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# Considerations About Municipal Government Finance in the State of the Espírito Santo: 2001/2009

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Fiscal decentralization in Brazil has promoted a break in the national collection system and granted greater autonomy to states and municipalities against the federal government with regard to fundraising. The theoretical difference emerged, when one observes the greatest proliferation of local entities from the autonomy granted by the Federal Constitution (FC) from 1988 to the various levels of government, many of which almost totally depend on inter-governmental transfers. There are those who advocate the strengthening of public actions from observing the problems of small units (municipalities) and who will now have greater decision-making freedom. Therefore, this article aims to analyze the public finances of municipalities in the core theoretical (all people born in Espírito Santo) state guided by the Fiscal Responsibility Law (FRL) and fiscal decentralization in the country. For this purpose, they were taken as the time frame 2001 and 2009. Methodologically, this paper used a literature review, as well as data from the National Treasury Secretariat (STN). In addition, authors took as a tool to help multiple regression models to strengthen the results. The principal evidence shows that, even with a slight improvement in the framework of indicators of revenue, these municipalities have proved essentially dependent on resources from the Union. Additionally, the results show a relative reduction of spending on items, such as staff costs and legislation in one year to another. In parallel, there were greater participation of the variables, costs of health and sanitation, education and culture, among others, to explain the variation of the expenditure of municipalities in Espírito Santo in the years observed. The data fit well to the model with a significance level of 1%.

Keywords: Fiscal Responsibility Law (FRL), public finance, cities of Espírito Santo State

# Introduction

The studies related to public finances require sometimes separate analysis on the income or expenses, others seek to develop further reflections regarding the government budget, leaving in turn, and tests seek to gather the collection and expenses of governments in the same context (Silva, Araujo, Figueiredo, Rangel, & Matos Filho, 2009; Silva, 2009).

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It is known that if it observes the governmental spheres as states and especially the cities, it shall note probably a close relationship between what one earns and what one spends. This is due to the inability to print money to finance public deficits and the need in these spheres, composing its tax collection through funds from intergovernmental transfers, which aims to raise the revenue available to actually meet the demands of the inhabitants of these federal entities.

These issues occur due to Brazil represent a federation, in other words, the political and administrative organization of the country is divided into three levels, namely: federal, state and federal district, and the cities. Furthermore, it is appropriate to emphasize that the Brazilian federal system has experienced throughout its history alternating between processes of centralization and fiscal decentralization, so that at certain times, sub-national entities have restrictions on the transfer of resources and reduction in its decision-centralism, assuming the opposite at other times (including today), featuring the decentralization (Silva, 2009).

Indeed, it should be noted that fiscal decentralization is an institutionalized status by the Federal Constitution (FC) in 1988, which has a targeted levels of government to lower amplitude, or her character is given by Rezende (2001): the existence of the municipalist inclination. Conversely, one can check the antithesis of regulation emphasized the FC 1967, as it established a fiscal centrality, due to the political-administrative structure of the military regime.

The FC 1988 promotes the possibility of a fairly significant expansion in allocative difficulties of the Union, since this instance should transfer resources to other, causing potential public deficits, whose macroeconomic problems are numerous. To do so, it arises, in Brazil, the Fiscal Responsibility Law (FRL), which establishes a control on government administrations, becoming an institution able to regulate the Brazilian public administrators (Gerigk, 2008; Silva, 2009).

Therefore, it is necessary to analyze in this research the cities belonging to the state of Espírito Santo, trying to compare public finances of these levels of government, focusing on the behavior of municipal income and expenditures. Moreover, the main objective of the study is to assess the allocative expenditure of federal entities emphasized tendency considering the years 2001 and 2009. It was considered that the year 2001 is referred to the first year after implementation of the FRL in Brazil and the year 2009 is the latest, contains the largest number of municipalities in the sample, and is contemplating the first decade of FRL in the country.

The hypothesis of the research suggests that the advent of FRL tends to improve municipal allocative conditions, particularly the collection of own source. In addition, it is understood to have been a more forceful relative increase in expenditure on areas of greatest demand by society, characterizing the occurrence of a strengthening of municipal finances and therefore in their own economies.

Thus, it can be emphasized that the research is justified by the fact that there is a large number of such studies to the municipalities of the Espírito Santo state, whose shortage is amplified when considering the methodological procedures adopted here. It is associated with these aspects that there are tests of the same kind proposed here for other units of the Brazilian federation.

Addition to those elements already explained, it is necessary to recall that the period in question meets the first year after implementation of the LFR and the other corresponding to a temporal cut, referring to a decade of operation of the institution under discussion. These methodological configurations concern the attempt to compare the possible effect caused by the legislation examined here, whose purpose is to observe whether the legislation has been effective indeed.

Finally, this article is divided into four sections beyond these initial considerations. In the second part, it presents the primary theoretical foundations to the study; following it is intended to show the methodological procedures taken to help the achievement of the proposed objectives; later, it analyzes the main results achieved in the research; finally, some final considerations and recommendations for future research are observed.

#### **Theoretical Foundations**

This section attempts to theoretically focus the search, that is, to reflect the municipal public finances in the context of the Brazilian Federation, considering some conceptual foundations capable of providing data for the interpretation of the results expected in the study. Thus, this item is divided into two parts, the first of which is synthetically the collection and public spending linked to municipalities; following, it presents the effects of the LFR and its implications to the elements before emphasized as an important attribute of this investigation.

#### **Theoretical Rescue of Public Finances**

Here it aims to discuss the revenue and expenditure connected to the municipalities, whose goal is to show the importance of these items to the economy of mentioned ones. Taking the studies by Silva Filho, W. G. Silva, A. O. F. Silva, and Y. C. L. Silva (2009) as references, it starts with the assumption that the municipalities, especially in Brazil, are strongly dependent on transferred funds to finance their spending. Therefore, a significant number of municipalities are "fragile" from the point of view of their collections, the allocation of revenues derives mainly from transfers from governmental spheres of greater magnitude. The pressing consequence is the increase of the Union expenditure, which is associated with a process known in the literature as proliferation of municipal spheres entirely submitted to the decisions of higher government entities.

It is noteworthy that the 1988 FC establishes favoritism to local government. With fiscal decentralization, financial transfers expand and institutionalizes up new municipalities. Hence, the statement of the 1988 constitution has municipalist character (Silva, 2009).

However, in most cases, the municipal federative entities that have proliferated in the country, do not exhibit sustainability in terms of own municipal tax revenue to perform the actions demanded by the local population. What can substantiate such claims is the outcomes of the studies of Silva Filho et al. (2009), Silva Filho, Queiroz, W. G. Silva, and A. O. F. Silva (2010), and Silva (2009), showing the flagrant dependence of municipalities of the northeastern states of the resources from the federal government. To compose the group of its revenues, it is being of vital importance in financing expenses of municipal entities.

In fact, it is essential to emphasize the behavior of municipal expenditure, since government spending are crucial to the supply of goods and/or services that citizens need. Indeed, government spending can promote economic dynamism, whose consequence is the increased circulation of the internal revenue of each municipality, increase in consumption pattern, and a possible drop in local unemployment (Blanchard, 2004).

Thus, the mentioned conditions allow to attest that the Brazilian federal behavior is inefficient, since the lifetime of the Brazilian constitutional provision enables the creation and especially the preservation of many dependent municipalities of government authorities of greater magnitude. Maia Gomes and Mac Dowell (1995) postulated that the municipal unsustainability, in respect of its non-fiscal autonomy, can cause two consequences. On one hand, the country must bear with the financing of the spendings of the entities extremely economically small, since transfers as the Participation Fund of Municipalities (FPM), establishing an amount, become a source of valuable use of the named groups of interests.

On the other hand, the dominant political classes plan strategies to create new municipalities to perpetuate in power, characterized in that way, in a "political gambling". Therefore, the resources transferred in significant quantities, generate little productive jobs. According to Silva (2009), what happens to allocative increment is an increase in the marginal product of the civil service, providing substantially lower returns for society.

In summary, the economically small municipalities, almost totally dependent on intergovernmental transfers, tend to perform unproductive spending allocating preferably their expenditure on civil service and allocating less than proportionally, resources for social areas, putting in contrast to Keynesian assumption which is said to be exponential government spending for economic dynamism. This thesis is contrary to what are observed by Maia Gomes and Mac Dowell (1995) and Silva (2009) in their studies.

# **Institutional Effects of LFR on Public Finances**

After the explanation of issues related to public finances, it is relevant to discuss the influence of FRL on the municipalities, establishing initially an important distinction: The FC of 1988 allowed an expansion in the actions of municipal managers, the opposite was emphasized by Complementary Law of May 2000, where there is a clear institutional confrontation (Silva, 2009).

According to Moura Neto and Palombo (2006), the 1988 FC suggests that the main transfer of the Union for municipalities becomes the FPM, composed of 22.5% of the collection of income tax (IR) and industrialized products tax (IPI), 70% tax on financial transactions (IOF) gold, 50% of funds raised by rural land tax (ITR), and 100% of IR resources withheld at source.

The transfers from states to municipalities are composed of 25% tax on sales and services (ICMS) collected in the municipality and the state fund for industrial products; the portion is equivalent to 50% of the motor vehicle tax on property (IPVA) collected in the locality. In addition to these transfers, municipalities also have other voluntary income, earned through agreements which aim generally works of infrastructure.

In the face of the fiscal decentralization, the proliferation of municipalities, as a result, spending and government revenues need further control, avoiding especially early debt of the new units and the control of the existing ones. Thus, before the picture of high emergency problems, inherent Brazilian public finances, in May 2000, created the LFR to guide municipalities in which concern the expenses and revenues.

This institution seeks to establish forceful rules of public finances, considering the control, planning, and administrative transparency, among other things, making it a legislation to systematize the government accounts (Gerigk, 2008; Silva, 2009).

Sena and Rogers (2007), in turn, argued that the advent of FRL is related to search by inhibiting the significant public deficits, which is that, the regulation becomes crucial to reach the reduction of government debt, the high cost of the machine with personnel, and the attempt to achieve balance in the accounts of governments, especially in the municipalities that assume a condition of wider administrative freedom, when it considered the decentralization, institutionalized in 1988.

Also in agreement with previous understanding, it is necessary to emphasize that the FRL establishes certain limits, such as: As only 1.2 net debts, from the point of view of proportionality, it must be related to the current revenues and the expenses with personnel which cannot exceed 60% of the current net revenue (RCL).

Thus, one can attest that personnel expense comes to the allocation of the total limits of personnel expenses by the Executive, Legislative, Judiciary, and Public Ministries. It was a very important innovation to

face the problem of uncontrolled expenditure with employees by autonomous entities. Soon, the other powers in addition to the Executive, are also responsible for the adjustment of expenditure (Dias, 2009).

The emergence of prudential limits, from the FRL has contributed to controlling municipal expenditures of the Brazilian federation. Therefore, as Article 22 in this Supplementary Law of May 2000, if personnel expenses exceed the 60% limit, the court union accounts will send an alert; if it does not decrease the expenditure in two subsequent quarters by the municipal entity, it cannot: absorb voluntary transfers, get direct or indirect guarantee from another entity or establish contract with credit operations, add to this decrease by at least 20% of the costs of commissioned positions, make the dismissal of unstable employees, or make the abolishment of stable servers.

Associated with these aspects, on the assumption that exceed the 95% limit before the proposed, it will be forbidden to Branch or organ: (a) granting of increased or adequacy of remuneration for any reason, except for the annual general review of remuneration; (b) creation of position, job, or function; (c) alteration of career structure involving an increase in expenditure; (d) provision of public position, employment, or hiring by any means; (e) hiring of extra hour (Dias, 2009).

However, from the reading of Fioravante, Pinheiro, and Vieira (2006) in regard to measuring decrease of spending on employees sheet, it becomes possible to understand that there was a reduction in government spending than many ones expected, since the salary cap of 60%, besides, it remains well above of the average of expenditures (42%), cooled the expense of a small number of municipalities that exceeded this restriction and served as a stimulus to occur rise in spending.

Indeed, the above argument brings an opposite explanation to the thinking of most researchers, being plausible to verify whether the FRL is a healthy institution or not for fiscal administrations, from the point of view of results to be found in the study when preparing this investigation. Therefore, in the next section, it intends to detail the fundamental methodology to reach the expected in this research.

# **Methodological Procedures**

This section presents the methodological procedures taken to achieve the objectives proposed by the study. In geographic scope, the research concentrates on state of Espírito Santo, with temporal cut for the years: 2001 and 2009. This procedure is due to the fact that 2001 is the first year subsequent year of the implementation of the LFR, and 2009 is its 10th year of operation. This is because the study has a bibliographic guidance on the meaning of that law which concerns the collection and municipal expenditures.

For the year, revenues and current expenses of the municipalities were taken, using the available sample database considered in the research. The information is coming from the National Treasury Secretariat (STN). At that, it highlighted that difference was observed among the number of sample municipalities in both revenues and the costs.

For the sample on municipal revenues in 2001, 77 municipalities were obtained from a total of 78 in the state. In the year 2009, there was the whole universe of municipalities. It should be noted, however, that some municipalities were excluded, especially in the construction of the sample to evaluate the costs. This was due to the fact that some of them have declared nothing to spend on variables used in this study. This time, it still recorded 76 municipalities in 2001 and 73 in 2009.

From these brief explanations, the subsection that follows aims to present the constructed indicators order to better strengthen the analysis.

#### **Construction of the Indicators**

This subsection aims to present the indicators used here to measure the level of dependency or financial independence of municipalities in Espírito Santo, of the transfers arising from the Union's resources. Therefore, it replicates the indicator here used by Riane (2002) and spread to other investigations by Matos Filho, Silva, and Viana (2008) and Silva Filho et al. (2009, 2010).

The first indicator called self storage capacity (CAP) aims to assess municipal capacity to acquire resources through their own efforts. Therefore, these municipalities use the resources available through the tax collection competence, as highlighted by Além and Giambiagi (1999) and Rezende (2001), they supported the territorial urban property tax (property tax), service tax (ISS), tax on property transfer properties and rights referring to them (ITBI), the share of the income tax withheld at source (IRRF), and other fees attached to them.

For the good performance of the municipalities, the higher is the own collection capacity, the better it is.

Thus, the CAP is described in the following manner:

$$CAP = (RT/RC) \times 100 \tag{1}$$

With the expression (1), it follows that the CAP is the ratio of the tax revenue earned by the municipality and its current revenue.

As for the dependence degree (GD), it reveals the level of participation of intergovernmental transfers in the constitution of current revenues of municipalities. Thus, one can realize that how dependent are these municipalities of resource transfers that come from other sources.

The indicator consists of the following form:

$$GD = (TI/RC) \times 100 \tag{2}$$

With the indicators presented here, it consists of what was proposed by the study. Sequentially, the subsection will bring the regression model proposed to strengthen the search results.

### **Multiple Regression Models (Log-Log)**

The multiple regression model, shown here, has now used to give them objectives, as its objective is to assist research in the treatment of data.

This work uses the method of ordinary least squares (OLS). With this method, it seeks to estimate the parameters, so that it is the minimum of the sum of squared residuals.

Johnston and Dinardo (2001) and Gujarati (2006) understood that such model establishes an observable relationship between one variable in front of two or more ones to explain the first; it also recognizes the existence of random error. Thus, the model presents the following manner:

$$Y = X \beta + \varepsilon \tag{3}$$

where *Y* is the dependent variable and is the matrix of exogenous variables. It corresponds to the parameter vector to the regression function and assumes the character of stochastic error observed from the estimation.

Given the fact of working with sample and not with the universe, it is necessary to point out that if you have observed and estimated, the difference between them reflects the stochastic error. Thus, it is emphasized that the results from the estimation process can be obtained from:

$$\hat{Y}_i = \beta_0 + \beta_1 X_i + \varepsilon_i, \quad i (1... K)$$
(4)

Thus, one can determine the  $\varepsilon$  in the following:

$$\varepsilon = Y - \hat{Y} \tag{5}$$

With the linear equation OLS, which depicts the multiple regression of the log-log, the intention is to observe the variation in order to obtain the contribution of each variable on the explanation of the dependent variable. Thus, it is necessary to make logarithms of the variables used, so that they can directly get the elasticities. This model can be expressed as:

$$\ln(\hat{Y}_i) = \beta_0 + \beta_1 \ln(X_i) + \varepsilon_i \tag{6}$$

where the inclination coefficient measures the elasticity of Y in relation to X.

After viewing the general econometric model, the same is reflected in this study to note the contribution of each of the variable components of current income. It takes the following scale:

$$\ln(RC_i) = \beta_0 + \beta_1 \ln(RT_i) + \beta_2 \ln(FPM_i) + \beta_3 \ln(OTC_i) + \varepsilon_i$$
(7)

where RC<sub>i</sub> is reflected in the current revenues of the municipalities in the state of Espírito Santo; RT<sub>i</sub> is the corresponding tax revenues; FPM<sub>i</sub> represents the background of participation of municipalities; OTC<sub>i</sub> refers to other constitutional transfers them deduced FPM; at that,  $\beta_1$ ,  $\beta_2$ , and  $\beta_3$  assume the parameters to be estimated by ordinary least squares, with  $\beta_1 > 0$ ,  $\beta_2 > 0$ , and  $\beta_3 > 0$ ; and  $\varepsilon$  is the stochastic error term.

In addition, this paper used the variables to explain the running costs of Espirito Santo municipalities, namely:

$$\ln(DC_{i}) = \beta_{0} + \beta_{1}\ln(LEG_{i}) + \beta_{2}\ln(ASSISPREVI_{i}) + \beta_{3}\ln(SAUSANE_{i}) + \beta_{4}\ln(ADUCULT_{i}) + \beta_{5}\ln(HABIURB_{i}) + \varepsilon_{i}$$
(8)

where DC<sub>i</sub> corresponds to current expenditure of i municipalities of the sample; LEG<sub>i</sub> is costs of legislative; ASSIPREVI<sub>i</sub> refers to expenses assistance and welfare of the municipalities; SAUSANE<sub>i</sub> is about expenditure on health and sanitation; EDUCULT<sub>i</sub> refers to expenditure on education and culture; HABIURE<sub>i</sub> is the expenditure on housing and urbanism; and  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$ , and  $\beta_5$  are the parameters to be estimated by ordinary least squares, with  $\beta_1 > 0$ ,  $\beta_2 > 0$ ,  $\beta_3 > 0$ ,  $\beta_4 > 0$ , and  $\beta_5 > 0$ ; likewise,  $\varepsilon$  takes the random error term.

With the exposure of the methodological procedures taken in this study, the following section presents the main indicators observed in the municipalities in the state of Espírito Santo, in 2001 and 2009.

# Analysis of the Results of Municipal Revenues and Expenses of the Espírito Santo Descriptive Statistics of the Data

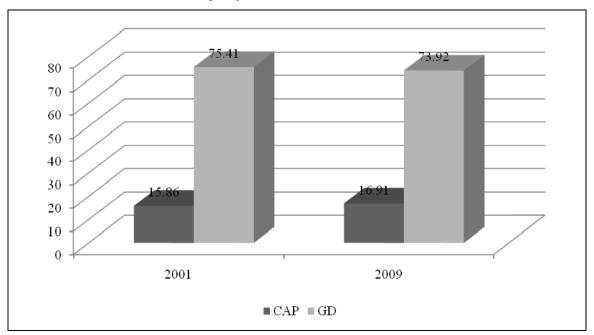
The theoretical framework that guides the discussion of financial dependence and municipal public spending proposed high level of dependence, especially those of lower economic dynamism. Therefore, in a context of FRL, this paper discusses the orientation of these units to raise revenue through better collection of taxes within their jurisdiction, as well as to better target expenditures of these municipalities.

The national literature has shown that, with fiscal decentralization 1988, an issue of greater fiscal policy has been established in the country. Many were the units that became towns, however, present resources to maintain even the small expenses of their competence. According to Maia Gomes and Mac Dowell (1995), this proliferation of assisted municipalities in the midst of decentralization caused a large problem, given that units of resources transferred economically larger and greater commitment to storage, to small units that do not

implement the slightest effort to generate own resources.

Moreover, Matos Filho et al. (2008) pointed out that in regions of lower economic dynamism, problems increase with greater clarity. This assertion was found in studies of Silva Filho et al. (2009, 2010) and observed, when the states of greater economic dynamism were from Brazilian Northeast. Dependence is therefore the result of a set of factors that affect the performance of these units to collect, either through the "political gambling" or "exchange of favors", be the low ability to raise, in front of an economic context of lower dynamism.

In Espírito Santo municipalities, it was observed, on average, comparing to those in 2001, to be generated by their own efforts only 15.86% of current revenues. Thus, with the CAP in this amount, the financial dependence on them was significantly high. However, despite a context of FRL, CAP of the same increased by only slightly and, in 2009, 10 years after the implementation of the supplementary law, there were only 16.91% of the current revenues of these municipalities, as being composed of municipal jurisdiction to collect. Therefore, there is still low allocative capacity of these units.

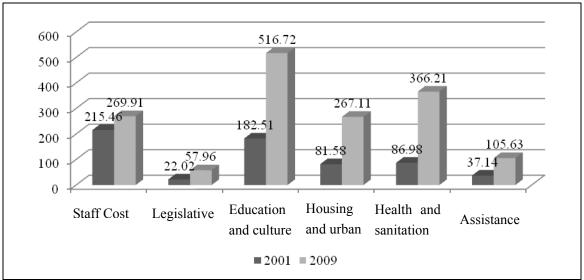


*Figure 1.* Self storage capacity and dependence degree of municipalities in the state of Espírito Santo (2001/2009). Source: Prepared by the authors based on data from STN 2011.

As a result of reliance on intergovernmental transfers, the GD of Espirito Santo municipalities was high. In 2001, 75.41% of the municipal state revenues were arising from Union, transferring to municipalities. In 2009, the GD of Espirito Santo municipal entities reduces slightly for 73.92% of current revenues composed of such resources.

Therefore, even though the state of Espírito Santo located in the region of greater economic dynamism of the country, in addition to have a marked own dynamics, the municipalities of this state are not free of lapses dependence of federal funds transfers. The reduction of municipal autonomy in tax, that is the municipalities, has less tax jurisdiction (Lopreato, 2002) or allocating capacity restriction of these units (Maia Gomes & Mac Dowell, 1995).

With regard to per capita spending according to the functions selected here, it is observed that even with the guidelines suggested by the FRL, all of them were noticed with an increase in expenditures on average by municipalities in the state assembly. Regarding the variation, it is observed that the highest growth rates of per capita expenditures occurred with the variables, health, and sanitation (321.03%) and housing and urbanism (227.42%). The lowest growth rate observed occurred with personnel expenses (25.28%).



*Figure 2.* Per capita expenditure by function in the state of Espirito Santo (2001/2009). Source: Prepared by the authors based on data from STN 2011.

Even with the lowest growth rate recorded in personnel expenses, it is of significant importance to point out that the biggest expense per inhabitant recorded among the variables selected in 2001, was for expenses with employees (R\$ 215.46), even though the first year of FRL is the strong rigor to contain the cost of the machine, considering that one of the law devices prays for reducing expenses with the staff at most 60% of net current revenue (Fioravante et al., 2006; Dias, 2009).

In 2009, therefore, the highest spending per capita was registered in the state on education and culture (R\$ 516.72), followed by spending on health and sanitation (R\$ 366.21). Thus, it is recorded that, staff costs were reduced relatively even though it had already registered R\$ 269.91 in the same year. This may be related to the effects of the supplementary law of May 2000, for controlling expenditures in Brazilian municipalities.

By statistics, it is observed that there was an increase in per capita expenditures in the municipalities of the Espírito Santo, even if it has seen more modest growth for greater control of variables assisted by FRL and elevation of expenditures on variables from political and social nature with education and culture, health and sanitation, among others, it still needs further observation to capixabas (all people born in Espírito Santo state) municipal spending.

# **Econometric Results of the Data**

Empirical results obtained from the use of the regression model here were significant showed to 1%, besides to observe that the variables adjusted themselves to the model as well. The sample was composed of 77 municipalities in the first year (2001) and with the whole universe in the second (2009) (78 municipalities in the state), according to the data of Table 1.

Therefore, it was observed that the explanatory power of the tax revenues (TR) variable in the variation of current revenue (CR) is low, mainly in 2001. For the variation of one percentage point in the RC of Espirito Santo municipalities, only 0.07 was explained by RT. In the same year, the FPM variable explained 0.39 and the variable other constitutional transfers (OTC) 0.59. The results from the model, converge to that observed in the descriptive statistics, given that the FPM, as well as OTC, are important items in the constitution of the RC of Espirito Santo municipalities.

Table 1
Multiple Regression Results (Log-Log) to the Current Revenue of Municipalities of the State of Espirito Santo (2001/2009)

	Espírito Santo					
variables	2001		2009			
	coefficient	<i>p</i> -value	coefficient	<i>p</i> -value		
Intercepto	0.0269442	0.94249	1.17615	0.00584		
RT	0.0754126	< 0.00001	0.127472	< 0.00001		
FPM	0.3933100	< 0.00001	0.201426	< 0.00001		
OTC	0.5951390	< 0.00001	0.660934	< 0.00001		
Number of						
Observations		77		78		
R <sup>2</sup> adjusted		0.99		0.99		
<i>p</i> -global value		0.000000000		0.000000000		

Source: Prepared by the authors with data from the STN 2011.

When it is applied to regression to 2009, a higher participation of RT in the RC variable explanation was found. It was observed that for the variation of one percentage point in the RC (0.12), it was explained by RT, higher than that observed in 2001. Significantly, it was noted to reduce the power of explanation of the FPM variable, since that year, only 0.20 RC was explained by this, rising thus the explanatory power of OTC that went on to explain 0.66 in 2009.

Considering the current expenditure of municipalities in Espírito Santo in 2001 and 2009, it notifies important changes in the behavior of the variables selected to explain the costs of these municipalities. In 2001, the sample was composed of 76 municipalities within the 78 universe, and only the variable, housing and urban development presented unexpected signal. Furthermore, significant out with  $1\% R^2$  is 0.99. In 2009, the sample was comprised of 73 municipalities in front of that universe, all variables exhibited the expected signal with  $R^2$  equal to that observed in 2001, and all of them are significant at the same percentage.

In 2001, the greater explanatory power of municipal expenditures in the state of Espírito Santo was found for education and culture variable. This year, for the variation of one percentage point in municipal expenditures, 0.53 was explained by this variable. In the same year, the variable that ranked second in the ranking was the staff costs (0.23), followed by variable expenses with legislature (0.22), according to the data of Table 2.

In 2009, wide differences in the expenditure of Espírito Santo municipalities was notified, which won another dimension to be explained. In this sense, the variable health and sanitation went on to explain the variation 0.35 of expenditure, taking the highest participation. About the personnel expenses that have been

reported with the second greatest explanatory power in expenses in 2001, it is reduced sharply to 0.01 in 2009. The same trend was observed for the variable costs of legislative, which went on to explain only 0.11 in the variation of costs. Also, it points out that the housing and urban development presented the expected sign on that year and explained 0.05 in the dependent variable.

Table 2
Multiple Regression Results (Log-Log) to the Current Expenditure of Municipalities of the Holy Spirit State (2001/2009)

	Espírito Santo					
Variables	2001		2009			
	coefficient	<i>p</i> -value	Coefficient	<i>p</i> -value		
Constant	1.105530	< 0.00001	1.58805	< 0.00001		
Staff costs	0.2262430	< 0.00001	0.0135577	< 0.00001		
Legislative	0.2172430	< 0.00001	0.1133840	0.00005		
Service and Security	0.0293203	0.01033	0.0621436	< 0.00001		
Health and Sanitation	0.0379375	0.04916	0.3475580	< 0.00001		
Education and Culture	0.5309650	< 0.00001	0.2985930	< 0.00001		
Housing and Urbanism	-0.0222397	0.00982	0.0474239	< 0.00001		
Number of Observations		76		73		
R <sup>2</sup> adjusted		0.99		0.99		
Global p-value		0.000000		0.000000		

Source: Prepared by the authors with data from the STN (2011).

#### **Conclusions**

After all the way developed in the study, it is essential to highlight some major points made in research, notably which explained the behavior of revenue and Espirito Santo municipal expenditures. Soon, it was observed that from the point of view of revenues, these showed a slight upward trend in the period considered, particularly as regards the collection of own source.

Indeed, the local levels studied, during the years of research, revealed a mild expansion in the own resource allocation, but retained the same characteristic dependence on intergovernmental transfers. This fact allows to understand the continuity of reduced own allocative capacity, overwhelming need for fiscal decentralism, and the clear evidence that the Espírito Santo municipalities are similar to other Brazilians, mostly economically weak.

With regard to costs, there has been a tendency to change after the full realization of the FRL, since the municipal spending in the state of Espirito Santo were less inclined to fund the public machine, towering towards the areas of social nature, that is, the managements of municipal entities sought in the analyzed period, enlarge expenditures that would enable improvement of a social nature. After all, what is the economic impact for this result?

The answer is feasible, since the municipalities had an upward trend in spending on health and sanitation, education and culture, and reducing expenses with legislative and staff, allowing there is in the long term, the possibility of the reach of development, considering these rubrics treat about expenditures very important to obtain the prerogative to society.

Finally, it became possible to point out that the revenue performance and Espirito Santo municipal expenditures were due to the enactment of the LFR, as observed in the decade, there was a change in the trend of public finances of the federal entities analyzed, showing signs of the institutional power of the FRL which was modestly effective in the years examined, allowing in its turn that the hypothesis of the article were partially accepted.

It is recommended that for future research, it uses a greater number of years in order to consider a series. Furthermore, it is suggested that they may use other econometric methods in such investigations. Thus, the studies to be developed may eventually reach results that maybe the ones found to be not reached here, with a view to strengthening this line of research.

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