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Impact Of Non-Execution Of Public Expenditure On The Ideb Of Primary Education

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Abstract
The objective of this research was to verify the impact of the lack of execution of public expenditure on the IDEB of elementary education. Quantitative research was carried out, with secondary data covering the period from 2017 to 2021, using descriptive statistics and multiple linear regression analysis for panel data. The sample consisted of 373 municipalities that presented published data for all variables and years of the study. The results obtained suggest that the lack of public expenditure on municipal public elementary education does not negatively impact the quality of elementary education for the municipalities analyzed, as indicated by the IDEB scores. As a practical implication, it is expected that the findings of this research will motivate managers and public agents, including politicians and bureaucrats, as well as regulatory and control bodies, to develop public policies to improve the IDEB of Brazilian basic education.

Keywords: *IDEB; Elementary School; Inexecution of public expenditure; Basic education*.

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I. INTRODUCTION

Public education policies in Brazil have undergone major changes. According to Oliveira (2019) and Lourenço et al. (2017), the changes are based on the New Public Management (NPM), which aims to reorient the objectives, processes, and purposes of public schools, imposing external evaluation as a parameter for measuring efficiency.

Education in Brazil is financed through the distribution and transfer of resources between thefederal entities: the Union, States, Federal District, and Municipalities. To comply with the provisions of the Federal Constitution and operationalize the redistribution of resources earmarked for education, the Basic Education Maintenance and Development Fund (Fundeb) was created, through which the federal government supplements resources for education (Caetano et al., 2017; Peres & Santos, 2020).

The decentralization brought about by the 1988 Federal Constitution allowed states and municipalities to become more autonomous in the administration of their revenues and the allocation of their resources. However, this independence led to greater responsibility, especially for municipalities. Since it was determined that Brazilian municipalities should invest 25% of their revenue, both from taxes and transfers, in the maintenance and development of education (Caetano et al., 2017; Loyola, 2017; Peres & Santos, 2020).

As for the budget execution of public spending in Brazil, there has been a growing practice of expenditure contingency. This is a strategy of the Executive Branch to make preventive contingencies at the beginning of the year, as soon as the Annual Budget Law (LOA) is published, as a way of prioritizing the

generation of primary surplus to the detriment of the implementation of social policies (Peres & Santos, 2020; Silva & Oliveira, 2020).

In addition to the non-execution of public spending, the practice of contingency generates major programming difficulties for public managers, as it causes a misalignment between what was planned and the execution of the public policy that should be carried out within the budget period itself, negatively impacting on the efficiency of public spending, both in education and in other areas, such as in the case of indebtedness, credibility and transparency of government actions (Aquino & Azevedo, 2017; Vieira & Santos, 2018).

Verifying the impact of non-execution of public expenditure on the IDEB result for primary education is justified because it is an important issue in the public sector since it is basic education that forms the basis of future agents in society and induces economic growth (Dissouet al., 2016).

In 2007, the Basic Education Development Index (IDEB) was created to assess the quality of Brazilian education. This index measures the quality of basic education using various attributes, such as Brazilian education, municipal schools, structure, and teaching staff, among others (Capucho & Vieira, 2020; Kauko et al., 2016).

In Brazil, Caetano et al. (2017) argue that there is a high investment of resources in education, however, the country is in an unfavorable position in the world ranking. The same finding has been discussed in other studies, such as those by Menezes-Filho and Nuñez (2012), Menezes-Filho and Amaral (2009), and Souza (2012).

In Brazil's federal context, of the three spheres of government, the decisions made by public management at the municipal level are most quickly felt by society. The contact between local government and citizens is closer and more direct, so it is there that the consequences of the choices made by the best governments are observed, hence the importance of studying the non-execution of public expenditure at the municipal level (Loyola, 2017). Thus, this research aims to verify the impact of non-execution of public expenditure on the IDEB in primary education.

This study differs from other previously published studies such as Souza et al. (2016), Wildert and D'Abreu (2013), Melo-Becerra, Hahn-De-Castro et al. (2020), Lourenço et al. (2017) and Firmino and Filho (2018), which studied the municipal level only from the point of view of the efficiency of public spending on education. Therefore, no research was found analyzing the relationship between non-execution of public spending affecting the quality of primary education offered.

From a theoretical point of view, the study makes an innovative contribution by discussing the non-execution of public expenditure, especially in primary education. From a practical point of view, the study aims to subsidize managers, control bodies, regulators, bureaucrats, and politicians, showing how the practice of contingency provides for the non-execution of public expenditure and can affect the quality of basic education, to help them find mechanisms to develop public policies aimed at improving the IDEB indices of Brazilian basic education.

II. THEORETICAL FRAMEWORK

This chapter deals with Brazilian public administration and its main planning instruments, as well as public policy on basic education, the evaluation of its quality through the IDEB, and the lack of public spending on basic education.

Basic Education Public Policy

Public education policies in Brazil have undergone major changes. These changes are based on the NGP, which aims to reorient objectives, as a way of changing the dynamics of bureaucratic management to managerial management, seeking quality standards from the private sector, especially in education systems, in the processes and purposes of public schools, imposing external evaluation as a parameter for measuring efficiency (Oliveira, 2019; Lourenço et al., 2017).

Concerning the financing of education in Brazil, this takes place through the distribution and transfer of resources between the federated entities: Union, States, Federal District, and Municipalities. The 1988 Federal Constitution brought with it the innovation of decentralizing government, allowing states and municipalities to become more autonomous in the administration of their revenues and the allocation of their resources. However, this independence led to greater responsibility, especially for municipal entities. It was determined that Brazilian municipalities had to invest 25% of their revenue, both from taxes and transfers, in the maintenance and development of their education systems. Of the 25% to be distributed, 60% should be used to fund primary education, and 40% to fund other levels of education (Caetano et al., 2017; Loyola, 2017; Peres & Santos, 2020; Marciniuk& Bugarin, 2019).

To comply with the provisions of the Federal Constitution and operationalize the redistribution of resources earmarked for education, the Basic Education Maintenance and Development Fund (Fundeb) was created, through which the federal government supplements resources for education (Caetano et al., 2017; Peres

& Santos, 2020). In 2020, through Constitutional Amendment No. 108/2020, Fundeb was elevated to a permanent instrument for financing public education, and the resources of this fund, regardless of their origin, will be applied exclusively "in the maintenance and development of public basic education, as well as in the valorization of education professionals, including their decent remuneration".

In the new Fundeb, the Union's share will grow steadily to reach 23% (twenty-three percent) of the Fund's constituent resources by 2026. The aim is to go from 10% (ten percent) of the extinct Fundeb to 12% (twelve percent) in 2021, 15% (fifteen percent) in 2022, 17% (seventeen percent) in 2023, 19% (nineteen percent) in 2024, 21% (twenty-one percent) in 2025, reaching 23% (twenty-three percent) in 2026 (Inep, 2022).

As can be seen, and corroborating the studies by Caetano et al. (2017), Brazil invests a lot of resources in education, but the country is in an unfavorable position in the world *ranking. The* same finding has been discussed in other studies, such as those by Menezes-Filho and Nuñez (2012), Menezes-Filho and Amaral (2009), and Souza (2012). Another study found that the most efficient municipalities were those that spent the least per pupil. Conversely, the municipalities with the highest expenditure per pupil were among the least efficient (Schuster &Zonatto, 2017).

The Basic Education Development Index-IDEB

The need to assess the quality of Brazilian basic education led to the creation of the Basic Education Development Index (IDEB) in 2007. The IDEB assesses the quality of basic education based on attributes such as Brazilian education, municipal schools, structure, and teaching staff, among others, setting targets to promote the improvement of teaching (Capucho & Vieira, 2020; Kauko, et al., 2016).

The IDEB, the main indicator of the quality of basic education in Brazil, is calculated based on the school performance rate and the average performance in the Inep exams. As for the pass rates, these are obtained from the School Census carried out each year, an indicator that influences the school flow, i.e. the progression of students to the following years. The proficiency averages used in the IDEB are from the Prova Brasil or SAEB - Sistema de Avaliação da EducaçãoBásica (Basic Education Assessment System) Portuguese Language and Mathematics exams, for schools and municipalities, and states and the country, together with the School Census, carried out every two years and applied to students in the initial and final years of elementary school.

According to Inep(2018), the IDEB began its historical series of results in 2005, when biennial quality targets were set to be achieved by the country, schools, municipalities, and states by 2021, with an average of 6 points. The average of 6 points to be achieved took into account the result obtained by the countries of the Organization for Economic Cooperation and Development (OECD) when applying the IDEB methodology to their educational results. "Six was the score obtained by the developed countries that were among the top 20 in the world."

It is important to note that the IDEB target set by the Brazilian government for the final years of elementary school (5th to 9th grade) in the period analyzed in this study is 5.0 for 2017, 5.2 for 2019, and 5.5 for 2021 (Inep, 2022).

The IDEB, with a standardized score from 0 to 10, assesses early childhood education, primary education, and secondary education. The IDEB targets are differentiated for each school and school network so that states, municipalities, and schools can improve their indices since each school has its target. Those networks and schools that have difficulties receive specific support from the Ministry of Education so that they can achieve the targets set by the government more quickly (Inep, 2022; Lourenço et. al, 2017).

The IDEB, which is made up of the school performance rate, pass rates, and the average performance in Inep's assessments, synthesizes two important concepts: Flow and Learning. Flow refers to the pass rate of students, and Learning refers to the results obtained in the Saeb test by Prova Brasil, this compatibility between flow and learning makes it possible to monitor the quality of the Brazilian educational system (Schuster &Zonatto, 2017).

In this context, these are the two dimensions that need to be improved if Brazilian basic education is to achieve better levels of educational performance. The construction of the indicator involving the two aforementioned dimensions means that to increase the IDEB, education networks and schools need to improve both dimensions at the same time since it is not possible to increase the indicator without both dimensions moving in the same direction (Inep, 2018).

IDEB 2021 is the last to be released, ending a cycle that began in 2005, when the indicator's trajectory was established as a result of the All for Education Goals Plan, using the same methodology as in previous years. However, according to an information note published on the INEP website (2022), the IDEB 2021 results should be analyzed with caution, since the Covid-19 pandemic scenario had a major impact on educational activities in the period from 2020 to 2021, especially in the past rates.

Crozatti (2013) carried out a study of Brazilian municipalities, taking IDEB and the average investment per school, teacher, and student from 2005 to 2009 as the study variables. He concluded that there is a positive

relationship between these variables, indicating that an increase in the average investment made in this way leads to better IDEB results, with this relationship also being impacted by the region and municipal size.

Lourenço et al. (2017) carried out a study of more than 5,000 municipalities in Brazil between 2009 and 2013 to see which social scenarios were related to municipal IDEB results. The results showed that aspects such as family and housing conditions had a positive effect on municipal IDEB indices, rather than public spending on education.

Oliveira and Lemes (2016) carried out a study in two regions of the state of São Paulo that adhere to the All for Education Target Plan, taking IDEB and GDP per capita as the study variables, and concluded that there is a positive relationship between the two variables, which means that regions with higher investments per pupil/year and GDP per capita will have better IDEB results.

Brazilian Public Budget

Concerning the Brazilian public budget, this study uses the thinking put forward by Deprá and Leal (2017): it is a contract signed between the government and society, where the monetary amounts collected by society (revenues) are transformed into government actions (expenses). This prior understanding is one of the most relevant to the study in question, because specifically, as far as the public budget is concerned, it is made up of revenues and expenses of a certain political scope, usually referring to the period of one year, with the aim of the State having command - almost punctually - over the management of public resources (Almeida & Costa, 2019).

Therefore, when it comes to the main planning instruments of the Public Administration, and corroborating the objective to be achieved in this study, it can be seen that the technique used in the constitution of these budget laws has allowed for a unified language in the relations between three laws: The Multi-Year Plan, the Budget Guidelines Law and the Budget Law, emphasizing the interconnection between planning and budgeting (Silva & Oliveira, 2020).

As for the budget cycle in Brazil, once the phase of authorizing appropriations is over, right after the Budget Law is passed, but before it begins to be executed, the Executive Branch, by means of contingency decrees, carries out budget and financial programming with the approval of expenditure quotas to be observed by all bodies. Among the contingent expenses are those of a nature such as other current expenses, investments, and financial inversions, while personnel expenses, charges, interest, and amortizations, as a rule, are not allowed to be contingent (Vieira & Santos, 2018).

Non-execution of Public Expenditure

The literature identifies two types of contingency: budgetary and financial. Budgetary contingency refers to the blocking of budget appropriations approved in the LOA and is characterized by the limitation of commitment. Financial contingency is characterized by the limitation of payments. Both types can lead to the non-execution of public expenditure (Alves, 2015; Galhardo et al., 2013).

Non-implementation of public expenditure is represented by expenditure that has not been committed. This is measured based on the updated appropriation, minus the expenditure committed, specifically in the education function and the primary education sub-function.

The total or partial non-implementation of public spending can occur either due to a failure of planning, or due to administrative acts by managers, and most of the time due to contingency to obtain a primary surplus (Pinto, 2006). Contingency of public spending in Brazil has been a growing practice. It is a strategy of the Executive Branch to make preventive contingencies at the beginning of the year, as soon as the Annual Budget Law (LOA) is published, as a way of prioritizing the generation of a primary surplus to the detriment of the implementation of social policies (Peres & Santos, 2020; Silva & Oliveira, 2020).

According to Marques and Lima (2018); and Santos and Gasparini (2020), the purpose of expenditure contingency is to maintain not only budget balance, but also financial stability, since it must be considered that not all revenues are acquired at the beginning of the year and may not even be confirmed, and resources for expenditure must be released according to collection.

Therefore, the practice of contingency can generate, in addition to the non-execution of public spending, major programming difficulties for managers, causing a misalignment between what was planned and the execution of public policy, which should be carried out within the budget period itself, negatively impacting on the efficiency of public spending, both in education and in other areas, also causing problems of indebtedness, credibility and transparency of government actions (Aquino & Azevedo, 2017; Vieira & Santos, 2018).

Da Silva et al. (2015) conducted a study with a sample of 359 municipalities to analyze whether Municipal Net Current Revenue and Public Expenditure on Education would be able to explain part of the efficiency of education in Brazilian municipalities, considering the IDEB. The results showed that the use of public resources is a determining factor in IDEB results. However, the increase in resources alone would not

enable Brazil to reach the target set for 2022; it would require good management of these resources, with the establishment of "clear and well-defined targets, measurement of results and accountability of managers".

In this way, the lack of implementation of public spending and the mismanagement of public resources is related to the IDEB result, since this can be affected by the mismanagement of public resources, when they are no longer applied in the implementation of public policies, such as education, which can also affect students' school performance (Da Silva et al., 2015).

Given this scenario, there was a need to create a hypothesis about contingency, as the non-execution of public expenditure and its relationship with the quality of basic education offered. Thus, the following hypothesis was created:

H1: Non-implementation of public education spending has a negative impact on the IDEB results for primary education.

III. RESEARCH METHODOLOGY

To verify the impact of non-implementation of public spending on the IDEB in primary education, the 5,568 Brazilian municipalities were used as a sample for the period 2017-2021. The reason for choosing the period to be analyzed was due to the availability of data.

Secondary data was used for this study. The data relating to measuring the quality of education, the Basic Education Development Index - IDEB, was obtained from the Inep website (2022). The other information was obtained from the portal of the Brazilian Public Sector Accounting and Fiscal Information System - SICONFI and the National Treasury Secretariat System - SISTN, obtained through the Budget Execution Reports - RREO, with information published in the 6th bimester of each year, considering the amounts committed (Couto et al., 2018).

The information on the control variable net consolidated debt was obtained from the Fiscal Management Report (RGF) published in the report for the third quarter of each financial year. The data for the control variables GDP per capita and Population were taken from the website of the Brazilian Institute of Geography and Statistics (IBGE, 2022). The data used to "calculate GDP per capita was the resident population, estimated by the municipality, with a reference date of July 1st of each year, sent to the Federal Court of Accounts - TCU". As for the population, the estimated published data of residents in Brazilian municipalities on July 1st of each year was also used.

The data was processed and after excluding those municipalities that did not have information disclosed on any of the study variables, or in any of the years studied, 807 municipalities remained, corresponding to 4035 observations, which constituted the final sample of the study.

The data was then tabulated in an Excel spreadsheet and the software Statistics Data Analysis - STATA/SE 2017.0 was used to analyze it. The database was made up of several sample units over a certain period, in the case of this study 5 (five) years, which is characterized as panel data.

To determine the size of the sample, the formula presented in equation (1) was used as applied in the research by Silva and Bruni (2019), which arrived at 371 municipalities, as shown below:

$$n = \frac{N.\ Z^2\ .\ p(1-p)}{Z^2\ .\ p(1-p) + e^2\ .\ (N-1)} \quad (1)$$

To guarantee proportionality between the sample obtained and the study population, we opted to use a stratified random sampling methodology. To do this, the population was divided into three homogeneous and different strata. The municipalities were then selected by simple random sampling, using a formula in the Excel program, giving a total of 373 municipalities. The selected municipalities that were repeated in the random sampling were replaced by others within the same federative unit and stratum.

To identify the extent to which non-execution of public spending impacts the IDEB in primary education, a multiple linear regression model was used, with a panel data structure, as shown below:

$$QEF_{it} = \beta_0 + \beta_1 Inexec_{it} + \Sigma Controles_{it} + \in_{it}$$

Where, *i,* indicates the Brazilian municipalities, t, indicates the time in years of the period analyzed from 2017 to 2021, and u, the error.

QEF represents the dependent variable that measures the quality of basic education, the indicator used is the IDEB score.

The IDEB score was chosen because numerous well-established studies have used it as a dependent variable, investigating possible relationships, both positive and negative, that may influence its indices. Thus, the IDEB is a suitable proxy for measuring the quality of education (Firmino & Filho, 2018; Schuster &Zonatto, 2017; Lourenço et al., 2017; Sousa et al., 2016; Wildert&D'Abreu, 2013).

IDEB scores are published every two (2) years, in the case of this study the years 2017, 2019, and 2021. For 2018 and 2020, the averages calculated between the years immediately before and after were taken into account.

The Inexec variable is the independent variable used in the model and refers to the non-execution of public expenditure, represented here by an expenditure that was not committed during the period analyzed. It will be measured based on the updated appropriation, subtracted from the expenditure committed, specifically in the education function and primary education sub-function, calculated as a percentage. Four control variables were adopted: net consolidated debt, degree of dependency of municipalities, population, and GDP per capita.

1 To calculate the sample using the formula presented, n = calculated sample; N = population; Z = standardized normal variable related to the degree of confidence; p = true probability of the event; e = sampling error (Agranonik& Hirakata, 2011; Virgillito, 2017). Applying N=807, Z = 1.96, e=0.03 and p=0.5 resulted in 371 municipalities. This calculation can be confirmed using the calculator on the statistical studies website available at https://comentto.com/calculadora-amostral/.

When processing the data, it was noted that the GDP per capita values are strictly positive monetary units, and it was decided to convert them into logarithms to reduce the dispersion of the variable. Furthermore, to minimize possible sample bias due to the presence of outliers, the data used in the study was winsorized at 1%. The relationship of dependence between the variables was determined using the panel data technique, estimating the regression using the Ordinary Least Squares (OLS) model.

IV. RESULTS AND ANALYSIS

Table 1 shows the results of the descriptive statistics for the variables in the model studied for the sample of 373 municipalities from 2017 to 2021. The sample consists of 1,865 observations and includes all the variables adopted for the model.

TABLE 1: DESCRIPTIVE STATISTICS OF THE MODEL VARIABLES

Variables	No. Obs.	Average	Median	Standard Deviation	1st Quartile	3rd Quartile	Minimum	Maximum
QEF	1865	4,609	4,700	0,774	4,050	5,200	2,800	6,300
Inexec	1865	7,331	4,663	8,229	0,796	11,000	0,003	40,460
DivConsoli	1865	13,237	4,400	26,370	0,01	26,130	-42,610	94,720
Graudedepe	1865	17,426	13,128	13,313	7,264	24,489	1,989	60,128
GDP	1865	9,910	9,895	0,721	9,26	10,525	8,794	11,531
Small_Port	1865	0,716	1	0,451	0	1	0	1
Gran_Porte	1865	0,147	0	0,354	0	0	0	1

Source: Preparedbytheauthor

Considering the municipalities in the sample, the average for the period for the QEF variable was 4.61 and the median was 4.70, meaning that most municipalities are above average. Regarding the period analyzed, 2017 to 2021, of the total of 1,865 observations, only around 25% of the municipalities achieved an IDEB score above 5.2, corresponding to 130 municipalities, and of these, only 21 (twenty-one) municipalities reached or exceeded the target set by the Brazilian government for the year 2021, which was 6 points.

The Inexec variable (non-execution of public expenditure) had an average of 7.33%. The municipalities that best executed their budget expenditure were Chorozinho and Icapuí in Ceará, with a minimum percentage of non-execution of 0.003% in 2018 and 2021, respectively, and the worst execution was Alto Feliz in Rio Grande do Sul, which had 40.46% of its elementary school expenditure limit not executed in 2019.

The control variable net consolidated debt had an average of 13.24%. The minimum percentage of debt was minus -42.61% and the maximum was 94.72%. The municipality with the lowest percentage of debt was Pouso Alegre in Minas Gerais in 2020, and the municipality with the highest percentage of debt was Cupira in Pernambuco in 2019.

The degree of dependence variable had an average of 17.43%, with a median of 13.13%, meaning that most municipalities are below average. This confirms the high degree of dependence of the municipalities in the sample on intergovernmental transfers, in line with the findings of studies by Massardi and Abrantes (2016) and Wakim et al. (2019) on the high dependence of Brazilian municipalities on intergovernmental transfers.

Table 2 shows the descriptive analysis of the quality of primary education by year, considering the years in which the IDEB scores were published.

TABLE 2: DESCRIPTIVE STATISTICS FOR THE QUALITY OF PRIMARY EDUCATION BY YEAR

YEAR	No. Obs.	Average	Median	Standard Deviation	1st Quartile	3rd Quartile	Minimum	Maximum
2017	373	4,332	4,400	0,858	3,600	5,000	2,500	6,000
2019	373	4,645	4,700	0,756	4,100	5,200	3,100	6,300
2021	373	4,836	4,900	0,677	4,400	5,300	3,250	6,500
Source: Prepared by the author								

Looking at Table 2, it can be seen that the average of the QEF variable, which represents the IDEB, shows an increase throughout the period analyzed, going from a score of 4.33 in 2017 to 4.64 in 2019, and from an average score of 4.64 in 2019 to 4.84 in 2021. Despite this growth, when compared to the IDEB's maximum score of 10 points, no great progress can be seen, as it falls far short of what was expected.

It is important to note that the standard deviation for 2017 is higher than for the other years, which suggests that there is greater heterogeneity between the schools in terms of the QEF score for that year (2017). However, over the period analyzed we can see a growing increase in the QEF results and a reduction in the standard deviation, which may show a reduction in inequality between schools in terms of IDEB scores.

Table 3 shows the descriptive analysis of non-execution of elementary school expenditure by year, considering the years in which the IDEB scores were published.

TABLE 3: DESCRIPTIVE STATISTICS FOR NON-EXECUTION OF EXPENDITURE BY YEAR

YEAR	No. Obs.	Average	Median	Standard Deviation	1st Quartile	3rd Quartile	Minimum	Maximum
2017	373	7,127	4,598	7,876	0,857	10,544	0,006	33,402
2019	373	6,099	3,427	7,147	0,774	9,031	0,002	33,806
2021	373	6,638	4,467	7,120	0,460	10,315	0,02	30,403
Source: Prepared by the author								

It can be seen that the non-execution of expenditure variable saw a small decrease from 2017 to 2019, from an average percentage of 7.13 to 6.10. From 2019 to 2021, there was a small increase in the percentage, from 6.10 to 6.64 on average.

Table 4 shows the execution of the estimated linear regression model

TABLE 4: REGRESSION RESULTS USING THE MQO MODEL

	QEF	
	Coef.	**Stat t.**
Inexec	-0,0016	(-0,75)
DivConsolid	-0,0042	(-6,59)***
Graudedepend	0,0129	(7,04)***
GDP per capita	0,2943	(9,40)***
Small	0,1365	(2,60)***
Large	-0,0924	(-1,52)
constant	*1,4512*	*(4,96)***
No. of Obs.	1.865	
R2	21,94%	

Note: *, **, and *** indicate significance at 10%, 5%, and 1% respectively.
Source: Preparedbytheauthor

Looking at Table 4, which includes all the variables in the study, it can be seen that the explanatory variable was not statistically significant about the quality of primary education variable (measured by the IDEB).

The result presented does not confirm the research hypothesis that the lack of public spending on education has a negative impact on the IDEB results for primary education, i.e. that the greater the lack of spending, the lower the IDEB of these municipalities, and that the lower the lack of spending, the higher the IDEB scores for primary education.

The result of the control variable net consolidated debt with 99% confidence shows that it has a negative impact on the IDEB for primary education, i.e. the higher the municipality's level of indebtedness, the lower the quality of its primary education. This finding corroborates the studies by Aquino and Azevedo (2017) and Vieira and Santos (2018), that indebtedness has a negative impact on the efficiency of public spending, and that by analogy it applies to education, in the form of "unpaid commitments". causing an increase in indebtedness, and consequently, a negative effect on the quality of education offered at the municipal level.

The variable degree of municipal dependence showed a statistically significant and positive relationship. With 99% confidence, it can be said that municipal independence has a positive impact on the IDEB results for primary education, i.e. the greater the municipal independence, the higher the IDEB scores of the municipalities in the sample. This result corroborates the studies by Satola et al. (2019), who concluded that the higher the percentage of own revenue, the lower the municipality's degree of dependence on central government transfers, and the greater their autonomy and chances of municipal development. This has a positive impact on the quality of education.

The control variable GDP per capita was statistically significant and positive, meaning that the higher a municipality's GDP per capita, the higher its level of education quality. This result corroborates the literature which concludes that the quality of education has a positive relationship with the economic development of entities, as in Menezes-Filho and Amaral (2009) and Oliveira and Lemes (2016).

As for the F-test, the result was higher than 10 (F-test = 97.64), rejecting the hypothesis that all the coefficients are statistically equal to zero. Although the model fits well, it is possible that other variables could be added.

V. FINAL CONSIDERATIONS

This research aimed to verify the impact of non-execution of public spending on the IDEB for primary education, from 2017 to 2021, based on Brazilian municipalities.

The results showed that the quality of primary education (measured by the IDEB) was not influenced by the lack of public spending on primary education. This means that, on average, the quality of primary education was not altered in the municipalities analyzed that failed to carry out their primary education expenditure as set out in the budget planning. Thus, the research hypothesis cannot be confirmed, and the research hypothesis is therefore rejected.

The result contradicts the findings of other studies since the literature points out how the indiscriminate use of the practice of non-execution of expenditure (contingency) negatively affects the realization of public policies, as in the studies by Aquino and Azevedo (2017); Vieira and Santos (2018).

It is important to note that the average score for the QEF variable, which represents the IDEB for primary education, continued to increase throughout the period analyzed, rising from 4.33 in 2017 to 4.84 in 2021 on average, suggesting that even in the face of the COVID-19 pandemic outbreak, these results have not been negatively impacted. Note that this result is limited to the municipalities in the sample.

It is worth noting that the control variables showed a significant and negative relationship, as in the case of net consolidated debt, corroborating the studies by Aquino and Azevedo (2017) and Vieira and Santos (2018), that indebtedness has a negative impact on the efficiency of public spending, by analogy especially in education, in the form of "unpaid commitments", causing an increase in indebtedness, and consequently, a negative effect on the quality of education offered at the municipal level, which was also found in the descriptive statistics.

The variables' degree of municipal dependence and GDP per capita showed a statistically significant and positive relationship. Confirming with 99% confidence that municipal independence and income have a positive impact on the IDEB result for primary education, i.e. the greater the municipal independence and development, the higher the IDEB scores of the municipalities. And it corroborates the studies by Satola et al. (2019); Menezes-Filho and Amaral (2009) and Oliveira and Lemes (2016), which conclude that a higher percentage of municipal own revenue, in addition to the capacity to generate wealth, will increase the degree of municipal autonomy and development.

Another noteworthy point that may have limited the research was the fact that some schools applied the suggestion of the National Education Council (CNE) adopting the curriculum *continuum* for the years 2020-2021. This measure allowed education networks to automatically promote students, causing an increase in pass rates without the corresponding student performance, which may have impacted the IDEB 2021 result with a possible bias.

From a theoretical point of view, the study contributes to the discussion on aspects involving the process of budget execution of primary education expenditure, and especially to demonstrating the consequences of this process, in the event of non-execution of expenditure, on the quality of education offered at municipal level. The creation of the non-execution of expenditure variable opens upa range of possibilities for further studies at other levels of education and could be extended to evaluate basic education at the state level and even secondary education.

It is hoped that these findings from a practical point of view will motivate managers, control bodies, regulators, bureaucrats, and politicians to develop public policies to improve the IDEB in Brazilian basic education. In addition to opting for more efficient budget execution of education spending, after all, basic education is the basis for training future agents of society, as well as promoting economic growth and a more developed society (Dissou et al., 2016).

As a suggestion for further research into verifying the impact of non-execution of public spending on the quality of basic education, the use of other variables, especially control variables, which in this study used economic dimension variables (Net Consolidated Debt, Degree of Municipal Dependence, GDP per capita) could be used as educational dimension variables such as qualification of teachers and educational agents, number and socio-economic level of primary schools, as well as expanding the sample to include more municipalities and other levels of education.

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