ARTICLES

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Budget execution during the pandemic and the future of health public funding

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Abstract

The pandemic struck Brazil while a reform agenda centered on austerity and reduction of the State's role in the economy was being put in place. Inasmuch as this was an exceptional context, the 2020 health budget space was expanded. This heightened the need to review the health funding mechanisms for the coming years. The first aim of this paper is to assess the extraordinary health expenditure during the pandemic, drawing on the Union budget. The budgetary process was found to be slow, which may have hindered the combat against the pandemic. The second aim of this paper is to evaluate the future of public health funding in Brazil. After analyzing the former norms for the floor of public health expenditure of the national administration, a rule of growth is proposed to eliminate its pro-cyclic characteristics and make it compatible with the needs of the Brazilian public health.

Keywords: Covid-19. Health Economic-Industrial Complex (HEIC). Unified Health System (SUS). Health Funding. Fiscal Norm.

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Introduction

The pandemic hit Brazil while a reform agenda centered on austerity and the reduction of the role of the State in the economy was being put in place. The concrete reality imposed a change in economic policy path and changed the fiscal debate in Brazil. The crisis postponed the debate about the reforms and created an "almost consensus state" among the economists. They believed that the expenditure with health, social welfare, and companies and worker support must be increased. Despite the post-pandemic period's demanding a political support environment to increase public health funding, the economic and political horizons point to resuming the fiscal austerity agenda. This poses challenges to funding the Unified Health System (SUS).

Fighting the pandemic also showed that the increase in the public health expenditure against the background of a pandemic and the need of specific equipment may affect local productivity fragilities and cause system vulnerability, high importing costs and "externalize" the SUS effective demand potential. This article is funded by Fiocruz as part of the project "Challenges for the Unified Health System (SUS) in the national and global context of social, economic, and technological change - HEIC 4.0."

This article proposes two aims that include funding SUS from circumstantial and structural perspectives. This text has two aims. The first one is to assess the extraordinary health expenditure during the pandemic based on the Union budget. The slow budget process has been an obstacle to fighting the pandemic. The second aim is to reflect upon the future of public health to funding from the minimum health expenditure rules and the Union budget evolution in the past two decades. The desired increase of the health public expenditure contradicts the current fiscal Brazilian framework. This is particularly found in Constitutional Amendment 95 (CA95), which must be reviewed regarding the primary expense increase rule and the minimum health public Union expenditure. Moreover, the old minimum public health expenditure rules are analyzed. A rule for the increase in the public health expenditure is proposed for public debate. This rule would eliminate the pro-cyclic characteristic of the health budget and enables more planning options

to it.

1. Budget execution during the fight against the pandemic

Soon after the World Health Organization (WHO) statement acknowledging the pandemic and the national emergency declaration, Law no. 13979 was enacted on February 6th, 2020, which coordinated the sanitary measures to manage the Covid-19 pandemic in Brazil. On March 20th, the National Congress acknowledged the calamity to enact the exceptional regime as permitted in the Fiscal Responsibility Law (Pinto; Afonso, 2020).

Between February 7th and August 16th, 2020, 30 extraordinary credit provisional decrees were made. They totaled R$ 472.2 billion in authorized budget appropriation and R$ 172.6 billion in cancelled allocation.[1] Consequently, R$ 299.6 billion amounts for the new credit, and the remaining value is budget rearrangement. The latter corresponds to funds that were taken from other areas to be invested in managing the pandemic.

In the current allocation, the three highest function funds are (R$ 312 billion), Welfare, (R$149.9 billion), Special Charges, and Health (42 billion). As for the cancelled allocation, the three functions from where the largest budget rearrangement occurred were R$ 164.4 billion in Special Charges; R$ 5.6 billion in Health; and R$ 941.2 million in Education.

In the budgetary action analysis of the cancelled allocation, the R$ 164-billion sum is linked to internal federal public debt service action; R$ 3.3 billion is linked to the temporary increment for basic health care as per goal reached; and R$ 2.3 billion is linked to temporary increment for health medium and high complexity (MHC) as per goal reached. That is, R$ 5.6 billion were redirected from other health budget actions to manage Covid-19. But this did not mean that new funds were actually allocated to strengthen that area.

1 A cancelled allocation is the budget appropriation that had been approved in the Annual Budget Law (ABL) for an action and was cancelled/redirected to another action via additional credit. This may be supplementary, special, or extraordinary.

In the budgetary action analysis of the authorized allocation, there were ten main budgetary actions allocated to manage the pandemic. Of these, six actions presented implementation equal to or below 50% even six months the Public Calamity Decree and the Law no. 13979/2020 were enacted. This law provides for the public emergency health measures of international importance due to Covid-19. In this scenario, there were more than 107,000 deaths, and over 3.3 confirmed cases due to the pandemic in the country (Table 1).

Table 1 - Authorized, paid allocation and percentage of execution by budgetary action of extraordinary credits to combat Covid-19 until July 31st, 2020

Budget action	Authorized Payment	Paid	% Executed
00S4 – Emergency social protection aid for vulnerable people	R$ 254.2 billion	R$ 167.6 billion	66%
Financial assistance to states, FD and municipalities related to the federal program to combat Covid-19	R$ 60.1 billion	R$ 45.1 billion	75%
21C2 – Emergency benefit for maintaining employment and income	R$ 51.6 billion	R$ 20.0 billion	39%
21C0 – Coping with a public health emergency of international importance	R$ 46.7 billion	R$ 23.1 billion	50%
00S5 – Grant of financing for payroll payment	R$ 34 billion	R$ 3.9 billion	11%
00S3 – Financial assistance to states, DF and municipalities to compensate for the negative nominal variation in resources transferred by the participation fund	R$ 16 billion	R$ 9.8 billion	61%
8442 – Transfer of income directly to families in conditions of poverty and extreme poverty	R$ 3 billion	R$ 369.2 million	12%
00NY – Transfer of resources to the energy development account	R$ 900 million	R$ 900 million	100%

Budget action	Authorized Payment	Paid	% Executed
20TP – Civil assets of the Union	R$ 320 million	R$ 7.7 million	24%
00EE – Payment of quotas in the operations guarantee fund for the support Program for Micro and Small Companies (Pronampe)	R$ 20 billion	R$ 5 billion	25%

Source: IFI, Extraordinary credit panel (data extracted on Aug. 16th, 2020). Authors' elaboration.

Two situations deserve highlight: the paid value of the budget funds that were to be redirected to the states, municipalities and the FD by the union was still 61%, and the (already low) 50%-value of budget appropriation to manage the pandemic. After analyzing the health budgetary action, 21CO, it can be noticed how slow the government was in facing the pandemic while granting funds monthly. Even though the public calamity decree has been enacted in February, it was only in April when larger fund volumes were implemented. In May, July, and August, R$ 92 million, R$ 1.9 billion, and 18 million, respectively, were cancelled in the 21CO action. Of the R$ 48 billion that were made available as extraordinary credit until August 16th, 2020, only R$ 24 billion of them (50%) were paid until now (Table 2).

Table 2 - Authorized, paid and canceled allocation of resources for action 21CO – Coping with the public health emergency of international importance, per month, until August 16th, 2020

Month	Extraordinary credits	Budget allocation canceled	Committed Value	Amount paid
February	11,287,803.00	0.00	1,411,586.83	131,710.50
March	5,481,795,979.00	0.00	1,473,772,020.89	1,038,278,613.16
April	17,847,197,150.00	0.00	7,760,298,563.97	4,753,937,548.93
May	16,486,437,095.00	-92,387,942.00	4,993,152,760.36	4,437,483,044.40

Month	Extraordinary credits	Budget allocation canceled	Committed Value	Amount paid
June	4,769,224,000.00	0.00	2,578,032,339.60	4,071,553,509.82
July	2,203,852,164.00	-1,921,613,141.99	15,762,355,422.71	7,350,839,779.42
August	2,012,960,005.00	-18,000,000.00	-917,722,284.94	3,164,777,295.51
Total	**48,812,754,196.00**	**-2,032,001,083.99**	**31,651,300,409.42**	**24,817,001,501.75**

Source: SigaBrasil (data extracted on Aug. 16th, 2020). Authors' elaboration.

Table 3 shows the budget appropriation of the Ministry of Science, Technology, Innovation, and Communications (MSTIC) The MSTIC deserves highlight because the research and development stage takes place prior to the industrial production stage. Both of them are intrinsically connected, especially in the health area, where there are frequent challenges and innovations. In the pandemic case, innovation, research, and production must be quickly leveraged. Funds for expanding the molecular tests at Bio-Manguinhos are also included in the MSTIC budgetary unit. Nonetheless, their participation is less relevant than the values allocated in the Health Ministry (HM) budget.

There was no budget appropriation with the Covid-19 marker for the Ministry of Industry, Foreign Trade, and Services (MIFTS), which is now placed within the Ministry of Economy superstructure. Of the three budgetary actions directed to research and development to manage Covid-19, all of them are below 50% of budgetary execution. The test innovation action had zero implementation despite the high demand for tests in Brazil, even by symptomatic health professionals who had not been tested.

Table 3 - Authorized, committed and paid budget allocation for MCTIC to face the public health emergency with extraordinary credits until May 25th, 2020

Budget unit	Action	Budget plan	Authorized value	Committed value	Amount paid
Ministry of Science Technology, Innovations and Communications	21CO - Coping with a public health emergency of international importance	Research and development in the areas of biotechnology and health	75,000,000	22,647,329	11,426,691
		Clinical drug trials and structuring of higher biosafety level laboratories	45,000,000	45,000,000	45,000,000
	20V6 - Promotion of research and development aimed at innovation	Covid-19	131,935	131,935	43,500
National Fund for Scientific and Technological Development	21CO - Coping with a public health emergency of international importance	Covid-19	100,000,000	98,028,045	63,634,290
		Development and scaling of production at Biomanguinhos	5,500,000	0	0
		Expansion of sample processing capacity in the public network	65,200,000	32,499,990	32,499,990

Budget unit	Action	Budget plan	Authorized value	Committed value	Amount paid
National Fund for Scientific and Technological Development	21CO - Coping with a public health emergency of international importance	Development of improvements in molecular tests and new tests	5,800,000	5,800,000	5,800,000
		Development of innovative or low-cost solutions for diagnostic kits	50,000,000	0	0
		Development of innovative or low-cost solutions for mechanical respirators	100,000,000	3,000,000	0
TOTAL			**452,881,935**	**84,069,994**	**0**

Source: Câmara do Deputados. Available: https://www2.camara.leg.br/ig-orcamento/. Data extracted on: Aug. 16th, 2020. Authors' elaboration.

The slowness in the budgetary execution of federal funds to manage the Covid-19 pandemic can be seen in a detailed analysis conducted for the HM. This worsened the structural SUS funding issues.

The authorized value is only R$ 40.8 billion. This is not enough for a country that is already lacking Covid beds in several municipalities and states. Of the budget authorized six months prior, only 66% of it were implemented by the HM (Table 4).

Table 4 - Authorized, committed and paid budget allocation for the Ministry of Health to face the public health emergency

Budget unit	Government action	Authorized value	Committed value	Amount paid
36201 – Oswaldo Cruz Foundation	21CO - Coping with a public health emergency of international importance	2,728,160,005	425,316,029	243,785,769
36901 – National Fund of health		37,753,948,096	26,151,813,262	8,994,927,921
	20TP – Civil assets of the Union	320,112,746	320,112,746	17,839,644,720
	212H – Maintenance of management contracts with Social Organizations	20,000,000	20,000,000	0
	212B – Mandatory benefits for civil servants, employees, military personnel	18,147,908	18,147,908	223,046
Total		**40,840,368,755**		**27,078,581,456**

Source: Câmara do Deputados. Available: https://www2.camara.leg.br/ig-orcamento/. Data extracted on: Aug. 16th, 2020. Authors' elaboration.

Such slowness in budgetary execution was also highlighted by the National Health Council. Only 37% of the value authorized for health were implemented until June 3rd, 2020. They also state that the HM has nearly R$ 21.5 billion to (i) transfer it to the states/FD and municipalities and (ii) apply directly through several purchases to fight Covid-19 (Funcia; Ocké-Reis; Benevides, 2020).

When the Ministry of Science and Technology data are compared with the Ministry of Health ones, it can be found that there are no detailed data in the

budgetary plans (BP), which makes it hard to fully understand where the health budget is being executed. This situation indicates a need for greater transparency of the budgetary information regarding the HM.

There is a consensus, even on a legal level, in which fiscal rules do not impede increases in expenditure and debts to tackle the calamity. Thus, there must be an urgent technical rational to prioritize the Covid-19 expenditure effectively and concretely, as well as to protect the state and municipality finances (Pinto; Afonso, 2020).

The budgetary execution of the budget transfers to manage Covid-19 for states, the Federal District, and municipalities was slow. Moreover, the Union delayed Bill 39/2020 in four months since the public calamity was declared. It regulates the revenue recovery of the federation entities because of the sharp decrease in revenues.

This particular delay might have occurred due to a federative articulation difficulty in the political-institutional context of the pandemic. This was found in tensions in the relation between the federal government with states and municipalities regarding the social isolation measures. This was aggravated by the fact that the specific monetary policy instruments, which enable fiscal policy expansion, are Union-exclusive.

2. The Union health expenditure in the past two decades and fiscal rules

In the period 2000-2019, the country had three different rules to calculate the minimum value to be invested in actions and health public services, which is also known as the minimum health expenditure. Up to 2012, there was no fund binding for the Union public health expenditure. CA29/2000 established fund binding for states and municipalities, but in the Union case, its establishing would surface later, via a Supplementary Law. (Guidolin, 2019, p. 23).

In 2012, SL141/2012 established the concept of Actions and Public Health services (Asps) and determined that the states should invest 12% of their tax revenues and constitutional and legal transfers to guarantee the people's right

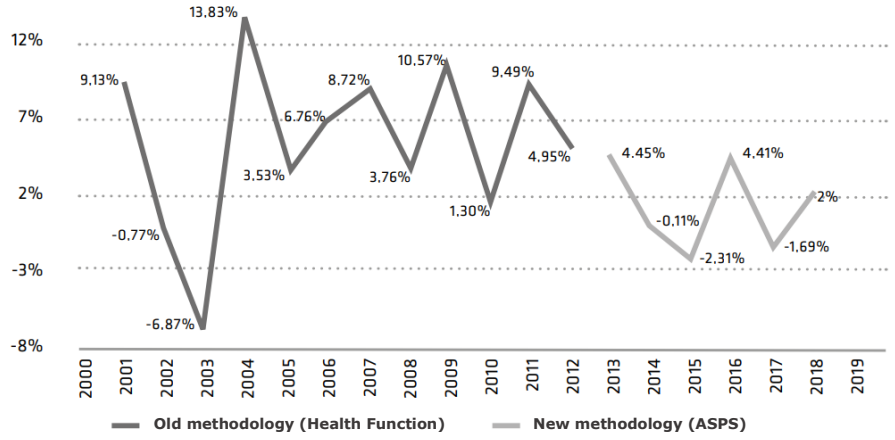
to health; the municipalities should invest 15%; and the Union should invest the previous year's sum adjusted for the nominal variation of the gross domestic product (GDP).

CA86/2015 determined that the Union should invest a minimum of 15% of their current net income (CNI) in health. However, there must be a scaling-up throughout five years, which would start at 13.2% in 2016. Because of the scaling-up and the minimum health expenditure reductive effect in 2016, social movements and political parties that defended SUS filed a Direct Action for the Declaration of Unconstitutionality (ADI) no. 5595/2016. On August 31st, 2017, Federal Supreme Court (FSC) minister Ricardo Lewandowski granted an injunction suspending the effects of two CA86 articles that treated the scaling-up and insertion of royalties to calculate the minimum health expenditure to be allocated (DAVID *et al*., 2020, p. 18).

The third rule is CA95/2016, also known as Expenditure Cap, which froze the primary expenses in real terms for 20 years. There can only be changes in adjustment for inflation after ten years. Besides, it reestablished the minimum health expenditure by disassociating it from the current CNI and defining the 2017 expenditure as minimum, as marked up by inflation. That is, the minimum health expenditure will be frozen on the 2017 level (Rossi; Dweck, 2016).

Graph 1 shows that between 2000 and 2019, there is a trend of decrease in the Union health expenditure growth. This can be explained by variations in economic growth and public revenues, the definitions of budgetary priorities and political decisions regarding tax adjustment. Between 2000 and 2012, the Union health public expenditure grew 5.4% per year on average. This rate was higher than the average annual economic growth of that period, 3.6%. In the years 2014-2019, the expenditure growth was 1% per year, and the economic growth was negative, equaling 0.4% per year.

Graph 1 - Annual variation of the Union health real expenditure, 2000-2019, Brazil[2]



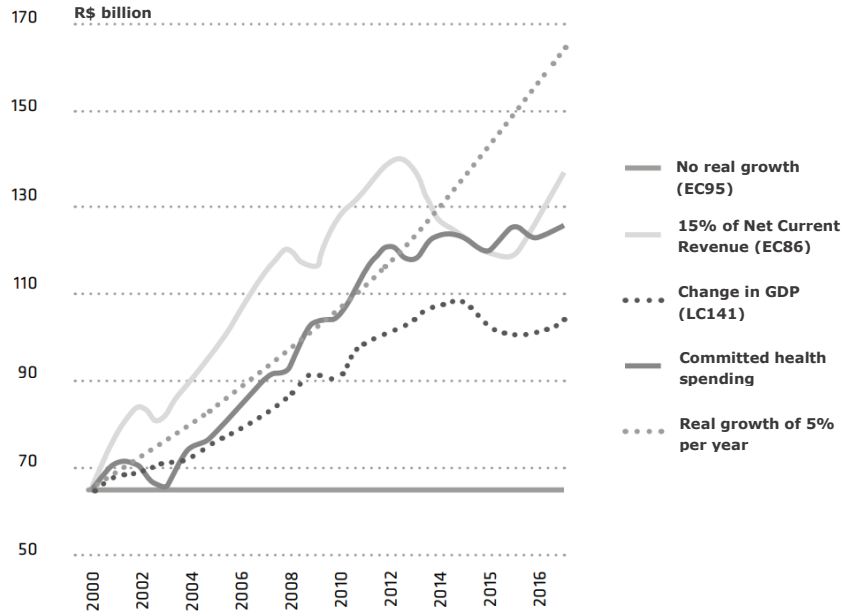
Source: SIOP (2020). Authors' elaboration.

Graph 2 presents a situation describing what would the minimum public health expenditure would be like in Brazil in 2019, in accordance with different rules for the past 20 years and compared with the evolution of the real health expenditure. The first line simulates zero real growth of public expenditure, as exemplified in CA95; the second line represents a 15%-fund binding simulation with the current net income according to CA86; the third line represents a fund binding simulation with GDP variation, such as SL141; the fourth line represents a simulation of a simple rule of real expenditure growth of 5% per year.

2 Methodological notes: The historic series assesses the implemented budget variation in the health function by the Union between 2000 and 2012, as well as the Actions and Health Public Services (Asps) between 2013 and 2019. This series starts in 2000 due to the data availability in the Public Budget Information System (Siop). And the change in function 10-health for use identifier 6 - Asps originates from Supplementary Law 141/2012, which defined what actually health expenditure is and determined the calculation criteria for the minimum to be allocated in health for each federation entity.

This simulation enables one to assess the advantages and disadvantages of the minimum public health expenditure rules. This could be useful for a needed debate about how to reposition public health as a national priority.

Graph 2 - Expenditure implemented in health and a simulation of what the minimum health expenditure would be considering the different rules adopted as of 2001 (real values, 2019 prices)[3]



Source: Siop, 2020; Tesouro Transparente, 2020; IBGE, 2020. Authors' elaboration.

3 These calculations consider the 2000 health budget with 2019 prices. After this year, a zero real growth was used to simulate a rule that is similar to CA95. This growth was in accordance with last year's real GDP to simulate a rule similar to SL141 and a 5%-real growth per year for a hypothetic rule. The rule similar to CA86 is calculated from each year's CNI brought at 2019 prices, CPI considered. The "implemented health expenditure" considers the "health function" until 2012 and as of 2013, "Asps", based on SL 141/2012.

The simulation using zero real growth assesses the 2019 minimum health expenditure based on the 2000 implemented value that was updated by inflation only (Consumer Price Index - CPI). That is, a real minimum freeze equaling R$ 65 billion, 2019 prices considered. If the zero growth rule had been in force since 2000, the minimum value for funding health in 2019 would have been R$ 59 billion smaller than the value effectively implemented by the Union in the same year, R$ 124 billion. This simulation presents more evidence of how inadequate CA95 is for funding health needs in Brazil. They require a decrease in the Union per capita public expenditure due to a context of an aging population, as discussed by Vieira e Benevides (2016).

Had the SA86 rule been applied in 2001, the health allocation would have increased immediately, since that year's budget accounted for nearly 14% of the CNI. Graph 2 shows that this rule dramatically increases the health expenditure in the economic growth periods. However, the decline is more marked at the deceleration times. This is due to the fact that the income elasticity in relation to the GDP is greater than 1. Moreover, the health expenditure is also subject to fiscal policies due to revenues, as it occurred in Dilma's tenure. She implemented a significant fiscal relaxation in the years 2013 and 2014.

A rule that links allocation to revenue has the advantage of allowing the health budget to use revenue gains that do not come from economic growth only. They also come from formalizing processes that expanded the collection base or even increases in the tax burden. On the other hand, this rule gives the health budget a highly pro-cyclic character. In crisis moments, it may reduce it drastically, as well as in case of tax reforms that reduce the Union collection.

Associating this to the variation in GDP is pro-cyclic, just as the association with revenue, yet in a smaller degree. This is because the budget reference is last year's GDP, and the GDP variation is usually smaller than the revenue variation.

The rule that links health expenditure to the previous year's economic growth shows that the budget would be below what was actually implemented. In 2019, the difference would be R$ 22 billion. Actually, this rule does not attribute the necessary priority to health expenditure, since it

maintains it in a fixed proportion in relation to the GDP. At crisis moments, the rule is extremely perverse, as it may reduce the sum allocated to health in real terms at a moment associated to a greater social vulnerability and demand for public health.

Finally, the 5%-proposed linear growth rule proposed shows a growth similar to the expenditure actually implemented until 2012. However, it signals what it would have been if such trend had continued. In 2019 the public budget would be R$ 163 billion, which is R$ 39 billion higher compared to the Union health expenditure in the same year.

This rule may offer a greater planning capacity to SUS to expand its service provision capacity and quality and enable it to invest in science and technology. The expenditure growth rule may pursue specific medium and long-term targets, such as achieving a certain level for the relation between health and GDP and target achievement indicators regarding the right to health. Besides, this rule is not pro-cyclic, and it contributes to maintain and continue improvements in public health even at crisis times.

Evidently, at crisis and decline in collection times, the health expenditure growth would increase the fiscal deficit. Nonetheless, there are some aspects to justify maintaining the health expenditure growth despite the being funded by deficits. Firstly, maintaining the health expenditure would work as an aggregate demand anti-cyclic element. This would reduce economic deceleration. Especially, the SUS purchasing power is an important source for the supply chain and job creation, given the importance of HEIC. Secondly, at crisis times, the health expenditure is supposed to increase, not the other way around. This is because economic crises tend to increase diseases due to an expansion of poverty and violence, psychological factor, and a reduction in the demand for private health, which overwhelms the public system. The growth in the public expenditure at those times preserves rights and avoids future economic damages, improving people's quality of living and the system productivity (Guidolin, 2019, p. 58).

Finally, the pandemic context heightens how important health public expenditure is, as well as how incompatible its growth is with the current fiscal structure. The current minimum health expenditure freeze is perverse and incompatible with the Brazilian health needs. The previous rules, which

link the expenditure to GDP and revenue, seem to be inadequate to increase the health expenditure in crisis contexts. Thus, we must resume this debate and formulate proposals. This article aimed to present a health expenditure annual rule.

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