WP/18/63. Washington, DC: International Monetary Fund, 2013.
- GRIGOLI, F.; PAREDES, E.; BELLA, G. D. Inequality and Growth: A Heterogeneous Approach. **IMF Working Paper**, [s.n.]. 2016. Available at: <https://www.imf.org/external/pubs/ft/wp/2016/wp16244.pdf>
- HARDT, Michael; NEGRI, Antonio. **Império**. Rio de Janeiro: Record, 2001.
- HECKMAN, James J.; MASTEROV, Dimitriy V. The productivity argument for investing in young children. **Review of Agricultural Economics**, v. 29, n. 3, p. 446–493, 2007.
- LIMA, Osmar; BALASSIANO, Marcel. Fortalecimento da Economia do Rio desde 2021. **Cidade iNova**, Rio de Janeiro, v. 1, n. 23, 2025. Available at: https://fjg.prefeitura.rio/wp-content/uploads/sites/37/2025/03/Revista-Cidade-iNova_Ed.-23.pdf. Acesso em: 27 abr. 2026.
- JACOBS, Jane. **The economy of cities**. New York: Random House, 1969.
- LA PORTA, Rafael; SHLEIFER, Andrei. Informality and development. **Journal of Economic Perspectives**, v. 28, n. 3, p. 109–126, 2014.
- NERI, Marcelo Côrtes. **A escalada da desigualdade**: Qual foi o impacto da crise sobre distribuição de renda e pobreza?. Rio de Janeiro: FGV Social, 2019.
- NORTH, Douglass C. Institutions. **Journal of Economic Perspectives**, v. 5, n. 1, p. 97–112, 1991.
- PIORE, Michael J.; SABEL, Charles F. **The second industrial divide**: possibilities for prosperity. New York: Basic Books, 1984.

RANGEL, Ignácio. **A inflação brasileira**. São Paulo: Bial, 1986.

SCHUMPETER, Joseph A. **Capitalismo, socialismo e democracia**. Rio de Janeiro: Zahar, 1984.

SCHUMPETER, Joseph A. **A teoria do desenvolvimento econômico**. São Paulo: Nova Cultural, 1985.

Secretaria Municipal de Desenvolvimento Econômico do Rio de Janeiro (SMDE) (2025). Atividade Econômica do Rio (2021-2024). Secretaria Municipal de Desenvolvimento Econômico do Rio de Janeiro, **Estudos Especiais**. Available at: https://observatorioeconomico.rio/wp-content/uploads/sites/5/2025/03/Estudo_Atividade_Economico_Rio.pdf

TAVARES, Maria da Conceição. **Da substituição de importações ao capitalismo financeiro**. 11. ed. Rio de Janeiro: Zahar, 1983.

WORLD BANK. Improving access to finance for SMEs: opportunities through credit reporting, secured lending and insolvency practices. Washington, DC: World Bank, 2018. Available at: <https://documents1.worldbank.org/curated/en/316871533711048308/pdf/129283-WP-PUBLIC-improving-access-to-finance-for-SMEs.pdf>

WORLD BANK. **World Development Report: the changing nature of work**. Washington, DC: World Bank, 2019.

About the Authors

Osmar Carneiro Guimarães de Lima is the Municipal Secretary of Economic Development of Rio de Janeiro. He holds a degree in Production Engineering and a Master's degree in Production Engineering from UFRJ, is a CFA Charterholder and has been an employee of the National Bank for Economic and Social Development (BNDES) for 16 years.

Marcel Grillo Balassiano is the Municipal Undersecretary of Economic Development and Innovation of Rio de Janeiro (SMDE/SUBDEI) and a licensed researcher at the Brazilian Institute of Economics (FGV IBRE). He is a doctoral candidate (FGV CPDOC), holds a Master's degree in Business Economics and Finance (FGV EPGE), a Master's degree in Administration (FGV EBAPE) and a Bachelor's degree in Economics (FGV EPGE).

Carina de Castro Quirino is the Municipal Undersecretary of Regulation and Business Environment of Rio de Janeiro (SMDE/SUBRAN), Co-Founder and Researcher at UERJ Reg. She holds a Doctorate in Public Law (UERJ), a Master's degree in Law (UFRJ) and a Bachelor's degree in Law (UGF).

Márcio Menezes Lopes has been an Architect and Urban Planner at the Rio de Janeiro City Hall since 2002. He is currently Chief of Staff of the Municipal Secretariat for Economic Development (SMDE). He holds a postgraduate degree in Project Management from FGV and works in planning and conducting strategic projects aimed at the city's development.

Author Contributions

Conceptualization [O.C.G.L, M.G.B, C.C.Q, M.M.L]; methodology [M.G.B]; validation [O.C.G.L, M.G.B, C.C.Q, M.M.L]; formal analysis [M.G.B]; investigation [M.G.B]; resources [O.C.G.L, M.G.B, C.C.Q, M.M.L]; data curation [M.G.B]; writing—original draft preparation [O.C.G.L, M.G.B, C.C.Q, M.M.L]; writing—review and editing [M.G.B]; visualization [M.G.B]. All authors read and agreed to the published version of the manuscript.

Acknowledgments

The authors thank Maíra França, Perla Rocha, Janaína Salles and Nathália Leite for their contributions with comments and suggestions.

Conflicts of Interest

The authors declare no conflicts of interest.

About *Coleção Estudos Cariocas*

Coleção Estudos Cariocas (ISSN 1984-7203) is a publication dedicated to studies and research on the Municipality of Rio de Janeiro, affiliated with the Pereira Passos Institute (IPP) of the Rio de Janeiro City Hall.

Its objective is to disseminate technical and scientific production on topics related to the city of Rio de Janeiro, as well as its metropolitan connections and its role in regional, national, and international contexts. The collection is open to all researchers (whether municipal employees or not) and covers a wide range of fields — provided they partially or fully address the spatial scope of the city of Rio de Janeiro.

Articles must also align with the Institute's objectives, which are:

1. to promote and coordinate public intervention in the city's urban space;
2. to provide and integrate the activities of the city's geographic, cartographic, monographic, and statistical information systems;
3. to support the establishment of basic guidelines for the city's socioeconomic development.

Special emphasis will be given to the articulation of the articles with the city's economic development proposal. Thus, it is expected that the multidisciplinary articles submitted to the journal will address the urban development needs of Rio de Janeiro.