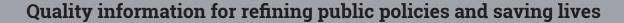
# Covid-19: Public Policies and Society's Responses



# **Policy Brief 33**

In 2020, the lack of efforts by the Ministry of Education and the Ministry of Economy to coordinate education policies and fiscal aid aggravated regional inequalities. States with lower GDP per capita were hardest hit and also presented the worst remote learning education plans. Nonetheless, in 2021, states improved their remote learning programs for public education, and those which preserved their education budgets in the year prior performed better.

## **Main Conclusions**

- Despite the federal government's lack of coordination during the COVID-19 pandemic and the expected reopening of school activities in a hybrid modality, Brazilian states have found ways to improve their remote learning plans and guidelines. On average, the Remote Education Policy (REP) Index score increased from 2.7 in 2020 to 5.1 in 2021. However, despite an 86.7% increase, the programs are still far from achieving a maximum score of 10.
- States with higher GDP per capita performed better in remote learning programs in 2020. Other factors, such as the states' budgetary performance, commitment to social distancing policies, and prior quality of the education system, are insufficient to explain the REP scores in 2020.
- On the other hand, after a learning period, wealth, as measured by GDP per capita, was no longer the key variable for evaluating program performance in 2021, and budget performance assumed the lead. Further commitment to education in 2020 meant better remote learning programs in 2021, while GDP per capita did not play a decisive role.

- Since the onset of the pandemic, the lack of an education plan coordinated by the Ministry of Education (MEC) and the Ministry of Health (MH) led to an initial aggravation of regional inequalities. Hence, poorer states performed worse on remote learning plans in 2020.
- The lack of equity criteria in the distribution of federal fiscal aid to the states further contributed to the inadequate performance of education plans and actions, which failed to circumvent regional inequalities among states. Notwithstanding this adverse scenario, we find a learning effect in the states, which have devised better plans in 2021 (especially in states that preserved their education budgets).

## Introduction

In Brazil, states are responsible for providing secondary public education, while municipalities also provide primary education. According to the 2020 School Census data, circa 15.2 million students are enrolled in public schools managed by Brazilian states and the federal district. This number represents 39% of all student enrollments in public schools (and, if we include the private school system, 32% of total enrollment in the country). This figure, however, conceals a vast heterogeneity. On one end of the spectrum, the Federal District has no municipal schools, and enrollments in state schools represent 98% of total enrollment in public schools (and 69% of total enrollment). On the other end, we find the state of Maranhão, where 19% (17% of total enrollment) of students are enrolled in state-managed schools. At any rate, states play a crucial role in the provision of education in Brazil.

In March 2020, in the early stages of the crisis engendered by the arrival of SARS-Cov-2 in Brazil, state and municipal governments enacted decrees to close schools for in-person learning at the kindergarten, elementary, and high school levels. Throughout 2020, educational policies were often dissociated from the general response to the COVID-19 pandemic and social distancing policies. While, as a federation, Brazil has failed to provide an orchestrated response to the COVID-19 crisis, individual state policies followed similar patterns: alternating between more stringent restrictive measures and the lossening of these policies, especially regarding businesses. In education policies, however, the situation was different. When the COVID-19 crisis first emerged in Brazil, in-person classes were suspended across the country and, with rare exceptions, schools remained closed for on-site learning throughout 2020. Although state governments decreed the closures of schools in March 2020, the research produced by our group in the Solidarity Research Network (SRN) revealed that remote education programs were not implemented simultaneously<sup>1</sup>. In short, our data leads us to conclude that there was a widespread lack of coordination between the federal and local governments and a lack of coherence among different social distancing and containment policies (particularly health and education).

Brazil is currently in its third semester of the pandemic. Even if some states and municipalities have partially resumed in-person school activities, remote learning remains a vital element for education during the pandemic, given the limitations in the percentage of students who are able to attend in-person classes. This policy brief investigates whether there have been improvements in the quality of remote learning programs introduced in 2020 and explores how state budget decisions have of

<sup>1</sup> BARBERIA, Lorena G.; CANTARELLI, Luiz, G. R.; SCHMALZ, Pedro H. de S. *Uma avaliação dos programas de educação pública remota dos estados e capitais brasileiros durante a pandemia do COVID-19*. Available at <a href="http://fgyclear.org/site/wp-content/uploads/remote-learning-in-the-covid-19-pandemic-v-1-0-portuguese-diagramado-1.pdf">http://fgyclear.org/site/wp-content/uploads/remote-learning-in-the-covid-19-pandemic-v-1-0-portuguese-diagramado-1.pdf</a>. Accessed on June 17, 2021.

remote learning programs introduced in 2020 and explores how state budget decisions have influenced the quality of remote learning programs. To assess the impact on quality improvement, we used the Remote Education Policy Index (REP) developed by the SRN in 2020 to monitor the quality of remote education in the states' public educational networks as well as in state capitals.

## The Remote Education Policy Index (REP) in 2020 and 2021

Devised by SRN researchers, and based on an analysis of official documents published by state governments and education departments (and, in the lack of these, news and press releases), the REP measures, on a daily basis, the scope and potential reach of remote learning programs developed by the states after the closure of schools. Like any other index, the REP summarizes information that is, by nature, qualitative into a single quantitative measure. Thus, it simplifies the monitoring of state plans and allows us to compare the strategies of each state.

Data collection is based on decrees published by state governments and state capitals and official publications on the websites of the education secretariats. The index consists of four components:

- BROADCAST MEDIA: The media and channels used for providing remote classes, videos, or other educational content to students, such as radio, television, or the Internet;
- FORMS OF ACCESS: The materials, devices, and technologies available for students and teachers to access classes and educational content, such as cell phones, tablets, textbooks, or other internet subsidies:
- STUDENT SUPERVISION: Whether responsibilities for supervising students and ensuring attendance, in addition to monitoring activities, are assigned to teachers and schools, government educational institutions, or both;
- COVERAGE: Educational levels covered, such as kindergarten, elementary and high school.

We rescaled the REP to a scale ranging from 0 to 10, with values for each unit-day, i.e., each state/capital received a grade for each day of the study period. The index exposed the vulnerabilities of the states' remote education programs throughout 2020. However, rather than acknowledging the shortcomings of remote learning programs and abandoning them altogether in pursuance of a full-time in-person education system in 2021, states sought to improve remote learning plans.

The updated REP shows an improvement in the potential reach of the programs in 2021 in all states, suggesting an awareness that in-person learning does not exclude remote learning, which can – and should – be improved. Despite the lack of efforts by the Federal Government (and the Ministry of Education) to orchestrate the provision of remote learning, the states addressed the challenges and began 2021 with more robust plans. The state with the most negligible positive variation in the REP was Rio de Janeiro, whose index increased by 14.4%. In contrast, the most significant improvement occurred in Bahia, where the index rose from 0 to 4.4, followed by Rio Grande do Norte, whose index increased by 491.3%. Overall, the state average increased from 2.7 to 5.1 (an increase equivalent to 86.7%).

Figure 1 below breaks down the REP by the three main components that comprise the index, and allows us to compare the index calculated for 2020 against 2021 in each state. The "Access" category indicates whether the state's plan envisions the distribution of specific textbooks, devices, and/or subsidies for Internet access. This category was the one that progressed the most rising by approximately 108%. The average score increased from 0.236 to 0.489.2 If none of these items are provided, the state score is 0; if one of these resources is provided in the plan, the score is 0.33; if two, 0.66; and, finally, if all three means are envisioned in the plan, the score is 1.

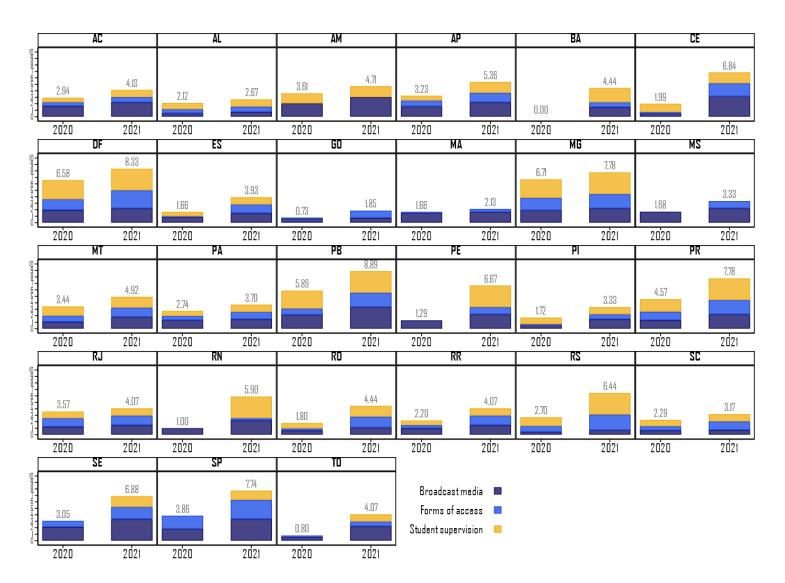


Figure 1. The REP in all States in 2020 and 2021

<sup>2</sup> It may be possible that this improvement is a result of the recent passing of Law No. 3477/2020, which provides a financial aid package of R\$ 3.5 billion from the Federal Government to states and municipalities for funding internet access for low-income students and teachers in public schools. However, it is to early to verify this correlation. This remains a task for future research.

# **Education Expenditure during the COVID-19 Pandemic in the States of Brazil**

The 1988 Federal Constitution (FC/88) promulgated tax allocation rules and raised the mandatory federal percentage<sup>3</sup>, i.e., the Federal Government was now required to reserve 18% of tax revenues for education,<sup>4</sup> while states and municipalities were required to allocate 25% of tax revenues and constitutional and legal transfers<sup>5</sup> for the maintenance and development of education (MDE). Local state constitutions could set aside an even higher share of this revenue (encompassing Net Tax Revenue – NTR) for education expenditures.<sup>6</sup>

In compliance with article 72 of the Education Guidelines Law (LDB, Law No. 9394/1996), states must calculate and inform their revenue and expenditure results for the MDE on a bimonthly basis, as an appendix to the Summarized Budget Performance Report (SBPR), released within thirty days after the end of each bimester (art. 165, § 3, FC/88). In 2020, except for Rio de Janeiro, all states complied with the minimum required allocation for education. For this year exceptionally, however, we cannot accurately calculate the available resources for education solely by verifying if the states complied with the reserved NTR share. The reason for this is that in 2020, in addition to the NTR, states benefited from Federal fiscal aid transfers to compensate tax revenue losses expected for that fiscal year. Except for a relatively small share of this aid allocated for expenditures towards the National Health System (SUS) financing, the remainder of fiscal support was not targetted. Furthermore, states were relieved from paying their debts to the Federal Government from March to December 2020. While the latter does not count as additional revenue per se, the budgetary saving allowed states to allocate resources previously reserved for debt payments to other areas, such as health or education.

In summary, the compensatory federal transfers and the suspension of debt payments, being non-binding resources, became two additional potential sources for education expenditure in 2020, not included in the total NTR amount. For the fiscal year 2020, the Current Net Revenue (CNR), coupled with earnings from non-payment of debt, serves as a more faithful representation of the available resources for education expenditure.

On average, the states' education expenditure dropped 9.1% compared with the previous year, in a downward movement counter to the CNR, which registered an average increase of 2.4%. Although only four states (Espírito Santo, Paraná, Rio de Janeiro, Roraima, and São Paulo) reported a decrease in the CNR, except for the state of Rondônia, all states compressed their education expenditure. States allocated limited resources to education. In part, the suspension of contracts for schools that

- 3 According to Castro (2001), the Calmon Amendment defined the binding of taxes in all three government levels, with a mandatory application in MDE from 1983 onwards, putting an end to what had been an erratic process since the 1930s. CASTRO, Jorge. *Financiamento da educação no Brasil.* Em aberto, v. 18, no. 74, IPEA, 2001.
- **4** Amendment 95/2016 suspended the mandate of education allocations from federal taxes in 2016, known as the Spending Ceiling Amendment.
- 5 In this policy brief, we will use the NTR to calculate the mandatory resource allocation for education, as shown in Appendix 8 of the SBPR LRF (Complementary Law No. 101/2000). If, on the one hand, we can easily calculate the net tax revenue and determine how much each state (or municipality) should spend, on the other hand, we find controversies regarding the definition of expenses with MDE. While articles 70 and 71 of the Education Guidelines Law (LDB, Law No 9,394/96) define the elements for calculating expenses with MDE, in practice each state devises its own criteria and, therefore, different definitions coexist for regulating these expenses. As such, it is impossible to perform a precise comparison of states (or municipalities). In some states (such as São Paulo), the payment of pensions for teachers is considered for the purposes of calculating MDE expenditure, while other states do not envision this possibility. Given that the definition of MDE expenditure is unclear, in order to ensure comparability between states this Policy Brief will analyze expenditure through the Education Function (functional classification of expenditure). Cf. PERES, U. D.; MATTOS, B. B.; MENON, I.; FELICES, M.; LIMONTI, R. M. Financiamento da Educação nos Estados Brasileiros. 2018. (Research report). Available at: <a href="http://www.consed.org.br/media/download/5c1a2ea79d702.pdf">http://www.consed.org.br/media/download/5c1a2ea79d702.pdf</a>>. Accessed on July 12, 2021.
- 6 Such is the case in the state of São Paulo, where this percentage reaches 30%.

were closed for on-site education explains this reduction. However, the mismatch between these variations – positive for the CNR and negative for education expenditures – is surprising, especially when considering the suspension of debt payments. Considering the fiscal space granted to states, we estimate a 45% reduction in expenses with interest rates and amortization compared to 2019.

For easier identification of the states most affected in education, we defined a variable we denote as *Net Reducation*, which measures the decrease in the education budget that exceeds CNR losses in 2020. Ideally, the net reduction should have been zero; therefore, a higher net reduction suggests a higher decline in education and vice versa. In our view, the savings from the closure of schools (represented, for example, by the interruption in water and energy costs) does not justify the decrease in education expenditures for two reasons. First, states had to undertake additional spending to develop remote education programs and their subsequent implementation. Second, states also had to allocate resources for infrastructure expenses to enable in-person activities in 2021. In turn, to identify the states that benefited the most from the suspension of the debt payments, the variable Debt Gains is defined as the opposite of the variation in percentage points in public debt expenditure (Interest + Amortization, according to the Budget Expenditure Appendix).

Figure 2 below shows the Net Reduction (NR) in education expenditure per state and the gains from public debt suspension. Among the 27 states, Piauí and Goiás<sup>8</sup> registered the highest net reductions, namely 42.2 and 40.7 percentage points (pp), respectively (the only states with values above 30 percentage points).

<sup>7</sup> We cannot not conclude, however, that all states benefited equally from this policy. The state of Rio de Janeiro, for example, resumed debt payment with the Federal Government in September 2020, as envisioned in the Tax Recovery Regime (RRF) signed in 2017. As a result, expenses with interest and amortization in 2020 exceeded 2019 values by circa 181.2%. On the other hand, states that benefited the most from debt suspension in 2020, namely, Amapá and São Paulo, experienced declines reaching 97.0% and 77.1% in debt expenditures, respectively.

<sup>8</sup> In the state of Goiás, the wide variation in the education and social security functions may suggest a recategorization of expenses with teachers' pensions, which could have affected this result.

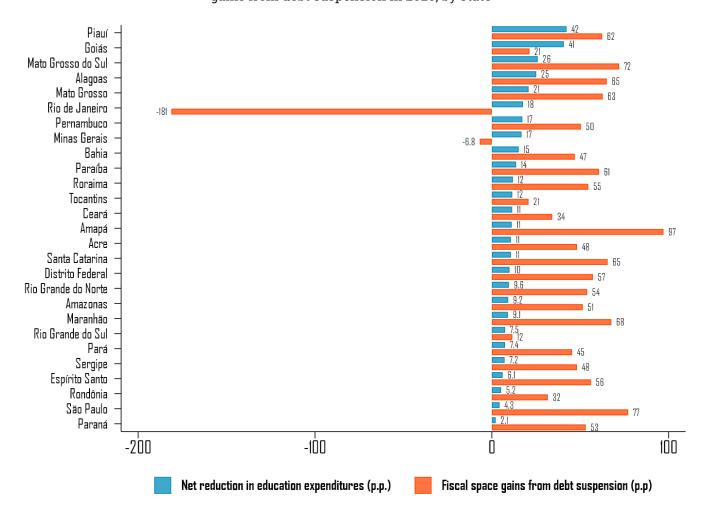


Figure 2. Net Reduction (NR) in education expenditures and fiscal space gains from debt suspension in 2020, by state

# The Determinants of the Quality of Remote Education Policies in the States

To verify whether the quality of remote education plans is affected by the Net Reduction (NR) in education and relative debt gains in state fiscal coffers, we performed a multivariate statistical analysis using data for the 26 states and the federal district. The purpose of this analysis is to verify if the REP and the *Net Reduction* are correlated, holding all other factors constant.

Regarding the REP score for 2020, the results confirm that neither the quality, nor the stringency of social distancing policies translated into better remote learning programs holding all other factors constant. The only variable that helps to explain the state REP variation is GDP per capita. In other words, wealthier states were better equipped to finance more ambitious remote learning programs and enact them in 2020. All else constant, an increase of R\$1,000.00 in GDP per capita is predicted to increase the REP by 0.0495. In turn, an increase of 1 standard deviation, i.e., circa R\$ 15,371.00, is predicted to head to an increase of 0.45 increase in the REP.

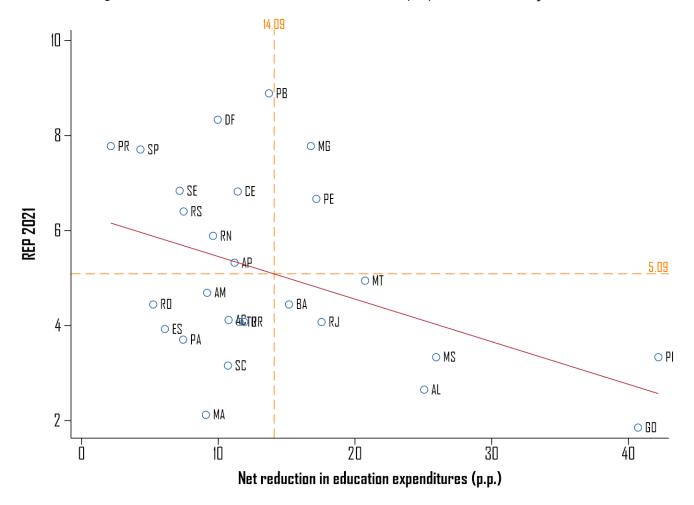


Figure 3. State REP 2021 Scores and Net Reduction (NR) in Education Expenditures

Figure 3 is a scatter plot<sup>10</sup> that shows the negative relationship between Net Reduction (NR) and REP in 2021. If, in 2020, the REP scores depended solely on the states' pre-existing infrastructure capacity, this figure suggests that the 2021 scores were no longer related to GDP per capita, but instead depended on whether or not the states reduced their education budget in the previous year. An increase of 1 percentage point in education cuts (see definition in the Appendix) leads to an average reduction of 0.085 in the REP (and an increase of 1 standard-deviation, i.e., approximately 9.78 pp causes a 0.42 reduction in the REP)<sup>11</sup>. Once again, the multivariate models confirm that the enactment of social distancing policies and the prior quality of the educational system held no influence on the scope and potential reach of remote learning plans. In short, while institutional learning was global (all states registered improvement), this trend was more intense in states that preserved their education budget in 2020.

# **Discussion**

Federal fiscal aid transfers in 2020 were not targeted to mandate expenditures in specific areas or programs, nor were allocations predefined. Furthermore, the federal government did not make efforts to supervise the use of these resources. Alongside the gains from the suspension of debt payments to the federal governments, federal transfers were converted into fungible resources that states could

<sup>10</sup> It should be noted, however, that the scatter plot of the dependent variable against the independent variable does not take into account the other independent variables included in the model.

**<sup>11</sup>** *p*-value = 0.041.

use at their discretion. In this sense, states could have allocated additional resources to education. Within this uncoordinated scenario, regional inequality emerged at first: the wealthiest states, despite their budgetary adjustments, presented remote education plans with greater potential reach. The findings that only GDP per capita helps explain variations in REP 2020 values, combined with the finding that expense cuts in education and gains from suspended debt payments were not significant, although unexpected, are justifiable. Indeed, while the federal government assisted states in 2020, the transfer volumes were not made considering tax revenue losses. Fiscal aid was also not concerned with mitigating regional inequalities in the fight against the pandemic. Transfers occurred by way of a fixed rule, oblivious to each state's individual needs. The federal government failed to channel resources to the poorest states. As a result, the wealthiest states, which already had better infrastructure and would have a higher likelihood of developing relatively higher-quality programs regardless of financial assistance, organized the most wide-ranging plans.

However, after some time had passed for the necessary adaptations and planning strategies, budgetary priorities weighed more significantly. States that prioritized education in their budgets in 2020 developed the best plans in 2021. State GDP per capita was no longer significant in explaining REP scores. In other words, greater commitment to education in 2020, as expressed by the states' budgetary choices, translated into higher quality plans in 2021.

#### Conclusion

In March 2020, when the crisis engendered by the arrival of SARS-Cov-2 in Brazil began to take shape, states projected a decline in revenues and announced contingency plans to cut expenses across different public policy areas and privilege health policies. Contingency cuts also happened in education, even though the crisis irradiated unique challenges to the states' educational systems. Some reduction in education expenses comes as no surprise, given that schools remained closed for many months. But the challenges for planning and implementing remote and hybrid learning systems required new resource allocations for education. States had to allocate resources to create remote learning programs quickly and undertake investments in the physical infrastructure of schools to provide a safe return to in-person classes in 2021.

Undeniably, the COVID-19 pandemic is more than an exclusively biological phenomenon. The crisis acquired a socioeconomic dimension by colliding with different local realities, potentially exposing or even exacerbating the country's longstanding inequalities. Although the federal government provided assistance to states in 2020 (Complementary Law No. 173/2020<sup>13</sup>), federal transfers were not tied to actual revenue losses, <sup>14</sup> nor were they focused on mitigating regional inequalities in the fight against the pandemic. Transfers were defined by a fixed rule, oblivious to the individual needs of each state.

In this Policy Brief, we present evidence showing that the federal government did not channel resources to the poorest states in Brazil. Consequently, the wealthiest states (i.e., with higher GDP per capita), which had prior better infrastructure (considering physical and most of all human resources) and would have therefore created good programs irrespective of financial assistances, structured the

<sup>12</sup> PERES; SANTOS, op. cit.

<sup>13</sup> BRASIL. Complementary Law No 173, dated May 27, 2020. Available at: <a href="http://www.planalto.gov.br/ccivil\_03/leis/lcp/lcp173.htm">http://www.planalto.gov.br/ccivil\_03/leis/lcp/lcp173.htm</a>. Accessed on July 12, 2021.

<sup>14</sup> PERES, Ursula D.; SANTOS, Fábio P. dos. Policy Brief No. 27 – Federal fiscal aid to the states maintained the 2020 tax revenue at the same level as 2019. However, there was an uneven distribution of resources for Health. Average expenditure on Education dropped by 9%, even in the states with an increase in ICMS revenues. Available at: <a href="https://redepesquisasolidaria.org/wp-content/uploads/2021/08/boletimpps-27-3marco2021-eng.pdf">https://redepesquisasolidaria.org/wp-content/uploads/2021/08/boletimpps-27-3marco2021-eng.pdf</a>. Accessed on: June 17, 2021.

most wide-ranging remote education plans, regardless of education budget cuts. Furthermore, we found no correlation between the initial quality (pre-pandemic) of the states' educational systems, nor their commitment to social distancing policies, and the creation of more robust remote learning programs.

In contrast, the scope of remote education plans in 2021 can no longer be explained by wealth, and budgetary prioritization of education now represents the key variable for understanding the variation in the quality of remote learning programs. Furthermore, the stringency of social distancing policies in 2020 and the pre-pandemic quality of the education system were not decisive elements. We conclude that the states' institutional learning can explain improvements in the plans. The Federal Government did not prioritize equity in the distribution of fiscal aid, nor did it spearhead the fight against the pandemic in the educational field. Hence, local governments were tasked with preparing and implementing remote learning plans. In this regard, the learning effects were more considerable in states that preserved their education budgets, meaning that budgetary choices from 2020 made the difference.

#### **Recommendations:**

- The COVID-19 pandemic unveiled regional inequalities in the states' capacity to organize a remote education plan and, on a different level, the extent of their digital development (and, therefore, the capacity to provide access to remote classes). To mitigate these issues, and thus prevent inequality from hindering the provision of quality education to Brazilian students, a federal alliance is urgently necessary, in which the Federal Government actively ensures that students are not deprived of education, however different their contexts;
- It is therefore essential to devise a joint federative plan for resuming school activities with a focus on reducing inequalities and based on territorial/regional specificities;
- The actions envisioned in the plan must be coordinated at the federal level, with technical and financial support to states and municipalities. Each state must coordinate its efforts by also taking into account municipalities' needs and possibilities;
- As the pandemic worsened in 2021, the states opted for a hybrid return to school activities –
  merging remote learning and in-person classes. Thre are thus necessarily continued needs to
  develop remote learning policies. At this moment, the pandemic is no longer a surprise factor as it
  was in 2020. We now have more precise foreknowledge regarding revenues for 2021. States have
  the obligation to prioritize public education expenditure, whether to improve remote learning
  programs or provide schools with adequate infrastructure for the safe resumption of in-person
  classes.

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# **Appendix**

We estimated the following multiple regression model:

RLI<sub>i,t</sub> = 
$$\beta_0$$
 +  $\beta_1$ Net Reducation<sub>i</sub> +  $\beta_2$ Debt Gains<sub>i</sub> +  $\beta_3$ GDP pc<sub>i</sub>  
+  $\beta_4$ SDPS<sub>i</sub> +  $\beta_5$ IDEB<sub>i</sub> + u<sub>i</sub>

In which:

- REP, is the average value of the Remote Education Policy Index (REP) for state i at t=2020 or t=2021;
- Net Reduction; is defined as the reduction in the education budget that exceeded CNR losses for state i in 2020 (in 2018 real values);
- **Debt Gains**; is defined as the opposite of the variation, in percentage points, in public debt expenditures in 2020;
- GDP pc, is the GDP per capita of state i in 2018 (in thousands of R\$);
- SDPS<sub>i</sub> is the average value of the Social Distancing Policy Stringency Index (SDPS) for state i in 2020:
- IDEB; is the value of the Basic Education Development Index (IDEB) for state i in 2019;
- u; is an error term.

Table 1. REP Determinants for 2020

	(1)
Net Reduction (NR)	-0.0328 (0.0338)
Debt Gains	-0.00157 (0.00655)
SDPS	-0.00516 (0.0510)
GDP per capita	0.0495** (0.0235)
IDEB	-0.0542 (0.706)
Constant	2.289 (3.907)
Observations (N)	27
R <sup>2</sup>	.266
R <sup>2</sup> adjusted	.0907

Standard errors in parentheses \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

Table 2. REP Determinants for 2021

	(1)
Net Reduction (NR)	-0.0852** (0.0392)
Debt Gains	0.00191 (0.00759)
SDPS	-0.0107 (0.0591)
GDP per capita	0.0278 (0.0273)
IDEB	0.380 (0.819)
Constant	4.106 (4.601)
Observations (N)	27
R <sup>2</sup>	.272
R <sup>2</sup> adjusted	.0989

Standard errors in parentheses \* p < 0.10, \*\*\* p < 0.05, \*\*\* p < 0.01

<sup>15</sup> See MOREIRA, Natalia de P.; OLIVEIRA, Maria L. C. de F.; CANTARELLI, Luiz G. R.; PEREIRA, Fabiana da S.; SEELAENDER, Isabel; ZAMUDIO, Marcela M.; SCHMALZ, Pedro. Policy Brief No. 4 – Lack of coordination between the Federal government and states undermines social distancing policies. Increased and unregulated relaxation could aggravate the pandemic. Available at: <a href="https://redepesquisasolidaria.org/wp-content/uploads/2020/05/boletim4-english.pdf">https://redepesquisasolidaria.org/wp-content/uploads/2020/05/boletim4-english.pdf</a>. Accessed on June 17, 2021.

<sup>16</sup> The IDEB ranges from 0 to 10 and gathers information on: 1) the average approval rate and 2) student performance in standardized math and reading exams for the end of Elementary School I (4<sup>th</sup> grade/5<sup>th</sup> year), Elementary School II (8<sup>th</sup> grade/9<sup>th</sup> year), and Secondary School (3<sup>rd</sup> grade/3<sup>rd</sup> year). The score is calculated at the school level for each of these educational grades, yet we may aggregate it by type (public – covering federal, state, and municipal schools – and private) or by the school's administrative dependence (state or municipal). To avoid excessive liberties with our model, an average of the IDEB result is considered for all three basic education levels, but only for schools in the state education system.

#### **ABOUT**

We are over 100 researchers, actively engaged in the task of improving the quality of public policies within federal, state, and municipal governments as they seek to act amidst the Covid-19 crisis to save lives. We dedicate our energies towards rigorous data collection, devising substantial information, formulating indicators, and elaborating models and analyses to monitor and identify pathways for public policies and review the responses presented by the population.

The Solidary Research Network has researchers from all scientific fields (Humanities as well as Exact and Biological Sciences) in Brazil and overseas. For us, the combination of skills and techniques is vital as we face the current pandemic. The challenge ahead is enormous, but it is particularly invigorating.

And it would never have come to fruition if it weren't for the generous contribution of private institutions and donors who swiftly answered our calls. We are profoundly grateful to all those who support us.

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