

THE DECLINE OF BRAZILIAN FEDERAL EXPENDITURES IN SCIENCE AND TECHNOLOGY

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The Brazilian fiscal crisis, with new cuts in budget appropriations for science and technology proposed by the federal government, has raised concerns of scientists and institutions about the future of research in Brazil. In April 2019, the National Council for Scientific and Technological Development (CNPq) - one of the most important S&T institutions in the country - announced that thousands of researchers could lose their scholarships as of October. Three months later, the council canceled all new calls for scholarships for the second semester; new scholarships were scheduled to begin only in 2020 and 2021.

To assess the size of the reduction in the S&T expenditures, we looked into the evolution in the appropriations of the Ministry of Science, Technology, Innovation and Communications (MCTIC in Portuguese), focusing on its most important agency and fund: the CNPq and the National Fund for Scientific and Technological Development (Fundo Nacional de Desenvolvimento Científico e Tecnológico - FNDCT). Traditionally, those are the two main sources of funding for research and innovation in Brazil. Together, CNPq and FNDCT account for more than half of the S&T budget of the MCTIC. The former primarily funds scholarships for undergraduate and graduate students and researchers, as well as research projects at Brazilian universities and other research institutions; the latter supports research and innovation projects carried out by Brazilian researchers in universities, research institutions, and companies. Among other things, FNDCT supports the purchase of materials, supplies, equipment, and scholarships for students and researchers involved in grant projects.

At current values, the spending for the CNPq has been falling steadily since 2013. The amount spent by the agency has decreased by more than 50%: from R\$ 2.6

billion in 2013 to R\$ 1.3 billion in 2018. In 2019, CNPq recovered the budget for the year, maintaining the same level as in 2016, it was the third worst year in the period. Regarding FNDCT, the spending by the fund fell by 70% from R\$ 2.5 billion in 2013 to R\$ 766 million in 2018. In 2019, the amount spent by the FNDCT corresponded to only 16% of the originally forecasted amount, or about R\$ 660 million. Following this trend, the disbursement of the main research and innovation support fund in Brazil in 2019 would have been in real terms at the same level as in the early 2000s.

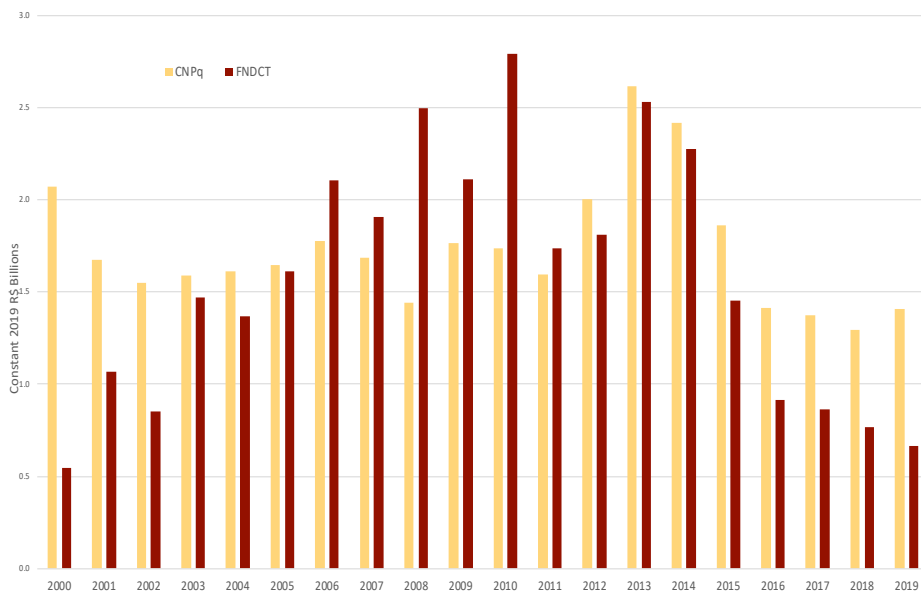


Figure 1. Budget Appropriations for the CNPq and FNDCT from 2000 to 2019 (in constant 2019 R\$ Billion Reais). Source: Integrated System of Planning and Budget – Ministry of Economy

In summary, as the 2010-decade ends, budget appropriations for the main sources of research and innovation funding in Brazil (FNDCT and CNPq) are at the same level they were in the early 2000s and the MCTIC budget as a whole has returned to levels equivalent to those of 2012.



What could be the consequences of this budget downsizing? The FNDCT is the main source of funding for scientific and technological research and innovation projects in the country and became even more important in the 2000s, as it replaced other programs of the former Ministry of Science and Technology. Its eventual collapse implies that a Brazilian researcher investigating new treatments for cancer or dengue, for example, has no means to fund their project other than state-level research agencies, such as Fapesp in São Paulo. If the researcher is a university professor or research institute researcher, their salary is likely to continue to be paid. However, research requires other expenses, such as with equipment and research assistants, commonly paid for with federal research grants, which are ceasing to exist.

Notes

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