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Article

Municipal financial (in)sustainability: the fragile methodology proposed by the Federative Pact PEC

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From the Constitution of the Federative Republic of Brazil of 1988, municipalities were promoted to the condition of Brazilian federative entities. Currently, Brazil has 1,307 small municipalities with a maximum population of 5,000 inhabitants. In 2019, the Proposal for Amendment to the Constitution n° 188 (PEC 188) entered the political and legislative scene, with one of its propositions being the extinction/incorporation of small municipalities considered unsustainable. Thus, this study aims to highlight existing weaknesses/vulnerabilities in the methodology proposed by PEC 188/2019 for measuring the Financial Sustainability of small Brazilian municipalities. The methodology proposed by the PEC was analyzed and applied to all 5,570 Brazilian municipalities, using the periods from 2015 to 2020 as a basis. The study is based on bibliographical and documentary research with descriptive and quantitative approaches. For data treatment and analysis, descriptive statistics and measures of central tendency techniques were used. The results show that, when the PEC-188 methodology is applied, Brazilian municipalities' national average of "sustainability" is 5%, reducing to less than 3% when only small municipalities with up to 5,000 inhabitants are analyzed. Furthermore, more than 85% of Brazilian municipalities, on average, are classified as "unsustainable" based on the PEC methodology, increasing this condition to 98% if only the stratum of small municipalities is analyzed. The methodology proposed by PEC 188 has weaknesses that, if not resolved prior to a possible enactment, could lead to the extinction of approximately 1,224 small Brazilian municipalities.

Keywords: small municipalities; financial sustainability; PEC 188; incorporation of municipalities.

(In)sustentabilidade financeira municipal: a frágil metodologia proposta pela PEC do Pacto Federativo

A partir da Constituição da República Federativa do Brasil de 1988, os municípios foram promovidos à condição de entes federativos brasileiros. Atualmente, o Brasil conta com 1.307 pequenos municípios, com população de no máximo 5 mil habitantes. Em 2019, entrou no cenário político e legislativo a Proposta de Emenda à Constituição n° 188 (PEC 188), tendo como uma de suas proposições a extinção/incorporação de pequenos municípios considerados insustentáveis. O presente estudo tem por objetivo evidenciar fragilidades/vulnerabilidades na metodologia proposta pela PEC 188/2019 para a mensuração da sustentabilidade financeira dos pequenos municípios brasileiros. Para o alcance do objetivo, tal modelo foi analisado e aplicado a todos os 5.570 municípios brasileiros, utilizando como base os períodos de 2015 a 2020. O estudo se fundamenta em pesquisa bibliográfica e documental, com abordagens descritiva e quantitativa. Para o tratamento e a análise dos dados, foram empregadas técnicas de estatísticas descritivas e medidas de tendência central. Os resultados evidenciam que, aplicada a metodologia da PEC 188, a média nacional de sustentabilidade dos municípios brasileiros é de 5%, reduzindo-se

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para menos de 3% quando analisados apenas os pequenos, com até 5 mil habitantes. Tem-se ainda que mais de 85% dos municípios brasileiros, em média, são classificados como “insustentáveis” com base na metodologia da PEC, elevando para 98% essa condição se analisados apenas os pequenos. A metodologia proposta pela PEC 188 carrega fragilidades que, se não sanadas previamente a uma possível promulgação, poderão ocasionar a extinção de aproximadamente 1.224 pequenos municípios.

Palavras-chave: pequenos municípios; sustentabilidade financeira; PEC 188; incorporação de municípios.

(In)sostenibilidad financiera municipal: la metodología frágil propuesta por la PEC del Pacto Federativo

A partir de la Constitución de la República Federativa del Brasil de 1988, los municipios fueron promovidos a la condición de entidades federativas brasileñas. Actualmente, Brasil tiene 1.307 pequeños municipios con una población máxima de 5.000 habitantes. En 2019, entró en el escenario político y legislativo la Propuesta de Reforma a la Constitución n° 188 (PEC 188) que, entre otras, propone la extinción/incorporación de pequeños municipios considerados insostenibles. Por lo tanto, el presente estudio tiene como objetivo resaltar las debilidades/vulnerabilidades existentes en la metodología propuesta por la PEC 188/2019 para medir la sostenibilidad financiera de los pequeños municipios brasileños. Para alcanzar el objetivo, la metodología propuesta por la PEC fue analizada y aplicada en los 5.570 municipios brasileños, tomando como base los períodos de 2015 a 2020. El estudio se basa en una investigación bibliográfica y documental, con enfoques descriptivos y cuantitativos. Para el tratamiento y análisis de los datos se utilizaron técnicas de estadística descriptiva y medidas de tendencia central. Los resultados muestran que, cuando se aplica la metodología PEC-188, el promedio nacional de sostenibilidad de los municipios brasileños es del 5%, reduciéndose a menos del 3% cuando se analizan solo municipios pequeños con hasta 5.000 habitantes. Asimismo, más del 85% de los municipios brasileños, en promedio, están clasificados como insostenibles con base en la metodología PEC, y dicha condición asciende al 98% al analizar solamente los municipios pequeños. La metodología propuesta por la PEC 188 tiene debilidades que, de no ser resueltas antes de una posible promulgación, podrían llevar a la extinción de aproximadamente 1.224 pequeños municipios brasileños.

Palabras clave: pequeños municipios; sostenibilidad financiera; PEC 188; incorporación de municipios.

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1. INTRODUCTION

In 2019, the political landscape and legislative process saw the emergence of Constitutional Amendment Proposal No. 188 (Proposta de Emenda à Constituição n° 188 - PEC 188), also known as the Federal Pact Amendment, which encompasses one of the main agendas of the Federal Government's program from 2019 to 2022. One of the proposals of this PEC is the inclusion of Article 115 in the Transitional Constitutional Provisions Act (ADCT), which in its wording brings the proposal for the incorporation of small municipalities, considered unsustainable, into larger municipalities. However, the topic has generated debates and questions about its legitimacy, based on the following question: after all, what is an unsustainable municipality?

As a result of the relevance of municipalities in the Brazilian federative reality, the questions regarding the viability of maintaining small municipalities, and the debates in the legislative arena regarding this issue (Senado Federal, 2019) – through Constitutional Amendment Proposal No. 188 (Proposta de Emenda à Constituição n° 188) that could affect thousands of municipalities nationwide –, this study examines the following guiding question: what are the shortcomings and impacts of the

method proposed by PEC 188 for assessing the financial sustainability of small Brazilian municipalities as a parameter for mergers and incorporations?

It is worth questioning whether only the analysis parameter proposed by PEC 188 – the fact that the product of municipal tax revenue corresponds to at least 10% of its revenue – is sufficient, or more than that, fair, to characterize the small municipality as “(un)sustainable”?

This article seeks to highlight weaknesses and vulnerabilities in the methodology proposed by PEC 188 for measuring the financial sustainability of small Brazilian municipalities. In order to achieve this objective, the discussed methodology proposed by the PEC will be applied to all Brazilian municipalities, by conducting analyses of the results and their possible weaknesses/vulnerabilities.

From the 1988 Federal Constitution of the Federative Republic of Brazil (Constituição da República Federativa do Brasil de 1988), municipalities have become part of Brazilian federalism with status and political and administrative autonomy, assuming constitutional obligations and responsibilities. By means of this constitutional innovation, they began to manage their own revenues and receive intergovernmental revenues, as well as acquired the power of self-management through the elaboration of their own organic laws.

Considering the above, the article is justified considering the relevance of the municipal theme – municipalities as federated entities endowed with autonomy and responsibilities – which, as Oliveira (2018, p. 34) states, is “the autonomous representation of the materialization of the State for its people in its territory.” Furthermore, in the same direction, Bonilha (2016) emphasizes that the discussion about municipal viability is relevant, and the debate encompasses factors such as the size of political units, as well as the obligation to provide services in an economic, efficient, and effective manner.

In this context, it is worth noting that the study brings practical contributions aimed at expanding the debate on the subject in the legislative scenario, promoting greater participation of public, private, and citizen agents in the legislative proposals, and encouraging local public managers to conduct more in-depth analyses of the results of public policies adopted in their administrations, especially those related to local development.

The text is structured into seven sections, with the first being this introduction. The second and third sections are dedicated to theoretical foundation and literature review. The fourth section describes the Constitutional Amendment Proposal No. 188 (Proposta de Emenda à Constituição nº 188) of 2019. The fifth section details the methodological procedures used in the study. The sixth and seventh sections are devoted to development, data treatment of the research, and analysis of results and discussions. Finally, in the sixth section, the final considerations and suggestions for future studies are synthesized.

2. BRAZILIAN FEDERALISM: THE MUNICIPALITY AS A FEDERATED ENTITY

As a concept of union and pact, federalism embodies the concept of articulating the parts of a country with the whole through the central state, constituting a form of territorial organization and articulation of central power with regional and local powers, called federal pact, which consists of a set of complex alliances materialized through public funds (Affonso, 1994).

The 1988 constitutional text restructured Brazilian federalism, introducing new foundations and reestablishing the relationship between the federation and the principles and rules that characterized this form of state, bringing a significant and unique innovation of the Federal Constitution of Brazil of

1988 (Constituição da República Federativa do Brasil de 1988), with the inclusion of the municipality as a component of the federation, holder of constitutional autonomy, own revenues, and the power of self-organization through the elaboration of an organic law (Affonso, 1996; Soares, 2008).

The power structure among government spheres in a federation, however, presupposes a significant transfer of public resources between regions with unequal economic capacities and significant social asymmetries. However, the flow of resources ends up forging, at certain times, the “federal pact” (Affonso, 1998).

Fabriz and Ferreira (2002), as well as Meirelles (2014), corroborate that by elevating the Brazilian municipality to a state entity, the new Constitution granted them political, administrative, and financial autonomy, with eminently political attributions and a wide power of self-government.

It is worth noting, however, that one of the fundamental requirements and characteristics of a federal state is the distribution of competences, whose attributions of the Union and the federated units are established in the constitution to ensure the autonomy and coexistence of the entities that compose it (Bercovici, 2008; Bonavides, 2015; Dallari, 2013; Horta, 1991).

The constitutional competencies of municipalities are listed in Article 30 of the federal constitution. Furthermore, in Article 13, administrative competencies common to the Union, states, the Federal District, and municipalities are mentioned. Among the main constitutional obligations of municipalities are programs for early childhood education and elementary education, health services for the population, and planning and control of land use, as well as land partitioning and urban occupation.

After the promulgation of the Federal Constitution of Brazil in 1988 (Constituição da República Federativa do Brasil de 1988), there was a significant increase in the number of small municipalities in Brazil due to the relaxation of rules for emancipation. However, despite the wave of municipalization, the process of creating municipalities came to a halt with the promulgation of Constitutional Amendment No. 15, on September 12, 1996 (Emenda Constitucional nº 15, de 12 de setembro de 1996), which modified Article 18 of the constitution, requiring the elaboration of municipal viability studies for emancipations (Brandt, 2010; A. L. Fernandes, Beal, Pepicelli, & L. F. Silva, 2015; Gomes & Mac Dowell, 2000).

In this scenario, it is worth noting some reasons identified for the emancipation of municipalities, based on studies by Boueri, Monasterio, Mation, and M. M. Silva (2013), as well as by Gomes and Mac Dowell (2000):

- 1) Because their populations and political elites perceive that they can do so, meaning that political decentralization has given them a share of power.
- 2) Since it increases their status and financial resources, prioritizing the territory rather than the number of people.
- 3) Because decentralization is more suitable for identifying the population's needs, as mayors of small municipalities would have more information about the citizens and their needs, which, involving a smaller group of people, would be more homogeneous, making it easier to adjust public policies.

Boueri et al. (2013) also analyze that a negative aspect of creating small municipalities revolves around the fixed costs inherent to each federated entity. Regardless of the size of a municipality, it is necessary to have a minimum executive and legislative structure, composed of mayors, secretaries, advisors, and councilors. Planning, the implementation of public policies, and accountability require

adequate technical resources, which can become costly for a small-town hall. Furthermore, problems of externalities arise when public policies have impacts that exceed the limits of the federated entity.

Thus, the smaller the municipality, the greater the difficulty in maintaining the minimum administrative and legislative structure for its sustainability. In addition, other unfavorable diagnoses for smaller governments include: lower fiscal capacity, high debt levels, negative balance in public accounts, and difficulty in providing services (Bonilha, 2016).

Henrichs, Cavalcante, and Nascimento (2014) add that while, on the one hand, emancipation brings the population closer to the government, suggesting an improvement in services provided, on the other hand, it can burden the municipal entity, making it financially dependent on transfers from other agencies and hindering human development.

3. FINANCIAL (UN)SUSTAINABILITY: POSSIBILITIES AND FRAGILITIES

The notion of “sustainability” can have a broad epistemological spectrum, and it can be discussed in terms of defining indicators, certifications, management and sectoral policies – of nations, regions, and organizations – projects and measurable economic outcomes, as well as referring to something socially inclusive, environmentally sustainable, or economically sustainable over time (Boeira, 2012).

Santos and Wagner (2008) argue that sustainable development challenges organizations to be more transparent and responsible in their management, aiming at creating sustainable value, increasing profits, reducing risks, legitimacy, and growth.

Mikhailova (2004) advocates that sustainability can be observed from the perspective of four key areas:

- 1) Economic growth and equity: An integrated approach to promoting responsible long-term growth.
- 2) Conservation of natural resources and the environment: Preservation of the environmental heritage for future generations.
- 3) Social: Guarantee of cultural and social diversity, labor rights, employment, food, education, energy, health services, water, and sanitation.
- 4) Financial sustainability: The ability of an organization to generate its own profits to finance its activities, becoming a sustainable enterprise – in institutional, technical, political, and economic-financial terms – over time (Araújo, 2003).

In Graph 1, the key areas linked to the term “sustainability” are illustrated.

GRAPH 1 KEY AREAS OF THE TERM “SUSTAINABILITY”

Source: Developed based on Araújo (2003) and Mikhailova (2004).

As observed, the concept of sustainability, in its broad aspect, is very comprehensive, despite the breadth of the concept, including its eco-environmental aspect. Thereby, the concept will be addressed in a narrow aspect - that of financial sustainability, which envisions measurable economic results (Oliveira, 2018), highlighted in Graph 1.

Scaff (2014) states that the financial (in)sustainability of a nation or government has positive or negative repercussions beyond its borders, emphasizing the importance and duty of concern for the collective. It is considered a diffuse interest of society.

Andrews (2015) supports the idea that the financial sustainability of local governments is often seen as finding the ideal scale and structure for the efficient provision of vital local public services. The response advocated by policymakers is that “bigger is better,” or at least “it’s cheaper,” so local governments should be restructured to maximize potential economies of scale that may be present in the system.

Andrews (2015) also highlights that small local governments can be particularly prone to financial mismanagement, especially because their ability to generate tax revenue is generally more restricted (and more critical) than larger units. In this line, Bernardelli, Kortt, and Dollery (2019) argue, based on empirical studies, for the need for a structural reform of local governments to adopt public policies that promote municipal mergers. For Tran, Kortt, and Dollery (2019), as well as for Bernardelli et al. (2019), these studies can be effective instruments for creating larger government entities, improving the efficiency of local authorities, and generating economies of scale.

However, this is a point that arouses controversy at the legislative, political, and social levels, especially in the Brazilian context. An example of this is PEC 188, which came into the Brazilian political and legislative scene in 2019 and will be further explored in subsequent sections of this study. The PEC addresses, among other topics, the measurement of financial sustainability of small municipalities, calculated based on the percentage of own revenue over total revenue, and the subsequent incorporation of those considered unsustainable into sustainable ones.

Caldas, Dollery, and Marques (2018) caution that the sustainability of local governments is much broader than financial sustainability and should be evaluated from a more comprehensive perspective, especially in terms of the local management's ability to act effectively in the long term and meet the community's interests.

Tran et al. (2019) report that there is a group of empirical literature decidedly skeptical about the merger of local governments. This group raises serious doubts about whether municipal mergers or incorporations improve the performance of municipalities. Furthermore, international evidence regarding the outcomes of municipal mergers, as accumulated in empirical literature, has had little influence on proponents of consolidation.

Given the gap in the topic and the intense discussion prompted by PEC 188, in a critical approach to its conceptual proposal, it is suggested that the analysis of the sustainability of local governments goes beyond the threshold of financial sustainability and starts to consider the aspects of local government capacity in a broader sense, synonymous with capacity and sustainability.

Wolman, McManmon, Bell and Brunori (2008) argue that, although the theme of local government capacity/sustainability is generally observed only from the perspective of resource sufficiency, this analysis should include a wide range of attributes, such as resource stability, professional skills, management competence, quality of service provision, etc.

Maintaining higher levels of local government capacity/sustainability, as in a virtuous circle, generates more resources to define agendas autonomously and achieve the goals of public policies. In other words, more capable governments are more successful in achieving their objectives (Grin, A. B. Nascimento, Abrucio, & A. S. Fernandes, 2018).

Contributing to the discussion, Marengo, Strohchoen and Joner (2017) analyze that the concept of state capacity is related to the intervention of state agents or local managers using means such as coercion, decisions, procedures, laws, information, resource distribution, status, income, or property. It is thus inferred that the capacity of local governments is closely linked to the actions of the agents involved in their management and the decisions they make.

4. PEC 188: PROPOSAL FOR THE INCORPORATION OF SMALL MUNICIPALITIES CONSIDERED UNSUSTAINABLE

The Proposed Amendment to the Constitution No. 188 of 2019 was submitted to the plenary of the Brazilian Federal Senate on November 5, 2019. It is a general norm PEC, classified under the subject: "Administrative - Political-administrative organization of the State." The proposal is authored by 33 senators from various political parties and aims to amend Articles 6, 18, 20, 29-A, 37, 39, 48, 62, 68, 71, 74, 84, 163, 165, 166, 167, 168, 169, 184, 198, 208, 212, 213, and 239 of the Federal Constitution; Articles 35, 107, 109, and 111 of the Act of Transitional Constitutional Provisions; in addition to adding Articles 135-A, 163-A, 164-A, 167-A, 167-B, 168-A, and 245-A to the Federal Constitution; adding Articles 91-A, 115, 116, and 117 to the Act of Transitional Constitutional Provisions; and repealing constitutional and legal provisions, among other measures.

Since its submission and processing, the proposal has received 66 amendments. In accordance with Article 332 of the Senate's Internal Rules (Risf), it was archived on December 22, 2023, due to the end of the 2019-2022 legislative term. It can be reopened at any time if there is political interest.

The subject matter dealing with changes that can influence the maintenance of small Brazilian municipalities with fewer than 5,000 inhabitants is defined in Article 6, which proposes to add Article 115 to the Act of Transitional Constitutional Provisions:

Article 6. The Act of Transitional Constitutional Provisions shall be supplemented with Articles 91-A, 115, 116, and 117.

[...]

Article 115. Municipalities with up to five thousand inhabitants must prove their *financial sustainability* by June 30, 2023. § 1. The financial sustainability of the Municipality is attested by demonstrating that the respective revenue from the taxes referred to in Article 156 of the Federal Constitution corresponds to *at least ten percent of its revenue*. § 2. The Municipality that does not prove its financial sustainability shall be *incorporated into one of the neighboring municipalities*, starting from January 1, 2025. § 3. The Municipality with the best financial sustainability index will be the incorporating municipality. § 4. Up to three municipalities can be incorporated by a single incorporating municipality. § 5. The provisions of Article 18, § 4 of the Federal Constitution do not apply to the incorporation referred to in this article. § 6. For the purpose of calculating the number of inhabitants referred to in the main clause, only the population census data for the year 2020 will be considered (Brazil, 2019, emphasis added).

The addition of this provision, if enacted, would result in the reassessment of the sustainability of 1,307 small municipalities in Brazil, posing the risk of incorporation for most of them, according to data from the National Confederation of Municipalities (CNM) (Aroldi, 2019). With the upcoming census by the Brazilian Institute of Geography and Statistics (IBGE), scheduled for the second half of 2022 and early 2023, it is certain that the total number of municipalities with a population of up to 5,000 inhabitants will be different from what was reported in the 2010 Census (Instituto de Geografia e Estatística [IBGE], 2010), due to changes in population quotient.

The Federal Pact Amendment (PEC) has been subject to criticism and questioning regarding potential weaknesses by organizations and institutions affiliated with interested parties, as well as by the media. Some identified criticisms and their authors are detailed in Box 1.

BOX 1 POSITIONS OF ENTITIES REGARDING THE WEAKNESSES OF PEC 188

Position – Weakness	Authorship – Organization/Entity
“The proposal is bad from a broader perspective of democratic institution design.”	Galdino (2019) Portal Transparência Brasil (Transparency Portal Brazil)
“PEC 188 is a disaster for Brazilian social policies.”	Amaral (2019) Observatório do Conhecimento (Knowledge Observatory)
“The Proposed Amendment to the Constitution No. 188/2019 represents a severe blow to the federal form of government, a fundamental clause.”	Macedo (2020) Estadão

Continue

Position – Weakness	Authorship – Organization/Entity
“The PEC related to municipalities undermines municipal autonomy, a regressive measure, contrary to the dispersion of public resources, which would harm political capacity, alienate citizens from participating in local political life, and challenge their identity.”	Bonilha (2019) Instituto Rui Barbosa - IRB (Rui Barbosa Institute)
“PEC 188 is a major mistake and demonstrates the lack of knowledge of its authors about the Brazilian reality. Furthermore, it violates the federative principle, which is a fundamental clause in the Brazilian Constitution.”	Aroldi (2019) President of CNM (National Confederation of Municipalities)

Source: Research data.

On the other hand, studies such as those by Bonilha (2016), Boueri et al. (2013), Henrichs et al. (2014), and Oliveira (2018) highlight important points to consider regarding the consequences of maintaining a structure of such a small entity with indiscriminate responsibilities, as shown in Box 2.

BOX 2 STUDIES AND REMARKS CONCERNING THE MAINTENANCE OF SMALL MUNICIPALITIES:

Study	Observations from the study
Boueri et al. (2013, p. 224)	“A municipality, regardless of its size, requires a minimum executive structure (mayors, secretaries, and advisors) and legislative structure (councilors). Planning, the execution of public policies, and accountability demand an appropriate technical staff, which can be challenging to afford in a small municipality. Problems of externalities are associated with public policies whose impacts extend beyond the limits of the Federated Entity.”
Henrichs et al. (2014)	“With the emancipation of a small municipality, there may be a financial burden on the municipal entity, making it financially dependent on transfers from other entities and hindering human development.”
Bonilha (2016)	“Unfavorable diagnoses for smaller governments include lower fiscal capacity, a high level of indebtedness, a negative balance in public accounts, difficulty in providing services, and the smaller the municipality, the greater the difficulty in maintaining a minimum administrative and legislative structure.”
Oliveira (2018)	“The study analyzed small municipalities in the state of Paraná, and the results concluded that, due to their lack of financial capacity to meet their federal functions, most of these municipalities are dependent on intergovernmental external transfers to provide basic services to the population.”

Source: Elaborated by the authors.

Considering the above, in order to provide a better understanding and clarification of the issue of financial sustainability mentioned in PEC 188, the following section presents the analysis and application of the methodology for assessing municipal financial sustainability.

5. METHODOLOGICAL ASPECTS

The purpose of this article is to study and critically assess the methodology proposed by PEC 188. It should be noted that the methodology was not created by the authors but rather elucidated and interpreted, as detailed in this section.

The calculation proposed by PEC, referred to here as Municipal Financial Sustainability (MFS), to determine whether a municipality is sustainable or not is defined in the wording of § 1 of Article 115 of the proposal: “§ 1. The financial sustainability of the Municipality is attested by demonstrating that the respective revenue from the taxes referred to in Article 156 of the Federal Constitution corresponds to at least ten percent of its revenue.”

The calculation for determining the Municipal Financial Sustainability of PEC-188 (MFS-PEC188) is structured in Equation 1.

Equation 1

$$SFMPEC188 = \left[\left(\frac{AP}{RT} \right) \times 100 \right]$$

Where:

AP = Municipal Own Revenue

RT = Total Revenue

Municipal Own Revenue (AP) is calculated using the equation:

$$AP = (IPTU + ITBI + ISSQN)$$

Where:

AP = Represents the sum of values related to Municipal Own Revenue. In the sum of Municipal Own Revenue, revenues marked with an asterisk (*) in Annex A were considered.

IPTU = Property Tax (art. 156, I, CF/88)

ITBI = Real Property Transfer Tax (art. 156, II, CF/88)

ISSQN = Tax on Services of Any Nature (art. 156, III, CF/88)

Based on the teachings of Andrade (2010), Gil (2010), Marconi, and Lakatos (2018), as a source of documentary research, statistical data were extracted from official public and private databases, such as the Brazilian Institute of Geography and Statistics (IBGE), Brazil Finance (Finbra), and the Brazilian Public Sector Accounting and Financial Information System (Siconfi).

According to the mentioned PEC, municipalities that do not reach the 10% threshold in the SFM-PEC188 indicator will be considered unsustainable. Thus, it can be inferred that the score of the PEC methodology is classified as shown in Graph 2.

GRAPH 2 CLASSIFICATION SCORE OF SFM-PEC188

Source: Developed based on PEC 188 (2019).

PEC 188 specifies that, for the purpose of calculating the number of inhabitants referred to in the proposal, only the data from the 2020 population census will be considered. However, due to the public health emergency caused by the COVID-19 pandemic, IBGE (2020) announced the postponement of the demographic census, which was only resumed in the second half of 2022 (IBGE, 2022). For this study, population estimate data for municipalities published by IBGE in 2021 (IBGE, 2021) were chosen.

As it is a quantitative study, descriptive statistics and measures of central tendency techniques were used for data analysis and the development of results and discussions, employing the Minitab® 18 Statistical software, version 18. Additionally, the data analysis tool of the Microsoft Excel spreadsheet editor and the Power BI business analysis tool were used as complementary tools.

When analyzing the available population and a potential sample, the chosen methodology was applied to all Brazilian municipalities, with an emphasis on the analysis of results for small municipalities with a population of up to 5,000 inhabitants, as they constitute the primary stratum of municipalities to be affected by PEC 188.

Regarding the temporal period considered for data collection and analysis, a six-year interval was defined, from 2015 to 2020. Data from 2021 were not considered due to limitations in information on the Brazilian Public Sector Accounting and Financial Information System/Brazil Finance (Siconfi/Finbra) portal. Finally, data analysis was performed based on consolidations of tables, charts, graphs, and reports.

6. RESULTS AND DISCUSSIONS

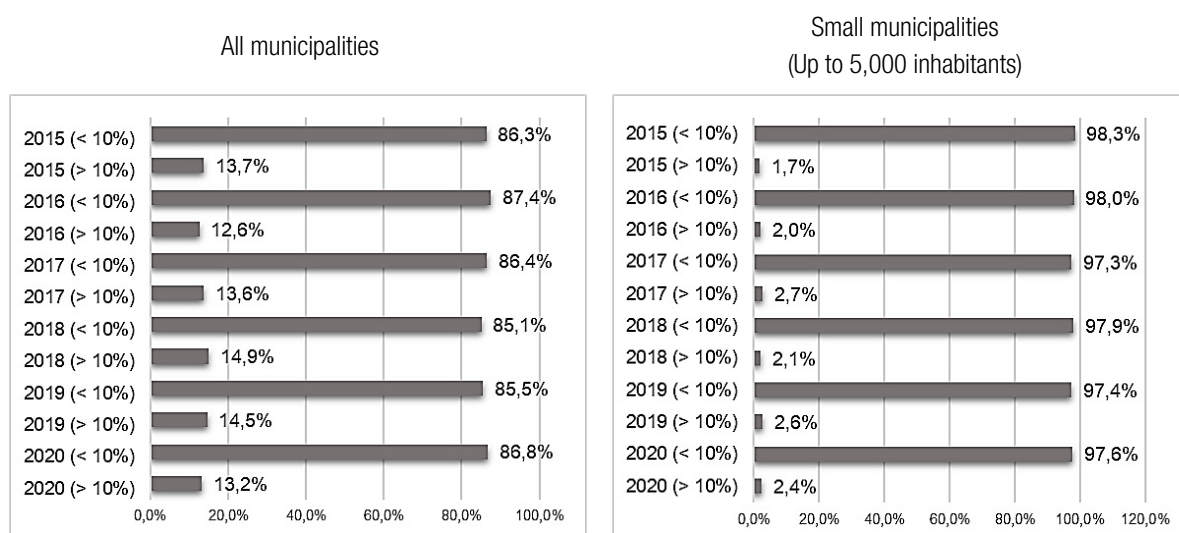
6.1 Analysis of SFM-PEC 188 for Brazilian municipalities based on the PEC methodology

Data from all 5,570 Brazilian municipalities were collected and analyzed for the period from 2015 to 2020. Based on the population estimate table from IBGE (2021), 1,249 of these municipalities are small, with a population of up to 5,000 inhabitants, representing an estimated reduction of 4.43% compared to the 2010 census.

The data for the analysis were collected from the Siconfi/Finbra portal, resulting in the creation of a final database with 5,570 elements. For the purpose of analysis in each year, those municipalities that did not have complete data for all categories in the database were excluded, resulting in the final count shown in Table 1.

The first significant data point to note in the results of the methodology application is the concerning portion of municipalities classified as unsustainable (result < 10%). As seen in Graph 3, on average, more than 85% of municipalities had results below 10% for SFM-PEC188 in all the analyzed periods.

GRAPH 3 PERCENTAGE OF MUNICIPALITIES THAT ACHIEVED RESULTS > OR < 10% FOR SFM-PEC188



Source: Research data.

When considering only small municipalities, the result is even more alarming, as, on average, 98% of them classify as “unsustainable” in all the analyzed periods. This means that only 2% of them achieve the necessary percentage to be considered sustainable according to the methodology proposed by PEC 188.

For further detail, Table 1 lists the main results of the statistics applied to the study’s database: the count of municipalities with valid data for SFM-PEC188 calculation, the average result of all observed municipalities, the standard deviation, the lowest result for each year, the 1st quartile – representing the accumulated result of the lower 25% of the data, the median, the 3rd quartile – representing the accumulated result of the upper 75% of the data, and the highest result for each year.

TABLE 1 DESCRIPTIVE STATISTICS OF SFM-PEC188 RESULTS FOR BRAZILIAN MUNICIPALITIES

Year	Count	Mean	Standard Deviation	Smallest	T1	Median	T3	Largest
2015	5059	5.08%	5.56%	0.05%	1.46%	3.11%	6.80%	49.59%
2016	4683	5.04%	5.79%	0.07%	1.48%	3.04%	6.60%	88.38%
2017	5140	5.12%	5.69%	0.08%	1.47%	3.14%	6.75%	66.73%
2018	4767	5.34%	5.84%	0.05%	1.56%	3.26%	7.09%	89.45%
2019	5069	5.28%	5.65%	0.07%	1.58%	3.24%	7.11%	53.60%
2020	5064	5.12%	5.33%	0.02%	1.57%	3.31%	6.88%	50.86%

Source: Research data.

It is evident that the average SFM percentage is approximately 5%, with little variation across the periods. Additionally, it can be observed that 75% of the analyzed municipalities have results below 7% for SFM-PEC188, as indicated by the data from the 3rd quartile.

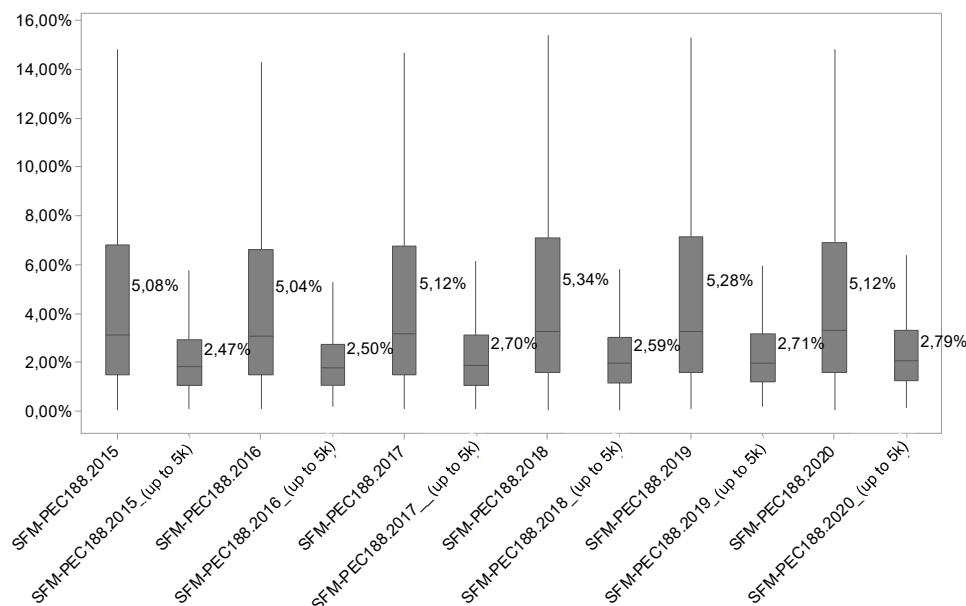
The same analysis was conducted considering only data from small municipalities, as shown in Table 2, yielding alarming results as the average percentage remains below 3% in all periods. When examining the data from the 3rd quartile (75% of municipalities), it becomes clear that most municipalities do not even reach 4% in their results.

TABLE 2 DESCRIPTIVE STATISTICS OF SFM-PEC188 RESULTS FOR BRAZILIAN MUNICIPALITIES WITH UP TO 5,000 INHABITANTS

Year	Count	Mean	Standard Deviation	Smallest	T1	Median	T3	Largest
2015	1135	2.47%	2.73%	0.08%	1.06%	1.81%	2.93%	36.60%
2016	1065	2.50%	3.70%	0.20%	1.06%	1.75%	2.74%	72.86%
2017	1125	2.70%	3.71%	0.08%	1.06%	1.87%	3.10%	56.33%
2018	1053	2.59%	2.81%	0.05%	1.12%	1.93%	2.99%	31.88%
2019	1133	2.71%	2.90%	0.17%	1.18%	1.97%	3.15%	32.70%
2020	1125	2.79%	2.77%	0.15%	1.25%	2.07%	3.31%	31.37%

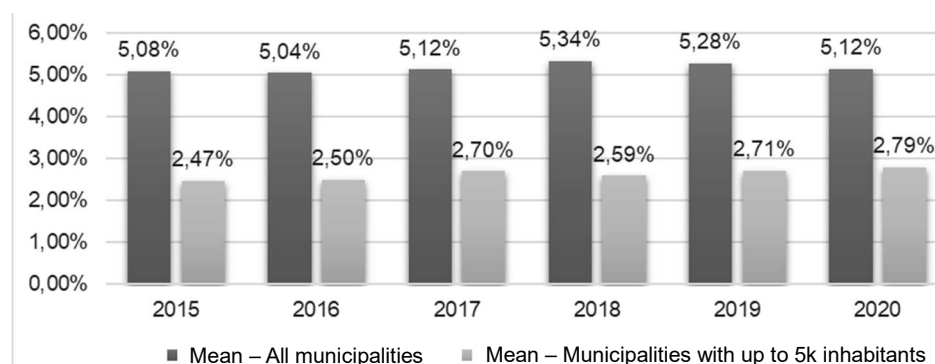
Source: Research data.

The analysis in Graph 4 illustrates the variation in results when considering all Brazilian municipalities and only the group of small municipalities.

GRAPH 4 BOXPLOT GRAPH OF RESEARCH DESCRIPTIVE STATISTICS

Source: Research data.

Graph 5 demonstrates the evolution of the average SFM-PEC188 results from 2015 to 2020, considering the two examined groups.

GRAPH 5 COMPARATIVE GRAPH OF SFM-PEC188 AVERAGE FROM 2015 TO 2020

Source: Research data.

In the six observed periods, an average of 98% of small municipalities classified themselves as unsustainable, as shown in Table 3. Based on the methodological proposal of PEC 188, the results indicate that 1,081 small municipalities are at risk of being incorporated into others.

TABLE 3 PERCENTAGE OF MUNICIPALITIES CLASSIFIED AS “UNSUSTAINABLE” BASED ON SFM-PEC 188

Period	Number of small municipalities analyzed	Number of municipalities classified as unsustainable	%
2015	1135	1116	98%
2016	1065	1044	98%
2017	1125	1095	97%
2018	1053	1031	98%
2019	1133	1103	97%
2020	1125	1098	98%
-	Mean	1081	98%

Source: Research data.

It can be inferred that the methodology proposed by PEC 188 exhibits significant methodological weaknesses, especially when considering the consequences that it will have for all small municipalities and their residents. It foresees the possibility that a municipality unable to prove its financial sustainability will be incorporated into one of its neighboring municipalities starting on January 1, 2025. The criteria for incorporation are as follows: i) The municipality with the best financial sustainability index will be the incorporating municipality; ii) up to three municipalities can be incorporated by a single incorporating municipality.

These changes may lead to a reduction in intergovernmental resources allocated to the region, such as the FPM and Fundeb, as the shares previously received by certain municipalities would be absorbed into the share of the incorporating municipality. This redistribution would be based on population levels, potentially resulting in incorporation without an increase in the share received by the incorporating municipality. Furthermore, there may be greater challenges in accessing public services and advocating for demands, given the increased distance between the local government and the newly incorporated residents.

Based on this criterion and the trend observed in Table 3, it is estimated that, with a potential promulgation, the incorporation of approximately 1,224 (98%) of the 1,249 small municipalities could occur, representing a reduction of approximately 22% (1,224 out of 5,570).

It is worth highlighting the perspective of Tran et al. (2018), which sheds light on consistent doubts about whether municipal mergers or incorporations improve the performance of municipalities.

Additionally, certain points raised as weak and questionable by the CNM (Aroldi, 2019) in an official note published regarding PEC 188 are noteworthy:

- 1) Flawed methodology for defining “sustainability” (§ 1): It is not possible to measure the efficiency of a municipality with an indicator as presented in the PEC because, according to the proposed rule, 97% of small municipalities would not reach the limit of 10% of taxes on their total revenue.
- 2) Federal principle: The PEC violates the federal principle by proposing the extinction of small municipalities since the establishment and merger/incorporation of municipalities are mandates

of the original constituent and can only be carried out through a plebiscite, involving the affected communities.

- 3) Democratic principle: In theory, extinguishing small municipalities would distance citizens from local political life, thereby violating the principle of democracy.
- 4) Misunderstanding regarding own revenue: The PEC disregards the constitutional transfers outlined in the 1988 Constitution as part of the total revenue of municipalities. Despite being collected by the Union and states, these are portions of revenue that constitutionally belong to the residents and local governments. Consequently, the Municipal Participation Fund (FPM), as an example, plays an essential role in redistributing resources and reducing inequalities.
- 5) Indicators that should be considered include population and the public services provided when calculating sustainability.

Considering the findings and the implications of the PEC proposal, it is important to highlight the warning from Caldas et al. (2018), who emphasize that the sustainability of local governments is much broader than just financial sustainability. They recommend evaluating it from a broader perspective, especially in terms of local management capacity, effectiveness, and the provision of public services to the population.

There are several gaps that deserve to be exposed and warrant further debate and attention. These gaps can provide valuable input for discussions related to the PEC and contribute to finding a balanced solution for the following issues:

- 1) Will intergovernmental transfers be counted in the total revenue of municipalities for the calculation proposed by the PEC? If these transfers are counted, will the results disadvantage smaller municipalities that, for example, receive the same share of the Municipal Participation Fund (FPM) despite having obviously lower own revenue?
- 2) Considering that a portion of the revenue collected by other federal entities, which is later distributed through intergovernmental transfers, originates from municipalities – for example, the Tax on Rural Property, which the Union is responsible for instituting and collecting, then passing on 50% to municipalities as mandated by the Federal Constitution – it is reasonable to assume that this revenue, collected by a higher-level federal entity and then passed on to municipalities, originally belongs to the municipality. In this way, shouldn't intergovernmental transfers be considered or counted as a municipality's own revenue to make the analysis fairer?
- 3) Municipalities have other sources of own revenue besides the taxes listed in Article 156 of the Federal Constitution, such as fees and contributions. So, why not consider them as own revenue?

As an illustrative example, although it is not the focus of this study, Table 4 shows the behavior of the indicator when all current revenues collected locally by municipalities are counted, except for current transfers, for the periods of 2015 and 2016.

To differentiate this indicator from the SFM-PEC188, it will be referred to as the "Own Revenue Indicator" (ORI), represented by equation 2.

Equation 2

$$IAP = \left[\frac{(RC - TC)}{RT} \right]$$

In the equation above, CR represents “current revenues,” CT represents “current transfers,” and TT represents “total revenue” – the annual value of the municipality’s total revenue.

For the proposed calculation of the ORI, current transfers were excluded to observe the total of all revenues collected at the local level by municipalities. The revenues considered can be seen in Annex A, and the results are shown in Table 4.

TABLE 4 COMPARISON OF THE RESULTS OF THE OWN REVENUE INDICATOR (ORI) AND THE SFM-PEC188 FOR BRAZILIAN MUNICIPALITIES IN 2015 AND 2016)

Year	Count	Mean	Standard Deviation	Smallest	T1	Median	T3	Largest
SFM-PEC - 2015	5059	5.08%	5.56%	0.05%	1.46%	3.11%	6.80%	49.59%
SFM-PEC - 2016	4683	5.04%	5.79%	0.07%	1.48%	3.04%	6.60%	88.38%
ORI-2015	5428	12.36%	9.86%	0.19%	5.18%	9.46%	16.50%	99.95%
ORI-2016	5416	12.58%	10.18%	0.23%	5.14%	9.66%	17.21%	99.30%

Source: Research data.

When considering all sources of own revenue for municipalities, the indicator yields more robust results. The average increases from approximately 5% in SFM-PEC 188 to over 12% when using the Own Revenue Indicator (ORI). Furthermore, all other statistical parameters show a considerable increase, confirming that a deeper exploration of indicators and indices related to this topic is valid and will contribute to the empirical and academic field.

This discussion highlights the need for a broader and more in-depth analysis to address the theme of municipal financial sustainability. It involves delving into the concept of local government capacity and considering a wide range of attributes, such as resource stability, management competence, quality of service provision, and the ability of state actors or local administrators to intervene, including coercion, decision-making, information dissemination, resource distribution, income, or property. The goal is to generate positive outcomes for local government, such as achieving public policy objectives, resource generation, and the attainment of its ultimate purpose (Wolman et al., 2008; Grin et al., 2018; Marenco et al., 2017).

7. FINAL CONSIDERATIONS AND SUGGESTIONS

After analyzing the methodology defined by the PEC to measure Municipal Financial Sustainability (SFM) and its application to all Brazilian municipalities, the average percentage for Brazilian municipalities is approximately 5%, reducing to less than 3% when considering only small municipalities. In general, more than 85% of them show SFM-PEC188 results below 10%, which could be considered unsustainable. When considering only small municipalities, approximately 98% of them fall into the category of financial unsustainability in all the analyzed periods.

It is worth noting that a potential enactment of PEC 188 could lead to the extinction of approximately 1,224 small municipalities, based on the percentage identified as a trend in the six analyzed periods. Thus, the study's results suggest that the methodology proposed by PEC 188 for analyzing the SFM of small municipalities appears to be fragile and even concerning, especially when considering the consequences for those small municipalities classified as unsustainable. With this classification, small municipalities would necessarily be incorporated into larger ones, regardless of any geographic, cultural, social, or developmental interactions they may provide.

It is important to mention the political implications of the extinction proposal outlined in PEC 188, which goes beyond the boundaries of the National Congress and impacts the legislative powers at the local spheres. It is known that districts seek emancipation for two reasons: "(i) because their populations and political elites perceive they can do so, meaning that political decentralization gives them a share of power; and (ii) because it increases their status - and financial resources" (Oliveira, 2018, pp. 41-42).

Considering this, it can be presumed that any imposition of mergers or incorporations of emancipated and politically structured municipalities will result in political implications and necessitate rearrangements in the distribution of political power in local and regional contexts.

However, despite the weaknesses evident regarding the subject of PEC 188, this does not imply that there are only virtuous aspects in these thousands of municipalities with very low revenue and population, subsisting on intergovernmental transfers. Therefore, in alignment with the studies of Bonilha (2016) e Boueri et al. (2013), as well as Henrichs et al. (2014), there is a need for reflection on the disadvantages of maintaining such small municipalities: high fixed costs, difficulty in maintaining the minimum administrative and legislative structure, lower fiscal capacity, a high degree of indebtedness, a negative balance in public finances, challenges in service provision, financial dependence on other entities, and hindrances to human development.

This work provides theoretical and empirical contributions to the topic, as it not only fosters discussions about federalism and its strengths and weaknesses but also highlights the importance of municipalities as implementers of state and government policies for the people who actually inhabit and utilize the local space, necessitating state participation in problem-solving. The agenda of municipality extinction requires more robust political-scientific support, as the proposal for mergers or incorporations based solely on the methodology proposed by PEC 188 is fragile.

Therefore, there is a need for research and debates on the topic of municipal financial sustainability, considering other municipal revenues and relevant economic, political, and social aspects.

Recognizing the significance and limitations of this study, there is room for new and complementary research to further expand our understanding of the subject through empirical confirmations. Hence,

it is suggested to develop and deepen studies focusing on the proposition of a robust methodology for characterizing Municipal Financial Sustainability, considering budgetary, economic, social, local/regional development, and quality of life aspects. Additionally, this should consider other sources of own revenue, such as fees and contributions, in the composition of total revenue, in addition to the taxes listed in Article 156 of the constitution.

Finally, it is recommended to carry out research and studies related to the qualitative outcomes of local governments beyond the financial aspect, analyzing public policies, local/regional development, investments, and results.

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Antonio Gonçalves de Oliveira: Conceptualization (Supporting); Data curation (Supporting); Formal Analysis (Supporting); Funding acquisition (Lead); Investigation (Equal); Methodology (Supporting); Project administration (Equal); Resources (Equal); Software (Supporting); Supervision (Lead); Validation (Supporting); Visualization (Supporting); Writing – original draft (Supporting); Writing – review & editing (Equal).

DATA AVAILABILITY

The entire dataset supporting the results of this study was made available in the Institutional Repository of the Federal Technological University of Paraná (RIUT) and can be accessed in <http://repositorio.utfpr.edu.br:8080/jspui/handle/1/30450>

ANNEX

BOX A SOURCES OF CURRENT REVENUE FOR MUNICIPALITIES

1.0.0.0.00.00.00 – CURRENT REVENUES**1.1.0.0.00.00.00 - Tax Revenue****1.1.1.0.00.00.00 - Taxes**

1.1.1.2.00.00.00 - Taxes on Property and Income

1.1.1.2.02.00.00 - Property Tax (IPTU)*

1.1.1.2.04.00.00 - Income Tax and Any Nature of Income (IR)

1.1.1.2.04.31.00 - Withheld at Source - Labor

1.1.1.2.04.34.00 - Withheld at Source - Other Income

1.1.1.2.08.00.00 - Real Property Transfer Tax (ITBI)*

1.1.1.3.00.00.00 - Taxes on Production and Circulation

1.1.1.3.05.00.00 - Tax on Services of Any Nature (ISSQN)*

1.1.2.0.00.00.00 - Fees

1.1.2.1.00.00.00 - Fees for the Exercise of Police Power

1.1.2.2.00.00.00 - Fees for the Provision of Services

1.2.0.0.00.00.00 - Contribution Revenue

1.2.1.0.00.00.00 - Social Contributions

1.2.1.0.29.00.00 - Contributions to the Public Servant's Public Pension

1.2.1.0.29.07.00 - Contributions to the Active Civil Servant's Public Pension

1.2.1.0.29.09.00 - Contributions to the Inactive Civil Servant's Public Pension

1.2.1.0.29.11.00 - Contributions to the Civil Pensioner's Public Pension

1.2.3.0.00.00.00 - Contributions for the Cost of Public Lighting Services

1.3.0.0.00.00.00 - Property Revenue

1.3.1.0.00.00.00 - Real Estate Revenue

1.3.1.1.00.00.00 - Rent

1.3.2.0.00.00.00 - Revenue from Securities

1.3.2.1.00.00.00 - Interest on Income Bonds

1.3.2.2.00.00.00 - Dividends

1.3.2.5.00.00.00 - Remuneration of Bank Deposits

1.3.2.8.00.00.00 - Remuneration of Investments in the Public Servant's Public Pension

1.3.3.0.00.00.00 - Concessions and Permits Revenue

Continue

1.6.0.0.00.00.00 - Service Revenue

1.6.0.0.01.00.00 - Commercial Services

1.6.0.0.03.00.00 - Transportation Services

1.6.0.0.13.00.00 - Administrative Services

1.6.0.0.19.00.00 - Recreational and Cultural Services

1.6.0.0.43.00.00 - Collection, Transportation, Treatment, and Final Disposal of Solid Waste Services

1.6.0.0.99.00.00 - Other Services

1.7.0.0.00.00.00 - Current Transfers

1.7.2.0.00.00.00 - Intergovernmental Transfers

1.7.2.1.00.00.00 - Federal Transfers

1.7.2.1.01.00.00 - Share of Federal Revenue

1.7.2.1.01.02.00 - Share of the Municipal Participation Fund (FPM)

1.7.2.1.01.03.00 - Share of the Municipal Participation Fund - 1% Annual Share

1.7.2.1.01.04.00 - Share of the Municipal Participation Fund - 1% Share delivered in July (67)(I)

1.7.2.1.01.05.00 - Share of the Rural Property Tax (ITR)

1.7.2.1.22.00.00 - Transfers from Financial Compensation for Natural Resource Exploitation

1.7.2.1.22.40.00 - Share of Royalties for Excess Oil Production - Law No. 9478/97 Article 49 I and II

1.7.2.1.22.50.00 - Share of Royalties for Special Participation - Law No. 9478/97 Article 50

1.7.2.1.22.70.00 - Share of the Special Petroleum Fund (FEP)

1.7.2.1.33.00.00 - Transfers of Resources from the Unified Health System (SUS) - Fund-to-Fund Transfers

1.7.2.1.34.00.00 - Transfers of Resources from the National Social Assistance Fund (FNAS)

1.7.2.1.35.00.00 - Transfers of Resources from the National Education Development Fund (FNDE)

1.7.2.1.36.00.00 - Financial Transfers of ICMS (Value Added Tax on Sales and Services) - Exoneration - Law No. 87/96

1.7.2.1.99.00.00 - Other Federal Transfers

1.7.2.2.00.00.00 - State Transfers

1.7.2.2.01.00.00 - Share in State Revenue

1.7.2.2.01.01.00 - Pro Rata Share of ICMS (Value Added Tax on Sales and Services)

1.7.2.2.01.02.00 - Pro Rata Share of IPVA (Vehicle Tax)

1.7.2.2.01.04.00 - Pro Rate Share of IPI (Excise Tax on Manufactured Goods) on Exports

1.7.2.2.01.13.00 - Pro rate Share of the Economic Domain Intervention Contribution

1.7.2.2.33.00.00 - State Transfers for Health Programs - Fund-to-Fund Transfers

1.7.2.2.99.00.00 - Other State Transfers

1.7.2.4.00.00.00 - Multigovernmental Transfers

Continue

1.7.2.4.01.00.00 - Transfers of Resources from the Maintenance and Development Fund for Basic Education and Teacher Enhancement (Fundeb)

1.7.3.0.00.00.00 - Transfers from Private Institutions

1.7.5.0.00.00.00 - Transfers from Individuals

1.7.6.0.00.00.00 - Covenant Transfers

1.7.6.1.00.00.00 - Covenant Transfers from the Federal Government and Its Entities

1.7.6.1.03.00.00 - Covenant Transfers from the Federal Government for Social Assistance Programs

1.7.6.1.99.00.00 - Other Covenant Transfers from the Federal Government

1.7.6.2.00.00.00 - Covenant Transfers from States and the Federal District and Their Entities

1.7.6.2.01.00.00 - Covenant Transfers from States to the Unified Health System (SUS)

1.7.6.2.02.00.00 - Covenant Transfers from States for Education Programs

1.7.6.2.99.00.00 - Other Covenant Transfers from States

1.9.0.0.00.00.00 - Other Current Revenues

1.9.1.0.00.00.00 - Fines and Late Payment Interest

1.9.1.1.00.00.00 - Fines and Late Payment Interest on Taxes

1.9.1.1.38.00.00 - Fines and Late Payment Interest on Urban Property Tax (IPTU)*

1.9.1.1.39.00.00 - Fines and Late Payment Interest on Real Estate Transfer Tax (ITBI)*

1.9.1.1.40.00.00 - Fines and Late Payment Interest on Services of Any Nature Tax (ISS)*

1.9.1.1.99.00.00 - Fines and Late Payment Interest on Other Taxes

1.9.1.3.00.00.00 - Fines and Late Payment Interest on Tax Active Debt

1.9.1.3.11.00.00 - Fines and Late Payment Interest on Tax Active Debt for Urban Property Tax (IPTU)*

1.9.1.3.12.00.00 - Fines and Late Payment Interest on Tax Active Debt for Real Estate Transfer Tax (ITBI)*

1.9.1.3.13.00.00 - Fines and Late Payment Interest on Tax Active Debt for Services of Any Nature Tax (ISS)*

1.9.1.3.98.00.00 - Fines and Late Payment Interest on Tax Active Debt for Improvement Contributions

1.9.1.3.99.00.00 - Fines and Late Payment Interest on Tax Active Debt for Other Taxes

1.9.1.5.00.00.00 - Fines and Late Payment Interest on Tax Active Debt for Other Revenues

1.9.1.8.00.00.00 - Fines and Late Payment Interest on Other Revenues

1.9.1.9.00.00.00 - Fines from Other Sources

1.9.2.0.00.00.00 - Compensation and Refunds

1.9.2.1.00.00.00 - Compensation

1.9.2.2.00.00.00 - Refunds

1.9.2.2.01.00.00 - Covenant Refunds

1.9.2.2.10.00.00 - Financial Compensation between the General Pension and the Public Pensions of Civil Servants

1.9.2.2.99.00.00 - Other Refunds

1.9.3.0.00.00.00 - Active Debt Revenue

Continue

1.9.3.1.00.00.00 - Tax Active Debt Revenue
1.9.3.1.11.00.00 - Urban Property Tax (IPTU) Active Debt Revenue*
1.9.3.1.12.00.00 - Real Estate Transfer Tax (ITBI) Active Debt Revenue*
1.9.3.1.13.00.00 - Services of Any Nature Tax (ISS) Active Debt Revenue*
1.9.3.1.98.00.00 - Improvement Contributions Active Debt Revenue
1.9.3.1.99.00.00 - Other Tax Active Debt Revenue
1.9.3.2.00.00.00 - Non-Tax Active Debt Revenue
1.9.9.0.00.00.00 - Various Revenues

Source: Elaborated by the authors based on Siconfi/Finbra (Tesouro Nacional, 2019).