

Potentialities and contradictions of the Municipal Fund for Environmental Sanitation and Infrastructure in the city of São Paulo – 2011-2018

Potencialidades e contradições do FMSAI no município de São Paulo – 2011-2018

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Abstract

This article proposes a critical analysis of the sanitation policy in the city of São Paulo, focusing on the performance of the Municipal Fund for Environmental Sanitation and Infrastructure (FMSAI) between 2011 and 2018. It illustrates the relevance of the municipal fund in relation to other sources of resources and details its budget execution in this period. The methodological proposal adopted here aimed to understand the role of the FMSAI in the pursuit of universal sanitation considering two essential dimensions: investments over time and their distribution in the territory. The results indicate that, despite incorporating the intersectoral character of the environmental sanitation policy in its institutional design, its execution led to the worsening of the distributive conflict inherent in the public budget.

Keywords: public fund; public budget; environmental sanitation; water governance; urban policy.

Resumo

O presente artigo propõe uma análise crítica sobre a política de saneamento no município de São Paulo, com enfoque para atuação do Fundo Municipal de Saneamento Ambiental e Infraestrutura – FMSAI, entre 2011 e 2018. Para tanto, ilustra a relevância do fundo municipal em relação a outras fontes de recursos e detalha sua execução orçamentária nesse período. A proposta metodológica adotada buscou compreender o papel do FMSAI na busca pela universalização do saneamento, considerando duas dimensões essenciais: os investimentos ao longo do tempo e sua distribuição no território. Os resultados apresentados indicam que, apesar de incorporar o caráter intersectorial da política de saneamento ambiental em seu desenho institucional, sua execução levou ao acirramento do conflito distributivo inerente ao orçamento público.

Palavras-chave: fundo público; orçamento público; saneamento ambiental; governança da água; política urbana.



Introduction

Critical literature on the role of public funding (Oliveira, 1988) and its implications in the reproduction of capital, on one hand, and in the reproduction of workforce, on the other, brought to light the importance of State action in the economic sphere (Bercovici; Massoneto, 2006). The fundamental feature of the public Welfare State budget, in its origins, was supposedly the provision of public services and the guarantee of social rights. However, the peripheral status of Brazilian economy has never attained the kind of Keynesian standard of funding that central countries did, as it has gone through processes of greater instability.

Considering the human right to water and sanitation, State action regarding the funding of water and sewage infrastructures is characterized by the necessity of high-level investment, which historically renders public grants or subsidies customary in the basic sanitation sector in a global scale (Heller et al., 2014). In the Brazilian case, an important part of the funds invested by private agents were not characterized as their own resources, but as capital that came majorly from public funds and banks – such as, for instance, FAT, FGTS, and BNDES – with the goal of boosting sector activities with considerably attractive interest rates (Britto; Rezende, 2017).

The role of the Basic Sanitation Act (law 11.445/2007) was to fill in the institutional gap (Britto, 2011; Heller et al., 2014) that marked the national sanitation policy since the National Sanitation Plan – Planasa came to an end. The national regulatory framework recognized Municipalities as the providers of basic sanitation services in the country,

making it possible for local government to institute, by means of the so-called program contracts, cooperation agreements with State Basic Sanitation Companies – CESBS. With that in view, it was established that Municipalities would be able to, either on their own or through public consortia, create funds aimed at financing the universalization of access to sanitation, by investing a portion of the revenue accrued by basic sanitation services.

According to a survey conducted by the Brazilian Institute of Geography and Statistics – IBGE,¹ the number of municipalities that declared the existence of a municipal fund with that purpose went from 215 (3.9%), in 2011, to 580 municipalities (10.4%) in 2017.

In the case of São Paulo, what stands out, on one hand, is the diversity of actions that can be financed with the resources from this municipal fund, which shows an intersectoral reading of environmental sanitation (Moretti; Moretti, 2014). On the other hand, considering that the public budget is a space of mediation of conflict involving money from the public fund, the distribution conflict tends to escalate in the moment of dividing this fund among the various public policies, particularly in a scenario of economic recession and stagnation of municipal revenue (Peres, 2020), as we will see further on.

In that sense, this paper intends to explore the potentials and contradictions present in the performance of the São Paulo Municipal Fund for Environmental Sanitation and Infrastructure – FMSAI and is divided into four sections in addition to this introduction. The first shows the relevance of the municipal fund for the financing of public policies through a comparative analysis against major funding sources. The second is about FMSAI's

budget implementation and the changes that occurred in the time period between 2011 and 2018, focusing on disputes about the allocation of funds. On the third, we explore the spatial aspect of the investments over the same time period. Finally, the final considerations point, based on the data presented, to the contradictions present in the implementation of the municipal fund.

FMSAI's potentials in the urban policy of the municipality of São Paulo

The beginning of the 2000s was marked by the dispute between the state and the municipality of São Paulo over who was in charge of sanitation services. After frustrated attempts to municipalize the services, a shared governance model was implemented for water supply and sanitation in the capital of the state of São Paulo. The agreement and contract, instituted in 2010 (São Paulo, 2010a; 2010b), guaranteed the provision of services by the Basic Sanitation Company of the State of São Paulo (Sabesp) for 30 years, defining the attributions of each federative entities, both the state, through Sabesp and a regulating agency, and the municipality. Generally speaking, the agreement lacked decentralization and social control and had a marked economic and financial bias (Moretti; Moretti, 2014; Ferreira, 2020).

According to the agreement for the provision of public services of water supply and sanitation,² a portion of the funds obtained by Sabesp from the exploration of the services of water supply and sanitation must be directed

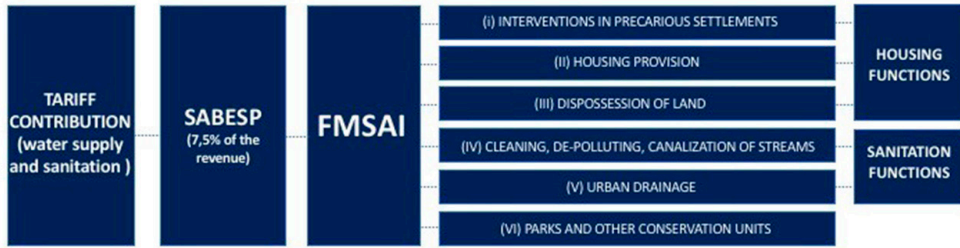
to the Municipal Fund for Environmental Sanitation and Infrastructure – FMSAI, with the purpose of complementing the activities of Sabesp in the municipality.

However, the purpose of the Fund is supposed to be the investment on a wide range of work and services relative to (1) interventions in areas predominantly occupied by low-income households, with a view toward making precarious settlements up code; (2) housing for families in areas of influence or predominantly occupied by low-income population; (3) dispossession of areas for the implementation of actions that fall under the Fund's responsibility; (4) cleaning, de-polluting, canalization of streams; (5) urban drainage; (6) implementation of parks and other conservation units as needed for the protection of natural conditions and production of water in the municipalities, as well as detention basins for peak flow periods, sports areas, landscaping, and leisure areas. (São Paulo, 2010b).

The management of the Fund's money is done by a Management Board presided by the Housing Office and also comprised of eight other municipal offices³ and three boards of civil and organized society representatives.⁴ The deliberations of the Management Board are published in the Official Gazette of the City and the Fund's official website, for transparency about the board's discussions.

The institutional composition of the management board, however limited it may be in terms of control and social participation, suggests that a sectoral rationale in the application of public municipal funds has been overridden. The environmental sanitation policy in the municipality, then, is shown to be intersectoral.

Flow chart 1 – FMSAI funds flow. Government functions summarize the actions adopted in the methodology



Source: Elaborated by the author based on the actions defined by the shared governance agreement.

It bears noting that the Municipal Plan for Basic Sanitation was elaborated in 2010 under the coordination of the Municipal Housing Office and its provisions cover a 20-year plan, with periodic quadrennial updates. However, it was only in 2019 that the São Paulo City Hall published a complementary revision of the plan with new guidelines, with a view toward a full revision in 2020.

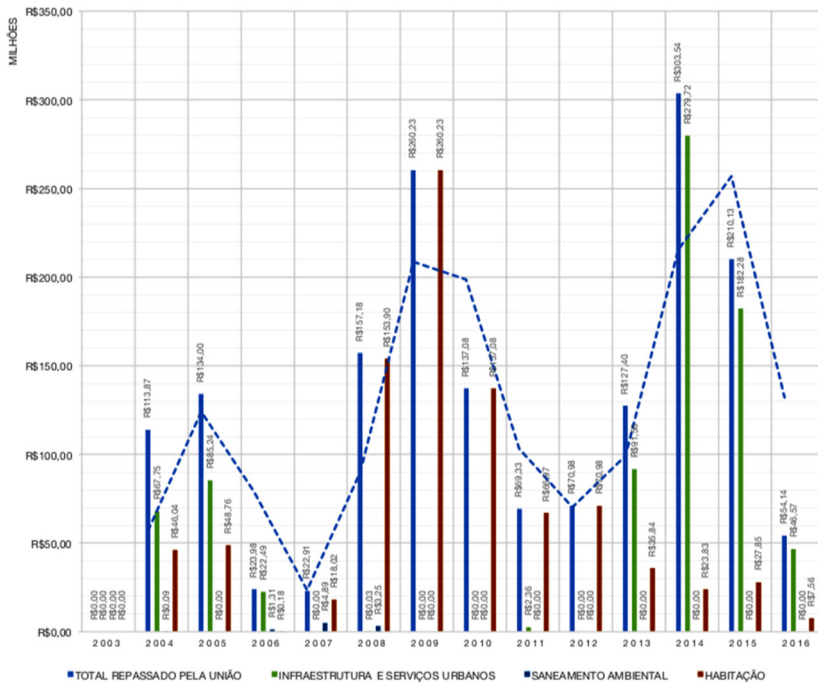
The referred plan, instituted after municipal decree no. 58.778 of May 2019, does not set up an investment plan considering FMSAI funds nor SABESP funds collected from the municipality in 2019 and 2020, leaving those, respectively, to the Fund's Management Board and the contract's Management Board.

To understand the relevance of FMSAI for the funding of the city of São Paulo's urban, housing, and sanitation policies, it is necessary to understand that it is a robust and perennial municipal source of funds.

To that end, we propose a comparative analysis against other sources of funds that are important for the development of urban policy in the local scale.

The transfers of funds from the Union (the juridical person of the Federal Government of Brazil) for the financing of the municipality of São Paulo's urban policy between 2003 and 2016 demonstrate that there are two periods where there was greater investment capability. The period from 2007 to 2012 was marked by the launch of the Growth Acceleration Program – PAC, mainly meant for works and services of urbanization of precarious settlements and for land formalization, reaching its highest mark in 2009, in the order of 260 million reais (Chart 1). In the same year, the second phase of the Federal program is launched (PAC – II), extending toward the end of 2016, with a steadily diminishing budget.

Chart 1 – Revenue of the Municipality of São Paulo from Federal Agreements and Transfers; funds aimed at Urban Development. Yearly amounts in millions of reais, corrected for 2016



Source: Royer, Santos and Filocomo, (2018).

Between 2013 to 2016 there is an important increment in Federal transfers of funds destined for urban infrastructure projects in the city of São Paulo, reaching a peak of over 279 reais in 2014. Starting in 2013, what stands out is the reduction in the transfer of funds for housing works and the exponential increase in transfers for infrastructure works and urban services from the agreement between Siurb and MCidades (Royer, Santos and Filocomo, 2018).

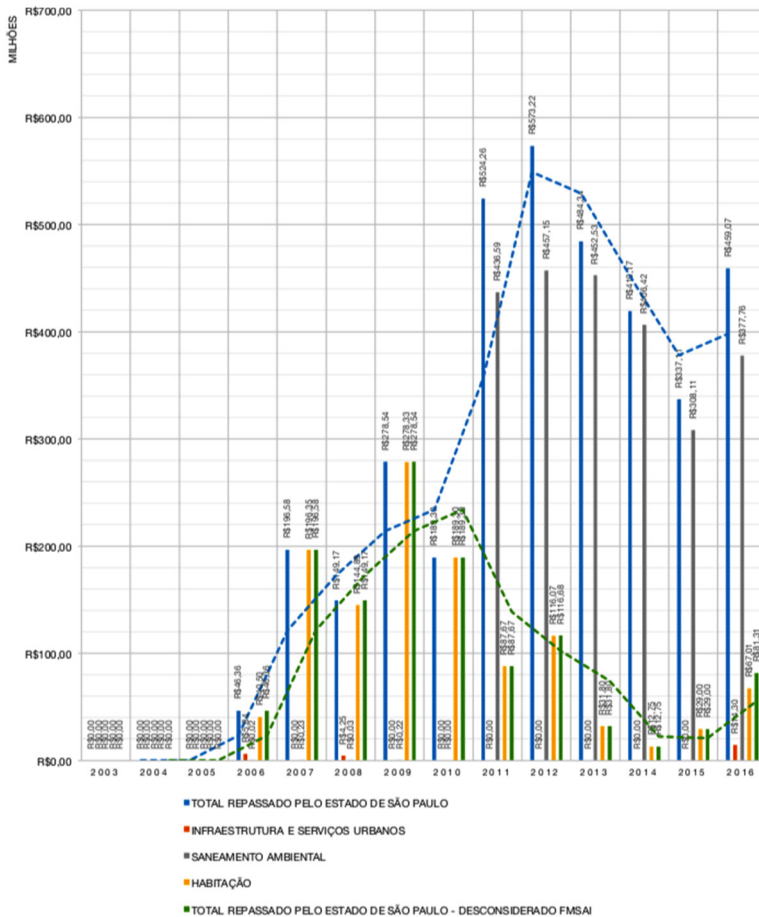
A look at the Municipality of São Paulo revenue coming from funds transfers by State Agreements shows that, between 2006 and 2009, a large portion of the transfers fell under the Housing function as a result of agreements signed between Sehab and the State Company for Housing and Urban Development – CDHU, destined largely for the construction of new housing units. Between 2010 and 2012, the State Government, as signatory of a new contract with the Growth Development

Program – PAC, also known as PAC Mananciais ("Springs PAC"), transferred important funds destined for works and services of urbanization and basic sanitation in the spring's areas of the Billings and Guarapiranga dams.

The state cooperation for funding urban development in São Paulo gained a new dimension in 2011, with the beginning

of the FMSAI operation, responsible for concentrating 67% of all state funds transferred to the municipality of São Paulo between the years of 2003 and 2016. In total, FMSAI transferred over 2.4 billion reais to the capital of the state between 2011 and 2016, which explains the inflexion show on Chart 2 (Royer, Santos and Filocomo, 2018).

Chart 2 – Municipality of São Paulo revenue from State Agreements, funds transferred to FMSAI. Yearly amounts in millions of reais, corrected for 2016



Source: Royer, Santos and Filocomo (2018).

It is important to point out that the FMSAI funds transferred by Sabesp do not adequately represent a state transfer of fiscal funds to the municipality of São Paulo. Considering that such funds are revenue coming from the contract of concession and provision of services, they should be categorized as the municipality's own revenue. However, this accounting distortion still remains.

Comparing the federal and state revenues of the municipality of São Paulo, from the previous charts (Charts 1 and 2), it is possible to subsume the relevance of FMSAI for the funding of urban policy compared with transfers from federal programs such as PAC (I and II). Taking the year of 2014 as an example, as it had the largest revenue from federal transfers and one of the lowest state revenues historically,⁵ federal transfers reached the mark of around 300 million reais, and the FMSAI funds reached the mark of 400 million reais.

In a scenario of fiscal crisis and the inconstancies of transfers from the Union – through federal programs such as PAC and MCMV – the municipality of São Paulo expands its budgetary and financial autonomy through the implementation of FMSAI.

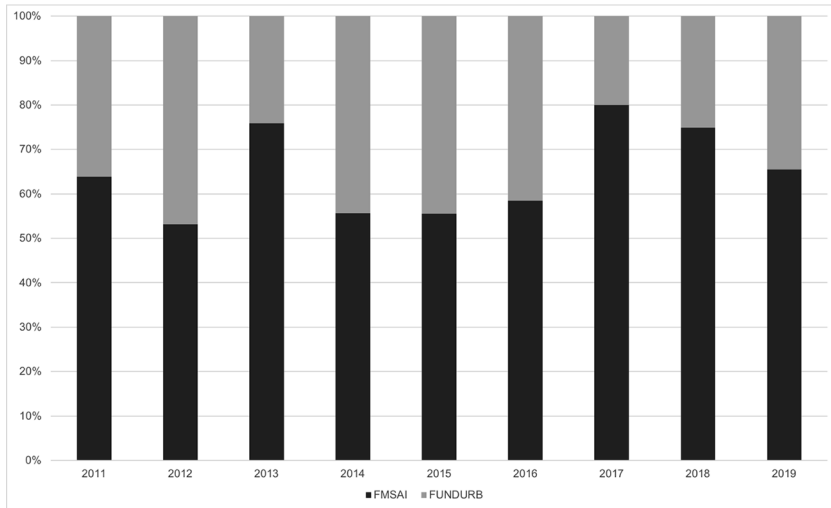
Another important source of funds for the city of São Paulo is the Urban Development Fund – Fundurb. A comparative analysis using this municipal fund, which is also a protagonist of the financing of urban development, contributes toward a better understanding of FMSAI's role. It is not, however, a comparative analysis meant to impute a hierarchy between both funds, as they often perform complementary roles in the budgetary structure of some municipal revenues.

The central characteristic of the Urban Development Fund – Fundurb, created in 2002 through the Strategic Master Plan, is the redistribution of the onus of real estate appreciation toward the collectivity. The Strategic Master Plan of 2014 provides an application of money from the fund toward six priority functions: (1) social interest housing programs; (2) implementation of collective transportation systems; (3) planning and steering of urban structures; (4) implementation of urban amenities and public spaces; (5) protection of areas of historic, cultural, or landscaping (such as public gardens and common greens) value; (6) creation of conservation units.

To demonstrate the importance of Fundurb in the budgetary execution of the municipal offices that have access to its funds, Paim (2019, p. 24) remarks that "the volume of Fundurb funds used by the Municipal Housing Office, against the outlay from the office's 2016 budget, represents almost 50% of it."

Even though the participation of Fundurb in the budget destined for the urban development of São Paulo, the FMSAI funds represent the largest portion. Comparing total expenditures from both funds, if we consider the total outlay, in all government functions, we get an average of 65% for FMSAI and 35% for Fundurb in the timespan between 2011 and 2019 (Chart 3). The year with the largest disparity between the participation of the two funds in the financing of urban policy was 2017, when FMSAI represented 80% and Fundurb, on the other hand, came in with 20%.

Chart 3 – Comparison of total expenses from the FMSAI and FUNDURB funds.
Values shown



Source: Tribunal de Contas do Município (2018). Elaborated by the author.

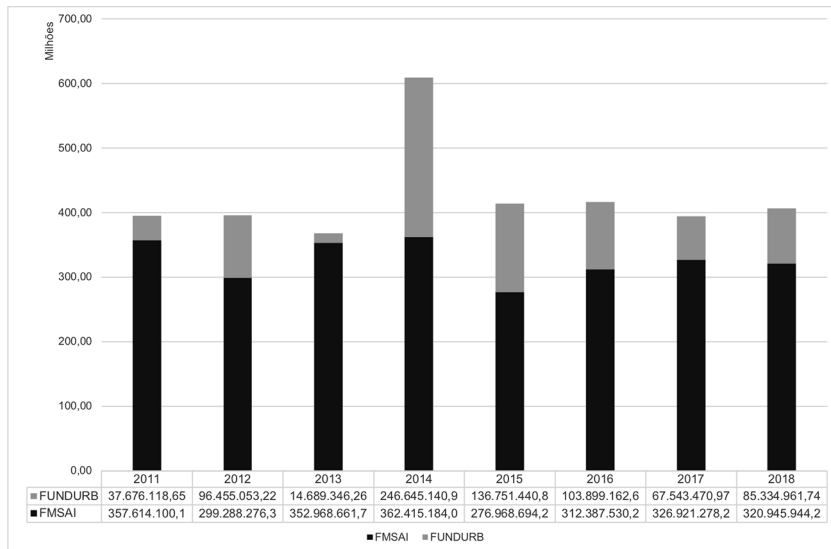
Due to the fact that the main source of Fundurb revenue are offsetting collections via the Onerous Bestowal of the Right to Build – OODC, its revenue depends directly from the city's real estate activity, which renders the available resources from that fund considerably variable from one year to the other. On the other hand, as the collection of funds for the FMSAI is based on a percentage of the revenue from water and sanitation services, that renders its revenue more constant, a fact that is also reflected in the budgetary execution – as we will see in the following section.

About the absolute outlaid amounts in the functions Housing and Sanitation, between 2011 and 2018, Fundurb presented an investment total in the order of 1.1 billion (26%), while FMSAI concentrated a budget

implementation of over 3.2 billion (74%), presenting three times the financial capacity, in comparison.

The data assessment developed in this section expresses the importance of the Municipal Fund for Environmental Sanitation and Infrastructure, in general figures, for the funding of the urban policy of the Municipality of São Paulo, particularly regarding the government functions of Housing and Sanitation. In terms of amount of funds, FMSAI achieved an unprecedented scale in the municipality, expanding the municipality's autonomy from the PAC I and II federal transfers, and consolidated its status as the main source of funds for housing, environmental sanitation, and infrastructure policies, with greater stability and heft than Fundurb.

Chart 4 – FMSAI and Fundurb outlays for the government fuctions of Housing and Sanitation, in the timespan between 2011 and 2018. Sums are updated for 2018, based on the IPCA index.



Source: Tribunal de Contas do Município (2018). Elaborated by the author.

Budget implementation in perspective: allocation of funds in the 2011-2018 time span

The Municipal Fund for Environmental Sanitation and Infrastructure – FMSAI, much like many other municipal public funds, is a mechanism of budgetary and financial management that relies of the obligation of revenues as defined by law, specific budget appropriation, and a specific account for financial transactions. From the standpoint of budgetary and financial management, the advantage of implementing the budget through a fund, beyond the obligation of

receipts, is that an eventual balance at the closing of the fiscal year will carry into the following year, thus ensuring that the funds – obligated to specific activities – do not return to the municipal treasury nor get re-allocated for other purposes.

The fact that public accounting funds have guaranteed no-year budget authority is important when looking at the FMSAI's budget implementation. And so, even though the fund was created by an Act in the year 2009,⁶ the Cooperation Agreement and its respective Contract were only signed in June 2010. Therefore, the first transfers from Sabesp to the municipality only occurred in the third and fourth quarters of 2010. On the other hand, the first investments were incurred in 2011.

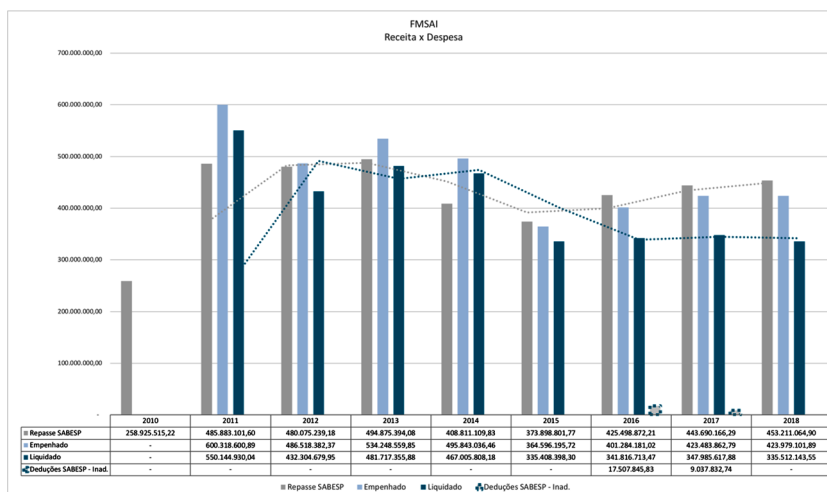
The reading of the budget implementation of the fund suggests a division of the analysis into three different phases: (1) 2010 and 2011, as they were atypical years – the transfers done in 2010 fell under the Yearly Budget Act of 2011, when they came to be budgeted as expenditures (2) from 2012 to 2014 the fund operate with the highest investment capacity, over 400 million reais per year; (3) 2015 to 2018, period after the water crisis management, particularly the year of 2015. In the following years, the management of funds proved incapable of recovering their investment capacity, progressively increasing the difference between committed amounts and the outlaid amounts.⁷

The first year of FMSAI budget implementation (2011) was the year that performed higher regarding volume of funds, because of the accumulated balance from the former year; the expense was higher than the revenue and reached a mark of over 550 million reais for the year. In that year, practically every available resource in the implemented fund was concentrated in the Housing Office, which is the authority that presides over the Fund – as we will see further on.

In 2012 and 2013, the fund expenses were relatively constant, and it invested an average of 450 million reais per year. Much like in 2011, in those two years, the funds were concentrated on the Housing Office. In the year of 2014, however, the water crisis

Chart 5 – Budget x committed and outlaid amounts.

FMSAI in the time span of 2011 to 2018. Sums are updated for 2018, based on the IPCA index



Source: Tribunal de Contas do Município (2018). Elaborated by the author.

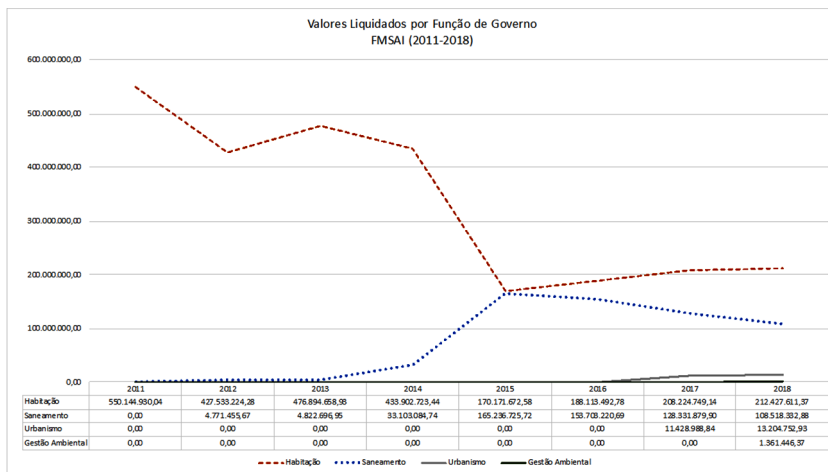
and the drop in collection by Sabesp led to a smaller amount of transfers to FMSAI. The expenditures, in turn, remained around the 400 million reais mark and outlaid amounts exceeded the transferred amounts, using the balance from the previous years.

With the worsening of the 2015 water crisis, the revenue continued to drop and led to the year with the lowest investment in history. The following years, from 2016 to 2018, were marked by Sabesp's collection recovery and a progressive increase in their transfers to the municipality, which, in its turn, did not recover its management capacity and the investments became stuck at the mark of 340 million reais, reaching a balance of almost 90 million reais only in the year of 2018. In this period of greater

difference between committed and outlaid amounts, the largest unused balances happened on large-scale infrastructure works, mainly flood control interventions undertaken by the Municipal Office of Urban Infrastructure – Siurb.

This time around, investments undertaken by government function allow us to identify the key disputes between the municipal offices over the fund's resources (Chart 6). From the institutional and methodological standpoint, the amounts invested in the Housing function were implemented by the Municipal Housing Office (Sehab) and the amounts invested in the function Sanitation represent the implementation done by the Municipal Office of Urban Infrastructure (Siurb).

Chart 6 – Outlaid amounts by Government Function – FMSAI in the period between 2011 and 2018. Sums are updated for 2018, based on the IPCA index



Source: Tribunal de Contas do Município (2018). Elaborated by the author.

In this case, the analysis of the chart at hand suggests the distinction of two very well-defined periods: (1) from 2011 to 2014, the entirety of the FMSAI funds is destined for projects/activities undertaken by the Housing Office – Sehab; (2) in 2015, there is a clear inflection in the destination of funds, arriving at almost 50% for the Housing function and 50% for the Sanitation function. From 2016 to 2018, the funds continue to be shared between the two government functions, with a drop in the Sanitation function and a slight increase in the Housing function.

In the first period, the Fund invested, over the four years, a total sum of about 1.9 billion reais concentrated in the Housing function. Overall, those funds were routed for favela (informal communities) urbanization efforts, divided into two large-scale programs: Urbanization of Favelas and the Springs Program.⁸ Both programs include integrated urbanization efforts, with the implementation of water and sanitation networks as well as drainage infrastructure in precarious settlements, land regulation efforts, expropriation of lands and construction of new housing units for the re-settlement of low-income households.

However, it bears pointing that the amount of funds invested in the Housing function does not necessarily entail the guarantee of the right to housing as a rule. As pointed by Silva (2020), this period was marked by an exponential increase in new provisional housing aid consisting of the payment of monetary sums⁹ for families that were evicted by favela urbanization efforts.

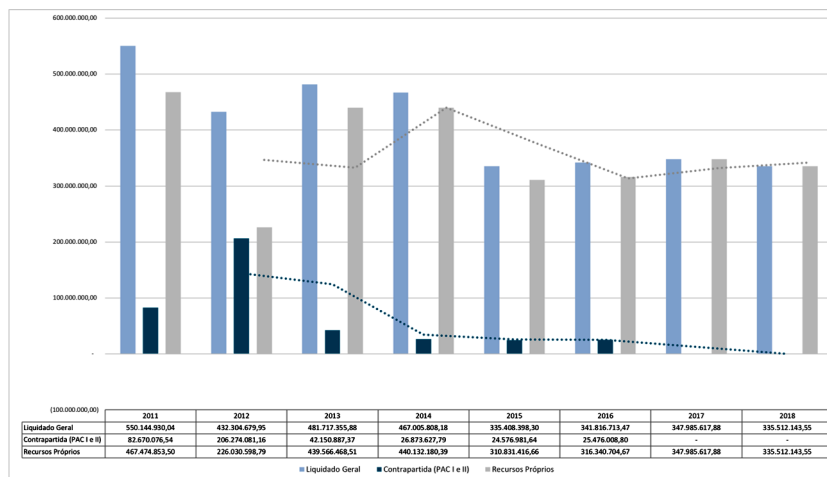
To understand the inflection that happened in 2015, we suggest two central elements of analysis, which will be explored

further: (1) counter-intuitively, in spite of the considerable increase in federal transfers for infrastructure and urban services efforts (Chart 1), the FMSAI did not have considerable participation on the municipality's matching of funds provided in the agreements; (2) with the institution of the Strategic Master Plan, in 2014, there were changes on the regulation of the financing of urban policy – specifically from Fundurb – which, potentially, led to a reallocation of the FMSAI investments.

The agreement between the Ministry of Cities and the Office of Urban Infrastructures – Siurb represented the largest increment in federal transfers, starting in 2014 (Chart 1). It would be reasonable to raise the hypothesis that those agreements with the Federal Government would have caused the inflection in the municipal fund starting in 2015, as they drained municipal funds for the payment matches that are usually provided in federal agreements. This hypothesis, however, is not applicable.

The transfers from federal programs did not prove to have a direct influence on the routing of the FMSAI funds. Chart 7 illustrates the relationship between FMSAI funds used as a complement of federal resources (PAC I and II), falling under the category of matched payments from the municipality, and the outlays from programs and efforts solely of the municipality. In 2011 and 2012, there is an important contribution taken from the FMSAI funds for payment matches from the municipality to PAC, in the modality Urbanization of Precarious Settlements. In 2012, almost half of the Fund outlays were earmarked for payment matches, reaching the amount of 206 million reais, for services and construction efforts in Paraisópolis, São Francisco and the Springs Program (PAC-Mananciais).

Chart 7 – FMSAI amounts obligated for PAC payment matches in the period of 2011 to 2018. Sums are updated for 2018, based on the IPCA index



Source: Sehab – PSMP. Elaborated by the author.

From 2013 on, what stands out is a considerable drop in the allocation of funds as payment matches. As for the period between 2015 and 2016, the payment patches were mainly allocated for services and drainage efforts in the Ponte Baixa stream; however, the amount of funds is not enough to explain the inflection demonstrated by Chart 6.

As we have previously argued, Fundurb and its central status in the financing of the municipal urban policy may be the key to interpret the alteration in the distribution of FMSAI funds, as its resources are used for the same government functions and tend, partially, to the same municipal offices.

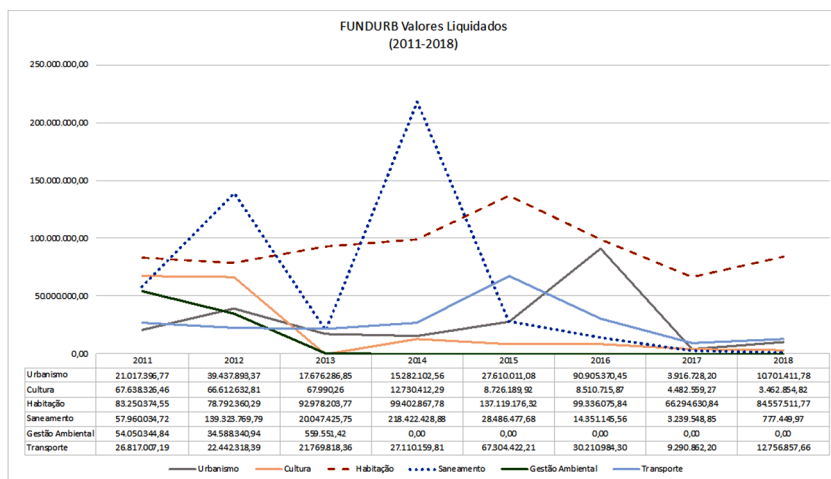
The approval of the Strategic Master Plan – PDE¹⁰ in 2014 installed new guidelines for the destination of Fundurb funds. Among them, article 340¹¹ established a minimum of

30% of its funds for the Housing function, to be earmarked for the acquisition of land in prime locations.

Note that the re-routing of FMSAI funds in the transition from 2014 to 2015 also occurred on Fundurb, but inversely instead (Chart 8). Until 2014, albeit with a considerable variation, the Sanitation function received a greater volume of funds, in comparison with the Housing function. From the standpoint of the new PDE rule, we observe an abrupt drop of funds directed to Sanitation – in constant fall up to 2018 – and Housing remained at a more elevated tier of funds because of the 30% obligated for the expropriation of lands.

Therefore, we surmise that the Fundurb funds that financed efforts in the Sanitation function in 2014 went on to invest in the acquisition of real estate in prime locations,

Chart 8 – Outlaid amounts by Government Function – Fundurb in the period between 2011 and 2018. Sums are updated for 2018, based on the IPCA index



Source: Tribunal de Contas do Município (2018). Elaborated by the author.

restricted to the more central macro-areas in 2015. On the other hand, the FMSAI funds that invested on services and construction in the Housing function, such as Acquisition of Land for construction and the Springs Program in 2014, went on to finance urban drainage works starting in 2015.

Between 2011 and 2014, Fundurb invested considerable amounts on urban drainage works, such as, for instance, efforts conducted by Siurb in the Cordeiro and Ponte Baixa streams. Starting in 2015, with the institution of PDE, the referred efforts started to receive FMSAI funds. As for the acquisition of lands for the construction of housing units and/or for the expropriation of real estate for

efforts of urbanization in favelas, they were partially funded by FMSAI. Since 2015, they went on to be financed by Fundurb.

As such, we understand that the inversely correlated re-direction in both funds reflects the accommodations of municipal funds to uphold the new regulations established by the PDE. Such accommodations can be compared to the image of communicating vessels, concerning the compensations in the distribution of inversely correlated funds between the government functions of Housing and Sanitation, observed in both Funds.

The amounts demonstrated by the government functions (Chart 6) can also be interpreted as Projects – or Activities – in the

period between 2011 and 2018 (Chart 9). The activities (or efforts) classed as Urbanization of Favelas, Springs Program, Construction of Housing Units, and Land Regulation comprise what we previously held as "Housing Function". The activity categorized as Sanitation and Drainage Works refers to the Sanitation Function. As for "Works and services in Areas of Geotechnical Risk" and "Implementation of Linear Parks" correspond to the Urbanism and Environmental Management functions, respectively.

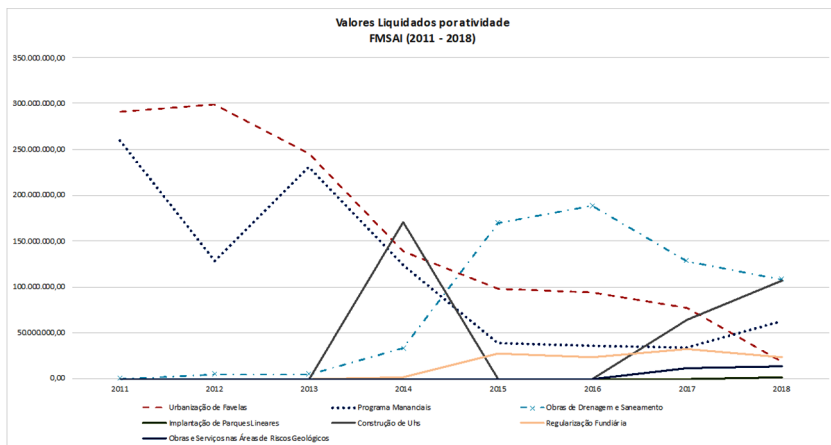
The analysis of data by Project/Activity supports the previously laid out arguments. The reduction of investments referred mainly to the efforts of urbanization of favelas¹² and the implementation of the Springs Program. The first one, in 2011, presented an implementation of 290 million. However,

in 2018, the total amount directed to the urbanization of favelas amounted to about 19 million, representing a drop by 88%. As for the Springs Program, which received, in 2011, around 259 million reais, it had its lowest budget in 2017, with only 34 million reais – representing a drop by 77%.

On the other hand, the activities pertaining to drainage and sanitation works, over three years, hiked up from 33 million reais in 2013 to 188 million reais in 2016, achieving the post of activity that received the highest amount of money from the Fund since 2015 – with an increase of 70%.

The alteration of the municipal regulatory framework created the favorable conditions for the re-routing of municipal funds between 2014 and 2015. Beyond that, as we will present in this section, that

Chart 9 – Outlaid amounts by Project/Activity – FMSAI between 2011 and 2018. Sums are updated for 2018, based on the IPCA index



Source: Tribunal de Contas do Município (2018). Elaborated by the author.

re-routing mentioned above represents, in some measure, the escalation of the distribution conflict particularly concerning the budget dispute between the municipal and urban infrastructure offices, during a time of stagnation of the municipal revenue. In the next section, we will look at the spatial dimension of the distribution of resources from the municipal fund.

Cartography of investments: concentration x dispersion

The cartography proposed in the present section has the main function of offering a deeper analysis of the distribution of FMSAI funds in the spatial dimension. The map shows georeferenced information about the total budget implementation of the Fund, with the accrued amounts from 2011 to 2018.

From a methodological standpoint, the structure of the maps considers different layers of information. As a basis, we have the administrative limits of the municipality of São Paulo and the administrative subdivisions of the constituent districts, the Billings and Guarapiranga dams, the grid of the sanitation networks in the municipality, and their relationships with the favelas and irregular settlements.

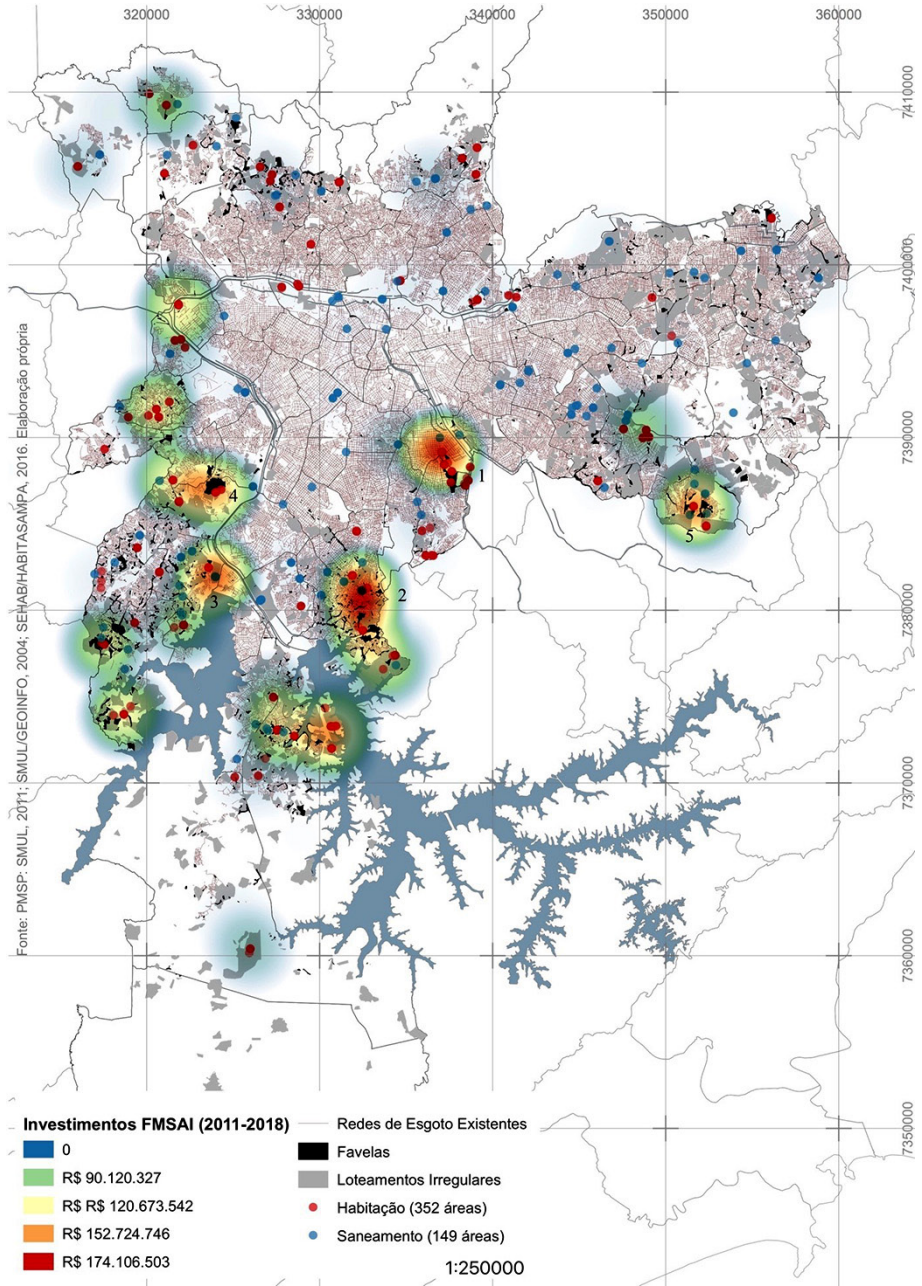
The dispersion of funds is represented by red and blue dots, illustrating the areas that received, in the analyzed timeframe, some kind of fund from FMSAI under the Housing and Sanitation government functions (they were almost entirely urban drainage efforts).

In the interest of representing the concentration of funds using the same dots, the temperature maps illustrate the amount of funds for each undertaking, following the gradation in the legend (where blue represents a smaller amount of funds and red indicates a higher concentration). The spatialized figures represent solely investments on projects and infrastructure/construction work. The so-called "specialized technical services by third parties" involving the management of contracted projects and works were not accounted for, as they are general services, and therefore do not have a particular spatial dimension. As such, the mapped figures are contained in, but do not coincide exactly with the total amounts presented in the previous section's charts.

Throughout these years, the municipal fund invested around 2.2 billion reais in approximately 500 construction/infrastructure efforts, amounts that do not count the investments in efforts pertaining to specialized technical services contracted from third parties (management) and investments on the expropriation of land for the construction of new housing units – which account for 70% of the construction efforts in Housing and 30% in Sanitation.

From the total sum, 74% are earmarked for the government function of Housing, divided between the activities of Urbanization of Favelas, Springs Program, Land Regulation, and Construction of Housing Units. The investments that fall under the Sanitation function represent 24%, shared between the activities of flood control intervention and interventions on at-risk areas, and drainage. Only 1% was earmarked for environmental management efforts.

Map 1 – Summary of total investments (2011-2018)



Source: PMSP, SMUL (2011); SMUL/Geoinfo (2004); Sehab/Habitasampa (2016). Elaborated by the author.

Furthermore, if we analyze the concentration of funds for targeted areas, we observe the concentration of 35% (728 million reais) in only 5 main areas. The areas that received more funds in the analyzed timeframe were:

1) Projects and construction/infrastructure work for the urbanization of favelas in Heliópolis, in the sub-prefecture of Ipiranga, concentrating around 174 million reais. The concentration of funds, even though it concerns the same precarious settlement, took place over time with different contracts and efforts;

2) Drainage and sanitation work in the Cordeiro stream, in the sub-prefecture of Cidade Ademar, concentrating a total of 152.7 million reais in one sole contract;

3) Drainage and sanitation work in the Ponte Baixa stream, in the sub-prefecture of M'boi Mirim, concentrating a total of 155.7 million reais in one sole contract;

4) Projects and construction/infrastructure works in Favelas in Paraisópolis, in the sub-prefecture of Butantã, concentrating around 124.7 million reais, divided between several contracts;

5) Projects and construction/infrastructure works in Favelas in São Francisco, in the sub-prefecture of São Mateus, concentrating around 120.6 million reais.

It is important to stress that the concentration on the urbanization of favelas efforts (items 1, 4, and 5, above) incurred as different contracts during the entirety of the analyzed timeframe. On the other hand, urban drainage works (items 2 and 3) were concentrated mainly in the years of 2015 and 2016.

Considering the character of the interventions and the level of investment needed for the works of urban drainage alone, such concentration of funds led to an important drop in the amount of funds earmarked for the urbanization of favelas.

Final considerations: underscoring the contradictions

The public fund – and its antivalue character – historically, has an irreplaceable role in the safeguarding of social rights (Oliveira, 1988). It's no different when it comes to sanitation policy.

The present paper intended to do a critical analysis of the destination of municipal funds in the search for the universalization of the access to environmental sanitation. The cooperation agreement between Sabesp and the municipality of São Paulo is a development of LNSB, from 2007. The federal regulation framework expanded the notion of environmental sanitation beyond just water supply and sanitation, including urban drainage and management of solid residue. It also determined municipalities as incumbent of services of basic sanitation in Brazil, opening the door for the local government to create funds to finance the universalization of the access to sanitation via an apportionment of the collection revenue from basic sanitation services.

In that sense, the methodology adopted sought to understand the Municipal Fund for Environmental Sanitation and Infrastructure of the municipality of São Paulo from the

standpoint of its two essential dimensions: the evolution of budget implementation over time and its spatial distribution.

Concerning the amount of funds, we highlight FMSAI is extremely important for the financing of urban policy in the city of São Paulo. The institution of the fund amplified the autonomy of the municipality in relation to the federal transfers from PAC I and II, outmatching the amounts transferred by the program. The amounts also outmatched the budget implementation of Fundurb, another source of municipal funds that is important for the city.

In the 2011-2014 timeframe, the funds were allocated entirely to efforts falling under the Housing government function, promoting works of urbanization of favelas – including within protected springs areas –, land regulation, and the construction of new housing units. The efforts were mainly distributed among the peripheral areas of the city (inner cities), but did not represent the safeguarding of the right to housing, when we consider the rise in evictions to make way for construction/infrastructure works.

Between 2014 and 2015, a notable redirection of investments appeared. After debunking the hypothesis that this redirection would have been a result of the disbursement of payment matches provided in the agreements with the federal government, we showed that the inversions in the destination of funds, both from FMSAI and Fundurb – displaying "communicating vessel" features – unfolded as a result of a re-accommodation of the municipal funds to uphold the new regulations established by the 2014 Strategic Master Plan (PDE).

The years of 2015 and 2016 were characterized as the period with the highest concentration of investments. In this period, resources from the municipal fund were mainly concentrated in two large-scale drainage efforts: the Cordeiro and Ponte Baixa streams. The referred Drainage and Sanitation works conducted by Siurb, contrary to the urbanization of favelas efforts, exclusively fall under the urban drainage rubric. Even when next to precarious settlements, those works were not intended to uphold the safeguarding of the right to housing through land regulation of irregular settlements or favelas. As illustrated, the concentration of resources in those efforts led to an important drop in the funds earmarked for the urbanization of favelas – a reduction that was not compensated by Fundurb.

Over the last few years, we noticed a decrease in financial management capacity, and, consequently, a drop in the outlaid investments by the offices in charge in relative figures. A consequence of this is the outstanding balance from the municipal fund, which saw an increase starting in 2016 and was amplified in 2017 and 2018.

In 2017 and 2018, there is a noticeable diffusion of the funds, particularly compared to previous years. The greater dispersion of funds, on the other hand, can show a trend in the allocation of funds, which historically were invested in more peripheral areas, in higher income areas in the city, such as the isolated but emblematic case of the improvement of the rainwater gallery of Lorena avenue, in the affluent neighborhood Jardim Paulista. However, the absolute figures continue to illustrate a greater concentration of funds in a few urban drainage efforts.

The analysis undertaken in the present paper puts us in the position of pointing that the FMSAI implementation, even though it embodies the intersectoral character of the environmental sanitation policy in its institutional design, led to the escalation of the distribution conflict in the public budget. In a scenario of fiscal and economic crisis, marked by the reduction of other sources of revenue, the fund ended up being positioned, in practice, as a complement to the municipal budget and an object of

dispute in an austerity context. Although the legal provision for its application of funds is very diversified, we understand that its growing participation in exclusive efforts of urban drainage, considering the character of the interventions and the level of investment they necessitate, ended up compromising, in some measure, the advancement of the universalization of access to water supply and sanitation services because of the discontinuous status of the efforts of urbanization of favelas.

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Notes

- (1) See IBGE (2018, p. 23).
- (2) “Clause 35. Sabesp shall:
 - a) Direct, per trimester, 7.5% (seven and a half per cent) of the net revenue obtained in the Capital for the Municipal Fund, up to 5 (five) weekdays after the publication of the quarterly and/or yearly financial statements, as provided in the agreement, especially its Clause II;
 - b) Invest on services a minimum of 13% (thirteen per cent) of the net revenue obtained in the Capital, without prejudice of revising the sum to a larger or higher percentage, in order to maintain the economic/financial balance of the contract.”
- (3) Municipal Housing Office; Municipal Greens and Environment Office; Municipal Government Office; Municipal Urban Infrastructure and Construction Office; Municipal Urbanism and Licensing Office; Municipal Finance Office; Municipal Planning Office; Municipal Coordination of Boroughs Office;
- (4) Municipal Housing Board – CMH; Municipal Environment and Sustainable Development Board – Cades; and Municipal Urban Policy Board – CMPU; the board members are appointed by their own boards, with one representative, as well as one sub-representative, each.
- (5) In the years of 2014 and 2015, because of the water management crisis in the city of São Paulo, Sabesp saw a considerable drop in revenue, and therefore the amounts of transfers to the municipality were compromised.
- (6) Municipal Act n. 14.934, of 18 June 2009, authorizes the creation of an agreement between municipality, ARSESP and Sabesp and creates the Municipal Fund for Environmental Sanitation and Infrastructure – FMSAI.
- (7) The committed amounts are budget reserves that guarantee, through the public power, the necessary credits for liquidation and payment of services. The outlaid amounts incur after the service is effectively performed, and the payment is requested. Methodologically, comparing both amounts shows us the dimension of the budgeted funds and helps understand the portion that was truly implemented.
- (8) The Springs Program focused on the urbanization of favelas in Areas of Protection and Recovery of Springs, in the outermost Southern portion of the city of São Paulo, specifically the basins of the Billings and Guarapiranga dams. For a more detailed analysis of the Springs Program, see Ferrara (2013, p. 293).
- (9) The government aid at hand, under the modalities of Rent Stipend, Social Partnership and Rent Aid, consists of monthly payments of 400 reais by way of provisional aid. The funds for this aid did not come from FMSAI, but from the Municipal Treasury. About the Rent Aid policy in the Municipality of São Paulo, see Silva (2020, p. 15).
- (10) Municipal Act n. 16.050, of July 2014 – Approves the Urban Development Policy and the Strategic Master Plan of the Municipality of São Paulo and revokes Act n. 13.430/2002.

- (11) “Art. 340. Resources collected by Fundurb must observe, yearly, the limits of:
- I – A minimum of 30% (thirty per cent) obligated for the acquisition of land meant for the production of Social Interest Housing located in the Macro-area of Metropolitan Structuring, and the Macro-area of Consolidated Urbanization, and the Macro-area of Qualification of Urbanization, classed preferably as ZEIS 3, according to Map 4A attached;
 - II – A minimum of 30% (thirty per cent) obligated for the implementation of collective transportation, bicycle, and pedestrian systems.
- § 1st The funds specified on item I that are not implemented at the established minimum amount, must remain in reserve for the period of one year; after this timeframe, the Management Board may direct this fund to subsidize state and federal programs of Social Interest Housing provision.
- § 2nd The funds specified on items I and II of the "caput" that are not implemented at the established minimum amount, must remain in reserve for a period of 2 years, after which, the Management Board may direct it elsewhere as provided on article 339.
- § 3rd In the year that follows the year of promulgation of this Act, the limits to the Fundurb balance established in the "caput" are applicable.”
- (12) The funds relative to the Construction of Housing Units in 2014, 2017, and 2018 were included in the "Urbanization of Favelas" activity in the other years, a fact that can entail a distortion in how the amounts are read, but does not alter structurally the arguments presented above.

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