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The Effects of the Changes in the Revenue Sharing Fund of the Municipalities After the 1988 Federal Constitution

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I – Introduction

The Revenue Sharing Fund of the Municipalities (RSFm) provides resources that are distributed to municipalities with the aim of helping their economic and social development. Following the trend of the 1988 Constitution, which promoted Brazil's return to a fully democratic regime and to a less centralized structure of government, the RSFm and other constitutional funds were significantly increased. Reinforcing this provision, other factors helped to increase the resources of the RSFm, so that the size of the Fund almost doubled in real terms between 1986 and 1993.

This paper focuses on the effects of the change in the size of the RSFm, suggesting a correlation between this change and at least two extraordinary set of events that took place simultaneously. The first is the unexpected increase in the number of municipalities created in Brazil in the years that immediately followed enactment of the new Constitution, together with the fact that these municipalities had very small populations.

The second relates to the way in which Congress handled its authority to discipline the distribution of the RSFm. One could expect that, initially, the representatives would act cautiously, maintaining pre-existing criteria. Nevertheless, it is puzzling that more than a decade after the Constitution was enacted most of the norms for the distribution of the Fund, established since 1966, are still in place. All attempts by the Congress to change the old rules were immediately followed by new legislation aimed at barring the total application of recently approved norms.

To help analyze these events, recent data on Brazilian municipalities and on the resources of the RSFm are presented, along with the criteria for the distribution of the RSFm and with an explanation of the story underlying a succession of laws aimed at regulating the matter.

An example, with actual population data for municipalities in Paraíba, a small state in Brazil's North East region, will help the reader to understand how the rules for the distribution of the Fund's resources are applied.

Questions regarding the efficiency of the use of resources are presented, together with a brief discussion of the recently-enacted Fiscal Responsibility Law that sets new principles and rules to be followed by Brazilian public administrators.

A few suggestions arise from the conclusion that current criteria for sharing the RSFm, and for the creation of municipalities in Brazil, need to be revised in the near future.

II - Overview of Brazilian Municipalities

II.1- The Federal Legislation and the Municipalities

The broad definition of a Brazilian municipality is found in article 18 of the Federal Constitution, which states that a “Municipality is an autonomous part of the country’s administrative organization.” Paragraph 4 of the same article states that the establishment or fusion of municipalities are a matter of state law: “The establishment, merger, fusion and dismemberment of municipalities shall be effected through state law, within the period set forth by supplementary federal law, and shall depend on prior consultation, by means of a plebiscite, with the population of the municipalities concerned, after the publication of Municipal Feasibility Studies, presented and published as set forth by law”.

In Brazil, all municipalities are governed by elected mayors and municipal councils, whose number of councilmen is established in proportion to their population. Municipalities are ruled by an organic law, approved by two-thirds of the members of the municipal councils. The federal constitution sets certain limits on municipal autonomy; for example, it limits the expenditure for councilmen’s payroll to a maximum of five percent of the revenue of the municipality. It is interesting to notice that in the previous 1967 constitution the councilmen in municipalities with less than a hundred thousand population did not receive any remuneration.

The limits on the municipalities' autonomy are set forth in article 30 of the federal constitution, which concedes to them the power to: legislate upon matters of local interest; institute and collect taxes within their jurisdiction; create, organize and eliminate districts; organize and render, directly or by concession or permission, the public services of local interest; maintain, with the technical and financial cooperation of the federal government and the state, programs of pre-school, elementary school, and health services for the population; promote adequate territorial usage, by means of planning and control of use, apportionment and occupation of the urban soil; and promote the protection of their local historic and cultural heritage. The supervision of the executive branch is carried out by an internal auditing system, under the external control of the municipal legislature. This outside control is exercised with the assistance of the state Court of Accounts. The creation of municipal courts, special councils or agencies of accounts is forbidden.

In summary, it is a well recognized fact that the 1988 constitution provided full political and administrative autonomy to the municipalities, no matter their size.

II.2- The Municipalities in Brazil Today

The Brazilian Institute of Geography and Statistics (IBGE) has recently released the results of research carried out in 1999: 75% of the 5,507 existing municipalities have less than 20,000 inhabitants. One of the major weaknesses of these small units is that they usually offer a very limited range of services. The research revealed also that they lag behind in implementing the legislation required by federal law. On the other hand, the results showed that people's participation in the administration, through special municipal sector councils, is quite widespread, even in smaller municipalities.¹ Councils in the areas of health and education are present in more than 90% of the municipalities, whereas councils for the implementation of the rights of children and adolescents exist in

¹ The creation of these councils is required by federal and state legislation to enable the municipality to receive special funds for social sector expenditures. The major function of these councils is to establish priorities and to monitor the use of these resources. They are generally considered to be a powerful instrument for promoting the participation of civil society in municipal affairs.

more than 50% of them. In total, there are 27,000 councils in the country, an average of almost five per municipality.

One of the most impressive findings of this research refers to the number of recently-created municipalities in Brazil. The table below shows not only that since 1989 - i.e., after the enactment of the constitution- 1307 municipalities were created, a significant number that represents 23,8% of the total 5,506 municipalities, but also that among the newly-created ones, 92% have less than 15,000 inhabitants; 81.2% have less than 10,000, 54.7% have up to 5,000 inhabitants.

Table 1 – Municipalities by year of installation and population

| Population Ranges | Municipalities | | | | | |
|---|----------------|----------------------|-------------------|-------------------|-------------------|--|
| | Total | Year of Installation | | | | % of municipalities installed from 1989 to 1999, by size of population |
| | | Before 1940 | From 1940 to 1963 | From 1964 to 1988 | From 1989 to 1999 | |
| Up to 5,000 | 1407 | 41 | 511 | 140 | 715 | 54.7% |
| From 5,001 to 10,000 | 1320 | 156 | 639 | 179 | 346 | 26.5% |
| From 10,001 to 15,000 | 860 | 218 | 386 | 115 | 141 | 10.8% |
| From 15,001 to 20,000 | 532 | 223 | 209 | 51 | 49 | 3.7% |
| From 20,001 to 50,000 | 908 | 586 | 206 | 73 | 43 | 3.3% |
| From 50,001 to 500,000 | 453 | 339 | 75 | 26 | 13 | 1.0% |
| Above 500,000 | 26 | 23 | 3 | 0 | 0 | 0% |
| Total * | 5506 | 1586 | 2029 | 584 | 1307 | 100% |
| % of municipalities created in each time period | 100 | 28.8% | 36.8% | 10.6% | 23.8% | |

Source: IBGE, Research on Basic Municipal Informations, 1999. * The IBGE research excluded the capital. Including Brasília the total number of municipalities in the country, in 1999, is 5,507.

While these figures demonstrate a fragmentation in the administration of the cities, the research shows also a regrouping of municipalities via consortia for the purpose of supplying services: e.g., health consortia are used by 37% of all municipalities. If one considers only the smallest cities, i.e., those with less than 5,000 inhabitants, consortia are utilized by 44% of them; if one considers only the municipalities installed after 1989, the same percentage applies.

Another interesting finding shows that 96% of all municipalities in 1999 complied with the limit imposed by the Fiscal Responsibility Law. They spent less than 60% of their revenue on personnel expenditures; half of them spent 40% or less on personnel. Considering all the municipalities, on average, each of them has 31 civil servants per group of 1,000 inhabitants. Looking at them from another perspective, 50% of the municipalities employ up to 300 civil servants and 70% employ up to 700 civil servants.

III - The Revenue Sharing Fund of the Municipalities (RSFm) and the 1988 Federal Constitution

III.1- Definition and Characteristics of the RSFm

The Revenue Sharing Fund for the municipalities (RSFm) is a constitutional fund that represents the most significant sources of transfers from the federal government to the municipalities and the main source of revenue for many of them, possibly for the majority. The 1967 constitution had established that the federal government would remit to the Revenue Sharing Fund of the Municipalities (in Portuguese, *Fundo de Participação dos Municípios-FPM*) ten percent of its proceeds from the collection of taxes on income and on industrialized products. In Table 2, it can be observed that many constitutional amendments were gradually enacted to change that percentage, until it reached 17%, in 1985. Then, following the pattern of decentralization that characterized the 1988 constitution the percentage allocated to the RSFm rose a significant 5.5 percentage points. The figure went from 17% to 22,5% of the proceeds from the income tax and the tax on industrialized products (Federal Constitution, article 159, b). Note that,

as determined by the constitution, a portion of that increase was to be applied gradually, at a rate of 0,5% a year, starting at 20% in 1988 and going to 22,5% in 1993.

Table 2 - The Evolution of the RSFm since 1967

| Year | Legal Instrument | RSFm |
|-------------|--------------------------|-------------|
| 1967/68 | Constit. Amendment 18/65 | 10,0% |
| 19969/75 | Supplementary Act 40/68 | 5,0% |
| 1976 | Constit. Amendment 5/75 | 6,0% |
| 1977 | Constit. Amendment 5/75 | 7,0% |
| 1978 | Constit. Amendment 5/75 | 8,0% |
| 1979/80 | Constit. Amendment 5/75 | 9,0% |
| 1981 | Constit. Amendment 17/80 | 10,0% |
| 1982/83 | Constit. Amendment 17/80 | 10,5% |
| 1984 | Constit. Amendment 23/83 | 13,5% |
| 1985 | Constit. Amendment 23/83 | 16,0% |
| 1985/88 (*) | Constit. Amendment 27/85 | 17,0% |
| 1988 | Federal Constitution | 20,0% |
| 1989 | Federal Constitution | 20,5% |
| 1990 | Federal Constitution | 21,0% |
| 1991 | Federal Constitution | 21,5% |
| 1992 | Federal Constitution | 22,0% |
| 1993 | Federal Constitution | 22,5% |

(*) until 10/1988

Source: Secretary of the Treasury

At present, other constitutional transfers from the federal government to the municipalities include 50% of the proceeds from the federal tax on rural property located in the municipalities (ITR), and a fraction of the tax on financial transactions (IOF) and FUNDEF.²

Table 3 presents a comparison between the RSFm and the other constitutional transfers during the period from 1996 to 2000. It shows that, on average, the RSFm

² FUNDEF is a fund created in 1998, with resources subtracted from other federal transfers and destined to specific expenses for elementary education.

represents more than 80% of the total federal transfers to the municipalities. In fact, the dimension of the RSFm makes it a major source of resources for municipalities, especially the smaller ones with very little economic activity and with only meager revenues from their own municipal taxes.

Table 3- The Revenue Sharing Fund and the Other Federal Transfers to Municipalities (in current reais)

| Year | RSFm | Other Transfers | Total | RSFm as % of total |
|-------------|-------------------|------------------------|-------------------|---------------------------|
| 1996 | 9,142,303,639.11 | 208,866,191.98 | 9,351,169,831.09 | 97.7% |
| 1997 | 10,333,725,577.34 | 1,364,384,727.17 | 11,698,110,304.51 | 88.3% |
| 1998 | 10,417,131,126.59 | 3,206,410,786.56 | 13,623,541,913.15 | 76.4% |
| 1999 | 11,663,211,236.34 | 4,632,817,435.84 | 16,296,028,672.18 | 72.4% |
| 2000 | 12,816,400,875.72 | 4,894,510,091.3 | 17,710,910,967.02 | 72.6% |

Source: Secretary of the Treasury and the Federal Senate

III.2 – The Allocation of the RSFm to Municipalities

As established in the 1988 constitution, a new supplementary law had to be adopted in order to determine rules for the transfer of the RSFm funds, rules that would promote social and economic balance among municipalities. (Federal Constitution, article 161, II)

The supplementary Law n° 62/89, approved in the last days of 1989, set the rules for the distribution of the RSFm resources in 1990. However, because Congress did not have enough time to discuss the matter in detail, the 1989 law maintained the same criteria for distribution as had prevailed since 1966. These criteria, having been established by Law n° 5172/1966, had been modified only once before by a decree in 1981.

Those criteria, reiterated in the 1989 Law, established that the resources of the Fund should be allocated as follows:

10% to the state capitals- allocated to each of them according to coefficients directly proportionate to their population and inversely proportionate to the per capita income of the states in which they are located. The law provides the two tables to be used, one with factors corresponding to population ranges, and the other with factors corresponding to the inverse of the range of values for per capita incomes.

86,4% to the other municipalities- allocated to these municipalities (which will be called, for this purpose, interior municipalities) in accordance with coefficients related to their population, as shown below; it is necessary to note that, although not specified in this law, the 86,4% of RSFm to be distributed to interior municipalities is first allocated among the states, in percentages that have been historically determined and have remained unchanged since long before the 1988 constitution. Then, the RSFm for each municipality in a state is obtained by multiplying the state's quota by the ratio between the municipality's coefficient and the sum of the coefficients attributed to all interior municipalities in that state.

Ranges of Population

Coefficients

a) Up to 16,980 inhabitants

- ? First 10,188 0.6
- ? For each additional 3,396 or fraction, plus 0.2

b) From 16,980 up to 50,940 inhabitants

- ? First 16,9801.0
- ? For each additional 6,792 or fraction, plus 0.2

c) From 50,940 up to 101,880

- ? First 50,9402.0
- ? For each additional 10,188 or fraction, plus 0.2

- d) From 101.880 up to 156,216 inhabitants
 - ? First 101,8803.0
 - ? For each additional 13,584 or fraction, plus 0.2

- e) Over 156,216 inhabitants..... 4.0

For the full range of population brackets and coefficients see Table 4 on page 26.

Law n° 5172/66, wherein this table was first established, determined that each time a new count of the country’s population was done through a general census, the limits of those brackets should be adjusted by the same percentage increase as observed for the country’s population.

3,6% to form a Reserve – This amount was allocated to the interior municipalities with a population larger than 142,633 inhabitants³, in addition to their regular share. The coefficients for the participation in the Reserve are calculated according to the same criteria used for the capitals. That is, by applying a coefficient resulting from the product of a factor in direct proportion to the population, and another inversely related to the per capita income of the state to which the municipality belongs. These factors are the same as designated in the 1966 Law for the capitals.⁴

As mentioned, the few modifications on these criteria were enacted through Decree n° 1881/81. Namely, the decree changed the lowest coefficient in the table of coefficients for interior municipalities from 0.4 to 0.6 and it created the Reserve within the RSFm.

³ When it was created, the Reserve was assigned to municipalities with a coefficient of 4,0; later on, in order to benefit a larger number of cities, supplementary Law n° 91/97 included also in the Reserve municipalities with a coefficient of 3.8.

⁴ Law n° 5172/1966

In summary, to get the shares in the RSFm, either for a capital Y, for an interior municipality Z, located in state N, or for the participation in the Reserve, one must calculate:

I) RSFm Capitals = 10% of total RSFm

$$\text{Value of RSFm for capital Y} = \text{RSFm Capitals} \times \frac{\text{coefficient of capital Y}}{\text{sum of all capitals coefficients}}$$

II) RSFm Interior Municipalities = 86.4% of total RSFm

$$\text{RSFm for State N} = n\% \times \text{RSFm Interior Municipalities}$$

n% = percentage participation of state N in the RSFm for the interior municipalities

$$\begin{aligned} \text{Value of RSFm for municipality Z} \\ = \text{RSFm for State N} \times \frac{\text{coefficient of munic. Z}}{\text{sum of coefficients of all municipalities in state N}} \end{aligned}$$

III) Reserve of the RSFm = 3.6% of total RSFm

If interior municipality Z has more than 142,633 inhabitants, it will get in addition:

$$\begin{aligned} \text{Quota in the Reserve} \\ = \text{Reserve of the RSFm} \times \frac{\text{Coefficient of munic. Z}}{\text{Sum of coefficients of all municipalities in the Reserve}} \end{aligned}$$

Observe that in the three groups, because the individual coefficients for the capitals and for the interior municipalities do not represent a percentage, they do not add up to a hundred and, therefore, cannot be immediately multiplied by the portion of the RSFm assigned to a group. The percentage is obtained only after each coefficient is divided by the sum of coefficients of the group entitled to that portion of the RSFm.

Later on, in section IV.2, examples with actual data show more clearly how these calculations are done.

III. 3 – A consensus about the distribution of the RSFm

As the population brackets in the tables of coefficients should be adjusted in accordance with changes in the country's population, and as a census was to take place in 1990, supplementary Law n° 62/1989 established that the population brackets were to be maintained up to 1991, and then revised for 1992 pursuant to the results of the census. Delays in publishing the outcome of the census data led to the passage of a new supplementary law that postponed implementation of the revision until 1993.⁵

However, when the results of the census became public, they showed that in spite of a 23% growth in the country's population, 64% (2,829, at that time) of the municipalities would suffer reductions in their coefficients, either due to a loss in population or to a population increase below the nation's average. This development meant that the application of the 1989 supplementary law, which maintained that the population brackets should be revised according to the census results, would cause a large number of municipalities to suffer a revenue loss.

In order to avoid such losses, another supplementary law was approved in April 1993⁶. It determined that the municipalities' coefficients and the table itself were to be maintained without adjustment, with the exception of the municipalities that were subdivided and that lost population to the newly-created municipalities. The revision of the coefficients of the former and the attribution of coefficients for the latter should be done in accordance with the established table, although using their actual population data.

A new obstacle to compliance with the 1993 law arose because, by then, there were no accurate data about the changes in municipal population for the years 1990-1993. Also legislative proposals were being presented in both houses of Congress that would

⁵ Supplementary Law n° 72/1993

⁶ Supplementary Law n° 74/1993

mandate the use of new criteria for the distribution of the RSFm funds, ranging from leaving them permanently unchanged to applying fully the results of the population data then available. A consensus on this matter proved to be almost impossible as most of the representatives refused to approve a law that could harm their constituents. Again, apart from the inclusion of the new cities in the share of the Fund, everything remained unchanged.

In 1996, the IBGE proceeded to a new count of the country's population, making it again possible to revise the coefficients in accordance with official data.

As before, congressmen were afraid to allow municipalities to suffer a sudden loss of resources. Therefore, several proposals were presented that would maintain the existing situation. Others went in the opposite direction. Finally, the two Houses approved a supplementary law, at the end of 1997⁷. It stated that in 1998 all coefficients of the RSFm were to remain the same as in 1997; from 1999 onwards, in each succeeding year for the next five years, the municipalities would lose 20% of the excess RSFm resources they receive due to the maintenance of a population coefficient that should be lower. It meant that by 2003, all the interior municipalities would have their coefficients adjusted to correspond to their actual populations. The same gradual adjustment would apply to the capitals' and the Reserve's coefficients. This law also introduced an innovation to benefit larger municipalities: municipalities with a coefficient of 3.8 (instead of 4,0) would also be entitled to a share in the Reserve. At the same time, population ranges were to be kept unchanged. In March 2001 a new supplementary law was enacted in order to reduce the pace of adjustment that had been established by the 1997 law; the full adjustment was postponed to 2008.⁸

⁷ Supplementary Law n° 91/1997

⁸ Supplementary Law n° 106/2001.

In conclusion, since the promulgation of the 1988 constitution, the Congress has been reluctant to set rules that could lead to a reduction in the share of the RSFm for a significant number of municipalities.

Those who advanced the idea of protecting municipalities from the downward adjustments argued that the decrease in these municipalities population is mostly due to the migration to the big cities, reflecting the lack of opportunities in the smaller interior towns. As the RSFm is such an important source of revenues for the smaller municipalities, such a loss of resources would reinforce the migration trend.

Even if this assertion is true, the maintenance of the *status quo*, without taking into consideration the existing incentives for the installation of new municipalities, leads to a series of distortions. An explanation for this attitude could be that, due to the increase in the size of the RSFm, communities became much more aware of the losses that would arise from decreasing the coefficients, than they were of the effective reduction in the shares of the RSFm that resulted from the creation of new municipalities. These distortions are analyzed in the next section.

IV- Distortions in the Distribution of the RSFm

IV.1 – An incentive to the creation of small municipalities

As mentioned in section II, one indirect result of the 1988 Constitution was the unprecedented increase in the creation of new municipalities. Of the 1307 municipalities created from 1989 to 1997(1997 was the year that the last group of cities was authorized before a new restrictive constitutional amendment was effective), more than half have less than 5,000 inhabitants and 81% have less than 10,000. Considering all the new cities, only 15% have more than 15,000 inhabitants.

Concern about the proliferation of municipalities led to the approval of the 1996 constitutional amendment that stated: "...the establishment, merger, fusion and

dismemberment of municipalities shall be effected through state law,... , by means of a plebiscite, of the population of the municipalities concerned, *after the publication of Municipal Feasibility Studies, presented and published as set forth by law*".⁹ The introduction of the requirement of feasibility studies was put forward as a barrier that helped to restrain the number of new municipalities installed after 1997. Some representatives, fearing that this rule is still too loose, have been presenting bills designed to establish more defined and restrictive requirements for the creation of a municipality.

One of the major unforeseen consequences of the RFSm rules was the incentive it provides for the creation of small municipalities. Basically, the smaller the size of the municipality, the greater the advantage in terms of the RSFm: if the new municipality has a population within the first bracket of the table of coefficients, it will be assigned the minimum coefficient of 0.6. (The upper limit for this bracket is 10,188 inhabitants). Therefore, if a municipality of 12,000 (which, in the table, corresponds to a coefficient of 0.8) is dismembered, in total, the two new municipalities with 6,000 inhabitants each will get a bigger share of the RSFm. Although this is an hypothetical example, it reflects what happened after 1988

Even if securing a larger share of the RSFm was not the main reason for the creation of so many small municipalities, the significant size of this Fund after passage of the 1988 constitution definitely contributed to making them viable. Other factors, such as the permission to pay salaries to council members, even in small municipalities (forbidden under the previous constitution) and initially the absence of any restraint on personnel expenses, were also factors encouraging the installation of municipalities.

The creation of new municipalities, together with the decision not to change the coefficients of the municipalities that had lost population, certainly produced a revenue loss for the rest of the municipalities since each state has a previously determined share of the Fund. As municipalities are created, there are new participants to share in the RSFm and, consequently, less resources available for any one of them.

⁹ Constitutional Amendment n° 15/96.

In fact, it seems that the negative effect of the new participants was not considered when successive supplementary laws were enacted. One explanation for this oversight may have been that these losses were not noted at first because the size of the RSFm was growing faster than the number of cities. This faster growth rate meant that, at the beginning, the volume of resources transferred to each municipality continued to increase even though the number of cities was expanding.

Since the approval of the last two supplementary laws, in 1997 and 2001, this situation has started to change and will presumably be settled by 2008. Nevertheless, the full consequences of what happened to the RSFm in the last decade may never be fully assessed.

IV.2 – An example: the State of Paraíba

A practical analysis of the phenomenon discussed above is presented for the state of Paraíba. This example presents a simplified estimate because it assumes that none of the existing municipalities in the state, besides the cities that were sub-divided in order to create new ones, has had a significant decline in population.

Paraíba provides a representative illustration of these impacts because the 24% increase in the number of municipalities in this state from 1990 to 1997 is close to the national average. In Paraíba, a small state in the Brazilian North-East with a population of approximately 3.3 million, of the existing 222 municipalities(including the capital), 52 (23,4% of the total) were created in the last ten years. This state is a good example also because, typical of the recent phenomenon in the rest of the country, all new municipalities are small, having less than 9,000 inhabitants. In fact, most of them are even smaller: of the 52 new towns, 42 have less than 5,000 inhabitants and 28 have less than 3,000. This small size means that they all belong to the first range of coefficients used in the distribution of the RSFm, i.e., 0.6.

In order to evaluate the impact of these new municipalities in the sharing of the Fund, three situations with respect to the RSFm were calculated. The starting situation is one in which the RSFm is to be shared only by the municipalities in existence in 1990 (exactly 169, leaving out the capital). In this hypothesis, the sum of their coefficients (attributed to each of them in proportion to their populations) is 150.8.¹⁰ Each municipality would be entitled to a share equal to the fraction of its coefficient divided by 150.8 and multiplied by the amount of the RSFm assigned to the interior municipalities in Paraíba. For example, the municipality of Cuité with a population of 22,590 would have a share of $1.2/150.8$ of the RSFm available to all interior municipalities of the state of Paraíba, a ratio which is equivalent to 0.8% of the resources.

The second simulation is based on the supplementary law n° 91/97 as it was applied in 1998: the 52 new municipalities installed start to participate in the RSFm, while all the other coefficients remained unchanged (even the coefficients of municipalities that conceded part of their population to create another one). In this example, to evaluate the impact of the new municipalities, instead of calculating individual coefficients, each group will be considered as a whole. The coefficients of the pre-1998 municipalities add up to 150.8, the same as in the first simulation, and the 52 new ones, all with less than 10,188 inhabitants and with corresponding coefficients of 0.6, achieve a sum of 31.2 [52 (municipalities) x 0.6]. By adding up all the coefficients for the two groups, ($31.2 + 150.8 = 182$), and calculating the new ratios, one can see that the total share of the pre-1998 municipalities will be $150.8/182$ (83%), and the new ones will be entitled to $31.2/182$ (17%)¹¹. Compared to the first situation, it means that, in total, the existing municipalities would lose, jointly, a slice equivalent to 17% of the RSFm to the new ones. Individually, as an example, the loss for the municipality of Cuité can be calculated. Even with the same coefficient of 1.2, it will receive 0.12% less than before, since its share is now given by the ratio of $1.2/182$, or 0.66% of the RSFm, instead of $1.2/150.8$, that corresponded to 0.8%.

¹⁰ In these simulations the coefficients were attributed by the author, in accordance with the population data from the 1996 IBGE population count and the table of coefficients as shown on p. 27.

¹¹ Observe that the denominator of these fractions (182) is simply the sum of all of the coefficients attributed to the 221 municipalities (as these examples refer to the RSFm assigned to interior municipalities, the capital of Paraíba, João Pessoa, is not included).

For the comparison with the next situation, it is necessary to split the pre-1998 municipalities into two groups. The first, encompass the pre-1998 municipalities that didn't lose population to the new ones. These number 128, with their coefficients summing up to 105.4. The second, formed by the pre-1998 municipalities that yielded population to the new ones. These total 41 and their coefficients sum up to 45.4. Observe that, at this point, the sum of the coefficients of the two groups is the same as in the second simulation, that is, 150.8, and the results are exactly as before, i.e., the share of the two groups together is $(105.4 + 45.4)/182$, or, $150.8/182$. With no adjustment in the coefficients for the group that yielded population, this fraction represents their joint share of 83%, 58% for the first group and 25% for the second.

The third simulation represents what would happen if the supplementary laws had not prevented the adjustment of coefficients, that is, if the municipalities which lost population to the new ones had had their coefficients adjusted in accordance with the decline of their population. In fact, the supplementary laws ignored all the downward adjustments in the coefficients, but here, we will consider only the decreases in population due to sub-division of the cities and, for the sake of simplification, ignore the decreases due to migration to other cities.

Now, in this simulation, the cities that lost population will have their individual coefficients adjusted, so that some of them will be lowered. It is important to realize that a reduction in population, in some cases, may not be enough to cause a fall to a lower bracket of population in the table of coefficients, and the coefficient may remain the same. In the case of Paraíba, applying the population data, only some coefficients have decreased, so that the new total of coefficients for the second group adds up to 38.8 (instead of 45.4).

The new ratios will be: $105.4/175.4$ (corresponding to the share of the pre-1998 municipalities with unchanged coefficients); $38.8/175.4$ (corresponding to the share of the pre-1998 municipalities that were dismembered and had the coefficients revised); and

31.2/175.4 (corresponding to the share of the new municipalities).¹² Their respective percentage shares given by these ratios are: 60% for the first group, 22% for the second and 18% for the group of new municipalities. Jointly, now the group of pre-1998 municipalities will be entitled to 82%. As compared to the second simulation, the share of the dismembered municipalities has declined from 25% to 22%, due to the adjustment in their coefficients. This three percentage point loss is “transferred” as an increase in the share of the two other groups: the pre-1998 municipalities, which had no adjustment in coefficients, increase their participation to 60%, instead of 58%, and the newly-created ones get 18% instead of 17% (the two groups get 2% and 1% more, respectively).¹³

As shown in simulation three, the effect from the adjustment in the coefficients of the group that lost population is very small. Although in the example the losses in population due to migration were not taken into account, it is very unlikely that they would change this conclusion. On the other hand, a 17% impact due to the participation of the new municipalities can make a significant difference.

The example of Paraíba illustrates the “maximum advantage” in the sharing of the RSFm resulting from the creation of new municipalities, as was theoretically described in section III.2. As in that hypothesis, in Paraíba all the new municipalities had less than 10,188 inhabitants; therefore, their individual coefficients were all set at the minimum 0.6. At the same time, even when coefficients are adjusted, the dismembered municipalities, by conceding only a small fraction of their population, suffered small reductions in their coefficients or, in some cases, none. Actually, in Paraíba, of the 41 cities that conceded area and population for the installation of new municipalities, 18 of them remained in the same population bracket, therefore keeping the same coefficients; 15 suffered a drop in their coefficients of just 0.2; and 6 had a decrease of 0.4. Two municipalities suffered the more sizeable drop of 0.6. On the whole, it is a matter of

¹² As before, the denominator corresponds to the sum of all the coefficients. Here, $175.4 = 105.4 + 38.8 + 31.2$. Observe that, as the second group suffered a reduction in its coefficients, the sum of all coefficients declined from 182 to 175.4.

¹³ Arithmetically this increase happens because even if the numerators of the two ratios remain the same, corresponding to unchanged coefficients, the denominator is smaller due to the adjustment in the coefficients of the dismembered group.

simple arithmetic to realize that whereas the new municipalities became entitled to a portion equivalent to the ratio $31.2/182$ (17%) of the RSFm (which is subtracted from all the others) the compensation through the reduction of the coefficients (and consequently the shares) of the dismembered ones would be comparatively very small, equivalent here to three percentage points.¹⁴

The Paraíba results are not surprising given the tiny populations of the new municipalities. Many examples of small municipalities can be cited, all entitled to a 0.6 coefficient: the newly-created Coxixola, with 1,230 inhabitants; Parari, with 1,243; Algodão de Jandaíra, with 1,906; Sossego, with 2,333; or Baraúna, with 2,455 inhabitants. They were severed, respectively, from the municipalities of Serra Branca, São José dos Cordeiros, Cuité, Picuí and Remígio which, except for the small José dos Cordeiros, have populations between 12,000 and 20,000 and, therefore, bear zero or negligible losses in their coefficients (in fact, their coefficients decreased by 0.2, zero, zero, 0.2, and zero, respectively). Most other cases follow the same pattern.

To sum up, this illustration shows that the lack of adjustment in the coefficients, permitted by successive supplementary laws, although benefiting the municipalities which lost population while keeping their coefficients frozen, have not caused much harm to the other pre-existing municipalities. By contrast, it shows that the participation of the new municipalities significantly diminished the amount of RSFm resources available to the rest of the municipalities in a state, even if the compensatory adjustments are allowed. These features, which are probably true for most other states, mean that the

¹⁴ The steps for these calculations were:

Created municipalities: 52 municipalities, with populations of less than 10,188 inhabitants, had assigned coefficient of less than 0.6. Thus, each will share $0.6/(\text{sum of coefficients})$. Together they will receive a fraction of $(55 \times 0.6)/(\text{sum of all coefficients})$, that is, $31.2/182$, or 17% of the RSFm. This fraction allocated to the new municipalities represents a subtraction from the total amount of the Fund that otherwise would be available to the preexisting municipalities.

Dismembered municipalities: even if the coefficients of the 41 dismembered municipalities is adjusted, the total decline in the sum of these coefficients was much smaller than 31.2: the reduction summed up to only 6.6. The ratio $6.6/175.4$, or 3%, is the amount of RSFm that the dismembered municipalities will “return” to the Fund. The net impact of the creation of municipalities in this hypothesis is 18%, even higher than in simulation two, meaning a subtraction of 18% in the resources in the RSFm to be distributed, in comparison with the situation prior to the creation of the municipalities.

proliferation of small municipalities during the last decade should be a matter of concern to legislators.

IV.3 – The need for an evaluation of the RSFm expenditures

As mentioned before, the constitution of 1988 determined that a supplementary law should establish criteria for the sharing of the fiscal revenues, seeking to promote social and economic balance among states and among municipalities.

This principle was followed in determining the shares of state capitals in the RSFm as is. Thus, the calculation of coefficients includes a factor that is inversely proportional to the per capita income of the state to which a capital belongs.

For municipalities of the interior, the only guiding parameter is population size.¹⁵ Although distribution according to population was not initially meant to promote social and economic balance, it ended up having a strong positive affect in this direction as very small municipalities are receiving larger per capita shares of the Fund. Therefore, it can be argued that the dismembering of municipalities into smaller ones helped poorer communities, as may have actually happened in Paraíba and certainly in many other states.

However, before concluding that the proliferation of small municipalities is a good thing, other factors need to be taken into account. First, it is necessary to assess the costs and benefits to the involved populations. When municipalities are very small, the costs arising from the installation of a new administration (mainly the executive and city council) can easily offset the advantage of receiving a proportionally larger slice of the RSF. It is also known that when a municipality is dismembered, administrative costs are never transferred in exact proportion to the conceded area and population. So, taken

¹⁵ Suggestions discussed in the Senate about including a per capita income factor in the criteria for the distribution of the RSFm could not advance due to a lack of timely information for most municipalities in Brazil.

together, the new and the “old” municipalities’ administrative costs will increase. Whether this translates into better public services is a matter to be evaluated empirically.

It is quite obvious that an excessive fragmentation of the administration can provoke inefficiency. Looking at the tiny size of some municipalities and their budgets, it is difficult to see how they can even afford to provide essential services. The results of the IBGE research on municipalities show that the number of consortia among municipalities is increasing. Certainly, consortia are an attempt to augment efficiency by sharing fixed costs and by increasing the scale of activities. However, the creation of consortia should not substitute for actual efficient solutions that could arise from merging two or more units in order to cut avoidable administrative costs. The results of the research also reveal that consortia are more frequent in smaller municipalities (44% occur in municipalities of less than 5,000 inhabitants), which reinforces doubts about the viability of very small municipalities.

As the RSFm is not a yearly fund, it is not submitted to any kind of evaluation as to whether it achieves its goals or whether the expenditures are efficient. A thorough review of the criteria for distributing the RSFm that stopped the proliferation of non-viable municipalities, together with the imposition of restrictive conditions on expenditures, could go a long way in promoting a better use of resources.

V – Conclusion

The conclusion of this paper goes beyond the initial objective of the research, which was to analyze the effects of the changes in the RSFm caused by the 1988 constitution.

It was mentioned here at length that, even if the constitution cannot be determined as a direct cause, one of the major aspects influencing the distribution of the RSFm after 1988 is that 1,307 new municipalities became participants. Although most of them have

small populations, they are entitled to a relatively large proportion of the Fund. At the same time, even though the constitution established that the criteria for the distribution of the Fund's resources should be revised, the Congress not only maintained the previous rules but, in a very protectionist attitude, prevented the application of the rules whenever they would have led to a loss of revenue for the existing municipalities.

Therefore, one of the main conclusions of this paper is that the discussion about the distribution of the RSF should not be focused on the maintenance of the share of the municipalities, with the only aim being to avoid the possibility of revenue losses, as has been done up to now. Rather, the discussion should ensure that these resources are applied to provide better living conditions to the communities. In this debate, a main issue to be assessed is how the large number of new communities employed the financial resources transferred to them.

The question to ask is whether, during the years following enactment of the full increase in the percentage allocated to the RSFm, the extra money assigned to the Fund was spent in the most efficient way. Even without a mathematical answer to this question, it seems that a significant portion of the resources went to the newly-created small municipalities, but did not ensure that they actually offered improved benefits for the populations. What can be assured is that no efficiency criteria were used to promote the installation of the small municipalities. Only recently has the creation of municipalities become subject to the elaboration of feasibility studies.

The case of Paraíba provided a good illustration of the unforeseen consequences of the creation of municipalities for the distribution of the RSFm within a state. Although the main impact on a municipality's share of the RSFm was supposed to be the decrease in its coefficient, the example made it clear that a significant increase in the number of municipalities in a state had a decisive affect on the share of the other municipalities in that state.

Still, to ensure efficiency, and to achieve social and economic goals, more specific conditions should be required for the creation of municipalities. For example, it could be required that a new municipality not spend more than 30% of the RSFm on administrative expenses, that a new municipality has to be able to generate a minimum amount of tax revenue, or that it commit to supply certain services to the population.

It should also be required that, together with the publication of feasibility studies, a summary of the pros and cons of the creation of the municipality be published, including any possible positive or negative impact on the other municipalities.

There is an urgent need to evaluate the municipalities created during recent years and, if necessary, reverse the process. There is no sense wasting public resources through inefficient administration.

In order to conduct this evaluation, each state should be asked to evaluate the municipalities installed after 1993. The states should verify whether the cities are economically and financially viable, and should determine whether they should be maintained or merged. Each state should be able to guarantee that the existing municipalities can actually contribute to the welfare of the population and not only fulfill political interests.

With respect to the RSFm, there is an immediate need to discuss and implement more adequate criteria that would focus on promoting the social and economic development of the municipalities. For instance, the RSFm could be distributed according to the per capita income of the municipality, since these data will soon be available; or according to the tax revenue generated by the municipality, thus providing an incentive to the promotion of economic activity. At the same time, some systematic follow-up and evaluation of the Fund expenditures should be created to ensure that the resource transfers are achieving their aims.

Table 4 - Coefficients for the distribution of the Revenue Sharing Fund for the interior municipalities (Decree 1.881/81, art.1)

| Range of Inhabitants | Coefficients |
|-----------------------------|---------------------|
| Up to 10.188 | 0.6 |
| From 10.189 to 13.584 | 0.8 |
| From 13.585 to 16.980 | 1.0 |
| From 16.981 to 23.772 | 1.2 |
| From 23.773 to 30.564 | 1.4 |
| From 30.565 to 37.356 | 1.6 |
| From 30.357 to 44.148 | 1.8 |
| From 44.149 to 50.940 | 2.0 |
| From 50.941 to 61.128 | 2.2 |
| From 61.129 to 71.316 | 2.4 |
| From 71.317 to 81.504 | 2.6 |
| From 81.505 to 91.692 | 2.8 |
| From 91.693 to 101.880 | 3.0 |
| From 101.881 to 115.464 | 3.2 |
| From 115.465 to 129.048 | 3.4 |
| From 129.049 to 142.632 | 3.6 |
| From 142.633 to 156.216 | 3.8 |
| Beyond 156.216 | 4.0 |

Source: Secretary of the Treasury

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