Factors Related to Inequality in the Results of Public Policies in Education and Health

Introduction

When management is related to public policies, one of the most important interests is to create a common basis for development and social well-being to take place in a homogeneous way. There are at least two possible approaches to the issue of heterogeneity in public policy outcomes: economics and political science.

In political Science, there are the perspective of federalism, local autonomy the perspective of federalism and local autonomy applied to this phenomenon. There would be a choice between territorial equality and the autonomy of subnational governments, since policies aimed at reducing inequalities depend on institutions that concentrate political authority and thus reduce autonomy at the subnational level (IMMERGUT, 1992; PIERSON, 1995; WEAVER AND ROCKMAN, 1993). However, uniform laws at the national level do not always lead to equal results.

Many studies on the implementation and impact of public policies use the theoretical lens of the New Institutional Economics and do not consider the different local consequences achieved by adopting the same national policy, they consider that there is homogeneity between the results found in the same country (ACEMOGLU, JOHNSON and ROBINSON, 2001, RODRIK et al. 2004). However, with the decentralization of public policies, some research starts to be carried out at the local level (ARRETCHE, 2009). This research intends to advance along this path, by comparing two public policies that are highly dependent on implementation by the municipalities.

The two policies are the National School Feeding Program (PNAE) and health spending at the municipal level. For both programs, a federal law regulates a percentage amount that must be spent in a specific way, whose compliance is monitored by a council. In the case of the PNAE, at least 30% of the amount transferred from the federal government to purchase food for school meals must be used to purchase products from family farming. In the case of spending on health, at least 15% of the amount collected in municipal taxes needs to be spent on health expenditure.

Despite some similarities, these laws are quite different in their enforcement mechanisms. The health budget law foresees the suspension of the transfer of resources from the Federal Union to municipalities that do not comply. The 2009 PNAE law, on the other hand, does not have the same rigor, the transfer of resources is suspended only when school lunches are not offered to students, or the School Feeding Council does not exist.

The results of recent years available to the PNAE show great heterogeneity in its fulfillment, with the percentage of food purchases from family farming ranging from zero to almost 100% of total purchases (FNDE, 2016). A commonly used argument to explain this type of heterogeneity in the program is Brazil's territorial inequality. For example, municipalities with more access to rural agriculture and with higher GDP per capita would

be among those that comply with the PNAE law and such characteristics are distributed very unevenly across the country.

If the distribution of factors that characterize the local socioeconomic context is the main reason related to the diversity or homogeneity of the results of PNAE public policies, it is expected that the distribution of the performance of municipalities in relation to the health budget law is similar. In other words, municipalities that comply with one law would also comply with the other.

If the diversity of policy outcomes is not well explained by socio-economic and geographic context, the answer may be related to institutions. The argument of this research is that despite the local context being related to greater ease or difficulty in implementing a public policy, the establishment of institutions (federal laws) with different levels of rigidity would lead to results with also different homogeneities. Stricter laws would be more characterized by greater adherence and, therefore, homogeneity in compliance.

The objective of this research is to test whether the homogeneity in the results of a public policy is related to the rigidity of the general rule that institutes it. To achieve this objective, the quantitative technique of multiple regression was used, comparing the observations of secondary data on health and education.

Theoretical Reference

Local inequalities for political science

The main political science theories for local inequalities predict three possible outcomes for inequalities in public policy performance between different jurisdictions. One of the theories based on Wildavsky (1984) associates federalism with inequality, as there is autonomy on the part of municipalities or other types of federation unit, which allows them to disagree and generate heterogeneous results (ARRETCHE, 2009). For this argument to be present, it would be necessary to exist different laws within the scope of the municipalities, which does not occur in either of the two cases studied. According to both laws studied, education and health, the gross amounts spent on each policy by the municipalities varies, but the percentages determined by federal law are fixed at the country level. In other countries different types of federalism, such as the United States, this theory finds evidence.

A second theory also assumes that federalism leads to inequality, as the amounts transferred from the federal to the local level would go to the districts that managed to elect the most influential politicians, not necessarily the neediest ones, also because federalism can generate a dispute for citizens and companies that move to another city according to local incentives. In this case, there would be an interest in getting rid of the poorest and attracting individuals who would contribute more with taxes (ARRETCHE, 2009).

The third theoretical line predicts that federalism and local homogeneity can exist simultaneously, at the cost of losing the local autonomy of the districts or

municipalities. The laws that regulate the programs studied seem to have chosen centralization over the autonomy of municipalities.

Arretche (2009) studied the application of these theories in Brazil. After several analyzes that present the pattern of territorial inequality in the country, she concludes that another factor that influences the federal government's choice for centralization is the protection of citizens from local exploitative elites, who are not concerned with rights and quality improvement. of citizens' lives. According to the author, distrust of local elites is rooted in the country's history. Since the publication of the article in 2009, at least two laws that imply the centralization of public policies, those studied in this article, have been created.

Local inequalities from the perspective of the economy

Decisions to centralize or decentralize take place in an institutional setting. Federal laws function as macro-institutions given their wide reach. The New Institutional Economy assumes that all organizational types would respond to macro-institutions in the same way. However, there are transaction costs that must be considered. They arise from the choices agents make when creating and selecting coordination mechanisms to implement a policy (BROUSSEAU and RAYNAUD, 2006). Therefore, the conditions of implementation and application of macro-institutions are fundamental to explain how these rules work at the organizational level (BROUSSEAU and RAYNAUD, 2006, MENARD, 2018).

It is possible that the different environment where macro-institutions are translated to the organizational level deal with different available resources (technological, human and physical) and this would be the reason for the diversity of results. However, even when a macro-institution specifies and limits the resources and conditions for carrying out an activity, there is no guarantee that there will be a standardized interpretation or that incentives and punishments will be felt in the same way by all organizations.

On the one hand, there is a literature based on the institutional approach of North (1990) that deals mainly with macro-institutions and development. Acemoglu and Robinson (2012), some of the most influential researchers in this approach, show the influence of macro-institutions on the economic and social development of countries. On the other hand, there is a literature based on Williamson's (1985) approach that deals with micro-institutions and organizations. Both approaches assume a direct interaction between general rules and the organizational level, leaving out the intermediary institutions in this process.

However, some experiences show that, for the same public policy (general rule), there may be different results achieved (MENARD, 2017) and this would be due to the layers between macro-institutions and organizations that have been ignored so far. Therefore, the lens used to understand the interaction between a general rule, which has a broad scope, and the organizational level at which transactions take place will be intermediate institutions or meso-institutions that are used throughout this text as synonyms. In the case of this research, the meso-institutions are the School Feeding Council and the Health Council.

Figure 1 - Institutional Layers

Institutions	**Macro-institutions** (General rules that establish rights and their allocation modalities)
	Meso-institutions (Determine and impose specific rules delimiting the environment of transaction possibilities)
	Micro-institutions (Managing how transactions happen within the rules)

Source: Authors based on Menard, 2017

Meso-institutions are "arrangements through which rules and rights are interpreted and implemented" (MENARD, 2017, p. 2). They are necessary because in their absence it would be very difficult for individuals and organizations to be aware of, understand and implement the rules according to macro-institutions (SCHNAIDER and SAES, 2018).

The roles of meso-institutions are to translate and allocate, implement, monitor and encourage rules and rights (MENARD, 2018). The first role is seen when the necessary tools and entities are created for a general rule to be implemented. In the case of the school food purchase law and the health spending law, which are the research objects of this study, there was a need to install a consultative, deliberative, normative or supervisory council.

The second role (implementation) is observable when there are incentives and penalties to act according to the rule (MENARD, 2018). For example, in the food purchase law, if the executing unit, which is usually a municipality, does not buy 30% or more from family farmers and does not justify this failure, it runs the risk of not receiving financial resources transferred from the federal government. The role of monitoring and encouraging can be seen in the purchase of food at the school feeding council and when the executing unit informs how much it has purchased from small producers and needs to present documents.

Brazilian cases

In Brazil there is a great territorial inequality. There is a large concentration of inhabitants in a small part of the territory, in the more densely populated regions, there is a lot of difference in income and economic activities between the capitals and neighboring municipalities used mainly as dormitories. And within state capitals, there is a lot of difference between neighborhoods and family units (ARRETCHE, 2009).

To minimize such territorial differences, the federal government imposes guidelines and limits for the autonomy of local governments, determining spending levels and standards for implementing public policies. Limiting the scope of decisions at local levels happens mainly for public policies that most benefit the poor, such as health and education. From this, a pattern is found: in public policies with more decision-making power of the federal government, there is more homogeneity of results in the comparison between municipalities (ARRETCHE, 2010).

Both public health and public education services mainly benefit the poorest. According to the Praetorian competition theory, prioritizing these services would not happen naturally, as competition between municipalities would generate an incentive to improve services that most benefit the rich and thus attract better taxpayers. But an important factor that controls part of the heterogeneity is the limitations that the federal government imposes on the autonomy of municipalities. It should be noticed that such policies are decentralized and implemented by the municipalities. The combination of these factors generates limited territorial inequality.

The purchase of food for school meals in Brazil is regulated by Law No. 11,947 of 2009. It states that at least 30% of the total money transferred from the federal government for the purchase of food for school meals in each municipality must be used to buy products from family farming[1] . Every year, the federal government records what percentage was purchased from family farming producers and the municipality that does not meet the minimum objective runs the risk of being penalized. However, such a penalty is rarely applied. There are justifications that municipalities can use for not complying with the law.

The different percentages achieved in the public policy expressed by the law may be due to different resources in the local context. However, if in a similar social and economic context, there is a heterogeneous result (that is, municipalities that show different percentages according to what the law determines), this may be due to intermediary institutions such as the school feeding council, contracts between different levels of government and others.

Health expenditures in Brazil are decentralized to the municipal level and regulated by a law that requires a minimum percentage of expenditure, as well as the law in the area of education studied. Firstly, the regulation began with Constitutional Amendment number 29 of 2000. It already provided for percentages of tax collection that should be used in health expenses and would come into effect over the following years.

Subsequently, according to Complementary Law number 141 of 2012, "The Municipalities and the Federal District shall apply annually in public health actions and services at least 15% (fifteen percent) of the tax collection" (Brasil, 2012). With the important observation that "Failure to comply with the provisions of this article will imply the suspension of voluntary transfers between entities of the Federation" (Brasil, 2012). This sets it up as a stricter law than buying food for school meals because it clearly presents the penalty for non-compliance.

Objectives and Assumptions

The objective of the research is to investigate which are the factors related to inequality in the results of the same public policy.

Hypothesis 1: The heterogeneous results for the same general rule are directly related to the different rigidity of the sanctions of the general rule

Hypothesis 2: The different characteristics of meso-institutions are directly related to the rigidity of sanctions in the general rule.

Hypothesis 3: The heterogeneous results for the same general rule are directly related to different characteristics of the meso-institutions.

Methodology

This research uses a quantitative approach. The first hypothesis is tested together with the others, so that if there is a difference between complying and not complying with the minimum expenditures defined by law in education compared to health and the purchase percentages are not related to councils, this hypothesis will be true.

To test hypothesis two, the characteristics of the councils will be compared between health and education. If there are differences between the characteristics of the school feeding council and the health council, it will be confirmed.

To test hypothesis three, the multiple regression technique will be used. The factors analyzed will be the socioeconomic characteristics of the municipalities, as well as the characteristics of the intermediary institutions, which are the characteristics of the school feeding council (SFC) and the health council (HC).

This is the model to be tested by the education regression and the health regression for this hypothesis:

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + u$$

Where: β_0 is the constant parameter, $\beta_1 x_1$ are the variables related to the existence and characteristics of the school feeding or health council, $\beta_2 x_2$ are the characteristics of the economic, social and geographic context u emerge as the error term. Contextual features are not present in the design of the hypotheses but are used as a counterargument. If the percentages are related to the context and not the characteristics of the councils, this would be an argument against this hypothesis. If the percentages are related only to the council, this will be an argument in favor of this hypothesis.

The dependent variable for education is the average of the percentage of purchases of family farming products in the last three years available by FNDE, which are 2017, 2016 and 2015, in an interview with an expert, it was suggested to researchers to use more than one year as a base as the percentages vary greatly over time due to crop variations. The dependent variable for health is the percentage of health expenditures on total taxes collected by the municipality.

Table 2 – Independent Variables for Multivariate Regressions

Name	Feature	Source
city code	*string* that identifies the municipality	IBGE
Municipality's fiscal independence	continuous that has values between 0 and 100 (percentage)	Public Health Service Information System-SIOPS 2017 indicator 3.1 or 3.2

% rural family establishments/total rural establishments	continuous that has values between 0 and 100 (percentage)	IBGE - Agricultural Census 2006
% family farming production/total agricultural production	continuous that has values between 0 and 100 (percentage)	IBGE - Census 2010
GDP/Capital (2015)	continuous only positive values	National treasure
Taxes/capita (2015) (total taxes collected by the municipality/capita)	continuous only positive values	National treasure
area of the municipality in km²/capita	continuous only positive values	IBGE - Census 2010
% rural pop/total population	continuous that has values between 0 and 100 (percentage)	IBGE - Census 2010
Number of nutritionists 2015	Score	FNDE - Register of nutritionists
Average % acquisition of family farming in 2017, 2016 and 2015	continuous that has values between 0 and 100 (percentage)	FNDE - Family farming acquisition data
Improved school meals	binary categorical (dummy)	IBGE-MUNIC 2014
existence of the council	binary categorical (dummy)	IBGE-MUNIC 2014
Year of the creation of the SFC law	interval, positive numbers	IBGE-MUNIC 2014
The Council follows representative proportion required by lar or not (parity)	binary categorical (dummy)	IBGE-MUNIC 2014
Advisory character of SFC	binary categorical (dummy)	IBGE-MUNIC 2014
Deliberative character of SFC	binary categorical (dummy)	IBGE-MUNIC 2014
Normative character of SFC	binary categorical (dummy)	IBGE-MUNIC 2014

Supervisory character of the SFC	binary categorical *(dummy)*	IBGE-MUNIC 2014

Source: survey data

Results

When analyzing the statistics described for the dependent variable of education and health, that is, the average percentage of purchases of family farming products in the last three years available and the percentage of health expenditures on municipal tax collection, we notice that health policy has a much higher rate of adherence than education. And health is less heterogeneous than education, as its percentage range and standard deviation are smaller.

The percentage targets set by law for health and education are different. For education, at least 30% of the amount transferred by the federal government to purchase food for school lunches must be used to purchase food from family farming. And for health, at least 15% of the amount that the municipality collects in taxes must be spent on health. Thus, for education, the average and median values do not reach the target, with health the opposite happens, with even the lowest quartile meeting the target with ease.

Table 1 - Comparison between percentage variables of health and education

	% Education	% Health
number of observations	5565	5568
Average	27.3904	22,82569
standard deviation	18.29	4,987
minimum value	0	10
maximum value	99,749	46
first quartile	14.94	18.88
median	27.4	22.2
third quartile	37.66	26.12

Source: survey data

In the following analysis, the same data is used, but not as percentages, but as *dummy* variables, that is, we do not use the information on which percentage value the municipality achieved, only the information whether this value was greater than or equal to the target or not.

Only 52 municipalities or one centtenth of the total did not comply with the health law. In this case, the standard deviation of health is more than ten times smaller than that of education, which reiterates the homogeneity of one case compared to another.

Table 2 - Comparison between health and education *dummy* variables

Feature	dummy education	dummy health
number of observations	5570	5570
average	0.44	0.998
standard deviation	0.49	0.04
municipalities that reach the goal	2460	5518
municipalities that do not reach the target	3110	52
% municipalities that reach the target	44.17%	99.066%
% municipalities that do not reach the target	55.83%	0.934%

Source: survey data

To analyze the second hypothesis, we compare the characteristics of the councils informed to IBGE at the time of the MUNIC 2014 survey, which collected this data. Only the existence or not and the characteristic of parity present great differences when comparing education with health. Parity indicates that participating council members, who are representatives of some class, follow the proportion recommended by law.

Thus, hypothesis 2, that the different characteristics of meso-institutions are directly related to the rigidity of sanctions in the general rule, is partially accepted.

Table 3 - Comparison between characteristics of the health and education council

Health					education				
exist. advice	Yes	not	uninformed	refusal	exist. advice	Yes	not	uninformed	refusal
exist. advice	5556	11	two	1	exist. advice	5433	133	13	1
older	1941	average	1995		older	1947	average	2000	
	Yes	not	uninformed	refuse or -		Yes	not	uninformed	refuse or -
parity	5429	125	4	12	parity	4941	491	4	134
Advisory Character	3302	2253	3	12	Advisory Character	3542	1890	4	134
Deliberative Character	5006	549	3	12	Deliberative Character	3926	1506	4	134
Normative Character	2586	2969	3	12	Normative Character	2072	3360	4	134

Supervisory Character	4325	1230	3	12	Supervisory Character	4825	607	4	134

Source: survey data

For hypothesis 3, regressions were also carried out in which the dependent variables are percentages of expenditure for health and education policies.

For the regression with education data, some variables were significant, which indicates that there is a relationship between it and the dependent variable. None of them concerns the characteristics of the council, or the meso-institutions, all of them portray the socioeconomic context in which the municipality is inserted.

The variable percentage of family farming production/total agricultural production is significant and positive. This indicates that access to family farming food production is important for the rule to be met. This production is usually subject to climate and crop variations, it is possibly not homogeneous throughout the Brazilian territory and over time.

In the case of education, hypothesis 3 is not confirmed. The heterogeneity shown in the expenses of this policy seems to be the result of the diverse socio-environmental context in which different municipalities in Brazil find themselves.

Figure 4 - Regression of the percentage of the average purchase of food from family farming

Source	SS	df	MS
Model	21.2019228	24	.883413451
Residual	149.614158	5092	.029382199
Total	170.816081	5116	.033388601

Number of obs = 5117
F(24, 5092) = 30.07
Prob > F = 0.0000
R-squared = 0.1241
Adj R-squared = 0.1200
Root MSE = .17141

Mediaaquisioagrfam	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Melhoriadaalimentaoescolar	.0213205	.0107767	1.98	0.048	.0001935	.0424475
Conselhodealimentaoescolar	0	(omitted)				
AnodaleidecriaodoCAE	.0002803	.0004333	0.65	0.518	-.0005691	.0011297
CarterConsultivo	-.0046258	.0055743	-0.83	0.407	-.0155539	.0063022
CarterDeliberativo	.0007066	.0056256	0.13	0.900	-.010322	.0117352
CarterNormativo	-.0027783	.0056583	-0.49	0.623	-.0138711	.0083144
CarterFiscalizador	-.0056753	.0077557	-0.73	0.464	-.0208798	.0095292
Quantidadedereuniesnosltimo	-.0003057	.0005131	-0.60	0.551	-.0013117	.0007002
Leiorgnicadefineopercentual	.0041213	.0066587	0.62	0.536	-.0089326	.0171752
estabelecimentosruraisfamilia	.215518	.0191915	11.23	0.000	.1778943	.2531417
produoagriculturafamiliar	.038657	.0075784	5.10	0.000	.0238001	.0535139
ind_fin_mun	-.002965	.0002725	-10.88	0.000	-.0034992	-.0024308
pop2017	3.52e-08	7.27e-08	0.48	0.628	-1.07e-07	1.78e-07
PIBCapita2015	1.25e-06	1.70e-07	7.34	0.000	9.17e-07	1.58e-06
Impostoscapita2015	-2.21e-06	1.14e-06	-1.93	0.053	-4.45e-06	3.24e-08
readomunicpioemkmcapita	-.0859777	.0087321	-9.85	0.000	-.1030963	-.0688591
poprural	.0746631	.014131	5.28	0.000	.0469602	.102366
qntdenutricionistas2015	.0010537	.0015979	0.66	0.510	-.002079	.0041863
nutricionistasescola	.0678281	.0163973	4.14	0.000	.0356824	.0999739
escolasatendidas2016	-.0005316	.0001406	-3.78	0.000	-.0008072	-.0002559
alunosatendidos2016	6.49e-07	5.37e-07	1.21	0.227	-4.03e-07	1.70e-06
Recursosrepassados2016	-1.31e-09	1.10e-09	-1.19	0.233	-3.47e-09	8.43e-10
caeparitario	-.0075393	.0085145	-0.89	0.376	-.0242314	.0091528
gestrecresorggestedc	.034705	.0055044	6.30	0.000	.0239139	.0454961
gestrecresgabpref	0	(omitted)				
gestrecresout	.0116673	.0073785	1.58	0.114	-.0027976	.0261323
_cons	-.2947596	.8670519	-0.34	0.734	-1.994554	1.405035

Source: survey data from Stata software

Also for hypothesis 3, data from the health policy were tested. Again, some were significant. One of them refers to a characteristic of the council, more specifically the fact that the council is an oversight. However, the fact that the coefficient is negative is noteworthy. As it is a predictive technique, this indicates that the fact that the council is an inspector would hinder the use of municipal tax resources in health expenses, keeping the other variables constant for similar samples. This counter-intuitive result may be due to some bias and suggests the need for further analysis to better understand it. Health data analyzes are not conclusive for hypothesis 3.

Figure 5 - Regression of the percentage of revenue of municipalities spent on health

Source	SS	df	MS			
Model	16171.7801	13	1243.98309			
Residual	120579.412	5488	21.9714672			
Total	136751.192	5501	24.8593332			

Number of obs = 5502
F(13, 5488) = 56.62
Prob > F = 0.0000
R-squared = 0.1183
Adj R-squared = 0.1162
Root MSE = 4.6874

per_rec_desp_saude	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
ind_fin_mun	-.0860074	.0069886	-12.31	0.000	-.0997078	-.072307
pop2017	-1.03e-06	3.05e-07	-3.37	0.001	-1.63e-06	-4.30e-07
PIBCapita2015	5.48e-06	4.29e-06	1.28	0.201	-2.92e-06	.0000139
Impostoscapita2015	-.0000294	.0000286	-1.03	0.303	-.0000855	.0000266
readomunicpioemkmcapita	-1.196685	.2257313	-5.30	0.000	-1.639208	-.7541627
poprural	-4.409294	.3288944	-13.41	0.000	-5.054057	-3.764531
csAno	-.0018004	.0093008	-0.19	0.847	-.0200336	.0164328
CSConsultivo	.0381245	.1553646	0.25	0.806	-.2664516	.3427006
CSDeliberativo	-.1748363	.2154811	-0.81	0.417	-.5972647	.247592
CSNormativo	-.1881538	.1568915	-1.20	0.230	-.4957232	.1194157
CSFiscalizador	-.5422721	.1680454	-3.23	0.001	-.8717077	-.2128365
cs_Qnt_reu	-.0039271	.0142025	-0.28	0.782	-.0317697	.0239154
csparitario	-.1343328	.4290663	-0.31	0.754	-.9754728	.7068071
csexist	0	(omitted)				
_cons	36.15835	18.53438	1.95	0.051	-.176387	72.49308

Source: survey data from Stata software

Conclusion

This article aimed to test whether the homogeneity in the results of a public policy is related to the rigidity of the general rule that institutes this public policy. After a review of theories that address this issue in political science and economics and a quantitative data analysis with several variables and census observations, there is evidence that a relevant factor is the rigidity of public policy sanctions.

In this case, an immediate question is why all public policies are not rigidly punished by the federal level, then. The answer is that the federal government has limited power to monitor and punish. Furthermore, for this rigidity to be legitimate, it is necessary that all municipalities can comply with the law to which it refers. This does not seem to be the case with the food purchase law for school meals, as access to family farmers and agricultural crops varies across regions and over time.

A limitation of this research is some counter-intuitive results, which may indicate bias or deeper analysis. For future research, it is suggested to research data from previous years

of health, to see if there is also a variation over time. If not, the hypothesis that homogeneity needs rigid laws that in turn need consistency over time would gain more strength. Another piece of data that could complement the analysis is the agricultural harvest data for the years analyzed. Thus, it would be possible to identify whether the fluctuation in the percentage of purchases from family farming follows the availability of the harvest.

As a contribution to the theory, it is emphasized that stricter general laws are not enough to reduce inequality between municipalities. Despite being a very important factor, as the quantitative analysis showed, it also seems to be essential that there is supervision by a legitimate and active municipal council. The empirical contribution for public managers is that to increase adherence to a rule if it is not possible to use tougher sanctions, it needs to be more flexible according to the availability of factors. For example, in the case of demand for purchases from family farming, a suggestion would be to set annual targets according to the harvest forecast.

References

ABREU, KDRD (2014). *The implementation of the National School Feeding Program (PNAE) in small municipalities: practical and theoretical implications* (Doctoral dissertation).

ACEMOGLU, D.; ROBINSON, JA (2012). *Why Nations Fail* : The Origins of Power, Prosperity and Poverty. 1st ed. New York: Crown, 529.

ARRETCHE, Martha. Federalism and place-equality policies: a case study of policy design and outputs. 2009.

ARRETCHE, Martha. Federalism and territorial equality: a contradiction in terms?. Data, v. 53, no. 3, p. 587-620, 2010.

BRAZIL (2006). Law No. 11,326, from July 24th. About the National Program of Family Agriculture and Family Farmers. Retrieved from https://goo.gl/1bC2hF

BRAZIL (2009.) Law No. 11,947, from June 16th. About school feeding and Money Directly to the School Program and basic education students. Retrieved from https://goo.gl/bXihWN

BROUSSEAU E, GARROUST P, RAYNAUD E (2011). Institutional changes: Alternative theories and consequences for institutional design. *Journal of Economic Behavior & Organization* 79. 3–19

BROUSSEAU E, RAYNAUD E. (2011). "Climbing the hierarchical ladders of rules": A life-cycle theory of institutional Evolution **.** *Journal of Economic Behavior & Organization* 79, 65–79

BROUSSEAU, E., & RAYNAUD, E. (2006, September). The economics of multilevel governance. In *ISNIE Conference, U. of Colorado at Boulder*

FNDE. (2016). Family Farmers Products Procurement. Retrieved from: https://goo.gl/nn4ZsH

IMMERGUT, Ellen M. (1992). Health politics : interests and institutions in Western Europe. Cambridge [England]; New York, NY, USA : Cambridge University Press

MENARD C. (2018). Research frontiers of new institutional economics *RAUSP Management Journal* 53 (2018) 3–10

MENARD, C. (2017). Meso-institutions: The variety of Regulatory Arrangements in the Water Sector . *Utilities Policy* , 49: 6-19

NORTH, DC (1990), *Institutions, Institutional Change, and Economic Performance* , Cambridge (UK): Cambridge University Press.

PIERSON, Paul (1995). "Fragmented Welfare States: Federal Institutions and the Development of Social Policies." Governance: An International Journal of Policy and Administration. 8(4): 449-78

Rodrik, D., A. Subramanian, F. Trebbi (2004), "Institution Rules: the Primacy of Institutions over Geography and Integration in Economic Development", *Journal of Economic Growth,* 9, 131-165.

SCHNAIDER, PSB ; SAES, MSM (2018). What are meso-institutions and why do we need them?. In: Enanpad, 2018, Curitiba. *Enanpad* .

WEAVER, KR & ROCKMAN, B (1993). Do institutions matter? Washington: Brookings Institutions.

WILLIAMSON, OE (1985), *The Economic Institutions of Capitalism* , New York: The Free Press-Macmillan.

---

[1] "A family farmer and rural family entrepreneur is one who practices activities in the rural environment, while meeting the following requirements: does not hold, under any title, an area greater than 4 (four) fiscal modules; predominantly use labor from their own family in the economic activities of their establishment or enterprise; has a minimum percentage of family income originating from economic activities of its establishment or enterprise, as defined by the Executive Branch; run your establishment or business with your family." (BRAZIL, 2009)