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Covid-19: Public Policies and Society's Responses

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Quality information for refining public policies and saving lives

Technical Note 6

Subpar investments and lack of a strategy for research and innovation will hinder Brazil's way out of the crisis[1]

Main Conclusions

- The effective way out of the crisis depends on the human capacity to produce vaccines, drugs, and adequate treatment for the Covid-19 virus. Therefore, in addition to measures to control the pandemic and its economic and social consequences, many countries have expanded investments in research and innovation and designed new scientific strategies against the virus and in preparation for the post-crisis scenario.
- In the US alone, more than US$6 billion was allocated exclusively to research about Covid-19, circa 4% of the government's R&D investment in 2019. Canada increased federal investment in R&D by about 12%. Furthermore, new public policies in Germany and the UK seek to guarantee and accelerate their recovery capacity in the post-crisis.
- Brazil's longstanding scientific and technological dependency was laid bare before the population with the scarcity of equipment and tests to combat the Covid-19 virus. These shortcomings could be minimized with a coordinated investment strategy in R&D, which has not yet occurred.
- The federal government published only two public notices in the amount of R$60 million, with results expected for June. This means that, so far, the Brazilian government is not using new resources to fund any research on the disease. This comes as a shocking fact, not as much because of Brazil's reduced investment, but mostly due to the country's inaction in the face of the crisis. Even with scarcer resources, Brazil could do much more.

1 This bulletin was based on a survey carried out by the researchers, which the IPEA will publish as a Technical Note.

- This stance by the federal government condemns Brazil to be no more than a consumer of S&T. As in other smaller pandemics, the lack of strategies for the development of vaccines and other drugs will leave the country at risk of being completely devoid of any vaccines or medical equipment and supplies, which will be conveyed to supply countries with better scientific competence and greater purchasing power.

The way out of the current crisis, which affects health, the economy, and poses difficulties to societies across the planet increasingly depends on the production of knowledge. Currently, thousands of researchers, universities, and companies have turned their efforts to the development of effective vaccines and treatments for the COVID-19 virus. However, even with a vaccine, humanity will face the challenge of its large-scale production in a scenario in which scarce medical and pharmaceutical supplies will tend to be absorbed by the few producing countries, as evidenced by the experiences of this pandemic (in which the Brazilian government faced difficulties to acquire respirators and PPE) and other smaller epidemics.

In the short and medium term, it is possible to increase knowledge in auxiliary treatments and new protective equipment, such as respirators and rapid tests. However, the nature of the coronavirus – its impact and destructive power, its unknown origins, its relationship with the environment and climate and our current way of life – require long-term strategies, capable of offering satisfactory answers to underlying epidemiological questions[2] regarding the long-term effects of the disease, its transmission potential, and how segments of the population are more vulnerable than others. Difficult questions that have no magic solutions.

For this reason, many governments have defined priorities, coordinated their initiatives, and allocated additional resources to promote scientific research and innovation. By doing so, they mobilize universities, research centers, and companies and invite scientists from the fields of exact, biological, and human sciences to combat a virus that can only be controlled with long-term incentives and policies.

This Bulletin seeks to map the research and innovation policies currently adopted in some countries in order to find solutions to the crisis. In addition to the resources allocated for research on the virus, we seek to identify the measures adopted to preserve the innovation capacity of companies and how governments have articulated their actions among the international and scientific community[3].

Research and innovation actions for tackling the crisis in selected countries

For this study, in addition to Brazil, we selected developed countries with high investments in Research and Development (R&D), both in absolute terms and in proportion to GDP, developing the largest number of clinical tests according to the WHO records, and which announced ambitious economic aid packages to mitigate the crisis.

United States

The United States (USA) is the country with the highest absolute volume of public investments in science and technology (S&T). Each year, the government invests over US$130 billion (or circa 0.8% of its GDP) in R&D. 30% of this investment goes to the National Institutes of Health (NIH), a group of research institutions linked to the Department of Health.

2 The most relevant epidemiological issues were mapped in the New England Journal of Medicine, one of the most influential scientific publications in health, in April 2020.

3 On the other hand, we do not take into account the resources invested and the policies adopted by subnational governments are not considered, which may be relevant in some countries.

Since the outbreak of the crisis, the US government has launched three major packages with health and economic measures. The first was the Coronavirus Preparedness and Response Supplemental Appropriations Act, dated March 6. Under that act, an additional US$836 million was earmarked for research on Covid-19 at the National Institute of Allergy and Infectious Diseases, one of the NIH. This act also includes an additional US$3.1 billion budget for an emergency fund for health and social services, linked to the Department of Health. This supplement more than doubled the budget available for this Fund, which was US$2.6 billion in 2019. A significant share of these resources will be directed to the Biomedical Advanced Research and Development Authority (BARDA), responsible for conducting R&D in biomedicine. As the crisis worsened, the government enacted the Families First Coronavirus Response Act, with sanitary and health care measures, and a broader package of economic measures, called the Cares Act, which forecasts the injection of over US$1 trillion (approximately 5% of GDP) of new resources into the economy, with US$500 billion in direct public spending and US$500 billion in credit for companies (60% geared towards small businesses). The package also includes new budget allocations for research and development, totaling over US$6 billion[4]. While this amount is equivalent to just over 1% of the volume spent on the pandemic, it represents circa 4% of the total resources destined to R&D by the government in 2019, directed exclusively for research on Covid-19, as shown in Table 1.

Table 1 - Resources allocated by the US government for research and innovation to tackle the Covid-19 crisis (in millions of dollars)

Agency	Amount (US$ millions)
Biomedical Advanced Research and Development Authority (BARDA)	3.500
National Institutes of Health (NIH)	1.781,4
Department of Defense - Defense Health Program*	415
National Foundation on the Arts and Humanities	150
Department of Energy - Office of Science	99,5
National Science Foundation (NSF)	75
National Institute of Standards and Technology (NIST)	66
National Aeronautics and Space Administration (NASA)	60
National Oceanic and Atmospheric Administration (NOAA)*	20
Department of Agriculture	3
Environmental Protection Agency	2,25
Total amount of new research resources for Covid-19	**6.172,15**

Source: Coronavirus Preparedness and Response Supplemental Appropriations Act and Cares Act

Note: This table does not include the US$4.5 billion from the Centers for Disease Control and Prevention, focused on epidemiological surveillance, infection control, and expansion of operational capacity.

4 Law passed by Congress and which identifies the amount received by typical R&D institutions in the USA.

Germany

Germany[5] prepared a package of measures to tackle the pandemic amounting to €750 billion (circa 20% of GDP). Part of the package will be financed from the approval of a supplementary budget, which was published in late March and envisages additional resources of €122.5 billion. This supplementary budget includes €160 million for the Ministry of Education and Research, from which €145 million is directed towards research and innovation in the field of health and health economics, specifically for the development of vaccine and treatments for Covid-19.

The Ministry of Education and Research defined three priority areas for investment in health research. The first concerns research to identify the biology, transmission routes, and dynamics of the virus, with the publication of a €15 million funding call in early March. The second area refers to the development of drugs for treating the disease, both for the development of new active principles as well as the use of known substances, and for which a new specific notice is expected. The third priority, to which the ministry will allocate most of the additional resource of €140 million, provides support to the CEPI (Coalition for Epidemic Preparedness Innovation) in the development of a new vaccine, reinforcing its alignment with international initiatives. The volume of resources foreseen in these initiatives is greater than in the supplementary budget recently approved to address the crisis, indicating that, in addition to the additional resources, the Ministry is also reallocating the existing budget to focus on research on Covid-19.

Furthermore, the ministry announced new projects/investments: an additional €150 million for the creation of a research network to connect the research activities of German medical schools. The goal is to create a national task force and establish a centralized infrastructure, including a database of patients. Although announced as additional resources, it is not yet clear whether these resources come from the supplementary budget or whether the government will use the original 2020 budget. The second project announced is support for the WHO Solidarity Trial, with an initial contribution of €1.5 million.

The budget of the German federal government also envisioned an increase in the budget for science, research, and development beyond the confines of higher education institutions between the years 2019 and 2020, and with the supplementary budget this increase became 11.8 %. In the first three months of 2020, however, we may also identify an accelerated spending in science, research and development, when compared to the first three months of 2019, rising from €1.6 billion to €2.3 billion, representing an increase of 37.1%, in current values.

Although the additional resources directly applied to research and development on Covid-19 are not as expressive as that of the United States, Germany launched protection measures for startups and invested €2 billion in venture capital funds in an attempt to ensure the survival of innovative small business during the epidemic. By adding these resources to the supplementary budget, the estimated volume for research and innovation amounts to €2.1 billion, as shown in table 2.

5 Data collected until 05/06/2020. The authors acknowledge the support of Nicolas Koeller in the translation from German.

Table 2 - Resources allocated by the German government for research and innovation to tackle the Covid-19 crisis (in millions of Euros)

Actions	Amount (€ millions)	Amount (U$ millions)
Supplementary R&D budget	145	161
Support measures for Startups	2.000	2.224
Total investment in Research and Innovation	**2.145**	**2.385**

Source: Federal Ministry of Finance, Germany Trade & Invest (GTAI). Prepared by the authors. The exchange rate used for the conversion to US$ was the one in force on 03/02/2020.

Canada

The Canadian federal government also announced firm measures to contain the Covid-19 crisis. The first was the Covid-19 Response Fund, focused on the health and safety of the population. This fund became part of Canada's Covid-19 Economic Response Plan, with an additional investment of CA$275 million in research for the development of vaccines, antivirals, and clinical trials. After the creation of the fund, public notices were launched in March in line with the guidelines established by the WHO and totaled CA$52.6 million, selecting, in record time, 96 research groups across the country[6]. In addition, the Strategic Innovation Fund Covid-19 allocated CA$192 million in projects to support large Canadian companies that promote solutions to overcome the pandemic .

Two other institutions introduced measures focused on research and innovation: The National Research Council of Canada (NRC) and the Natural Sciences and Engineering Research Council of Canada (NSERC). The NRC established the CA$15 million Pandemic Response Challenge Program, comprised of teams from the government, academia, and the private sector to address specific shortcomings and challenges identified by Canadian health experts. The Program is structured around three main research pillars: rapid detection and diagnosis, development of vaccines and therapies, and digital health. Furthermore, the NSERC established a program, costing CA$15 million, to promote partnerships between academia and industry for research and development of solutions related to the pandemic[7].

In addition to the resources from the Response Fund, the second stage of investments in research and innovation forecasts approximately CA$1 billion for health research against Covid-19, mainly for the development of a vaccine, treatments, and virus screening. Part of the planned investments will be directed to research networks or institutions and companies with specific objectives.

In total, the support for research and innovation envisaged for the two announced phases is approximately CA$1.330 billion, accounting for 1.2% of the direct support measures forecast in Canada's Covid-19 Economic Response Plan, as shown in the table below.

6 Três províncias contribuíram com recursos para os editais – através de suas instituições ***Research Manitoba, Research Nova Scotia*** e ***Alberta Innovates*** – permitindo financiar mais três projetos, aumentando o número total de grupos de pesquisa para 99 e o investimento total para CAD$ 54,2 milhões. https://www.canada.ca/en/institutes-health-research/news/2020/03/government-of-canada-funds-49-additional-covid-19-research-projects-details-of-the-funded-projects.html. Acesso em

7 https://pm.gc.ca/en/news/news-releases/2020/03/23/canadas-plan-mobilize-science-fight-covid-19. Accessed on 05/05/2020.

Table 3 - Table 3. Resources allocated by the Canadian government for research and innovation to tackle the Covid-19 crisis (in millions of Canadian dollars)

Actions / Institutions	Amount (CA$ millions)	Amount (U$ millions)
First phase – total	**276,1**	**206,8**
Strategic Innovation Fund COVID-19	192	143,8
Natural Sciences and Engineering Research Council of Canada (NSERC)	15	11,2
National Research Council of Canada (NRC)	15	11,2
Genome Canada	1,5	1,1
Canadian Institutes of Health Research (CIHR)	52,6	39,4
Second phase – total investment in research and innovation	**1053,48**	**789,1**
Canadian COVID-19 Genomics Network (CanCOGeN), led by Genome Canada	40	30,0
Vaccine and Infectious Disease Organization-International Vaccine Centre (VIDO-InterVac)	23	17,2
National Research Council of Canada (NRC)	29	21,7
Strategic Innovation Fund	600	449,4
Canadian data monitoring initiative	10	7,5
Canadian Immunization Research Network	10,3	7,7
Canadian Institutes of Health Research - CIHR	114,9	86,1
AbCellera Biologics	175,6	131,5
Stem Cell Network	0,68	0,5
Next Generation Manufacturing Supercluster	50	37,5
Total investment in Research and Innovation	**1329,6**	**995,9**

Source: Department of Finance; NRC; NSERC; CIHR; https://pm.gc.ca/en. Prepared by the authors.

Note: The exchange rate used for the conversion to US$ was the one in force on 03/02/2020.

United Kingdom

As in other countries, the economic measures adopted by the UK to combat the coronavirus crisis were significant. In March, a £30 billion fiscal stimulus package was released, which included subsidies for small business, tax incentives, and circa £5 billion for the National Health Service (NHS). The UK also established an alliance to sequence the virus genome and monitor its mutations in the country, the Covid-19 Genomics UK Consortium, which received an initial investment of £20 million and comprises public and private institutions.

Regarding innovation, in early April the UK announced a £20 million fund for the development of new technologies focused on new work methods to strengthen the resilience of companies across several sectors due to the social distancing measures. This fund will provide subsides of up to £50,000 to companies with innovation projects during the crisis.

The country is also strongly committed to research on the development of vaccines for the virus, with resources exceeding £250 million.

However, the most ambitious research and innovation program launched by the government was not destined for the development of research on the disease. The support package for innovative companies aims to preserve the innovative capacity of British companies afflicted by the crisis[8]. The package includes a £500 million investment fund for high growth companies, half of which contributed by the government and the other half complemented by private investors. In addition, the package also contains an additional £750 million in subsidies and credit for innovative micro and small businesses, to be made available by the British innovation agency, Innovate UK.

In total, the UK government has so far allocated over £1.3 billion in resources to stimulate research and innovation in the Covid-19 crisis.

Table 4 - Resources allocated by the British government for research and innovation to tackle the Covid-19 crisis (In millions of pounds)

Institution / Program	Amount (£ millions)	Amount (U$ millions)
National Institute for Health Research (NIHR)	30	38,3
Department of Health and Social Care (DHSC)	10	12,8
UK Research and Innovation (UKRI) – Coronavirus Rapid Response Fund*	20	25,6
Covid-19 Genomics UK Consortium*	20	25,6
Department for Business, Energy and Industrial Strategy (BEIS) – Fund for business innovations amidst the crisis*	20	25,6
Coalition for Epidemic Preparedness Innovations (CEPI) – vaccines**	250	319,5
Support package for innovative companies***	1	1,3
Estimated total	**Between 1300 and 1350**	**Between 1661 and 1725**

Source: British government websites. Prepared by the authors.

Note: The exchange rate used for the conversion to US$ was the one in force on 03/02/2020

** We were not able to discern, with certainty, if the resources for these two initiatives are additional resources or if they are part of the budgetary supplement already planned for the NIHR and the DHSC*

Brazil

The economic measures of the Brazilian government to combat the Covid-19 crisis include monetary measures, designed to provide greater liquidity to the financial system, emergency lines of credit via public banks, and fiscal stimulus measures.

The fiscal measures were estimated by the Independent Tax Institution (IFI in the Portuguese Acronym) at R$211 billion[9] (equivalent to 2.9% of GDP). Among the main measures we find the emergency aid of R$600 for informal workers and wage compensation for workers who had reduced working hours due to the crisis

8 https://www.gov.uk/government/news/billion-pound-support-package-for-innovative-firms-hit-by-coronavirus
9 https://www12.senado.leg.br/ifi/dados/arquivos/creditos-extraordinarios-da-uniao-destinados-ao-enfrentamento-da-covid-19-r-bilhoes/view

In 2017, federal expenditures on R&D were R$25.7 billion, which represented 0.39% of GDP. If we do not include expenditures with postgraduate university programs, the executed budget was R$13.7 billion[10]. In 2020, the federal budget predicts approximately R$7.2 billion for science and technology[11].

Regarding new investments in R&D for tackling the crisis, two public notices with calls for research proposals were announced until the beginning of May. The first one was published on March 21, by the Ministry of Science, Technology, Innovation and Communications (MCTIC in the Portuguese acronym) in partnership with the São Paulo Research Foundation (FAPESP), in the amount of R$20 million, from which R$10 million came from federal funds[12]. The public notice was focused on companies interested in developing technologies to combat the coronavirus, ranging from diagnostic tests, pulmonary ventilators to personal protective equipment[13].

A second public notice, in the amount of R$50 million, was launched by the National Council for Scientific and Technological Development (CNPq in the Portuguese acronym), on April 4, in partnership with the Ministry of Health, which allocated R$20 million[14]. The notice is directed at researchers interested in developing research on treatments, vaccines, diagnosis, pathogenesis, prevention and control, among others.

These notices were contemplated by the MCTIC's currently available budget and do not represent new resources for research on Covid-19. However, two provisional measures (PMs) currently under analysis in the National Congress provide additional budgetary credit for the MCTIC to invest in research on the disease. PM 929[15], from March 25, and PM 962[16], from May 6, which allocate, respectively, R$100 million and R$226 million to the National Fund for Scientific and Technological Development (FNDCT) for the development of technologies and innovation to tackle the health crisis. In addition, PM 962 allocated an additional R$120 million to a program for the development of applied technologies, innovation, and sustainable development.

It is worth remembering, however, that the FNDCT, a fund of over R$4 billion, and Brazil's main scientific research fund, has most of its resources subjected to limits (approximately R$3.5 billion)[17]. The Fund's real budget, therefore, started 2020 at roughly the same level as that observed in the early 2000s. From this perspective, these extraordinary credits are far from restoring the Fund's losses in recent years.

The table below details the resources planned so far for R&D by the Brazilian government due to the Covid-19 crisis, which totaled approximately R$466.5 million.

Table 5 - Resources allocated by the Brazilian government for research and innovation to tackle the Covid-19 crisis (In millions of reais)

Institution/Program	Amount (R$ millions)	Amount (U$ millions)
Ministry of Health resources in the MCTIC public notice for research	20	4,5
FNDCT supplemental budget	326,5	72,8
Supplemental budget to the MCTIC for applied technologies, innovation, and sustainable development	120	26,8
Estimated total	**466,5**	**104,0**

Source: SIOPI and the Ministry of Health. Prepared by the authors.

Note: The exchange rate used for the conversion to US$ was the one in force on 03/02/2020, available on the IMF website (https://www.imf.org/external/np/fin/data/rms_mth.aspx?SelectDate=2020-03-31&reportType=REP): R$1=US$0,223.

Learning from the experience of other countries

Many countries have invested heavily in the only long-term solution to the crisis: science and technology. According to the data, Brazil stands out in the lack of public support for research. The difference lies not so much in the amount of investments when compared to the United States, Canada, the United Kingdom, and Germany, but in the government's inaction, which shows a lack of harmony with the most advanced actions and the inability to swiftly allocate the country's sparse resources.

Government investments in research are not the only concrete measures taken by several countries. Some are concerned about the survival capacity of their innovative companies amidst the crisis. Countries such as Germany and the UK, aware that innovative companies will be instrumental in resuming growth in the post-crisis scenario, have created or reinforced investment funds in innovative companies in order to ensure the necessary financial strength for this difficult transition period.

Last but not least, the adoption of consistent measures – in health, the economy, and society – requires that governments be well informed about the disease as well as its short, medium, and long-term consequences. It is no accident that many countries have created scientific committees to advise the federal governments and assist in the formulation of measures capable of containing the pandemic.

The table below summarizes how countries have used scientific knowledge and research to tackle the ongoing crisis. It contains the main actions taken regarding research and innovation to face the crisis.

Table 6 - Actions regarding research and innovation to tackle the Covid-19 crisis

Actions taken / countries		USA	United Kingdom	Canada	Germany	Brazil
New resources for R&D and Innovation	In local currency	6.1 bi	1.3 – 1.35 bi	1.3 bi	2.1 bi	0.47 bi
	In US$	6.1 bi	1.66-1.72 bi	0.97 bi	2.34 bi	0.10 bi
	% of federal budget in R & D*	4.1%	10,8%	11.8%	6.3%	1.8%
Scientific advisory group for the federal government		NO	YES	YES	YES	NO
Fast approval mechanism for research and innovation projects related to Covid-19		YES	YES	NO	NO	NO

The exchange rate used for the conversion to US$ was the one in force on 03/02/2020*. The calculation of this percentage hopes only to establish a standardized measure of the efforts among countries. It does not mean that there has been a percentage increase, of this magnitude in the countries' investments in R&D, since some measures adopted are not R&D, but credit or investment in companies. We obtained the amount of the federal budget of these countries applied to R&D from the OECD website: in Germany it was €33.5 billion in 2019; in Canada, CA$11 billion in 2017; in the UK, £12 billion in 2017; and in the US, US$148 billion in 2019. For Brazil the amount was R$25.7 billion in current reais in 2017. www.mctic.gov.br/mctic/opencms/indicadores/detalhe/recursos_aplicados/governo_federal/2.2.1.html, Prepared by the authors.

10 Current Values. https://www.mctic.gov.br/mctic/opencms/indicadores/detalhe/recursos_aplicados/governo_federal/2.2.1.html. Accessed on 05/12/2020.
11 Current values. Source: SIOP, SIAFI base data of 05/11/2020, accessed on 05/12/2020.
12 http://www.fapesp.br/14087
13 http://www.mctic.gov.br/mctic/opencms/salaImprensa/noticias/arquivos/2020/03/Finep_e_FAPESP_acabam_de_lancar_edital_de_R_20_milhoes_voltado_a_tecnologias_de_combate_ao_COVID19.html

In the UK and Canada, the resources for research and innovation are equivalent to over 10% of all federal investment in R&D in 2017. In the USA, although investments represent just over 4% of the federal budget in R&D, they are significant in absolute values.

In Brazil, however, despite the energy and enthusiasm emerging in universities and research centers, the situation is far from encouraging. The country lacks long-term public strategies to tackle, get through, and exit the crisis. Even social distancing policies are being implemented without any federal coordination. The scientific community has assisted some state governments in defining these measures, which has been important, but at the federal level, although the MCTIC created the so-called Virus Network to bring together health experts, there is no indication that this network is being heard to develop consistent and scientifically-grounded policies to fight the pandemic.

The country has patent technological deficiencies in the lack of respirators, PPE, and tests for the disease. Some attempts to develop the equipment within the country have been entirely uncoordinated and have not always made use of the country's existing technological skills.

To condemn Brazil to become a user of technologies developed in other countries, in view of the unsolved problems created by the coronavirus, means exposing the population to the risk of new contaminations. According to the WHO, the SARS-COV2 could become an endemic and persistent virus, similar to influenza. If this possibility confirms itself, there will be no vaccine available for the entire population of the planet for several years. Circa 6 billion people would have to be vaccinated to stop the spread of the virus, thus forming what is called herd immunity to reduce the spread of the virus. In addition to strictly medical concerns, we must also consider that the supply network has always slanted towards the most advanced countries. And nothing suggests this time will be any different from other pandemics.

This means that the asymmetry between countries will, once again, take a high toll (in sequelae or lives) on the poorest countries. According to data from the US Center for Disease Control and Prevention (CDC), in 2009 circa 80 million Americans vaccinated during the swine flu pandemic absorbed the same number of vaccine doses sent to 77 different countries by the WHO. The scarcity of respirators is a small warning sign to developing countries as they had very limited access to this type of equipment during the current pandemic.

The aggravation of a longstanding technological dependence could condemn the country to despondency due to the scarcity of medical equipment and advanced treatments. In other words, leaving the country unable to protect its population and save lives. Brazil's failure to participate in the global alliance to accelerate the production of vaccines against Covid-19, articulated by the European Union and the UN, and which has already gathered over 40 countries, was another negative signal by the federal government.

The country urgently needs coordinated policies in the present so it may build a future strategy for S&T. To this end, however, the country must define its priorities based on the optimal scientific knowledge available and expand investments in research on the disease beyond the R$470 million promised thus far and the two public notices totaling R$60 million, whose results have not yet been published.

Brazil undoubtedly can, and deserves, more than this.

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14 http://www.mctic.gov.br/mctic/opencms/salaImprensa/noticias/arquivos/2020/04/CNPqMCTIC_e_MS_lancam_edital_de_R_50_milhoes_para_combate_ao_novo_coronavirus.html **15** http://www.planalto.gov.br/ccivil_03/_Ato2019-2022/2020/Mpv/mpv929.htm

16 http://www.planalto.gov.br/ccivil_03/_ato2019-2022/2020/Mpv/mpv962.htm

17 https://www.ipea.gov.br/agencia/images/stories/PDFs/nota_tecnica/190828_NT_48_Diset.pdf

ABOUT

We are over 40 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.

WHO WE ARE

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