

## ARTICLE

# Distribution of the ICMS share: how can it be used to promote better results in education?

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### ABSTRACT

This paper aims to answer the following question: which guidelines should be observed when designing the transfer of discretionary ICMS share by states to municipalities in order to improve educational results, and which states have laws more favorable to this legislative change? The findings indicate that some guidelines depend on formulated laws (autonomy, equity, incentive, simplicity, singular focus, and safeguarding of grantor's objectives), and others must be understood in a broader context involving state laws. Thus, the particularities of each entity must be analyzed so the design of transfers can achieve the desired results and not encourage unwanted behaviors.

### KEYWORDS

collaborative regime; intergovernmental transfers; ICMS share.

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## ***DISTRIBUIÇÃO DA COTA-PARTE DO ICMS: COMO PODE SER UTILIZADA PARA PROMOVER MELHORES RESULTADOS NA EDUCAÇÃO?***

### **RESUMO**

Este estudo visa responder aos seguintes questionamentos: quais diretrizes devem ser observadas no desenho da transferência da parcela discricionária da cota-parte do Imposto sobre Operações relativas à Circulação de Mercadorias e sobre Prestações de Serviços de Transporte Interestadual e Intermunicipal e de Comunicação (ICMS) pelos estados aos municípios para se ter melhorias nos resultados da educação? Quais estados possuem leis mais favoráveis a essa mudança legislativa? Os achados indicam que há diretrizes que dependem das leis formuladas — autonomia, equidade, incentivo, simplicidade, focalização e salvaguarda dos objetivos do transferidor — e outras que devem ser compreendidas em um contexto mais amplo em que as leis estaduais se inserem. Assim, é indispensável analisar as particularidades de cada ente para o desenho de transferências que viabilize o alcance dos resultados desejados e não fomente comportamentos indesejados.

### **PALAVRAS-CHAVE**

regime de colaboração; transferências intergovernamentais; cota-parte do ICMS.

## ***DISTRIBUCIÓN DE LA CUOTA DEL ICMS: ¿CÓMO SE PUEDE UTILIZAR PARA PROMOVER MEJORES RESULTADOS EN EDUCACIÓN?***

### **RESUMEN**

Este artículo tiene como objetivo responder a la siguiente pregunta: ¿qué pautas deben observarse en el diseño de la transferencia de la cuota del ICMS por parte de los estados a las municipalidades para mejorar los resultados de la educación y qué estados tienen leyes más favorables a este cambio? Los resultados indican que existen pautas que dependen de las leyes formuladas (autonomía, equidad, incentivo, simplicidad, enfoque singular y salvaguarda de los objetivos del otorgante) y otras que deben entenderse en un contexto más amplio en el que se encuentran las leyes estatales. Por lo tanto, es esencial analizar las particularidades de cada entidad para el diseño de transferencias que permita alcanzar los resultados deseados y no fomente comportamientos no deseados.

### **PALABRAS CLAVE**

régimen de colaboración; transferencias intergubernamentales; cuota de ICMS.

## INTRODUCTION

The Brazilian state of Ceará, through its Law No. 14,023 (Brasil, 2007), uses criteria for the discretionary distribution of the share of the Tax on Operations related to the Movement of Goods and on the Provision of Interstate and Intermunicipal Transportation and Communication Services (*Imposto sobre Operações relativas à Circulação de Mercadorias e sobre a Prestação de Serviços de Transporte Interestadual e Intermunicipal e de Comunicação* — ICMS) ruled by output-based conditionalities. In this kind of transfer or grant, the results achieved — through the service provided and subject to conditionalities — are used to calculate the financial resources to be transferred. In Ceará, one of the criteria adopted is the Education Quality Index (*Índice de Qualidade da Educação* — IQE), whose use has led to significant improvements in the educational indices of the state (Abrucio, Seggatto and Pereira, 2016).

Considering such finding, as well as those of other studies (Lima, 2012; Brandão, 2014; Barroso, 2015; Carneiro and Irffi, 2017), a question that arises is what guidelines should be observed when designing the transfer of the discretionary portion of the ICMS share by states to municipalities in order to improve educational results, and which Brazilian states have laws more favorable to this legislative change? This study aims to answer this question.

Transfers made between entities from different governmental levels (*e.g.*, federal, state, and municipal) are called intergovernmental. This transfer is used to address the gap between the revenue and expenditure decentralization of public sector entities originated by the difference in proportional distributions of tax competences and spending responsibilities. Regarding tax competences (revenue decentralization), the amount of taxes that can be efficiently collected by municipal governments decreased since criteria such as the ease of exporting the tax, the mobility of the tax base, and the economies of scale in the tax administration are better observed by state governments and, mainly, by the federal government. Failure to achieve an adequate competence to collect taxes can stimulate fiscal wars, for example (Mendes, 2004). With respect to government spending responsibilities, the premise used corresponds to: “each public good must be provided by the government level that more closely represents the geographical area benefiting from that good” (Mendes, 2004, p. 432).

ICMS is a tax — the main one, in terms of values collected by Brazilian states — partially transferred to municipalities of the respective state that collected it. The current Brazilian Federal Constitution (Brasil, 1988) establishes that 25% of the ICMS collected must be transferred to municipalities of the respective state. Out of this resulting amount, at least three quarters, or 75%, must be redirected through the derivation principle, that is, the tax is distributed according to the place where the generating event occurred. This criterion is also known as value-added tax (VAT). The idea that underlies this criterion is that municipalities that collect most of the ICMS should be contemplated with an equally higher part at the time of the transfer. As a tax on the circulation of goods and services, more populous municipalities tend to raise larger amounts than less populous ones. The remaining

portion that belongs to municipalities — that is, up to a quarter, or 25% — must be transferred according to Brazilian state laws, *i.e.*, the distribution of this share is discretionary. The object of the present study is this remaining portion, adopting the expression discretionary portion of the ICMS share, or simply discretionary portion, since Brazilian state governments can change their laws in order to improve municipal performance in certain areas based on the criteria established for the distribution of this portion, as occurs in Ceará.

Previous studies have addressed the discretionary portion (Albuquerque, 2009; Sales, 2011; Lima, 2012; Nogueira, 2012; Petterini and Irffi, 2013; Brandão, 2014; Franca, 2014; Barroso, 2015; Garcia, Simonassi and Costa, 2015; Carneiro and Irffi, 2017). However, most of these studies focused mainly on identifying the impact of changing the criteria of distribution of this portion on educational results. We found no investigations addressing the guidelines that should be considered to determine these criteria, or transfer design, so that educational results are actually achieved.

The relevance of this study lies in its reflection that the desired educational results may depend, among other factors, on aspects involved in the transfer design. In the case of the discretionary portion of the ICMS share, guidelines should not be disregarded when designing these transfers, some of which depend heavily on state laws, while others constitute a broader context than specific state laws on the subject. The guidelines presented in this study do not comprise a thorough list of aspects to be discussed to achieve the results; however, non-compliance may cause inefficiency in the transfer of the discretionary portion.

In addition, we highlight the relevance of appropriately designing intergovernmental transfers since, in the long run, it can lead to unwanted behaviors, such as municipal dependence on transfers without searching for best practices and/or results. One example is the Municipal Participation Fund (*Fundo de Participação dos Municípios* — FPM), in which the transfer design guarantees higher financial resources to less populous municipalities, without demanding improvements in practices and/or results and, in some cases, fostering the waiver of taxes of municipal competence to avoid disapproval of the elected politician.

## LITERATURE REVIEW

### INTERGOVERNMENTAL TRANSFERS OR GRANTS

Intergovernmental transfers or grants refer to resources transferred between different government levels — federal to state and state to municipal. One of the reasons for their existence is the imbalance between the decentralization of execution of public policies and the tax collection by different government levels. Thus, intergovernmental transfers are a mechanism used to reduce this imbalance and redistribute resources among regions with different levels of income and development (Mendes, 2004).

According to Shah (2007), intergovernmental transfers can also be used to influence local priorities, deal with poor infrastructure, create macroeconomic stability in underserved regions, establish minimum national standards, and compensate for externalities or spillovers — public actions promoted by a local government that benefit not only local members but those of other locations, *i.e.*, under the responsibility of other governments.

Intergovernmental transfers can be classified either as general-purpose/unconditional or specific-purpose/conditional (Shah, 2007). The former consists of general budget support in which transfers are made with no strings attached. Namely, they are transfers stated by law and made to preserve the autonomy of entities, especially local ones, thus promoting interjurisdictional equity. In general, this type of transfer only increases the income and, since no restrictions are imposed, the receivers can allocate resources at their discretion (Shah, 2007).

On the other hand, specific-purpose or conditional transfers primarily aim to provide incentives for governments to invest in specific programs or activities. Usually, these transfers specify in which expenditures the resources can be used (input-based conditionality), with the possibility of being characterized as intrusive and unproductive, or which results should be obtained through the service provided with the transferred resources (output-based conditionality) and that may, in addition to preserving the autonomy of local governments, favor the objectives of the donor government (Shah, 2007). Chart 1 presents features of these two types of conditionalities.

Conditional transfers can be classified as non-matching and matching transfers. According to Shah (2007), the former is used to subsidize activities

**Chart 1 – Conditionality features based on input e output.**

Feature	Conditionality based on	
	<i>Input</i>	<i>Output</i>
Grant objectives	Spending levels	Quality and access to public services
Grant design and administration	Complex	Simple and transparent
Conditions	Expenditures on authorized functions and objects	Output-based delivery results
Local government autonomy and budgetary flexibility	Little	Absolute
Transparency	Little	Absolute
Focus	Internal	External, competition, innovation, and benchmarking
Accountability	Hierarchical to higher-level government, controls on inputs, and process with little or no concern for results	Results-based, bottom-up, client-driven

Source: adapted from Shah (2007, p. 14).

considered a high priority for higher government levels but a low priority for local governments. In turn, conditional matching transfers, or cost-sharing programs, require that the resources received be allocated to specific purposes and that a certain proportion of the expenditure be borne by resources from the receiving governments themselves (Shah, 2007). Moreover, the need for matching stimulates greater scrutiny and local understanding of expenses incurred through transfers; however, for receiving jurisdictions with limited fiscal capacity, matching transfers can be seen as heavier; therefore, the determination of the matching percentage should be proportionally inverse to the per capita fiscal capacity of the jurisdiction.

Also, conditional matching transfers can be classified as limited/closed-ended matching grants or unlimited/open-ended matching grants. In the former, the donor or grantor stipulates a maximum limit for the transfer, that is, the total sum of transfers cannot exceed an established amount (Mendes, 2004). According to Shah (2007), this limitation may allow or ensure the grantor some control over the costs of transfer programs. Conversely, conditional unlimited matching transfers are used to correct inefficiencies in the provision of public goods when externalities or spillovers are noticed.

In general, the type of transfer adopted depends on its purpose. Shah (2007, p. 15-16) lists 15 guidelines that can help design these transfers, ensuring efficiency and equality in the provision of services and fiscal health for local governments, as follows:

- Clarity in grant objectives. Grant objectives should be clearly and precisely specified to guide grant design;
- Autonomy. Subnational governments should have complete independence and flexibility in setting priorities. They should not be constrained by the categorical structure of programs and uncertainty associated with decision making at the center. Tax-base sharing—allowing subnational governments to introduce their own tax rates on central bases, formula-based revenue sharing, or block grants—is consistent with this objective;
- Revenue adequacy. Subnational governments should have adequate revenues to discharge designated responsibilities;
- Responsiveness. The grant program should be flexible enough to accommodate unforeseen changes in the fiscal situation of the recipients;
- Equity (fairness). Allocated funds should vary directly with fiscal need factors and inversely with the tax capacity of each jurisdiction;
- Predictability. The grant mechanism should ensure predictability of sub-national governments' shares by publishing five-year projections of funding availability. The grant formula should specify ceilings and floors for yearly fluctuations. Any major changes in the formula should be accompanied by hold harmless or grandfathering provisions;
- Transparency. Both the formula and the allocations should be disseminated widely, in order to achieve as broad a consensus as possible on the objectives and operation of the program;

- **Efficiency.** The grant design should be neutral with respect to subnational governments' choices of resource allocation to different sectors or types of activity;
- **Simplicity.** Grant allocation should be based on objective factors over which individual units have little control. The formula should be easy to understand, in order not to reward grantsmanship;
- **Incentive.** The design should provide incentives for sound fiscal management and discourage inefficient practices. Specific transfers to finance subnational government deficits should not be made;
- **Reach.** All grant-financed programs create winners and losers. Consideration must be given to identifying beneficiaries and those who will be adversely affected to determine the overall usefulness and sustainability of the program;
- **Safeguarding of grantor's objectives.** Grantor's objectives are best safeguarded by having grant conditions specify the results to be achieved (output-based grants) and by giving the recipient flexibility in the use of funds;
- **Affordability.** The grant program must recognize donors' budget constraints. This suggests that matching programs should be closed-ended;
- **Singular focus.** Each grant program should focus on a single objective;
- **Accountability for results.** The grantor must be accountable for the design and operation of the program. The recipient must be accountable to the grantor and its citizens for financial integrity and results—that is, improvements in service delivery performance. Citizens' voice and exit options in grant design can help advance bottom-up accountability objectives.

Shah (2007) also indicates the possibility of conflicts between these guidelines, that is, some of them may be absent in the transfer design due to the need for others to appear.

#### FISCAL FEDERALISM AND THE EXPERIENCE OF THE STATE OF CEARÁ IN EDUCATION

Article 211 of the current Brazilian Federal Constitution (Brasil, 1988) determines that the three government levels must organize their education systems through a collaborative regime. This is defined by the Ministry of Education as

the expression and form of organization of education systems through collaborative relationships, ensuring compliance with the responsibilities defined in the rules of cooperation and in the new funding rules, all directed by national quality references expressed in the LDB [Education Guidelines and Framework Law or *Lei de Diretrizes e Bases da Educação*]. (Brasil, 2015)

The decentralization of educational policies is evident, as the above-mentioned article indicates that the Brazilian federal government is responsible for the organization of the federal and subnational education system, the financing

of federal public educational institutions, and redistribution and supplementary functions by means of technical and financial assistance to states, the Federal District, and municipalities. The Constitution (Brasil, 1988) also states that municipalities must act primarily in elementary school and early childhood education, while high school, as well as elementary school, should be priorities of states and the Federal District.

Thus, as pointed out by Abrucio and Seggatto (2014, p. 52), “the model proposed by the Constitution for social policies combines autonomy and interdependence between entities”. For example, education has a collaborative regime since two distinct government levels, state and municipal, are responsible for elementary school. This shared competence requires greater coordination between entities for both the formulation and implementation of policies (Abrucio, Seggatto and Pereira, 2016).

Although the Constitution (Brasil, 1988) determines the cooperation between entities for the execution of educational policies through the collaborative regime, it does not establish how this interaction should take place. Such interaction is one of the initial difficulties for the implementation of coordination and cooperation arrangements between entities (Abrucio, Franzese and Sano, 2010). According to Abrucio, Seggatto, and Pereira (2016), the decentralization that occurred immediately after the Brazilian Federal Constitution of 1988 was characterized as disorganized, since federal coordination was absent, and, moreover, the intergovernmental financial flow did not favor the reduction of inequalities and the universalization of education.

So, in order to reduce such inequalities in expenditure among entities and thus ensure better distribution of resources, the Fund for the Maintenance and Improvement of Elementary School and Teaching Recognition (*Fundo de Manutenção e Desenvolvimento do Ensino Fundamental e de Valorização do Magistério* — Fundef) was nationally implemented in January 1998 (Brasil, 1996a). The changes proposed by Fundef include those related to the structure of elementary school financing since part of the resources constitutionally linked to education became bound to this education level.

The Constitutional Amendment No. 53 (Brasil, 2006) established the Fund for the Maintenance and Improvement of Basic Education and the Recognition of Education Professionals (*Fundo de Manutenção e Desenvolvimento da Educação Básica e de Valorização dos Profissionais da Educação* — Fundeb), replacing Fundef. Fundeb is an input-based conditional transfer, in which 60% of the resources should be allocated to teaching professionals from basic public education and 40% to the remaining expenses, such as school maintenance.

On the other hand, the legislation change regarding the ICMS in Ceará, which, together with other actions, has improved education rates, corresponds to an output-based conditional transfer. The previous Ceará law (Brasil, 1996b) was based on an input-based conditional transfer and determined the following criteria for discretionary portion distribution: 12.5% based on the proportion of expenditures on improvement and maintenance of education; 7.5% distributed equally among

all municipalities, representing the equal part; and 5% based on the population of each municipality.

According to these criteria, the proportion of discretionary portion that should be transferred did not rely on municipal efforts to improve either its indices or performance and thus receive more resources. The only criterion that could, in a way, modify the amount received was the expenditure on education. However, according to Brandão (2014, p. 40), “this is not a simple task, since the resources transferred from Fundeb had the greatest weight in this sum”.

With the revocation of that law and the enactment of Law No. 14,023 (Brasil, 2007), the discretionary portion distribution began to have features of output-based conditional transfer. Thus, the distribution of resources started to rely on indices achieved by the municipalities: 18% according to IQE, 5% to the Health Quality Index (*Índice de Qualidade da Saúde — IQS*), and 2% to the Environmental Quality Index (*Índice de Qualidade do Meio Ambiente — IQM*).

Previous studies indicate, among their main findings, the positive impact on education rates in the state of Ceará. Brandão (2014) noted that the municipalities of Ceará whose ICMS revenue decreased after the change — losing municipalities — showed higher growth in their education indicators compared to those with increased resources after the change — winning municipalities.

The change in criteria for discretionary portion distribution, from input-based to output-based conditionality, was a factor that contributed to the present improvement in Ceará’s educational indices.

## DATA COLLECTION AND GROUPING

The data sources used were Brazilian state laws regarding the criteria for discretionary portion distribution. A database was built with data identification of both revoked and existing laws, with their respective amendments, if any. The classification into revoked or in force considered the period of law collection — between February and March 2018. Sixty-five (65) laws were tabulated, 15 classified as revoked and 50 as in force.

The search for laws covered the 26 Brazilian states and the Federal District. However, some peculiarities should be underlined concerning the Federal District, Acre, and Paraíba. Regarding the Federal District, it does not have the attribution of distributing the ICMS share but of receiving its share from the state of Goiás (Barros, 2001). According to Barros (2001), Acre has no legislation about the criteria for discretionary portion distribution. In this state, 5% of the discretionary portion belonging to municipalities is distributed based on environmental criteria (Brasil, 2004b), and 95% on the distribution criteria of FPM. In Paraíba, the law on the criteria for the participation of municipalities in ICMS collection has been suspended because it establishes distribution criteria that together total 30%, thus exceeding 25% and disagreeing with the Brazilian Federal Constitution of 1988 (Secretaria de Estado da Fazenda da Paraíba, 2011). As a result, the Federal District was not included in the groupings and analyses performed. At the same time,

the states of Acre and Paraíba were addressed, so it is important to consider the above-mentioned notes.

The criteria for discretionary portion distribution of the ICMS share, as well as the percentage destined for each criterion, were collected from the 65 laws found. They totaled 173 criteria, 45 extracted from revoked laws and 128 from laws in force. Due to the number of criteria, categories were defined to group them and enable the analyses.

The condition used to create a category was: three or more criteria addressing the same or a very similar theme. Criteria employed by only one or two states were grouped into the category “Other”. This rule had one exception — the category Social Coefficient, a criterion used only by Mato Grosso (Brasil, 2004a), with a percentage of 11%. As the criterion corresponds to 44% of the discretionary portion (11% of the total of 25%), a category was created for it.

Thus, 14 categories were established (Chart 2). Additionally, we present their description and indicate whether the calculation of the distribution criteria grouped in the category is standardized, that is, performed in the same way among the states using the criterion or specifically determined by each member. Some cases have variations in the data source used to calculate the criteria, but the logic does not change. In these cases, the category was classified as standardized calculation.

Aiming to characterize the categories, descriptive statistics were performed for both revoked laws and the ones in force. They are presented in Table 1 and comprise: number of criteria in the category (columns 2 and 8); number of states using the distribution criteria (columns 3 and 9); lowest and highest percentage of the category criteria and their respective state or states (columns 4, 5, 10, and 11); average among the percentages of the distribution criteria (columns 6 and 12); and the standard deviation of such percentages (columns 7 and 13).

The number of distribution criteria is higher in the laws in force (128) than in revoked laws (45); however, only 13 states have revoked laws. In addition, certain categories present significant changes in the number of criteria of revoked laws and those in force. Among them, the Environment category stands out. This category also gathers the largest number of distribution criteria for laws in force. However, the category with the highest average corresponds to the Egalitarian Part — 12.48% among laws in force and 10.68% among revoked laws. The Equalization category has an average of 25% in revoked laws, but only the state of Pernambuco used this distribution criterion.

Regarding the category Sanitation (Table 1 and Part 2 of Table 2), we emphasize that the laws in force in the states of Piauí, Mato Grosso do Sul, Minas Gerais, and Espírito Santo also include criteria that could be classified in this category. However, the laws of these Brazilian states present only the overall percentage for the criterion, which impaired its proper separation. Therefore, the states of Piauí, Mato Grosso do Sul, and Minas Gerais had their criteria included in the category Environment and Espírito Santo in the category Health. The revoked law in the state of Minas Gerais also presented criteria that could be classified in

Chart 2 – Categories.

<b>Part 1: categories with standardized calculation</b>	
Egalitarian part	Corresponds to the share of resources that are equally distributed among municipalities. Also called minimum share.
Geographic area	Directly proportional to the territorial area of the municipality. It is the index resulting from the percentage relationship between the municipality area and the total area of the corresponding state.
Population	Corresponds to the directly proportional index resulting from the relationship between the total population of each municipality and the total population of its corresponding state.
VAT	Additional portion to the amount to be received by the municipal entity due to the value-added tax, that is, the 75% of the share belonging to municipalities to be distributed according to the derivation principle (Brasil, 1988).
<b>Part 2: categories with specific calculation</b>	
Environment	Comprises criteria related to the proportion of public and/or private environmental conservation units, such as environmental preservation areas, indigenous communities/lands, ecological stations, parks, forest reserves, forests, and forest areas.
Farming	Comprises criteria related to the transfer of resources based on cultivated area, that is, agricultural production in the territory of the municipality in relation to the production of its respective state. Certain state laws point to this criterion, the primary productivity, including agricultural, livestock, extractive, and food production, as well as the market of agricultural and horticultural products.
Own-source revenue	In most cases, this criterion is calculated based on data provided by State Courts of Auditors. It corresponds to the index resulting from the percentage of own-source revenue of each municipality or the percentage between the value of own-tax revenue of each municipality and the sum of the tax revenue of all municipalities in the state. Certain entities include in the calculation the value of federal and state transfers received by the municipality or the relative participation of all municipalities in the state in the per capita collection of municipal taxes.
Health	Comprises health-related criteria and can be calculated based on the transfer of resources in view of the municipal health quality index, obtained through indicators of infant mortality; the relationship between expenditures with per capita health in the municipal entity and the sum of per capita health expenditures in all municipalities in the respective state; an egalitarian way among municipalities that fall into the most advanced management conditions of the Municipal Health System, according to the basic operating standard of the public health system ( <i>Sistema Único de Saúde — SUS</i> ), among others.
Education	Comprises criteria related to the transfer of resources based on educational indicators, such as: quality index of municipal education, number of students enrolled, relationship between the total number of students assisted and the minimum care capacity of the municipality.
Equalization	Calculated and distributed according to the following criteria: proportionally inverse to the sum of the population, geographic area, and VAT indices of each municipal entity compared to the total of the state; equally among all municipalities that do not achieve a pre-established index, among others.

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**Chart 2 – Continuation.**

Rural population	Comprises criteria that include the proportion between the number of rural properties registered in the municipality and those registered in the respective state, as well as the resulting proportion between the number of inhabitants of the rural area of the municipality and the rural population of the state.
Sanitation	Comprises criteria related to the promotion of home waste treatment, including landfill composting, among others.
Social coefficient	Corresponds to the division of the percentage by the sum of the inverse of the Human Development Index (HDI) of all existing municipalities in the state multiplied by the inverse of the HDI of each municipality (Brasil, 2004a).
Others	Comprises distribution criteria for tax integration programs, public safety, cultural heritage, tourism, sports, consortium participants that provide health services, as well as mining municipalities, those home to penitentiary facilities, more populous municipalities, among others.

the category Sanitation, but given the impossibility of separating them, they were included in the category Environment.

Table 2 shows the criteria for discretionary portion distribution in each Brazilian state, classified into categories — Part 1 refers to revoked laws and Part 2 to laws in force. The highlights (in gray) correspond to states using the same distribution criteria, with variations only in the percentages allotted.

Only two groups were formed in each part of the Table for both revoked laws and laws in force. With respect to revoked laws, only the states of Amazonas and Amapá and of Paraíba and Alagoas (Part 1 of Table 2) have distribution criteria in the same categories. The same applies to the states of Roraima and Sergipe and of Amazonas, Maranhão, and Rio Grande do Norte (Part 2 of Table 2) concerning laws in force.

In addition, we emphasize the significant discrepancies between the number of criteria used in each state — Minas Gerais, for example, distributes the portion using criteria classified into ten categories, while Roraima and Sergipe (laws in force) adopt only Egalitarian Part criteria for distribution.

Regarding the Education category, revoked laws in Minas Gerais and Ceará presented criteria for discretionary portion distribution based on education (Part 1 of Table 2). As to laws in force, in addition to these two states, Amapá and Pernambuco also determine the distribution to municipalities using criteria based on education (Part 2 of Table 2).

However, among the states applying distribution criteria from the Education category, only the current legislation of Ceará is grounded in output-based conditional transfer — the IQE. Other criteria from both legislative sets refer to input-based conditional transfer.

Furthermore, a second grouping was elaborated to identify the year of creation of the basic laws dealing with discretionary portion, as well as the number of subsequent laws that changed the distribution criteria for mu-

Table 1 – Descriptive statistics of categories related to revoked laws and laws in force.

Categories	Revoked laws						Laws in force					
	Number of criteria [2]	Number of states that use the criteria [3]	Minimum (%) [4]	Maximum (%) [5]	Average (%) [6]	Deviation (%) [7]	Number of criteria [8]	Number of states that use the criteria [9]	Minimum (%) [10]	Maximum (%) [11]	Average (%) [12]	Deviation (%) [13]
Egalitarian part	11	11	2	25	10.68	7.01	18	18	2	RR; SE	12.48	7.41
Environment	1	1	-	MG	1	-	25	17	1	PE; SP	4.34	2.49
Geographic area	7	7	1	MG	12.5	3.94	16	16	0.3	AM	3.71	2.83
Population	10	10	2.5	TO	15	4.25	15	15	0.5	RO	5.05	3.63
Farming	2	2	1	MG	3.5	1.77	7	7	1	MG	3.99	2.52
Own-source revenue	2	2	2	MG	8	4.24	7	7	0.4	RJ	2.55	1.63
Equalization	1	1	-	25	PE	-	6	5	1.7	RJ	6.49	6.31
Health	1	1	-	2	MG	-	6	5	2	MG; PE	3.42	1.70
Education	2	2	2	MG	12.5	7.42	4	4	2	MG; PE	6.15	7.91
Rural population	1	1	-	5	RS	-	4	3	5	RS	6.67	1.53
Sanitation	-	-	-	-	-	-	3	3	2	PE	3.50	1.50
VAT	4	4	4.7	MG	15	4.87	3	3	1	SP	7	5.20
Social coefficient	-	-	-	-	-	-	1	1	11%	MT	11	-
Others	3	1	3.1	MG	3.1	-	13	6	0.5	RS	3.16	1.84
Total	45						128					

Table 2 – Criteria for discretionary portion distribution of the ICMS share, according to revoked laws and laws in force (values in %).

State	Equalitarian part					Categories					Total			
	Environment	Geographic area	Population	Farming	Own-source revenue	Equalization	Health	Education	Rural population	Sanitation	VAT	Social coefficient	Others	Total
Part 1: revoked laws														
MG	5.50	1	2.71	1	2		2	2			4.68		3.11	25
MT	2	3	7		8									25
TO	10	2.50	2.50								10			25
RS	2.50	7	7	3.50					5					25
AM	15	3	7											25
AP	10	3	12											25
CE	7.50		5					12.50						25
PB	20		5											25
AL	10		15											25
RR	25													25
GO	10									15				25
PI		12.50	12.50											25
PE						25								25
Part 2: laws in force														
MG	5.50	1	2.70	1.	1.90	4.24	2	2					3.31	25
AP	6.99	1.40	2.60	1.40	2.60		2.60	2.60					3.67	25
RO	14	0.50	0.50	5										25
RJ	8.18	2.50	6.43	5.79	0.38	1.73								25
TO	8	9.50	2						3.50					25
PA	7	8	5											25
PR	2	5	2	8					8					25
MS	7	5	5		3								5	25
PB	20	5									5			30
GO	10	5								10				25
SP	2	1	13	3	5					1				25
RR	25													25
SE	25													25
AM	24	0.30	0.70											25
MA	15	5	5											25
RN	15	5	5											25
AL	15	2.50	2.50										5	25
SC	15									10				25
MT		1	4		4							11		25
PI	5	10	10											25
RS	7	7	7	3.50		2			5				0.50	25
AC	5													5
CE	2						5	18						25
PE	1				1	17	2	2						25
BA		7.50	10	6		7.50	5.50		7					25
ES		5											1.50	25

unicipalities, the year of the last change made, and, finally, the percentage of distribution criteria that did not change since the basic laws. Table 3 presents this grouping.

**Table 3 – Year of creation of the basic laws (both revoked and in force) on discretionary portion of the ICMS share, information about their changes, and the percentage of non-changed distribution criteria.**

State	Revoked laws				Laws in force			
	Year of creation of the basic law	Number of changes (# of laws)	Year of the last law change	% of non-changed criteria	Year of creation of the basic law	Number of changes (# of laws)	Year of the last law change	% of non-changed criteria
ES					1989	2	1997	0
SC					1989	1	1990	0
RN					1997	1	2009	0
PI	1989	0		100	1998	2	2009	0
PE	1990	0		100	2000	1	2003	0
AL	1991	0		100	1997	1	2008	25
RS	1981	0		100	1997	3	2009	33
MT	1985	0		100	2000	1	2004	40
SP					1981	1	1993	43
PA					1991	1	2012	50
PR					1990	2	1998	57
MS					1991	2	2011	60
RO					1994	1	1996	60
RJ					1996	1	2007	83
SE					1990	0		100
MA					1992	0		100
RR	1991	0		100	1993	0		100
AP	1993	0		100	1996	0		100
BA					1997	0		100
AM	1990	0		100	2002	0		100
TO	1995	0		100	2002	0		100
AC					2004	0		100
CE	1996	0		100	2007	0		100
MG	1995	1	2000	92	2009	0		100
PB	1981	1	1998	50	2011	0		100
GO	2000	0		100	2012	0		100

Since 2012, no changes have been made in state laws regarding discretionary portion distribution. In addition, some laws in force have not changed since 1990 (Sergipe) and 1992 (Maranhão). Of note, Rio Grande do Sul has the largest number of amendments made in the basic law on discretionary portion distribution, with three changes, the last one in 2009, and only 33% of the distribution criteria remain the same.

Still, a third grouping was determined based on revoked and existing laws on discretionary portion distribution. In this group, the distributions were classified as traditional, almost traditional, and non-traditional. The concepts of traditional and non-traditional laws were extracted from Brandão (2014). According to the author, traditional ICMS distribution laws include: “(a) a component linked to the Value-Added Tax [VAT]; (b) an equitable component — that is, distributed equally to all municipalities; and, in some states, (c) a component related to demographic or territorial data” (Brandão, 2014, p. 29). Conversely, Brandão (2014, p. 29) considers non-traditional ICMS distribution laws the ones that contain “social, economic, financial, and/or environmental indicators in the division of the 25% of resources, whose distribution rule is up to them [the states]”.

The grouping presented in Chart 3 uses the classification concepts by Brandão (2014), but not exclusively, since the laws were classified as traditional, almost traditional, and non-traditional. The following categories were considered traditional: Egalitarian Part, Geographic Area, Population, and VAT. Consequently, the remaining ten categories were classified as non-traditional, namely: Environment, Farming, Own-source Revenue, Equalization, Health, Education, Rural Population, Sanitation, Social Coefficient, and Others.

Thus, a state law is classified as traditional when 25% of the discretionary portion was or is distributed according to criteria from categories considered traditional. State laws are regarded as almost traditional when they allocate between 15 and 24.99% of the discretionary portion based on criteria classified into traditional categories. Lastly, non-traditional laws distribute less than 15% of the discretionary portion following criteria belonging to traditional categories. The percentages used for the classification are presented in Table 2.

**Chart 3 – Classification of state laws as traditional, almost traditional, and non-traditional.**

States	Revoked laws	Laws in force
AM, RR	Traditional	Traditional
MA, RN, SC, SE	-	
AL, GO, PB, PI	Traditional	Almost traditional
BA, PA, RJ, RO, SP	-	
AP, TO	Traditional	Non-traditional
MT, RS	Almost traditional	
CE, MG, PE	Non-traditional	
AC, ES, MS, PR	-	

We found that revoked laws used a higher number of distribution criteria classified into traditional categories, 32 out of 45, while laws in force employ a higher number of criteria classified into non-traditional categories, 76 out of 128 (non-tabulated data).

Among the states that have revoked laws on discretionary portion distribution, only Ceará, Minas Gerais, and Pernambuco had non-traditional laws. Besides, up to the moment of law collection, most states (11) had non-traditional laws on discretionary portion distribution, and the minority (6) distributed the portion based on criteria classified into traditional categories. In addition, we highlight that some states have changed their traditional laws to non-traditional ones, *i.e.*, Amapá and Tocantins, and Mato Grosso and Rio Grande do Sul have changed almost traditional laws to non-traditional ones. According to Brandão (2014, p. 29), the use of non-traditional laws can be considered a mechanism for states to “encourage municipalities to improve their performance and thus receive more resources from the ICMS share”.

## GUIDELINES FOR THE AMENDMENT OF LEGISLATION ON THE DISCRETIONARY PORTION

Based on Shah’s approach (2007), the literature review on the experience in Ceará, and the analysis of state laws, 15 guidelines were elaborated. They can be considered for the amendment of legislation to modify the criteria for discretionary portion transfer by Brazilian states in order to favor a collaborative regime in elementary schools by including output-based conditionalities. We underline that the order of presentation of the 15 guidelines is not related to the priority they should have. The sequence was chosen with the sole purpose of facilitating the reading and understanding.

The first guideline refers to the clarity in grant objectives. The transfer criteria should be clearly related to expected performance results from municipal elementary school managers. In the case of Ceará, the portion destined for education is a component of the collaborative regime design between the state and municipalities, aiming to improve the quality of education since the initial concern was the number of illiterate children. In addition to the incentive through the transfer system, the state also provided technical support directed to the integration of the tripod: selection and training of teaching professionals; material and pedagogical monitoring; and monitoring and evaluation. Usually, transfer purposes are not clear or precisely established in the legislation that determines the criteria for discretionary portion distribution. This happens because the legislation is one of the instruments of operationalization of policies defined to meet the goals of the state Education Plan and, therefore, should be understood in a broader context of educational and fiscal policy.

The second guideline is autonomy. The change from transfers without conditionalities to transfers with conditionalities may reduce the independence and flexibility of municipal governments in defining their priorities. Transfers

without conditionalities stem from those based on traditional or non-traditional criteria related to municipal socioeconomic characteristics and not to input or output requirements.

Revenue adequacy is the third guideline to consider. The requirement to achieve certain results in elementary school can put pressure on municipal budgets, especially if the increase in revenue is insufficient to promote the expected results. Thus, even if the transfer is non-conditional, it may essentially behave as the opposite since part of the municipal revenue must be allotted to obtain the established results, even without pre-established restrictions as to resource allocation, as the results must be achieved to ensure the transfer receipt.

The fourth guideline is responsiveness. Municipalities may not be able to achieve/maintain the pattern of results in certain periods due to unexpected changes in their fiscal situation, with ramifications such as: reduction in conditional transfers received and the consequent worsening of their fiscal situation — as even if the transfer is made by a pre-established percentage, the decrease in the revenue collected by the state agency entails a reduced transfer to the municipal entity due to the lower calculation base, namely the Current Net Revenue in the Brazilian context — and/or pressure in prioritizing the allocation of budget expenditures to functions/subfunctions and/or specific actions. This scenario becomes more sensitive when the factors that changed the fiscal situation have not affected all municipalities with the same intensity. In this way, an important aspect of Ceará's experience can be observed — the definition of the general criterion by law and the operationalization of such criteria with a decree. Thus, it is possible to monitor the results of conditional transfers and adjust the operationalization of their criteria, both to accommodate unforeseen fiscal changes and advance the achievement of elementary school results when all municipalities have reached the same level. In the latter case, all municipalities tend to reach a certain level in educational status — for example, elimination of illiteracy — and renew competition by changing goals — for example, better results in the final years of elementary school. Such modification does not change the legislation but operationalizes the criterion by decree, as occurs in Ceará through Decree No. 29,306 (Brasil, 2008) and Decree No. 30,796 (Brasil, 2011), for example. Moreover, in Ceará, the pursuit of educational results through IQE reduces the legislation influence since it encourages competition among municipalities for higher indices and the consequent guarantee of revenue adequacy, also as a mechanism to increase the value received. Similarly, educational results differ among states. For those with higher educational levels, the change in indicators is much less sensitive, which can hinder the operationalization of the collaborative regime.

Efficiency is the fifth guideline. The non-adequacy of revenues and non-consideration of changes in the fiscal situation of municipalities can lead to an unwanted effect on transfers, such as the influence on the choices of municipal managers regarding the allocation of resources to education to the detriment of other areas and/or types of activities.

Another guideline to consider is equity (fairness). Discretionary portion distribution should take into account the differences in both tax capacity and expenditure demands in different government functions/subfunctions. Thus, the transfer design must analyze whether the criteria promote equity or not. For instance, the VAT-based distribution favors the largest municipalities, whose collection capacity is greater, unlike what occurs with the egalitarian part, in which small municipalities receive a higher per capita value. Based on Ceará's experience (Albuquerque, 2009; Sales, 2011; Nogueira, 2012; Franca, 2014), the municipalities whose transfer revenues increased were small ones. So, in addition to obtaining the best results in education, they also display one of the desired characteristics — equity. Therefore, states with no criteria that favor equity may have greater incentives to change the legislation on the discretionary portion.

In the context of guidelines for the amendment of legislation on discretionary portion, the incentive indicates that its distribution should not reward municipalities with inadequate tax practices, *e.g.*, if they adopt criteria that promote the non-fulfillment of one of their responsibilities — the collection of taxes of their competence; or encourage an increase in expenditure without associated results, as when the whole discretionary portion is distributed through criteria such as the Egalitarian Part, Geographic Area, and Population, as determined by the current laws of Amazonas, Maranhão, and Rio Grande do Norte, or exclusively through the Egalitarian Part, applied in Roraima and Sergipe (Part 2 of Table 2). In short, transfers should not be used to finance irresponsible tax practices.

The next guideline is reach. Changing the criteria for discretionary portion distribution produces winners and losers. Consequently, one should analyze who will win and lose, and what this situation represents for the policy to be encouraged. One of the reasons for the success of the experience in Ceará was the larger number of winners — small municipalities — compared to the number of losers — large municipalities. Moreover, the impact on revenues of losing municipalities was small, contrary to what occurred in winning municipalities, as, in some cases, their discretionary portion became larger than the non-discretionary one, whose distribution base is the VAT. In addition, the change in legislation occurred at a time of fiscal stability, with greater coherence between revenues and expenses, and was implemented in the first year of office of the mayor-elect. All these factors may have contributed to softening the pressure on the losing municipalities regarding the changes in legislation.

Predictability is also crucial. The analysis of winners and losers can be favored by the availability of the historical series of relevant variables of the transfer design, as well as the possibility of making annual/monthly projections for a period of five or more years. Thus, it is possible to evaluate the impact of changes in criteria and exceptions to the rule, whether applicable or not to all municipalities, or the use of some mechanism to compensate losing municipalities for reduced transfers of the discretionary portion of the ICMS share in the first years — voluntary transfers by the state, for example.

Transparency is another guideline that should be considered. Criteria dissemination, including their operationalization, the training of municipalities to plan for the new form of transfer, and the values transferred to all municipalities, may favor the self-evaluation of objectives and the adequacy of criteria for discretionary portion distribution, as well as possible changes in legislation.

For the amendment of legislation on discretionary portion, simplicity is a guideline that should also be analyzed. The criteria used to distribute the discretionary portion should be easy to understand because overly complex formulas — in number and relationships among variables — can hinder the municipal control of transferred values and favor those who have technical personnel more qualified to question the non-compliance with certain criteria. Thus, simplicity can avoid distrust of changes in legislation by allowing faster identification of winning and losing municipalities. Minas Gerais, for example, has 17 criteria for discretionary portion distribution, grouped into ten categories (Part 2 of Table 2), and among them, 0.01% is allocated to municipalities with mining activities. Therefore, it is clear which municipalities would be negatively impacted by the elimination of this criterion; however, the high number of criteria applied makes it difficult to analyze which municipalities would gain and/or lose with a possible change in the entity's legislation. A similar situation occurs in Amapá, whose current legislation determines the distribution through ten criteria, grouped into nine categories (Part 2 of Table 2).

Discretionary portion distribution aimed at solving problems of different government areas/functions may fail to have the desired impact due to the spread of the percentage to be allocated to each of them or to its concentration in a small number of municipalities presenting a certain characteristic that favors the transfer receipt. This refers to the singular focus in transfer design. Therefore, the amendment of legislation to favor a collaborative regime in elementary school through the inclusion of output-based conditionalities should involve not only an education criterion but also the percentage destined for this criterion since the values to be received should be relevant enough to change the behavior of the municipal manager. Besides, as seen in the simplicity criterion, the more diffuse the distribution of the 25% of the discretionary portion, the greater the difficulty in identifying the winning and losing municipalities. Moreover, considering that the education criterion in Ceará also contributes to the redistribution of transfers to smaller municipalities, criteria with a similar function regarding equity may favor the amendment of legislation.

Safeguarding of grantor's objectives is another important guideline that should be taken into account in the design of intergovernmental transfers. The grantor's objectives are better guaranteed when the conditionalities are based on outputs rather than inputs because the state does not always know the conditioning variables for the promotion of education in each municipality and might adopt conditionalities based on inputs that infringe the objectives outlined. In addition, output-based transfers allow flexibility for municipalities to use transferred values, which can generate more efficient expenditures and avoid pressures on their budgets to meet the conditionalities.

The affordability guideline makes it necessary to observe that the discretionary portion distribution is one of the financing sources of municipal elementary schools and should be analyzed together with other sources, such as Fundeb. Also, the criterion should agree with the objective desired, which may vary from state to state, given the diversity of socioeconomic characteristics. For this reason, the question about whether transfers related to the discretionary portion would have the same impact on the behavior of municipal managers from different Brazilian states is important, as, among other factors, the relevance of the amounts transferred to municipal budgets can vary significantly. In addition, one should determine the part of the state budget destined to compensate losing municipalities, actions to be undertaken by the state itself (*e.g.*, technical support), as well as develop and implement an evaluation and monitoring system that allows transfers based on outputs. In short, the discretionary portion distribution grounded in output-based conditionalities may favor the achievement of results as long as it makes a difference to municipal budgets and if efforts are directed to the attainment of objectives outlined according to the Education Plan, which is broader than the criterion itself.

The last criterion is accountability for results. The design of discretionary portion transfers built on output-based conditionalities can promote the accountability of both municipal managers and the state manager as to the results achieved in elementary school.

## FINAL REMARKS

We can note that some guidelines should be considered for transfer design, which in turn depends more heavily on state laws that determine the criteria for discretionary portion, while others do not. However, some other guidelines should be taken into account based on a wider context, as in the Education Plan, which presupposes the collaborative regime.

Among the 15 guidelines addressed, 9 should be understood in a broader context that includes state laws. They are clarity in grant objectives, revenue adequacy, responsiveness, efficiency, reach, predictability, transparency, affordability, and accountability for results.

On the other hand, the six guidelines that depend heavily on state laws are: autonomy, equity, incentive, simplicity, singular focus, and safeguarding of grantor's objectives. Thus, in order to amend the legislation and achieve the proposed objective — favoring a collaborative regime in elementary school through the inclusion of output-based conditionalities —, we must analyze the particularities of each state. By assessing the state laws of Minas Gerais and Amapá, for example, and the guidelines simplicity and singular focus, we could infer that the change in legislation in such entities would be more difficult to operationalize because they have a large number of distribution criteria — 17 and 10, respectively — and a diffuse percentage referring to the discretionary portion, whose distribution criteria for education are limited to 2 and 2.6%, respectively.

Moreover, changing laws classified as traditional (Chart 3), either to almost traditional or non-traditional, can reduce the autonomy of municipal governments since conditionalities would be attributed to transfers, and, therefore, the independence and flexibility of governments would decrease. Thus, considering this guideline, Amazonas, Maranhão, Rio Grande do Norte, Santa Catarina, Roraima, and Sergipe would be more opposed to changes in their distribution criteria, given that the laws of such states are classified as traditional.

In short, the guidelines proposed by Shah (2007) and applied to the design of discretionary portion transfers to favor a collaborative regime in elementary school should be taken into account when assessing which entities are more or less likely to change their laws.

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