Battling the true enemy

A comparative analysis of government spending on health and military in the context of a health crisis

María Pía Devoto and Alejandra Otamendi

"We are at war." These were the words pronounced by Emmanuel Macron on March 16 when announcing the measures taken to tackle COVID 19. Faced with this logic, under which COVID 19 is the enemy to "fight", it is reasonable for governments to allocate all resources necessary to confront and defeat it. Indeed, in the face of the ever-scarce public resources, in order to preserve the health and life of citizens, governments would be expected to redirect their budgets from other areas, e.g., military, towards the sanitary system when facing a health crisis.

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For this task, we have based our analysis on countries which have been most affected by different epidemics since the beginning of this century. Thus, we will examine China's actions in relation to SARS (Acute Breathing Syndrome) in the years 2002-2003; measures taken by the United States and Mexico in regards to influenza A H1-N1 during the period 2009-2010; and Guinea, Liberia and Sierra Leone's battle against Ebola between 2014 and 2016.

Indeed and as is notorious, the 21st century - despite its brief existence - has already witnessed all the aforementioned epidemics, some of them limited to certain regions, such as SARS in Asia or Ebola in West Africa, and others far-reaching and global, like influenza A.

Generally, and according to a 2019 World Health Organization (WHO) report covering the period 2000-2016, the world has seen a growth in public health spending, showing a raise in government financing and a fall in external aid; such an increase may be partially explained by an attempt to achieve the Sustainable Development Goals (SDGs), although this still would not be enough for the entire primary care.

As to military expenditure worldwide, it was estimated at 1,822 trillion dollars in 2018, with a growth of 5.4% since 2009. The 5 countries with the largest investment in this area in recent years have been the United States, China, Saudi Arabia, Russia and India, even though some variations have been observed since 2000, driven by particular regional contexts and oil prices.

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1 With the collaboration of Candelaria Lopez and Milena Balardini.


China and SARS

SARS was first detected in China in November 2002, more specifically in the Guangdong province. And in March 2003, when the WHO issued a global alert, the virus had already spread to at least Hong Kong, Taiwan, Canada, Singapore, the United States, and Vietnam. Around 8,000 infections and 800 deaths were registered worldwide, China being the most affected by the virus, with 5,327 cases and 349 deaths (WHO, 2020).

When we take a look at the behavior of this Asian country with regards to its military and public health expenditures, both numbers have a sustained growth trend, observed already before the pandemic, and remaining steady both during and after the outbreak. In this sense, the pandemic does not seem to have necessarily forced the reduction of military spending in pursuit of health; but rather both budgets have increased, although the rise in military expenditure was less pronounced.

As a matter of fact, from 2000 to 2017 both expenses were multiplied at least eight-fold (805% for military and 941% for health), probably due to China's economic growth during that period despite the pandemic. It is worth noting that the source of military expenditure, SIPRI, considers China's figures for military expenditure as an estimate, that is, numbers may be even higher (See Table 1).

![Military and health expenditure in China, 2000-2017](image)

Source: own compilation based on data estimates by SIPRI for military expenditures and WHO figures for health expenditures, both expressed per capita in current USD.
Influenza A in North America

This epidemic began in North America in April 2009 and spread rapidly throughout the world: by June of that same year it was already seen in 74 countries.

The reported toll amounted to 18,500 deaths out of 1,632,710 confirmed cases, although the U.S. Centers for Disease Control and Prevention (CDCs) claim that the death rate was far higher than reported, as not all countries were able to accurately and dependably confirm the number of deaths caused by this strain⁴.

The countries which took the worst hit from this pandemic were the United States, Brazil and Mexico. And only in August 2010, the WHO was able to officially announce the end of the spread.

If we look into the case of the United States, we can see that the country’s health spending had been increasing steadily from 3% to 8%, even before the epidemic (which, on the other hand, would prove that such increase should not be attributed to the implementation of Obamacare, since the law that consecrated the act passed in 2010). Military expenditure also saw an upward trend, at least until and during 2011, unaffected by the 2009 pandemic. Only in 2012 to 2015 did these figures decrease, rising slightly towards the end of the period. This reduction since 2012 is probably due more to the withdrawal from Iraq beginning in 2011 as well as the greater deficit control and austerity policy adopted since that year (see Table 1). In any case, the US military expenditure continues to be the highest in the world, comfortably surpassing all nations below it.

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Source: own compilation based on data from SIPRI for military expenditures and WHO figures for health expenditures, both expressed per capita in current USD.

⁴ https://www.cdc.gov/flu/pandemic-resources/2009-h1n1-pandemic.html
In the case of Mexico, data shows something different: health spending increased immediately after the pandemic, after having just suffered cuts that same year (2009), remained on the rise until 2013, amounting to a total increase of 29%, and then fell again once the pandemic was at bay. On the other hand, military expenditure, which had increased sharply since 2006 with President Calderon’s declaration of “war on drugs”, remained relatively stable as soon as the health emergency was over and then began to see an increase as the country moved away from the outbreak. Indeed, if we take into account the same period from 2009 to 2013, military expenditure rose in percentage points over health spending, even though the country was going through an epidemic (35% vs. 29%) and the number grows even higher when considering the 2014 peak (see Table 1).

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Source: own compilation based on data from SIPRI for military expenditures and WHO figures for health expenditures, both expressed per capita in current USD.

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West Africa and Ebola

The first case of infection with the Ebola virus was reported in December 2013, in Guinea, and the disease quickly spread to neighboring countries due to weak health surveillance controls and poor health system infrastructure. Throughout its development, the epidemic spread to 7 countries in the region.

The total number of cases amounted to 28,616 and 11,325 deaths were recorded, the majority in Guinea, Sierra Leone and Liberia.

If we analyze Guinea’s per capita expenditures, after the pandemic military expenditure barely decreased (by 2.3% from 2013 to 2014), and then rose again in 2015 (9.7%). Meanwhile, health spending grew appreciably over a period of three years (just over 84%) mainly due to the foreign aid received by the country, but once the pandemic was well under control after 2015, health spending fell sharply through 2017 (at least 20%) (see Table 1).

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Source: own compilation based on data from SIPRI for military expenditures and WHO figures for health expenditures, both expressed per capita in current USD.

5 https://www.cdc.gov/vhf/ebola/history/2014-2016-outbreak/index.html

6 The evolution of military expenditure between 2000-2003 is unknown due to a lack of data in the SIPRI source. In any case, the Ebola epidemic was subsequent, thus making the available data useful for the comparative analysis of this report.
As for Sierra Leone, general health spending also escalated after the epidemic (the external aid component is also very strong), to the point of doubling in the immediately following year, later shrinking as time elapsed after overcoming the emergency until prior levels were attained. On the other hand, in military expenditure, a strong increase was observed the year immediately following the pandemic (2014), after which it was reduced to pre-pandemic levels (see Table 1).

Source: own compilation based on data from SIPRI for military expenditures and WHO figures for health expenditures, both expressed per capita in current USD.
Could we argue that something similar happened in Liberia when compared to other countries in the region affected by the Ebola virus? That is, health spending rose 29% between 2012 and 2015, year in which its peak was seen (although this is not attributed, in this particular case, to international aid), and then fell as time went by after the pandemic. As for military expenditure, figures had been experiencing a sharp rise before the pandemic, and declined after it (Table 1).

**Conclusions**

Comparing the budgetary behavior of different governments during and after the aforementioned health emergencies allows us to show how epidemics and pandemics require special attention from national states in the form of substantial decision-making when allocating budget items to face a crisis, above all in developing countries with unprepared health systems. This article looks into countries that widely differ from each other in terms of infrastructure, military capacity, technological development, and economic power, all of which can determine a nation’s response and action after an emergency. While countries such as China and the US grow in health spending progressively regardless of pandemics and epidemics, others like African countries do so in response to specific health emergencies, helped in part by international funding.
In the case of China, health and military expenditures hike as its economic situation improves, and exactly the same can be said of the United States. In this regard, it could be stated that the level of expenditure in the case of these two countries has not particularly been affected by the pandemics they've had to face so far this century, i.e., there have not been necessary cuts in military expenditure in order to cover health expenses.

For West African countries, the scenario is very different. Actually, in the three aforementioned African nations, health expenditure rose quite immediately after the pandemic, mainly due to international humanitarian aid (clearly reflected in Sierra Leone and to a lesser extent in Liberia) which dwindled as time went on. In all three cases, on the other hand, military expenditure fell substantially.

The epidemics discussed in this article reached a total of 10,616,464 infections and 30,625 deaths on record; as of May 9th of this year, the current pandemic has amounted to 4,276,959 cases and 514,638 deaths. Over the next few years, experts will need to study the comparative evolution in the levels of health and military expenditures in the most affected countries so far (United States, United Kingdom, Italy, France, Spain, Brazil), so as to adequately determine what was each nation’s budget response to a pandemic which was characterized, not only by Emmanuel Macron but also by other world leaders, as a "war".

In short, we could ask ourselves: Will the majority of countries finally make the decision to preserve the health and lives of their citizens by implementing adequate measures and long-term policies that not only protect them against a health emergency like the current one but provide them with adequate care permanently?

Although much of the world’s population would favor the first of these options, the history of our species seems to anticipate that this will not be the choice for most governments. However, it has been underlined in

“While countries such as China and the US grow in health spending progressively regardless of pandemics and epidemics, others like African countries do so in response to specific health emergencies”
invest excessively in armed military instead of allocating more abundant resources to health care and the protection of lives in these actual “wars”.
Table 1. Military and health expenditures by selected country, 2000-2017 (per capita in current USD)

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Source: own compilation based on data from SIPRI for military expenditures and WHO figures for health expenditures, both expressed per capita in current USD.

Note 1: yellow shows the year of each pandemic and the following year if the outbreak occurred at the end of the year.

Note 2: Military spending data according to SIPRI estimates appears in blue.