From Double Shock to Double Recovery –
Implications and Options for Health Financing in the Time of COVID-19

Christoph Kurowski, David Evans, Ajay Tandon, Patrick Hong-Vu Eoenou, Martin Schmidt, Alec Irwin, Jewelwayne Salcedo Cain, Eko Setyo Pambudi, and Iryna Postolovska

March 2021
Health, Nutrition and Population (HNP) Discussion Paper

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Abstract

The COVID-19 pandemic resulted in a double shock - health and economic. As of March 1, 2021, COVID-19 has cost more than 2.5 million lives and it triggered an economic recession that surpassed any economic downturn since World War II.

Almost all countries responded with rapid increases in government spending during 2020 to control the pandemic and protect people, jobs, and businesses. Despite an expected return to economic growth, the IMF projects government per capita spending to fall across all income groups in 2021 and 2022. This drop primarily reflects a reduction in the capacity of many governments to further accumulate and service public debt.

Part I of this paper explores the impact of this current macro-fiscal outlook on the three primary sources of health spending. Drawing on experiences from previous economic crises, scenario analyses suggest a fall in government per capita spending on health in 2021 and 2022 unless governments make bold choices to increase the share of health in general government spending. The projected drop in per capita government spending on health is expected to coincide with lower levels of household out-of-pocket spending on health and a possible decline in development assistance for health.

The projected decline in government per capita health spending would threaten a recovery from the health and economic shock. An end to the pandemic can only come through enhanced disease surveillance, strengthened delivery platforms and the roll out of COVID-19 vaccines. Reclaiming losses in progress toward universal health coverage (UHC) due to disruptions in the supply and demand for essential non-COVID-19 health services during the pandemic is vital for a sustainable and inclusive longer-term economic recovery.

Part II of the paper discusses policy options to meet the surging spending needs in health. These options encompass strategies to make fiscal adjustments work and channel funds where they are most needed as well as policies to stabilize the balance sheets of social health insurance schemes. The paper explains how the health sector can play an active role in expanding fiscal space, contributing to tax reforms, most importantly pro-health taxes, and mobilizing and absorbing external financing, including debt relief.
Recognizing that the quality of spending has implications for its quantity, part II also discusses the challenges and opportunities of the crisis to increase the equity and efficiency of health spending. These include issues of which expenditures to cut and which to protect, which emergency measure to roll back and which to roll out, as well as some of the most controversial trade-offs in health financing underscored by the crisis.

Countries did not choose COVID-19, but their leaders have policy choices in health financing that will impact the response to the pandemic, the capacity to get back on the path to UHC, and ultimately the strength of the recovery.

**Keywords:** Covid-19, economic crisis, health financing, equity

**Disclaimer:** The findings, interpretations and conclusions expressed in the paper are entirely those of the authors, and do not represent the views of the World Bank, its Executive Directors, or the countries they represent.

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ACKNOWLEDGEMENTS

The authors are grateful to the World Bank for publishing this report as an HNP Discussion Paper.

The paper was prepared under the overall guidance of HNP Global Director Muhamad Ali Pate. Carolyn Reynolds provided editorial support. Kalkidan Woldegiorgis, Jennifer Anderson, Ira Marina and Carmen del Rio helped with the production and logistics. Alexandra Humme and Rama George-Alleyne supported external communications.

We very much appreciate the thoughtful comments and suggestions on an earlier version of the paper from peer reviewers Paolo Belli, Doerte Doemeland, Toomas Palu, Umar Serajuddin, Owen K. Smith (all World Bank) and David Coady (IMF). We are thankful to Mercedes Garcia-Escribano and Zsusa Munkacsi from the IMF to facilitate access to the World Economic Outlook and Fiscal Monitor data.

The paper benefited from discussion of preliminary findings at three sessions of the 5th Annual Health Financing Forum and the IMF/WB Joint Work Program seminar on Meeting Health Spending Needs during a Prolonged Pandemic. Our special thanks to all panelists and discussants, including Miriam Ally, WB; David Amaglobelli, IMF; Helene Barroy, WHO; Mark Blecher, Chief Director at National Treasury of South Africa; Maura Francese, Assistant Director in the Structural Economic Analysis Department at Banca d’Italia; Oyebanji Filiani, Commissioner of Health and Human Services at Ekiti State, Nigeria; Tamar Gabunia, First Deputy Minister of Internally Displaced Persons from the Occupied Territories, Labor, Health and Social Affairs, Georgia, and Mthuli Ncube, Minister of Finance, Zimbabwe.

We are grateful for discussions of preliminary results in meetings with representatives from partner institutions of the Sustainable Health Financing Accelerator of the Global Action Plan, in sessions with members of the Community of Practice hosted by the WB/JLN/GFF COVID-19 Health Financing Resilience Program, and in meetings of the Data Working Group and the Coordination Team of the World Bank’s Health Financing Global Solutions Group.
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<th>Description</th>
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<tbody>
<tr>
<td>ACT-A</td>
<td>Access to COVID-19 Tools Accelerator</td>
</tr>
<tr>
<td>COVID</td>
<td>Corona Virus Disease</td>
</tr>
<tr>
<td>DAH</td>
<td>Development Assistance for Health</td>
</tr>
<tr>
<td>DSSI</td>
<td>The G20 Debt Service Suspension Initiative</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GFF</td>
<td>Global Financing Facility for Women, Children, and Adolescents</td>
</tr>
<tr>
<td>GGE</td>
<td>General Government Expenditure</td>
</tr>
<tr>
<td>GGR</td>
<td>General Government Revenue</td>
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<tr>
<td>GHE</td>
<td>Government Health Expenditure</td>
</tr>
<tr>
<td>HICs</td>
<td>High-Income Countries</td>
</tr>
<tr>
<td>HIPC</td>
<td>Heavily Indebted Poor Countries</td>
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<tr>
<td>HTA</td>
<td>Health Technology Assessments</td>
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<tr>
<td>ICU</td>
<td>Intensive Care Unit</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>JLN</td>
<td>Joint Learning Network</td>
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<td>LICs</td>
<td>Low-Income Countries</td>
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<tr>
<td>LMICs</td>
<td>Lower-Middle-Income Countries</td>
</tr>
<tr>
<td>MAMS</td>
<td>Maquette for Millennium Development Goals Simulations</td>
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<td>MDGs</td>
<td>Millennium Development Goals</td>
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<td>MDRI</td>
<td>Multilateral Debt Relief Initiatives</td>
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<tr>
<td>OECD</td>
<td>Organization for Economic Co-operation and Development</td>
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<tr>
<td>OOP</td>
<td>Out-Of-Pocket</td>
</tr>
<tr>
<td>PFM</td>
<td>Public Financial Management</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
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<tr>
<td>SHI</td>
<td>Social Health Insurance</td>
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<tr>
<td>UHC</td>
<td>Universal Health Coverage</td>
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<tr>
<td>UMICs</td>
<td>Upper Middle-Income Countries</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>WB</td>
<td>World Bank</td>
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<tr>
<td>WHO GHED</td>
<td>WHO Global Health Expenditure Database</td>
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<td>WHO</td>
<td>World Health Organization</td>
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INTRODUCTION

The COVID-19 (coronavirus) pandemic has hit most countries with a double shock – health and economic (Kurowski, Evans, et al. 2020). The first blow was the virus’s rapid spread, driving a steep rise in infections and deaths that forced governments to pump resources into outbreak control and critical care, while struggling to keep non-pandemic-related essential health services operational.

The second shock was a severe economic contraction. Most countries introduced mitigation and suppression policies to save lives and prevent health systems from reaching breaking point (IMF 2020a). Along with voluntary social distancing, these measures led to a sharp decline in local economic activity and output.

Even where the health impact of the pandemic has been limited, countries have faced reductions in national income due to factors such as the fall in international trade, reduced domestic and cross-border travel, including for tourism, declining commodity prices, dwindling remittances, and shrinking direct foreign investments. All but a handful of countries fell into recession in 2020 (IMF 2020a).

Government revenues dropped even faster than economic output. But, even as resources dried up, spending needs surged, also in non-health sectors, including for programs to protect the people, jobs, and firms most affected by lockdown measures and the decline in economic activity. With revenues falling and spending needs soaring, governments borrowed to finance their deficits. In many countries, public debt as a share of GDP has reached record levels (IMF 2020b).

Standing up to the double shock

Globally, the pandemic continues to cost lives and livelihoods. As of March 1, 2021, 223 countries or territories have reported over 113 million cases and over 2.5 million deaths among them (WHO 2021). Many countries initially succeeded in reducing transmission rates, yet a substantial number have faced subsequent waves requiring the re-imposition of mitigation and suppression measures.

While there is now some hope that the recently started deployment of vaccines will bring the pandemic under control, uncertainty persists about vaccine production capacities, distribution, the duration of protection, long-term safety, the evolution of the coronavirus, and the timelines for achieving herd immunity.

The global recession continues, too, despite many countries’ having relaxed their most restrictive control measures in mid-2020. Countries face disparate economic effects, depending on their macroeconomic and fiscal starting conditions, the local public-health response, and factors such as their relative economic dependence on tourism and trade. Considerable uncertainty, therefore, also remains about the economic outlook: in particular, how fast economic growth and government revenues will recover.

---

1 In many countries, the reported number of cases is unlikely to reflect the full scale of infections due to low testing rates.
2 The disease’s impact has varied across countries. Some face the second or even third wave of transmission, while other jurisdictions have maintained low levels since the initial outbreak. In a few settings, first cases have yet to be registered.
A different kind of crisis

Recent decades have seen a series of economic shocks that affected health financing in some countries and regions. These included the Latin American debt crisis of the 1980s and 1990s, the Asian financial crisis of 1997, and the global financial crisis of 2007-8, among others.

The current economic crisis differs in important ways from earlier global recessions implying the need for a different health financing response to those of the past. First, the current crisis was triggered by a pandemic. With the exception of the regional economic contraction associated with West Africa’s 2014-2016 Ebola outbreak, which was limited to three countries, other recent recessions began with a financial or economic problem. Countries did not face the same immediate need to increase health spending because the impact on health came later, through increases in unemployment and poverty and reductions in governments’ spending capacity. As a result, in other recent economic downturns, government health spending per capita fell with the declines in GDP per capita in the majority of countries (Maresso, et al. 2015) (Gottret, et al. 2009) (Musgrove 1987) (Hou, et al. 2013). During the current recession, in contrast, many governments immediately announced increases in their spending on health.

Another difference is that the current economic downturn affects virtually all countries, rich and poor. In contrast, the late-20th-century Latin American debt crisis, the 1997 Asian financial crisis, successive Ebola outbreaks in Sub-Saharan Africa led to major economic contractions only in parts of the world, and during the global financial crisis, most of the poorest economies did not fall into recession.

Goals and structure of the paper

Against this background, the purpose of this paper is to explore the implications of the COVID-19 crisis for health financing. The paper includes two main parts. Part I estimates the impact of COVID-19 on country health spending. It examines government spending, households’ out-of-pocket health payments, and external financing for health in lower-income settings. Because countries’ situations and policy choices are not uniform, it considers a range of different ways that the crisis may affect these components of health spending.

Part II identifies policy options to strengthen health financing in the context of COVID-19. It discusses policies that countries and their international partners can pursue to attain levels of health spending sufficient to control the pandemic; roll out vaccines; meet any backlog of postponed non-COVID health services; and progress toward universal health coverage (UHC). The analysis prioritizes policies that evidence suggests would improve the sustainability of health financing and strengthen its resilience to future shocks.

Health-spending scenarios

Estimates of the pandemic’s impact on government health spending in Part I encompass four different scenarios to reflect the range of options available to countries account in the face of so much uncertainty. The use of scenarios incorporates the experience of past economic shocks by considering the implications for health spending if countries respond in the same way now as in previous recessions. But scenario building also allows for other responses, where per capita government health spending increases in ways that were not typically seen during earlier economic crises, but that may be desirable or necessary in the context of COVID-19.
The scenarios and other analyses presented here draw on the most recent IMF projections of the pandemic’s macro-fiscal impact (IMF 2020c). Results are organized according to World Bank country-income groups, while also highlighting variation across countries within income groups.3

A living document with a focus on health spending

This is a living document. Estimates and policy options will be updated as new macroeconomic projections and information on country responses become available. The paper expands on related work to assess the short-term economic impact of COVID-19 on health spending in Asia and draws on a previous analysis of the historical drivers of government health spending (Tandon, Roubal, et al. 2020) (Tandon, Cain, et al. 2018).

The paper does not speculate on the possible impact of changes in spending on the quantity and quality of service outputs and financial protection and health outcomes. The focus is only on the impact of the crisis on health spending – recognizing that spending is just the beginning of the process of protecting and improving the health of people, yet, the relationship between spending, outputs and outcomes complex, and both the production and demand for health services likely to change during crisis.4

3. All of the reported averages are unweighted. The average trends observed for income groups are with few exceptions similar to those observed for World Bank regions. A subsequent paper will further explore regional and cross-country variation, focusing on pre-pandemic vulnerabilities to the health and economic shocks.
4. The relationship between spending, service coverage, financial protection and health outcomes is non-linear and complex, with additional determinants outside the health sector (e.g., education, safe water, transport, etc.). Moreover, some of the determinants and dynamics are likely to have changed during the crisis, for example, the supply and demand for services, but also outside the health sector, most importantly, food security.
PART I: THE IMPACT OF THE COVID-19 CRISIS ON HEALTH SPENDING

Part I of this paper aims to describe the main channels through which the COVID-19 crisis will affect countries’ health spending and to estimate the pandemic’s likely health-spending impacts under several scenarios. To provide context, a first subsection summarizes recent IMF macro-economic projections for 2020 – 2025 highlighting the pandemic’s impact on economic growth, poverty, government revenues, and government spending. The analysis then hones in on how COVID-19 may influence the main components of countries’ health spending. It presents four possible scenarios for impacts on government health expenditure. It then estimates effects on household out-of-pocket health payments. Part I concludes with an examination of external financing for health in low- and lower-middle income countries.

The latest IMF country level macro-economic projections may prove optimistic and with that also some of the projections for government spending on health produced for this report. The IMF released the latest country-level projections in October 2020, that is, before the most recent set of lockdowns imposed in many countries to address second waves of the pandemic. In January 2021, the World Bank provided an update of its economic growth forecast for a subset of 129 countries included in the IMF dataset (World Bank 2021a). In comparison to the earlier IMF data, the World Bank projections suggest slightly lower growth rates for 2021. Hence, though concerning, some of the projections for government health spending presented later in part I may also prove optimistic.

COVID-19’S MACROECONOMIC IMPACT

The IMF macroeconomic data for the period 2020 to 2025 provide important context for understanding how the pandemic may affect countries’ health-financing needs and options in the coming years. The IMF projections highlight implications for economic growth and poverty, government revenues, and government spending—domains with central importance for health financing.

Economic growth and poverty: Damage on an unprecedented scale

COVID-19 has led to a deep global economic contraction in 2020. As many large economies adopted aggressive mitigation and suppression measures in early 2020, the global economy slowed, affecting all countries through subsequent declines in trade, tourism, commodity prices, foreign direct investment, and remittances. As a result, the IMF estimates that economies contracted in per capita terms in 2020 by 6.4 percent, on average (Figure 1).
Harsh impacts on the poor and vulnerable

The COVID-19 crisis is also expected to result in a sharp increase in extreme poverty. Estimates suggest that, in 2020 alone, between 119 and 124 million people will be pushed into extreme poverty, the majority in Sub-Saharan Africa and South Asia (World Bank 2020a) (Lakner, et al. 2021). After years of continuous progress in poverty reduction, this would return global poverty rates to levels observed in 2015. Even with a return to economic growth, additional people will still be pushed into extreme poverty in 2021 – estimated at between 24 and 39 million. Simulations suggest that COVID-19 has put the 2030 target of 3 percent global poverty even further out of reach. The COVID-19 crisis is also expected to have a disproportionate impact on vulnerable populations more broadly, with the result that income inequality is predicted to increase and shared prosperity to decline (World Bank 2020a).

Disparate effects across countries

The projected economic impacts of the COVID-19 crisis are not uniform across countries in each income group. On the one hand, countries have been affected differently by the virus, and their mitigation and suppression measures have varied in scope and duration. On the other hand, countries’ macroeconomic and fiscal starting points also differed substantially. As a result, there is considerable variation in the projected changes in GDP per capita across countries, illustrated in Map 1. Only a small number of LMICs (e.g., Bangladesh, Egypt, Vietnam, and Myanmar) and upper middle-income countries (UMICs) (e.g.,
China) are expected to maintain positive economic growth in 2020, though at lower rates than before the pandemic.

Map 1. Projected change in GDP per capita, 2020

![Map showing projected change in GDP per capita, 2020](image)

*Source:* Data from IMF, World Economic Outlook, October 2020

In contrast to the small set of economies maintaining positive growth, some others have been hit particularly hard. For example, India and Zimbabwe are expected to experience declines in GDP per capita of more than 10 percent in 2020, far exceeding the average fall in the LMIC group. Declines of more than 10 percent are also expected for Botswana and Peru among UMICs, and for Italy, Spain, and the United Kingdom among high-income countries (HICs).

**Return to economic growth**

In its latest forecast, the IMF expects global economic growth to recommence in 2021, although the analysts highlight the inherent uncertainty around the public-health and economic factors that will determine the timing, nature, and extent of the economic rebound. Moreover, these projections were generated before the latest round of COVID-19 mitigation and suppression measures (IMF 2020c).

Any rebound in growth would begin from the low base of 2020, hence, it would take GDP per capita until 2023 to reach pre-COVID-19 levels globally. Among country income groups, low-income countries (LiCs)
would return to pre-crisis growth levels slightly earlier – in 2022 – but all other income groups would only achieve this milestone in 2023.

There is considerable variation across countries within each income group in the projected time it will take them to return to pre-COVID-19 levels (2019) of GDP per capita. While 4 of the 25 LICs in the analysis would return to 2019 levels during 2021, another 4 would not reach pre-COVID-19 levels until 2025 or beyond, for example. Of the 45 LMICs for which GDP per capita is reported as falling in 2020, 10 would bounce back to 2019 levels in 2021, 21 would have bounced back by 2025, but another 14 would not have bounced back even by 2025. The slow return to 2019 levels is even more pronounced in UMICs and HICs, with only 8 of the 104 reaching this during 2021, while 24 would still have per capita GDPS below 2019 levels at the end of 2025.

**Government revenue takes a lasting blow**

In 2020, government revenue (including grants) per capita is projected to decline on average in all country income groups before rising again in subsequent years (Table 1a). Importantly, government revenue is not expected to rebound to pre-pandemic levels in low-income countries until 2022, while in upper-middle-income countries and high-income countries, this will not occur until 2024, and in lower-middle income countries not even by 2025. Projections of government revenue as a share of GDP follow similar patterns (Table 1b).

Table 1.b. Projected shares of government revenue in GDP by country income group, 2019-2015

<table>
<thead>
<tr>
<th>Country groups</th>
<th>N</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
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<tbody>
<tr>
<td>All countries</td>
<td>178</td>
<td>30.6</td>
<td>29.2</td>
<td>29.4</td>
<td>29.7</td>
<td>29.8</td>
<td>29.7</td>
<td>29.6</td>
</tr>
<tr>
<td>Low income</td>
<td>25</td>
<td>20.2</td>
<td>19.9</td>
<td>20.3</td>
<td>20.8</td>
<td>21.1</td>
<td>21.1</td>
<td>21.2</td>
</tr>
<tr>
<td>Lower middle income</td>
<td>49</td>
<td>26.9</td>
<td>24.8</td>
<td>24.9</td>
<td>25.0</td>
<td>25.2</td>
<td>25.0</td>
<td>25.1</td>
</tr>
<tr>
<td>Upper middle income</td>
<td>46</td>
<td>30.0</td>
<td>28.1</td>
<td>28.6</td>
<td>28.7</td>
<td>28.9</td>
<td>28.7</td>
<td>28.6</td>
</tr>
<tr>
<td>High income</td>
<td>58</td>
<td>38.8</td>
<td>37.8</td>
<td>37.9</td>
<td>38.1</td>
<td>38.2</td>
<td>38.0</td>
<td>37.8</td>
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Source: IMF, World Economic Outlook, October 2020

These declines will have their harshest effects in a subset of countries where the share of government revenues in GDP was relatively low to begin with (Map 2). In 2019, the average share of government revenue in GDP was 20.2 percent among all low-income countries and 26.9 percent in the lower-middle-
income country group. However, this share was less than 15 percent in 22 LICs and LMICs. In three countries, it was below 10 percent. They include Sudan, a low-income country, and Bangladesh and Nigeria from the lower-middle-income group.

Map 2. General government revenues (including grants) as a share of GDP, 2019

Another way of gauging countries’ capacity to increase or at least maintain levels of government spending is to examine the share of tax revenues, as opposed to general government revenues, in GDP. The IMF suggests a benchmark of 15 percent for sustainable growth and development (Gaspar, Jaramillo and Wingender 2016). Using this criterion, even more countries are at risk of being unable to mobilize sufficient domestic resources to invest in their recovery. Countries at risk by this measure include 64 of the 178 countries included in the analysis for this paper. Together, these economies are home to 2.2 billion people.

**Government expenditures: Upward pressures, even as revenues fall**

Government expenditures are expected to be higher in 2020 than in 2019 in most countries, in dollar terms and as a share of GDP (Figure 2). While general government revenues are expected to decline in 2020, government spending needs have increased: to fund the health-sector response, but also to protect people, jobs, and firms during the recession. The resulting budget deficits have been financed through...
increased borrowing. Monetary policies have also been relaxed to support this process, for example with the help of quantitative easing, where central banks sometimes buy government securities on the secondary market on a large scale.

Despite the expected increase in government spending in 2020 and the projected return to economic growth in 2021, government expenditure per capita is projected to fall in all country income groups in 2021, and then fall again in 2022. This reflects a reduction in the capacity of many governments to further accumulate and service public debt. Nevertheless, per capita government spending is expected to remain higher than pre-pandemic levels after 2020 (except for UMICs in 2022). Yet, on current projections, per capita government spending would not reach 2020 levels again in LICs until 2023, and in the other country income groups until 2025.6

Again, not all countries in each income group follow the average pattern. For example, among the countries that are projected to sustain positive economic growth over the next five years, in Bangladesh and Myanmar (both LMICs) and in China (UMIC), government expenditure per capita is also expected to grow consistently over the same period. In contrast, even though the IMF also projects continued economic growth for Egypt and Turkmenistan, government expenditures per capita are expected to fall from 2021 in Turkmenistan and from 2023 in Egypt.

Vulnerabilities linked to pre-pandemic debt might explain some of this variation. There are several indicators of debt distress, including the debt-service ratio (debt repayments, including interest, as a share of government expenditure). High debt-service ratios limit the capacity of governments to borrow. In several countries, this ratio is already relatively high, exceeding 20 percent. These include Egypt, where government expenditures per capita are expected to fall despite continued growth. Debt-service ratios also exceed 20 percent in Angola, Ghana, Jamaica, Pakistan, Sri Lanka, and Zambia. In two of these countries, Jamaica (UMIC) and Zambia (LMIC), government expenditure per capita is projected to fall already in 2020 and then again in 2021. In Sri Lanka (UMIC), it would also fall in 2020 but recover slowly thereafter. However, the projected trends in the other countries with high debt-service ratios follow the average in their income group, that is, they show increases in per capita government spending in 2020, then declines in both 2021 and 2022.

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6. Annex 2 shows the implications of the projected changes in government expenditure as the share of GDP over the same time period.
HOW WILL THE COVID-19 CRISIS AFFECT HEALTH FINANCING?

Countries’ per capita health spending generally increases with their level of economic development. For example, in 2018, the latest year for which country expenditure data from the WHO Global Health Expenditure Database are available, current per capita health spending averaged $42 in LICs, $129 in LMICs, $453 in UMICs, and $3016 in HICs. Health is typically financed from a combination of three primary sources: government (taxes and charges plus obligatory social health insurance contributions), household out-of-pocket payments (OOPs), and, in lower-income settings, external sources (largely development assistance for health (DAH)). Other private sources, mainly voluntary health insurance, comprise an additional, smaller component of overall health spending.

Source: IMF, World Economic Outlook, October 2020

8. The System of Health Accounts 2011 separates health expenditure into “current” expenditure and “investment in health capital formation”. Current expenditures comprise the final consumption of health care goods and services “including personal health care (curative care, rehabilitative care, long-term care, ancillary services and medical goods) and collective services (prevention and public health services as well as health administration), but excluding spending on investments” (Health Spending (indicator) 2021).
spending. The share of government funding for health also increases with countries’ levels of economic development (Figure 3)⁹ (Fan and Savedoff 2014). In turn, the share of spending from OOPs decreases. Obligatory social health insurance contributions constitute more than 20 percent of current financing only in HICs and are negligible in LICs. The share of external funding is highest in LICs.

The remainder of this section focuses on the three primary sources of health spending in turn – government, household out-of-pocket, and external.

**Government health spending: Multiple paths are possible**

Government health spending is derived from general government financing, which in some countries includes revenues from compulsory social health insurance (SHI) contributions. SHI revenues stem from earmarked payroll or income taxes or sometimes from obligatory premiums that covered people pay directly. Government financing can be mobilized at national and subnational levels. Where countries benefit from external financing, a share is typically also channeled through government budgets.

As discussed earlier, although there are some exceptions, general government spending is projected to rise on average in all country income groups in 2020 and then fall for at least the next two years. This projected trend reflects the expected sharp drop in revenues from tax and non-tax sources, and the declining capacity of countries to finance deficits through borrowing.

**What priority for health?**

The impact of the expected changes in general government expenditure on government health spending from domestic sources will depend on the priority given to health in government spending decisions. If, for example, health is given the same proportional allocation as before COVID-19, government per capita health spending will follow the trend in general government spending, that is, it will rise in 2020, then fall in 2021 and 2022 – though still remaining higher than in 2019. On the other hand, if governments give health higher priority in their spending because of the sector’s central role and increased resource needs in the COVID-19 fight, then the growth in per capita government health spending will be even higher in 2020, and it will decline less in 2021 and 2022 – or even rise.

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⁹. As countries grow and develop, there is an empirical trend which has recently been characterized as a ‘health financing transition’ towards higher levels of health spending with greater shares coming from public sources. (Fan and Savedoff 2014)

However, in each of these crises, some governments have been willing and able to increase their per capita spending on health despite declining economic output and government revenues. Others have protected recurrent health expenditures while allowing capital spending to decline, or protected expenditures on health programs that are vital for vulnerable populations and the poor (Thomson, et al. 2015) (Maresso, et al. 2015) (Gottret, et al. 2009) (Musgrove 1987) (Hou, et al. 2013).

As discussed, however, the current crisis differs from those previous economic downturns, most importantly because it was triggered by a pandemic requiring an immediate health-spending response. IMF and WB data suggest that most, though not all, countries have reacted to the crisis by raising their general government spending through deficit financing (IMF 2020c) (World Bank 2021a). While data on actual health spending in 2020 will not be available for some time,10 many countries also report that they have taken steps to increase the availability of funds for health in 2020, through steps such as supplementary budgets or access to emergency funds (WHO 2020a). In the current crisis, therefore, a

10. WHO’s Global Health Expenditure data base has just released data on country health spending for 2018, so 2020 data are unlikely to be available much before then end of 2022.
majority of countries are likely to follow countercyclical health spending strategies in 2020. The main question then, is what comes next.

**Government health spending in the time of COVID-19: Four scenarios**

Based on past patterns, and considering the specific nature of the current crisis, the evolution of government health spending per capita in the wake of the pandemic is projected here under four distinct scenarios:

- **Scenario 1: Procyclical health spending.** In this scenario, government per capita health spending follows the same procyclical pattern observed in previous economic downturns - it falls with a decline in GDP per capita (typically at a greater rate than GDP per capita) and increases again with a return to economic growth. The elasticity of government per capita health spending to changes in GDP per capita across all countries was estimated, depending on model specification, between 1.18 and 1.29. The projections reflect the lower bound estimate 1.18. Because many countries have increased their general government spending in 2020 and report that they have taken steps to increase their health spending, this scenario is likely to apply to the small group of countries where general government spending is projected to have fallen.

- **Scenario 2: Status quo priority to health in government spending.** Governments choose to hold the pre-pandemic share of health in government spending constant. Put differently, per capita government spending on health follows the trend in general government spending. This is considered the most likely scenario, in which health spending increase in 2020 with general government spending, but then fall with the projected decline in government spending in 2021 and 2022.

- **Scenario 3: Pro-health spending.** Governments protect the pre-COVID-19 trend in the growth of government health expenditure per capita, so they increase their health spending consistently every year, despite the reduction in general government spending. This is considered an optimistic scenario. Higher spending levels allow the health sector to meet at least some of the continued spending needs associated with the pandemic in 2021 and beyond and may also help countries maintain some progress towards universal health coverage (UHC).

- **Scenario 4: High-ambition spending.** Governments increase their health spending at the pre-COVID-19 rate, but also seek to partially compensate for lower household OOP health spending: on the grounds that at least some of the lower OOPs represent a reduction in households’ ability to use needed health services. Household out-of-pocket health payments (OOPs) are likely to fall in 2020, before rising again - but not reaching the levels expected in the absence of the crisis (see the next section). This is a very optimistic scenario and is considered the upper bound of the possible scenarios.

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11. For details how the elasticity of government health spending with respect to GDP per capita was calculated, see Annex 1.
12. The pre-COVID-19 share was taken as the average of the period 2016-2018 (see also Annex 1).
13. The pre-COVID-19 trend was estimated as the average growth of government health expenditure (GHE) per capita during the years 2009-2018 (see also Annex 1).
14. Technically, the algorithm projects GHE per capita plus OOPs per capita forward, based on the years 2009-2018. It then subtracts out the projections for OOPs/capita allowing it to be lower because of the decline (in 2020) then lower levels (subsequent years) of GDP per capita due to the crisis. The residual in GHE per capita allowing for any decline in OOPs due to the crisis. For details, see Annex 1.
Given uncertainty around the evolution of the pandemic and the full costs of the roll-out of vaccines, it is not clear that the projected spending increases under scenarios 3 and 4 can meet countries’ full requirements for addressing the pandemic, maintaining progress towards UHC, and—in the case of scenario 4—compensating for lower OOPs. Scenarios 3 and 4 simply illustrate alternative trends in per capita government health spending over time with an ambitious re-prioritization of government spending towards health.

In Scenario 1, government health spending per capita in 2020 declines in all country income groups (Figure 4). With the predicted return to economic growth in 2021, government health spending per capita then starts to rise but does not reach pre-pandemic levels in LICs until 2022, and in the other country groups until 2023. Again, this scenario is most likely to apply to the few countries where the IMF projects that overall general government spending per capita will decline in 2020. There is some variation across countries within income groups – those expected to have very rapid economic growth in 2021 and beyond will return to pre-pandemic levels much more rapidly.

In scenario 2, government health spending per capita rises in 2020 and then falls in 2021 and again in 2022 for all country groups, mirroring the fall in general government expenditure per capita described earlier (Figure 2). Per capita spending does not reach 2020 levels until 2024 in LICs and not until 2025 in all other income categories. Because government health spending per capita starts to rise with GDP in 2021 under scenario 1, the predicted levels of government expenditure per capita in scenario 2 are overtaken by those of scenario 1 for both LMICs and UMICs in 2023. For LICs and HICs, however, government health spending per capita is higher in scenario 2 than scenario 1 over the entire period 2020 – 2025.

There is, of course, variation across countries in each country income group in these projections. For example, the handful of countries described earlier that were expected to maintain economic growth and increase general government spending in 2020 – countries like Bangladesh, China, and Myanmar – do not see the dip in health spending after 2020 for scenario 2. And countries expected to have higher than average increases in economic growth find that scenario 1 overtakes scenario 2 much earlier than the averages reported here.

Scenario 3 projects continual yearly increases in government health spending per capita. Nevertheless, maintaining the pre-pandemic rate of increase in government health spending per capita result in a lower level of spending in 2020 than under scenario 2 for LICs, LMICs, and HICs. In other words, for these groups, the percentage increase in health spending per capita under scenario 2 in 2020, needed to respond to the crisis, exceed the pre-pandemic rate of increase. From 2021, scenario 3 results in higher spending levels than scenario 2 (and scenario 1) on average.

Scenario 4 projects continual increases in the growth of government health spending per capita in excess of scenario 3. It provides an upper bound to the four scenarios, except in 2020 for HICs, where scenario 2 yields higher levels of per capita spending.

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15. The implications for government health expenditure as a share of GDP are shown in Annex 2.
Figure 4. Scenarios for per capita government health spending per capita by income group, 2020-2025

Source: Authors’ calculation and WHO (2020), Global Health Expenditure Database.

Scenario trends and the priority given to health

To achieve the immediate spending levels required for both scenarios 3 and 4, governments would need to increase, sometimes substantially, the priority given to health in government budgets (Table 2 for scenario 4 – see Annex 3 for the implications for all scenarios). On average, small, consistent increases in priority to health are required in LICs, LMICs, and UMICs. In HICs, however, no additional priority to health is required in 2020 because of the very large increases in general government spending described earlier. In 2025, the share of government spending assigned to health would need to have increased on average across all countries from 11.4 percent in 2019 to 14.5 percent in 2025. The increase would range from a minimum of 2.5 percentage points in LICs, to a maximum increase of 4.2 points in UMICs.\textsuperscript{16} Part II of this paper extends these considerations and examines the policy implications of the scenario analysis in detail.

\textsuperscript{16} The increases in shares would be slightly lower for scenario 3, but the shares would need to increase consistently as well.
Table 2. Share of health government spending to protect trend growth in per capita government spending and offset lower OOPs (Scenario 2), 2019-2025

<table>
<thead>
<tr>
<th>Country groups</th>
<th>N</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>All countries</td>
<td>178</td>
<td>11.4</td>
<td>11.7</td>
<td>12.5</td>
<td>13.1</td>
<td>13.6</td>
<td>14.0</td>
<td>14.5</td>
</tr>
<tr>
<td>Low income</td>
<td>25</td>
<td>9.3</td>
<td>9.9</td>
<td>10.6</td>
<td>11.1</td>
<td>11.3</td>
<td>11.6</td>
<td>11.8</td>
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<tr>
<td>Lower middle income</td>
<td>49</td>
<td>8.6</td>
<td>9.3</td>
<td>9.9</td>
<td>10.3</td>
<td>10.7</td>
<td>11.0</td>
<td>11.3</td>
</tr>
<tr>
<td>Upper middle income</td>
<td>46</td>
<td>12.3</td>
<td>13.1</td>
<td>14.0</td>
<td>14.8</td>
<td>15.3</td>
<td>15.9</td>
<td>16.5</td>
</tr>
<tr>
<td>High income</td>
<td>58</td>
<td>13.9</td>
<td>13.5</td>
<td>14.5</td>
<td>15.1</td>
<td>15.6</td>
<td>16.0</td>
<td>16.6</td>
</tr>
</tbody>
</table>

Source: Authors’ calculations

Household out-of-pocket spending: Less is more?

Some countries relied heavily on household OOPs as a source of financing for health before the pandemic. In 2018, the share of OOPs in country health expenditure averaged 42.3% in LICs and 38.7% in LMICs.

As GDP per capita drops, the individual capacity to pay health expenses out-of-pocket falls, on average. This typically leads to a decline in utilization of health services that require payment, and sometimes to an increased use of free or subsidized services, if they are available. In the current crisis, this effect is aggravated by fear- and lockdown-related declines in health service utilization documented across many countries (WHO 2020b) (WHO 2020d). On the other hand, possible declines in government health spending may reduce the availability and quality of government services, spurring an increased need to use private health services – in which case OOPs might rise. Data on OOPs in health for 2020 will not be available for some time and the collection may be further delayed because of the difficulty to conduct large household expenditure surveys during COVID-19.17

The projections of OOP presented here are based on the historical elasticity of OOPs per capita to changes in GDP per capita across countries, estimated at 0.88.18 This suggests that a 1% fall in GDP per capita would result in a decline in OOPs per capita of slightly less than 1% (0.88%), consistent a recent study of the determinants of OOPs (Xu, Saksena and Holly 2011). This pattern is consistent with findings from previous recessions suggesting that OOPs falls with declining GDP (Musgrove 1987) (Gottret, et al. 2009) (Xu, Saksena and Holly 2011).

Mirroring IMF projections of GDP per capita, OOP spending per capita is expected to fall in 2020 and then increase in subsequent years (Figure 5). OOP spending per capita reaches pre-COVID-19 levels in all country groups in 2022, except in HICs, where it will match earlier levels only in 2023.

Paradoxically, declining OOP spending in 2020 may result in apparent improvements in the commonly used metrics of financial protection in health, for example, the incidence of financial catastrophe. This indicator measures the proportion of households spending more than 10 percent of their income or consumption on health. The direction this measure will take depends on how the drop in OOP spending compares to the drop in household income or consumption. Important to note is that a drop in the share of households facing financing catastrophe may simply reflect a lower use of needed health services – or forgone care - rather than improvements in financial protection.

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17 WHO’s Global Health Expenditure Database shows data up to 2018 as of 4 December 2020.
18 Methodological details are provided in Annex 1.
Figure 5. Projected impact of the recession on household out-of-pocket health payments.

Source: Authors' calculations and WHO (2020) Global Health Expenditure Database

Governments can act to protect the vulnerable

Countries may opt to increase their spending on health to compensate for some or all of the decline in OOPs. This will help to ensure the utilization of needed health services, most importantly, among the poor and vulnerable. As simulated in scenario 4, to do so, countries need to substantially increase the share of health in general government spending.19

External financing for health: A lifeline under threat

Many countries, mostly LICs and LMICs, relied heavily on external financing for health before the pandemic. Countries obtained that financing from bilateral or multilateral partners and foundations. In 2018, the last year for which country health expenditures derived from external sources are available, external financing accounted for over a quarter of current health spending in 26 countries, and over half of current health spending in five (WHO 2020c).

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19 In comparison to scenario 3, in scenario 4, the increases in government spending per capita compensate for the expected fall of OOPs per capita below levels projected based on pre-COVID-19 macro-economic forecasts.
**A critical input hangs in the balance**

Any reduction in external funding as a result of the impact of the pandemic in HICs would make it substantially harder for recipient countries, largely LICs and LMICs, to meet emergency needs related to the pandemic and maintain progress towards universal health coverage and the health SDGs. On the other hand, increases in external funding could help offset the projected falls in general government expenditures from domestic sources in lower-income countries in 2021 and 2022.

The 2008-09 financial crisis did not immediately result in a decline in external assistance for health. However, the rate of increase in such support to LICs and LMICs started to fall, with levels of external financing stagnating by 2014, falling in the next two consecutive years, and since then remaining stable at a level of around $14 billion annually.\(^{20}\)

The current economic shock is affecting higher-income countries more than other countries, with a much deeper recession than in 2008-09. Government borrowing in HICs has also risen substantially, leading to very high ratios of public debt to GDP. This might result in wealthy countries’ reducing their development assistance budgets. On the other hand, high-income countries are better able than others to weather the economic storm, at least in the short term, through increased public borrowing. The needs of lower-income countries are also greater than in 2008-09: not just because of the pandemic, but also because most of them are now in recession, something that did not happen during the earlier financial crisis. Given this context, bilateral partners might decide to maintain or increase their external financing for health.

A factor that reinforces this possibility is that HICs have an interest in ensuring that COVID-19 is controlled not only within their own borders but also outside. However, it is also possible that HICs might reallocate a portion of the funds that were previously used for external assistance at country level towards investments whose payoffs for wealthy countries’ own citizens may be easier to grasp, such as the creation of vaccines and effective COVID-19 therapies. While investment by HIC governments has been critical to the rapid development of a number of COVID-19 vaccines, shifting resources away from country support to fund such efforts could mean lower health expenditures in the poor countries that still rely on external financing.

**The future direction of external funding remains unclear**

It is hard to predict the trajectory of external funding. Current IMF projections, however, suggest that overall external funding in the form of grants to LIC and LMIC governments may rise in 2020, but then fall consistently, in per capita terms, each year to 2025. Similar patterns are projected for the individual countries in each income group.\(^{21}\) Unless donor and recipient governments choose to allocate a higher proportion of on-budget external grant funding to health, external financing for health would also fall from 2021 onwards, if the IMF projections are accurate.

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\(^{20}\) This is the 2018 spending in LICs and LMICs of external funding – e.g., development assistance for health – reported in WHO’s Global Health Expenditure Database for the countries included in this analysis. The total amount that donor countries and organizations report to the OECD Development Assistance Committee (whether commitments, disbursements or country programmable aid) or estimated by the Institute of Health Metrics Evaluation is higher because it includes funds classified by donors as development assistance, but which is spent in the donor countries rather than recipient countries.

\(^{21}\) These calculations do not include development assistance that is not channeled through government budgets, which can be quite significant in some countries.
Debt relief can boost health spending, but won’t do so automatically

High and increasing levels of public debt have put several countries at risk of default. This trend has also raised the cost of commercial borrowing for these countries (World Bank 2021b). Some degree of debt cancellation, suspension of payments, or restructuring is now being offered to the most distressed countries, though no coordinated framework has yet been established. G20 countries and several multilateral banks have already deferred interest payments, and other measures are being discussed (IMF 2020d) (UN 2020). Additional concessional lending is also being offered to some of the countries participating in debt relief initiatives, some of which can be used for health spending (World Bank 2021b).

The purpose of debt relief is to support countries at risk of default. The extent to which debt relief per se translates into higher levels of government health spending depends on whether countries fully commit the resources freed up by debt relief to reduce their budget deficits. Where they do not, some of the freed-up resources will increase levels of discretionary spending. The impact on health spending depends on the share that is allocated to the sector.
PART II – POLICY OPTIONS TO MEET HEALTH SPENDING NEEDS

THE PATH TO A DOUBLE RECOVERY

The double shock of COVID-19 has cost millions of lives and resulted in a deep global recession. The projected decline of 6.4 percent in per capita growth in 2020 surpasses any economic downturn since World War II, including the global financial crisis of 2007-8. Following the immediate increases in government spending in response to COVID-19 in 2020, including higher spending on health, most countries are expected to curb expansionary fiscal policies in 2021 and 2022, with a predicted fall in government spending per capita. The decline in spending is expected despite positive forecasts for growth in economic activity and revenues, in part because record debt levels are likely to prevent countries from borrowing as they did in 2020. The scenario analysis in Part I of this report suggests that, in countries where general government spending is now predicted to fall, per capita government spending on health will also decline, unless governments take steps to increase the share of their spending on health.

While it is understandable and even desirable for many countries that general government spending may fall in the next years, there are strong reasons why health spending in most countries should not drop, despite a return to growth and perceptions that the end of the pandemic is near. Any declines in health spending would be most damaging in countries that already faced severe health-financing constraints to begin with: most importantly, a group of lower-income countries with low levels of health spending and high shares of out-of-pocket expenditures and external financing (WHO 2020a).

No economic recovery without a health recovery

To bounce back from COVID-19’s double shock, countries need a double recovery. Getting over the economic crisis depends on solving the health crisis. On the one hand, this is because basic public services and key sectors of the economy cannot properly restart until COVID-19 is controlled. But there is more to the story. Universal health coverage and sound population health indicators are vital for a sustainable and inclusive longer-term recovery (World Bank 2019). Progressively closing gaps in affordable coverage with essential health services improves health and builds human capital, increasing workers’ productivity in the short term and boosting cognitive and physical development, educational attainment, and productivity in rising generations. Sound financial protection from health care costs promotes equity, for example by allowing the sick and poor to protect and improve their health and increase their earnings. As a result, income inequality falls. Inadequate health spending, in turn, is “macro-critical”: that is, it has the potential to threaten countries’ macro-economic stability and future growth (IMF 2019).

The health recovery involves two distinct but related short-term agendas. One is controlling the spread of the novel coronavirus. An end to the pandemic can only come through enhanced surveillance, including improvements in data infrastructure, testing and laboratory services, behavior change communication, quarantine and isolation capacity, the treatment of clinical COVID-19 cases, including patient safety for both COVID and non-COVID patients, and—most critically—strengthening delivery platforms and rolling out vaccines. Spending on these measures will save lives right now.

The second short-term agenda is about reversing the indirect losses in health from the pandemic. A full recovery from the health shock means undoing the growing gaps and reclaiming the pre-COVID gains in universal health coverage. Attending to COVID-19 patients while trying to ensure patient safety for all has caused substantial disruptions in the delivery of non-COVID-19 essential services. Demand for services is
down, as incomes decline and people fear the risk of infection. The effect of growing coverage gaps on health outcomes is aggravated by changes in health-related behaviors. Economic hardship, rising food prices, social distancing, and lock-down measures cause malnutrition, mental stress, domestic violence, and substance abuse. The loss of life from disruptions in maternal and child services and acute malnutrition alone may outweigh the direct death toll of COVID-19 (Roberton, et al. 2020).

**Bold choices amid hard times**

Even during macro-fiscal crises, countries have choices. During previous economic contractions, not all countries followed the path of pro-cyclical health spending. Most relevant today, some countries increased government expenditures on health when general government spending levels declined. This precedent points to options for countries today. For example, among the 53 countries that lowered their government spending per person in the first three years during and in the wake of the global financial crisis (2008 to 2011), almost half increased their government spending on health per person. The 25 countries that raised health spending per person in this period included 11 upper-middle-income countries – like Iran, Jordan, Mexico, several Eastern European countries, and several Caribbean and Pacific states. But this group also included lower-middle-income status countries, for example, Honduras, Pakistan, and Ukraine. Among the total of 17 middle-income countries, several not only increased their spending on health per person over the three-year period but raised health spending per person in at least two consecutive years, despite simultaneous cuts in the general government spending envelope. Among the few low-income countries whose economies contracted during the global financial crisis, several also elected to raise government spending on health. Here, external financing played an important role, as in the case of Guinea, Liberia, and Sierra Leone during the 2014-16 West African Ebola epidemic—a regional health and economic crisis that foreshadowed the current global double shock.

**Structure of Part II**

Countries have compelling reasons to maintain or increase their health investments now. But how can they achieve this, given fiscal constraints, political pressures, and competing demands on public funds? The remainder of Part II presents a set of policy options that countries can consider. The compilation draws on lessons from earlier crises, countries’ COVID-19 experiences to date, and a global consensus on effective health-financing policy options that was emerging in pre-pandemic days.

Part II includes three sections. The first explores options to boost the share of government spending for health. It first presents strategies for the health-sector revenue stream that is most important across all country income groups: budget allocations. It discusses spending reviews, performance budgeting, and other tools that decision makers can use to mobilize funds for health budgets. It then examines options to protect social health insurance schemes during crisis times. A second section looks at selected policy options to expand overall fiscal space. It focuses particularly on policies — notably pro-health taxes — where health policy makers need to interact with a ministry of finance, then discusses external financing for health, including debt relief. External financing remains a critical source of health funding for many

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22 This spending pattern has been well documented for European countries during the global financial crisis (Mladovsky 2012, Thomson 2015). It also holds true for some middle-income countries. For example, among the 18 middle-income countries experiencing negative per capita GDP growth between 2008 and 2011, more than half (13) increased their per capita government health spending during the period. This group of countries includes lower-middle-income states—like Benin, Honduras, Senegal and Ukraine—as well as upper-middle-income countries, for example, Gabon, Jamaica, Jordan, and Mexico. Increases in government spending on health per person have also been reported from earlier recessions, including the 1980s debt crisis in Latin America and the Caribbean. (Musgrove 1987).
countries, while collaboration between donors and beneficiaries is needed to ensure that debt relief unlocks additional resources for the health sector. Part II’s third section provides an overview of policies to ensure and advance equity and efficiency in health spending during the crisis and beyond. Successfully managing new and old challenges can strengthen the case for maintaining and increasing health spending going forward.

**INCREASING GOVERNMENT FUNDING FOR HEALTH**

To deliver the levels of health spending needed for health and economic recovery, most countries will need to boost their government spending in health. There are two main sources of domestic public revenues for the health sector: (1) the allocation to the health sector from tax financing and (2) obligatory contributions to social health insurance (SHI). Of these two sources, the larger across all country income groups is the allocation from tax financing (Figure 3). Obligatory social health insurance contributions are mostly relevant for HICs and some UMICs. For simplicity, the remainder of this paper refers to allocations from tax financing as health budgets, even though health-sector budgets may also include obligatory social health insurance contributions and external financing. This section looks first at tools and techniques countries can use to boost health budgets, then at options to stabilize SHI revenues, in settings where these are an important source of health financing.

**Health budgets**

During an economic crisis, pressures to spend on health from health budgets mount rapidly. In the ensuing economic recovery phase, however, these pressures may abate more slowly. The reasons for this asymmetry are intuitive. When incomes fall during a crisis, households lower their private spending on health, including payments for medicines, private providers, and voluntary health insurance, and increasingly rely on government-provided health services. Likewise, as unemployment and informal employment rise, many people lose employment-linked entitlements and turn to general tax-financed schemes or government-provided health services. These patterns produce converging upward pressures on government health budgets, only partially countervailed as some people choose (or are forced) to forego health services that remain beyond their financial reach. During the subsequent economic recovery, employment, SHI coverage, wages, and household incomes increase. This typically leads to a rise in demand for health care, and again keeps pressure on health budgets high. Depending on the economic shock’s duration and intensity, some people who avoided seeking timely medical care during the crisis may now experience more serious health problems as a result, placing additional strains on the system as recovery begins.

In the current crisis, the pandemic compounds these pressures on health budgets. Most key health response measures to COVID-19—including testing, treatment, and the roll-out of vaccines—require government funding to quickly attain the necessary scope and scale of coverage. Acute budget pressures are all the greater, since both disease-control principles and equity concerns have prompted some governments to subsidize COVID-19 services or in some cases provide them free of charge. The rationing of non-essential health services may relieve some pressure on government health budgets, especially since many people have avoided visiting health facilities for non-emergent complaints, due to fear of coronavirus exposure. But this relief is only temporary, and the pent-up demand for non-COVID-related services is likely to result in a powerful rebound effect later on.

In times of declining spending envelopes, the scope to reprioritize spending across sectors, however, is shrinking. As the spending envelope dwindles, so does the share of discretionary spending. It is only
discretionary spending that can be readily redirected, as it is not tied up with ongoing commitments such as government payroll and debt service. At the same time, critical spending needs are also growing in all social as well as other sectors, some of them vital to protect gains in universal health coverage and population health.

**Coordinating across levels of government**

Responding to this dilemma requires close coordination across levels of government and strengthen the frameworks and processes that govern the prioritization of expenditures. In many settings, a successful recovery will also require coordination across different levels of government—just as during the crisis response. While central governments tend to raise the lion’s share of resources, sub-national governments not only raise substantial amounts of funding but are often responsible for the delivery of frontline services, including the allocation of resources across sectors. Frontline services include primary health care, population-based health services, and other essential public health functions, all of which are critical both for pandemic response and achieving efficiency and equity on the path toward UHC. Making inter-governmental transfers more predictable can help sub-national governments improve the performance of frontline services. When carefully designed, results-based intergovernmental transfer can reinforce the efficiency use of resources and accelerate progress toward UHC and health outcomes (Gertler, Giovagnoli and Martinez 2014).

**Managing uncertainty**

During the pandemic, spending envelopes for health will depend on how effectively governments can manage uncertainty in the budgeting and planning process. These challenges are even greater in the preparation of medium-term budgeting frameworks. Critical questions surround, for example, the setting of the budget baseline. Which year serves as the starting point of the exercise - pre-COVID 19 or COVID 19, and is it the adopted budget or the actual outturn (IMF 2020f)? How accurately can governments anticipate the discretionary COVID-19 policy measures and the non-discretionary impact of COVID-19 on cost drivers, given the uncertainty about the evolution of the pandemic as well as the availability of new technologies? When countries started the budgeting process for the second year under COVID-19 in the last summer and fall, it was not even certain whether vaccines would become available. Given the possible large fiscal impact of vaccines costs alone - estimates range dependent on coverage and vaccine prices from 0.1 percent to 2.5 percent of GDP for 2021, countries may opt to set up separate expenditure programs or funds to facilitate the planning process and protect the health sector budget. In turn, it will also to what extent countries ensure agility in the budget, whether it is by setting up contingency and reserve envelopes, enhancing in-year budget flexibility mechanisms (e.g., limits on virements), and adopting supplementary budgets during execution.

**Making fiscal adjustment work**

A number of tools and strategies are available that can help governments find resources for health budgets and invest those resources where they will do the most good. This sub-section looks at three of the most powerful of these instruments: spending reviews, budgeting strategies, and macro-fiscal analysis.
Spending reviews

Spending reviews constitute a critical element of an agenda to find the space within budgets to finance spending programs in health. Spending reviews assess the level and intra- and intersectoral composition of expenditures. They also evaluate the effectiveness, efficiency, and equity of spending and its adequacy and sustainability against government goals. In contrast to the focus on new spending proposals in the budgeting process, expenditure reviews scrutinize baseline expenditures. The World Bank offers support to countries in carrying out public expenditure reviews at regular intervals.

Savings based on evidence

In a time of shrinking spending levels, spending reviews focus on the development of savings options, often with specific savings targets. Spending reviews should not end with the development of options but savings decisions (Robinson 2014). These savings decisions rest with the elected officials who exercise power over the content of the budget. In OECD countries, spending reviews with a focus on savings options have been widely introduced during global financial crises. In the majority of OECD countries, the practice of spending reviews continued and in some, the use is likely to increase (OECD 2020).

Learning what doesn’t work

In addition to savings options from efficiency gains, spending reviews identify savings options from the reduction of certain services or transfers to improve expenditure prioritization (strategic reviews). In other words, strategic spending reviews also identify ineffective budget lines and programs, from which resources can be redirected. The potential to reprioritize spending from lines and programs that do not produce any significant, desired effect can be substantial. The classic case is fuel subsidies included as part of anti-poverty programs. These subsidies typically benefit middle-class rather than poor households, and they counteract government investments in a green recovery. Fuel subsidies amount on average to 7.7% of GDP in LICs and MICs, exceeding by far the average of government spending on health in these countries (Coady 2019). In good economic times, significant reallocations between ministries are the exception. Under emergency conditions, however, targeted spending cuts are vital for an effective crisis response and recovery. In contrast, it is preferable to avoid blanket cuts that impose equivalent reductions on unproductive expenditures and on efficient programs that are producing important social benefits.

Protecting what’s essential

While unmasking waste, spending reviews can also shine a light on critically important expenditures and high-performing programs that warrant continued investment. In the current fiscal context, reviews can identify budget lines, programs, and sectors that are vital to end the crisis and accelerate an inclusive recovery. These can then be tagged for monitoring in budgets and medium-term expenditure frameworks. Such analyses equip decision makers to protect and adjust recovery-relevant spending priorities over time. For these budget elements, governments can also define minimum spending targets. Some countries have adopted such spending floors for poverty-reducing social spending (IMF 2019).

Budgeting strategies

Performance budgeting can institutionalize the logic of spending reviews, an approach to which some countries moved during the global financial crisis. In the most common form of performance budgeting, program budgeting, expenditures are not solely classified by economic, functional, and administrative
categories, but are assigned to programs based on objectives and types of service categories (Robinson and Last 2009) (OECD 2018). Information about program performance, using indicators and drawing on evaluations, feeds into the budget preparation process. Program budgeting typically provides flexibility for ministries and program managers to choose the best input mix for efficient service delivery. When the design and implementation of performance budgeting is adapted to local institutional circumstances, it can align activities and spending with government priorities while increasing fiscal transparency (de Jong and Ho 2017).

A whole of government approach to policy making and budgeting also holds the promise of better aligning spending decisions with spending needs. Priority is given to expenditure programs that contribute to one or a set of agreed national goals. This encourages ministries and agencies to focus budgeting processes on results and to coordinate and collaborate with each other to reduce inefficiencies and improve outcomes. Though evidence of the effectiveness is not yet conclusive, the rationale for whole-of-government budgeting is strong, and countries are continuing to develop the strategy. One prominent recent example is New Zealand’s Wellbeing Budget, with all ministries asked to apply for incremental spending based on how it contributes to inter-generational well-being. A similar approach, but focusing on a narrower goal, is the use of gender budgeting to address gender inequalities. As with spending reviews and performance budgeting, the approach relies on the definition of explicit criteria to assess the impact of spending.

**Macro-fiscal analysis**

To ensure the adequate prioritization of health and human capital spending more generally, adjustments to macro-fiscal analytics that inform spending decisions will be important. These include simulation exercises to assess the impact of fiscal and other policies on economic growth and other macro-economic variables. Steps have been taken to extend these models to account for strategies that boost human capital outcomes, including health. For example, Maquettes for MDGs (MAMS) offers, in comparison to other computable general equilibrium models features that enable users to assess the macro-economic trade-offs of financing strategies to attain targets of the Millennium Development Goals, including child and maternal mortality (Lofgren, Cicowiez and Diaz-Bonilla 2013).

Debate continues about how best to integrate non-debt liabilities, including health care, into the assessment and management of a government’s balance sheet (Heller, Hemming and Potter 2013). The general premise is that the amount of explicit debt and provisioned public guarantees understates the exposure of government finances to obligations and as such also fiscal risks. The type of obligations varies, from legally binding contingent liabilities with fully specified amounts and timing of payments to obligations based on policy promises and historical precedents. In health, government obligations fall somewhere in the middle of this spectrum. There is often some variation within countries. Obligations may range from explicit contractual commitments, in the case of contributory social health insurance, to formal legal obligations, for example, non-contributory guaranteed entitlements, to non-legal, implicit obligations, such as publicly financed and provided health services. Another question is how to determine the size of these prospective obligations, given the uncertainty about future outlays, not only in terms of costs and demand but also a government’s discretion over the quantity and quality of services, and the prospective flow of revenues. The benefit of recognizing these obligations is not only a greater sense of realism in health policy making, but also greater ambition in setting a politically viable and economically optimal tax to GDP ratio.
Earmarking

Earmarking, also known as hypothecation, is a different type of instrument that governments may use to channel resources into health budgets. The objective of earmarking is to maintain or increase funding for a particular category of expenditure, attempting to protect it from the political negotiations of the budget process.

Earmarks for health-sector activities are common, despite longstanding controversies about the appropriateness of hypothecated taxes in public finance (Cashin, Sparkes and Bloom 2017) (Ozer, et al. 2020). In periods when discretionary spending is shrinking, earmarks seem even more questionable. The effect on funding levels is often only temporary, as earmarks eventually prompt cuts in related spending programs during the budget negotiation process.

Depending on the circumstances, however, governments may want to consider earmarks as part of a set of policy measures to mobilize additional funding for health, for example, to secure future resources for high-priority programs. In the current crisis, pandemic preparedness and response might be a target for earmarked funds. As a source of revenue, pro-health taxes—discussed in detail below—may be a pragmatic choice as a source of earmarked funds. Linking pro-health taxes to high-priority programs in health establishes a strong benefit rationale, thus reinforcing the generally high political acceptability of these taxes.

Obligatory social health insurance (SHI) contributions

In some countries, a second important stream of domestic public funding for health comes through social health insurance (SHI) contributions. Given their mandatory nature, SHI contributions are considered a tax earmarked for the health sector. These contributions are, however, distinct from other taxes, in that people who pay into SHI are entitled to a specific set of health benefits, while those who do not make contributions are ineligible. Traditionally imposed on wages, obligatory SHI contributions often link entitlements to employment.

The policy options discussed in the following paragraphs are mostly relevant for upper-middle-income and high-income countries where SHI contributions are a significant source of health spending. In low- and lower-middle income countries with a relatively small working-age population and low rates of formal employment, obligatory SHI contributions do not constitute a promising source of revenue. In those settings, given SHI’s comparatively low revenue potential and the often inherent link of entitlements to employment, SHI can provide one piece of a UHC health-financing mix, but SHI alone will not deliver UHC goals or provide a foundation for crisis-resilient health financing (World Bank 2019).

As with tax revenue, revenue from SHI contributions tends to shrink rapidly during economic downturns, as wages drop and unemployment and informal employment rises. On the other hand, SHI revenue grows quickly when the economy recovers. During downturns and upswings, SHI schemes have options to stabilize their balance sheets and avoid cost shifts to providers and consumers. From a government perspective, the objective is to avoid using budget transfers to bail out SHI regimes. Because SHI schemes mainly cover better-off households, bailing such schemes out with public funds is equivalent to implementing highly regressive subsidies (Kurowski and Walker, 2012).
Benefiting from automatic stabilizers

At the onset of an economic crisis, SHI schemes can benefit from automatic stabilizers. SHI schemes accumulate reserves in times of surpluses, on which they can draw when facing temporary deficits. For example, SHI schemes in Kenya, Lao PDR, and Nepal have recently been drawing down reserves to stabilize their balance sheets (World Bank forthcoming). To support SHI, regulators may reduce minimum reserve requirements. The design of contribution rules can further cushion the effect of economic declines on revenues. When governments make formula-based allocations for non-contributing members to social health insurance, these may automatically trigger increases in budget transfers, for example, when they cover premia for individuals and households living below fixed welfare thresholds or for people who have lost employment. In periods of crisis and recovery, more people are below these thresholds, and, in turn, budget allocations are higher. Lithuania, for example, draws on several of these measures to limit swings in the revenue of its SHI. The SHI accumulates reserves in good times, receives government transfers in lieu of premia for non-contributing members, and establishes these premia based on average wages with a lag time of two years (Kacevicius and Karanikolos 2015).

Bolstering revenues

Trying to bolster SHI revenues by simply raising contribution rates increases labor costs where employers pay a share of SHI contributions. This may tend to increase levels of unemployment and informal employment. Alternatively, countries can opt to raise or abolish contribution ceilings or extend contributions to all forms of wages (e.g., short-term contracts, part-time contracts), as well as non-wage income (dividends, redundancy payments, self-employed revenue, pension income). Most of these measures primarily increase contributions of higher paid workers, sparing more vulnerable households. Therefore, they are less likely to generate the adverse labor market effects associated with increases in contribution rates, especially where employers pay a share of the contribution. Many of these measures have the additional benefit of making the overall revenue system less regressive. Another, relatively politically palatable option is to close loopholes in the collection of SHI contributions, rather than raising rates or ceilings. In the past, some European countries seized crises as an opportunity to overhaul their collection systems: for example, by linking contributions to tax databases or introducing penalties when collecting agencies do not improve their performance in enforcing the payment of contributions (Thomson, et al. 2015).

During past crises, some high-income countries suspended SHI contributions and/or lowered contribution rates for employers and employees, thus reducing labor costs and protecting jobs as part of crisis and recovery measures. Other countries reduced contribution rates, but only for vulnerable households. Countries may even opt to exempt vulnerable population groups from contributions entirely, for example, children from low-income households. In these instances, governments have compensated SHI schemes for the resulting revenue shortfalls through budget transfers. If sustained, these reforms relax the link between employment and SHI entitlements.

Expanding overall fiscal space

While countries tackle the challenges of securing government funding for health and other critical sectors during times of shrinking resource envelopes, they also seek ways to maintain and gradually increase

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23 Where contributions increase with incomes, this usually occurs only up to some upper limit, or ceiling. Once that level is reached, contributions do not increase any further.
levels of discretionary spending—that is, spending from the funds a government has left after making debt-service payments. Simply put, the point is to enlarge the initial “pie,” from which the government carves out pieces for health and other sectors. The overall pie-making agenda primarily involves ministries of finance. However, the health sector can also play an active role, contributing to tax reforms and mobilizing and absorbing external financing.

**Tax policies**

In the face of the current crisis, many countries are already adjusting their revenue strategies, with the aim of increasing the share of government revenues in GDP. As part of these efforts, the crisis warrants revisiting several taxes and groups of taxes and considering how they affect both revenue mobilization and the sustainability of health financing.

**Pro-health taxes: win-win for a healthy recovery**

The case for introducing or increasing pro-health taxes during the current crisis is strong. Pro-health taxes shape the long-term spending needs and efficiency of the sector while contributing to revenue generation. Such taxes target health-damaging products, like tobacco, alcohol, sugar-sweetened beverages, and the carbon content of fuels. In the case of carbon, in many places, the first step is to reduce and eventually abolish fuel subsidies.

Pro-health taxes have a positive effect on population health in the longer term and in turn the sustainability of health financing. Introducing or increasing taxes on health-damaging products reduces their consumption and lowers long-term morbidity and mortality from a whole range of non-communicable diseases, including metabolic conditions, pulmonary and cardiovascular diseases, and cancer, thus protecting human capital. In turn, lower prevalence and severity of such diseases helps limit cost growth in the health sector, increase sector efficiency, and improve labor productivity.

While secondary to the impact on health, revenues from introducing pro-health taxes or increasing their rates can be substantial. For example, excise taxes that increase the prices of tobacco, alcohol, and sugar-sweetened beverages by 50 percent could raise the tax-to-GDP ratio by an average of 0.7 percentage points in LICs and LMICs (World Bank 2019).

The pro-health rationale makes introducing or raising these taxes more politically acceptable than tax changes whose primary goal is simply to increase government revenue. This principle applies in general, but also during times of economic crisis. Spain, for example, increased the value-added tax on sugar-sweetened beverages from 10 to 21 percent in 2021. As noted earlier, earmarking additional revenue for critical population-based health interventions may further enhance the political feasibility of pro-health taxes. Taking into account the distribution of health benefits from these taxes, recent evidence rebuts earlier concerns that pro-health taxes might be regressive. When health gains in the longer term are factored in, pro-health taxes can be expected to deliver most of their benefits to lower-income populations (Fuchs, Icaza and Paz 2019). Moreover, revenues obtained from these taxes can be used for programs that disproportionately benefit the poor in other ways.

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Additional tax policy tools

Some countries apply—and so can now reduce or remove—tax relief for the purchase of voluntary health insurance and private health spending. Most countries that provide such relief are HICs. They may abolish tax advantages for social security contributions. However, those designing such tax reforms must anticipate their impacts on the poor and other vulnerable populations—for example, the chronically ill—and may need to introduce compensatory mitigation measures.

Although countries have seen their revenues drop sharply during the current crisis, it is prudent to consider lowering levies and taxes on medical goods and services, in order to reduce the costs of care and prevention. For example, Lao PDR, Nepal, Nigeria, the Republic of Korea, and Myanmar waived or eliminated tariffs for COVID-19 related medical goods and services, and Ethiopia, Indonesia, and Tanzania reduced them (World Bank forthcoming). Reducing these levies and taxes results in lower prices and health system costs. For products and services that patients pay for out-of-pocket, this approach also enhances affordability, especially for the poor.

External financing, including debt relief

For a substantial number of countries, any near-term expansion of fiscal space to improve health must rely in part on external financing. A key area for international action is to return to a growth path for this category of financing. Even before the COVID-19 crisis, most optimistic scenarios for domestic resource mobilization pointed to a significant financing gap for LICs and LMICs to attain the Sustainable Development Goals, including their UHC targets (World Bank 2019) (Stenberg, et al. 2017) (Archer and Muntasim 2020). The health sector is a major beneficiary of external financing. Prior to COVID-19, growth in levels of external financing for health in the form of grants was stagnating.

It is too early to tell whether the current surge in external funding for COVID-19—most importantly the Access to COVID-19 Tools Accelerator (ACT-A)—will translate into a significant and sustained rise in external financing for health. Moreover, it remains unclear whether this surge of international funding will primarily support the discovery and development of diagnostics, therapeutics, and vaccines, possibly at the cost of investments in health-system strengthening. By constraining countries’ scope to reinforce their health systems comprehensively, such a shift in external financing could limit recipient countries’ ability to benefit from global investments in research and development (R&D), if R&D investments ultimately give rise to global public goods such as low-cost treatments and vaccines. For this reason, the World Bank is providing $18 billion not only for global public goods but to support countries in strengthening their national delivery systems and essential public health functions (World Bank 2020b). The Global Financing Facility for Women, Children and Adolescents (GFF) provides grants linked to World Bank IDA and IBRD financing to help partner countries protect and promote primary health care and community health during and after the crisis. Both GFF and IDA will require renewed donor commitments in 2021 to respond to high-country demand for their support.

Donors can also do their part to ensure that external financing yields the expected dividends. The enhanced collaboration and alignment of partners under ACT-A is a critical departure from traditional, fragmented approaches. Its co-financing arrangements also establish links to domestic resource mobilization. The ACT-A builds on progress under the Global Action Plan financing accelerator, with critical features such as enhanced support for public financial management, other efficiency reforms, and advocacy platforms.
External financing can also help protect funding for priority expenditures during the crisis and recovery (e.g., monitoring, indicators and targets linked to disbursements, conditionalities). At the same time, it is important that countries be able to absorb higher levels of external financing for the health sector and use them efficiently and equitably. This may necessitate investment in organizational capacity for health financing and its governance more broadly.

The potential effect of debt relief

Debt relief, mostly available to low-income countries, seeks to help countries meet their debt payment obligations and more broadly alleviate debt distress. Debt relief can also indirectly foster economic growth, since the risk of debt defaults scares off potential lenders and investors, and the cost of servicing debt depresses public investments (Clements, Bhattacharya and Nguyen 2005). If not well coordinated among actors, though, debt relief can also impose high costs on economies. For example, uncoordinated changes in debt repayment schedules can lead to a lowering of a country’s credit ratings and reduce or even cut off its access to financial markets.

Debt relief, then and now

Earlier large-scale coordinated debt relief initiatives, most notably the Heavily Indebted Poor Countries effort (HIPC), later supplemented by the Multilateral Debt Relief Initiatives (MDRI), linked debt relief to investments, reforms, and progress in poverty reduction, among other conditions. The HIPC and MDRI resulted in reduced debt service, freed up resources equivalent to approximately 2 percent of GDP each year for beneficiary countries, and increased social spending in excess of the debt-service reductions obtained. Some beneficiary countries undertook remarkable increases in their spending on health, education, and other social services (IMF 2021) (Gupta, et al. 2001).

The current G20 Debt Service Suspension Initiative (DSSI) aims to help lower-income countries channel more of their scarce financial resources towards vital emergency and relief efforts. Even before COVID-19, using the standard assessment for debt sustainability, approximately half of the 69 DSSI countries found themselves in or at high risk of debt distress, though less than a quarter of these countries had faced such conditions in 2013 (IMF 2020e) (Kaddar and Furrer 2008).

As of February 2021, DSSI had delivered about $5 billion in relief to more than 40 eligible countries. Saving estimates of the DSSI for the period from May to December 2020 range from 0.2 to 5.8 percent of GDP. In contrast to earlier coordinated debt relief initiatives, conditions regarding the use of resources freed under DSSI are limited to full disclosure and IMF and World Bank monitoring of financial commitments. Furthermore, the DSSI provides only a temporary respite. In its current design, the debt standstill is neutral in net present value, implying that the unpaid debt service will have to be repaid, including interest, later. The IMF and World Bank have called for comprehensive action to address the financing and debt-relief needs of the poorest countries, including by private sector creditors, but this has not yet happened.

Boosting the chances for health gains from debt relief

Experiences from past debt relief initiatives offer some lessons on how the health sector can best position itself to benefit in situations where recipients and creditors agree to use some of the freed resources to

invest in poverty reduction and economic growth. For example, it is important that ministries of health actively engage in negotiations about the use of funds (Kaddar and Furrer 2008). Under previous coordinated debt relief initiatives that aimed to reduce poverty, health sectors benefitted substantially, and it is likely that they may also do so under the current DSSI, which aims to facilitate the COVID-19 response. However, previous initiatives did not always benefit the health sector as much as they could have. More effective engagement of the sector in negotiations will often require that health officials better understand the management and governance arrangements that apply to debt relief. Another precondition for success is full transparency from ministries of finance and central banks about the additional resources that relief initiatives make available.

For a successful engagement, investments in public expenditure, UHC and health monitoring systems, can help track spending, demonstrate the effectiveness of programs, and meet reporting requirements and conditionalities.

**Ensuring additionality**

Under coordinated debt relief efforts that link debt relief to investments and reforms spurring inclusive growth, it is equally important that health officials work with finance counterparts and partners to ensure the additionality of resources flowing to the health sector. Two pitfalls have been common. First, resources from debt relief may crowd out regular budget allocations. The risk increases when debt relief funds are managed separately from other public resources. A separate setup has short-term advantages, especially where public financial management systems are weak. For example, such a model initially provides greater transparency about available funds and their use. However, separate structures ultimately undermine efforts to improve public expenditure management. A second pitfall is that resources from debt relief can also crowd out project financing for the health sector. Again, to ensure additionality, it is important that debt relief funds be managed on-budget.

**TOWARD GREATER EQUITY AND EFFICIENCY IN HEALTH SPENDING**

To control COVID-19 and advance towards UHC, most countries need more health spending but also better health spending—that is, spending that can make health systems more equitable and efficient. Over time, the quality of spending has implications for its quantity. Especially where finance ministries have historically seen the health sector as wasteful, demonstrating equity and efficiency gains can strengthen the case for increased health spending going forward.

The current crisis poses challenges for health-spending equity and efficiency, while simultaneously creating opportunities to spend better. Amid shifting needs, policy makers face trade-offs as they weigh which expenditures to cut and which to protect. Leaders may choose to maintain some innovative policies introduced during the immediate crisis response, but they will have to roll back other emergency measures, and deciding when to do so may prove difficult. Like all crises, COVID-19 offers opportunities to tackle deep-rooted system performance issues. However, the pandemic has also sharpened long-standing equity and efficiency trade-offs, particularly through its disproportionate impacts on poor and vulnerable communities. How policy makers handle these multiple challenges will have long-term implications for health financing and health systems performance, as well as for countries’ recovery from the double shock.
Setting priorities: What to cut? What to keep?

Even when governments initially manage to sustain or raise spending levels during a crisis, spending cuts may become imperative as conditions evolve. The pandemic has shaken up spending needs at the sector level and for government as a whole. The pace of such change may accelerate during the recovery phase.

Who pays the price of spending cuts?

At the sector level, it is important for policy makers to fully appreciate the intended and unintended effects of spending cuts on health system performance—and thus ultimately on people. Spending cuts are often linked to reductions in entitlements. The need to anticipate the consequences of such measures is one reason why spending reviews, discussed earlier, are instrumental at the sector level. In previous crises, countries all too often opted for cuts in spending and entitlements that disproportionately affected vulnerable populations. For example, they reduced funding for primary health care or rationed other essential services. These policy choices shifted costs to people. Some governments increased co-payments—for example, for outpatient prescription drugs—dropped exemptions, increased caps, and reduced tax relief on out-of-pocket payments for health services. In some cases, policy makers deliberately cut back on the entitlements of vulnerable populations, lowering means-testing thresholds and excluding previously-covered groups (e.g., non-citizen residents). Even more frequently, countries chose to reduce funding for essential public-health functions, contributing to the system weaknesses that have fueled the current pandemic (Thomson et al. 2015).

In addition to deliberate reductions in spending, in times of declining health budgets, policy makers must also apprehend and adjust for so-called “automatic cuts.” This term refers to the pattern whereby, as budgets shrink, expenditures on salaries crowd out spending on non-salary items, due to difficulties in downsizing the payroll. For example, during the Asian financial crisis of the late 1990s, the share of salaries in the declining budget of the Thai ministry of public health increased from 39% in 1995 to 47% percent in 1999 (Wibulpolprasert 1999) (Koettl 2010). The effect on non-salary expenditures, for example medicines and other medical supplies, is compounded when currency devaluations drive up the prices of imported goods. The shift in the composition of spending and resulting change in the balance of medical inputs can quickly erode the quality of health services.

Priorities for protection

Against this background, the challenge for policy makers is not only to cut where it does the least harm, but also to protect spending critical for the performance of the health system. Spending categories to protect in times of crisis include, first and foremost, programs and policies that ensure access to care for vulnerable populations, such as the poor, mothers, and children, and the goods and services that benefit these groups most, in particular essential medicines, immunization and nutrition programs, and primary health care. Looking forward, it will be critical to secure and protect funding for COVID-19 vaccines. The current crisis has also highlighted the need to protect spending on essential public-health functions. As discussed earlier, relevant expenditure programs and items can be tagged and monitored in budgets and medium-term expenditure frameworks. Governments can further shield them through introducing minimum spending floors and, as discussed earlier, links to external financing.

Spending categories that tolerate cuts without major harm to health system performance tend to be context specific and spending reviews critical to identify them. Decisions need to weigh both short- and longer-term effects. In past crises, administrative budgets have sometimes been seen as a spending
category where cuts would do little damage to the system, at least in the short term. Indeed, in times of crisis, health-sector agencies often demonstrate their commitment to reduce inefficiencies by cutting administrative costs. Such measures are currently underway in Indonesia and Lao PDR, for example. However, to reap full returns on their investments in universal health coverage, countries often need to increase their administrative capacities in health, not reduce them. Similarly, the system may tolerate cuts in spending on maintenance of equipment and infrastructure in the short term, but not in the long term. During the global financial crisis, European social health insurance schemes reported some of the deepest spending cuts for hospitals and cash benefits (Koettl 2010). Policy makers speculated without evidence that cuts in hospital reimbursement rates would trigger efficiency gains. In the current crisis, cuts in both hospital spending and cash benefits, including sick leave, could have detrimental effects on the quality of care for the critically ill, as well as on beneficiaries’ compliance with critical public-health measures.

In some cases, targeted cuts in spending and entitlements can result in lasting, positive effects on equity and efficiency. For example, where entitlements were initially broadly defined and systems relied on implicit rationing, some countries seized emergencies as opportunities to introduce explicit benefits packages that prioritized the most cost-effective interventions. Countries have also curtailed benefits that show lower cost-effectiveness. Historically, cuts in capital budgets are typical: Thailand took advantage of forced delays in capital projects during the Asian financial crisis to critically re-assess costs and benefits and cancel some of these projects (Gottret 2009).

Keep learning as the crisis shifts

The immediate COVID-19 health response posed new challenges and opportunities to maintain and enhance the equity and efficiency of health spending. To ensure the efficient use of resources, countries will have to assess and find the right time to roll back adjustments to public financial management (PFM) that have been critical to facilitate the emergency response. For example, in the short term, it is important to rigorously review measures that streamlined procurement processes and accelerated funding flows at the risk of increased corruption and leakages (Curristine, et al. 2020). In the longer term, governments will need to carefully reevaluate measures introduced to strengthen the health workforce during the acute response phase: for example, whether and how supplemental pay packages and the rapid recruitment of additional health workers can be incorporated into the permanent payroll. Some countries adopted sunset clauses for emergency procedures from the outset, for example, Nepal and Indonesia (World Bank forthcoming).

Some policies implemented as emergency measures during the COVID-19 response are improving overall health-system equity and efficiency. Rolling-out and deepening these reforms holds great promise for health system performance improvements in the longer term. Examples include, as mentioned above, PFM adjustments that accelerated funding flows and absorptive capacity, furthermore, task-shifting, new modes of public-private collaboration, accelerated deployment of telemedicine, and expanding conditional cash transfer programs to people with high health risks. Information platforms that can swiftly capture changes in service coverage and financial protection, even under social-distancing and lockdown conditions, for example, high-frequency, phone-based household surveys, proved critical to protect vulnerable populations.
**New light on old debates**

The COVID-19 response has also shifted the balance on some of the most controversial, long-standing trade-offs in health financing, with potential long-term implications for equity and efficiency. Two initial examples pertain to the sources and management of public resources: Social health insurance versus tax funding in mixed financing systems and central versus decentralized financing.

Efforts to maintain government spending levels against the sharp drop in revenue from obligatory social health insurance contributions have increased the share of general tax revenue funding for health in some mixed financing systems. Budget transfers that lower or replace wage-based contributions relax the link between employment and entitlement inherent to social health insurance. The link between employment and entitlement can cause inequities and roadblocks on the path to universal health coverage.

In some countries, adjustments to PFM rules have not only accelerated the release of funds but shifted more resources and power over spending decisions to the system frontlines. The enhanced spending autonomy can help frontline services procure essential goods and services for their day-to-day activities and thus perform more efficiently. However, the shift from central controls to local autonomy may cause inefficiencies and requires additional PFM adjustments and regulatory steps to ensure transparency and accountability and equitable and efficient spending (IMF 2020g).

A second set of trade-offs concerns challenges in balancing spending priorities, specifically, spending on health care versus essential public-health functions and, within health care, spending on primary versus higher levels of care.

Surging care and treatment needs among COVID-19 patients, pushing health systems toward the point of collapse, have triggered increases in recurrent funding and capital investment in secondary and tertiary care. The capital investments will require sustaining increased levels of recurrent funding for higher levels of care over the longer term: for example, to cover staffing and maintenance. When a hospital builds or expands an intensive care unit (ICU), it has to shoulder the associated running costs for years or decades to come, likely compensating with spending cuts elsewhere. However, in many countries, primary health care was already underfunded and of poor quality compared to higher levels of care. Bold investments in primary health care are more vital than ever to get the most cost-effectives services to those most in need.

Investments in threat detection and pandemic response have amplified the resources available for health security in many settings. The challenges that countries at all income levels have experienced in controlling COVID-19 underscore the chronically low prioritization of essential public-health functions in funding decisions. Predicted and largely preventable, the COVID-19 tragedy challenges countries and the global community to finally break the cycle of panic and neglect around international public-health threats. At the same time, though, many countries still struggle to provide even the most essential health services to the bulk of their populations.

Finding the right balance for these trade-offs during the recovery holds the potential to improve the equity and efficiency of health financing and systems and eventually put countries on a new trajectory toward UHC (World Bank 2019). However, there are no perfect solutions. Available resources may shrink in many settings in 2021 and 2022, while calls for higher spending on an array of health agendas multiply. Countries and communities will resolve these dilemmas differently. A general principle is to maintain inclusiveness and transparency in the processes by which trade-offs are considered and decisions reached. When
decisions around frontline health care and public-health investments are discussed, for example, it is especially important that the voices of vulnerable constituencies be heard. All solutions have both up- and downsides, and the best answers may be those facilitated by a decision-making process that communities see as fair and open.

**Leveraging crises to spend better**

The COVID-19 crisis also provides policy makers with an opportunity to tackle other long-standing equity and efficiency issues. As countries weigh options, recent examples can inform their choices.

**Protecting the vulnerable**

In past emergencies, some countries deliberately chose to double-down on their investment in UHC as part of both their crisis response and recovery strategies. The rationale and supporting evidence are strong. Progress toward UHC, including stronger health financing, benefits the economy through multiple pathways, from health and human capital development to workforce and labor-market effects, poverty reduction and income redistribution, and strengthened consumption and competitiveness (World Bank 2019).

These strategic investments in UHC benefit from building on ongoing reforms and generate tangible improvements in coverage for vulnerable populations. During previous crises, some countries focused reforms on extending population coverage to vulnerable groups, shifting the basis for entitlement from formal employment to residency. Groups that benefited from these decisions included the elderly, students, the unemployed, self-employed workers, agricultural and informal workers, and the poor. Higher-income countries also extended benefits to non-citizen residents, including migrants, foreign workers, and stateless persons. For example, during the global financial crisis, Belgium, Bosnia and Herzegovina, and Estonia extended entitlements to the long-term unemployed, while Mexico almost doubled its coverage of the poor and informal worker households with guaranteed essential health services, expanding coverage from 31.1 million people in 2009 to 55.6 million in 2013 (Freeman and Boynton 2009) (Thomson et al. 2015) (World Bank 2017a) (World Bank 2018). During Argentina’s 2001-02 financial crisis, the government expanded maternal and child health and disease-specific programs, including vaccinations, while Indonesia and Thailand responded to the 1997 Asian crisis by increasing coverage of the poor with subsidized “health card” programs guaranteeing free services at public health facilities. Coverage under Indonesia’s program rose from near zero to more than 10 percent of the population (Braun and Di Gresia 2003) (Sparrow 2008) (Pongsapich and Brimble 1999).

In past crises, some countries also introduced health financing reforms focused on enhanced financial protection for vulnerable populations. Policy measures included lower co-pays, exemptions from co-pays, caps on out-of-pocket payments, the reimbursement of indirect costs of health care (e.g., transport), and sick-leave benefits to compensate for health-related income losses. For example, during the global financial crisis, 12 European countries reduced user fees for outpatient and inpatient care, lowering the cost to consumers of goods and services ranging from outpatient drugs to diagnostic tests. (Thomson, et al. 2015) In some instances, countries have also leveraged emergencies to improve the coverage of health services particularly important for low-income households (e.g., emergency, mental health, and preventive services (Musgrove 1987) (Gottret, et al. 2009). For the same reason, but also to facilitate disease control, several countries have offered COVID-19 services free of charge for the entire population. Countries adopting this strategy include Ethiopia, Indonesia, Papa New Guinea, and Tajikistan (World Bank forthcoming). Other countries are expanding their safety nets, targeting households with high health risks.
**Seeking efficiency gains**

In many low and middle-income countries, strengthened public financial management can improve the efficiency of government spending on health. Realistic budgets that are executed swiftly support the stability and reliability of health funding and, in turn, greater financial discipline (Cashin, Bloom, et al. 2017). Transparency and government accountability help direct public budgets efficiently and equitably to UHC goals. Countries can improve results when good practices are adapted to country-specific problems and capacities, accompanied by measures to strengthen PFM foundations, if needed (Andrews, Pritchett and Woolcock 2015). Where designed and implemented appropriately, PFM improvements have a positive impact on the capacity of health financing to achieve desired system goals (Goryakin, et al. 2017). In turn, countries that have achieved greater budget transparency and less corruption government-wide tend to allocate higher shares of their budgets to health (Sarr 2015) (Simpson 2014) (Robinson 2006) (Mauro 1998).

Other sources of inefficiencies and options to overcome them are well established (World Bank 2017b). Taking all forms into account, the magnitude can be staggering. Countries can waste an estimated 20 to 40 percent of all their health resources. Some options lie in the health financing system, while other solutions require actions in the wider health system. Some solutions are more likely to produce rapid returns than others.

Many sources of inefficiencies have been raised in this and previous sections and options to overcome them discussed. For example, earlier discussed issues of allocative efficiency included questions of cutting and protecting expenditure programs, performance and whole of government approaches to budgeting, imbalances in spending on health care versus essential public health functions and within care, spending on primary versus secondary and tertiary health services, the introduction and adjustment of explicit benefits with a focus on cost-effective interventions, including telemedicine, and the use of pro-health taxes as some of the most cost-effective health interventions. Issues of technical efficiency included adjustments of budget execution practices, including central controls versus local autonomy, public workforce management, procurement procedures, the prioritization and evaluation of capital expenditures, the engagement and contracting of private providers. Many countries are already pursuing these options.

Among the few other common sources of inefficiencies, the financing of pharmaceuticals has been a common focus of efficiency reforms across income settings in previous crises.\footnote{Additional, common sources of inefficiencies driven by financing decisions include issues of financing arrangements, most importantly, fragmentation and payment systems and their impact on service delivery.} Medicines constitute a significant share of both public and private spending on health. As discussed, when sector expenditures contract overall, spending on the payroll tends to crowd out funding for non-salary items, including pharmaceuticals and other medical supplies. For imported medicines, this effect may be compounded by price increases due to currency devaluations. Measures to increase the efficiency of spending on pharmaceuticals have been successfully implemented in many countries. Interventions include centralized purchasing, greater use of essential drug lists, health technology assessments (HTA) to evaluate new medicines, expanded use of generic drugs, price benchmarking, and reference pricing. Countries such as Bosnia and Herzegovina, Indonesia, and Kenya have started to pursue such reforms as part of their sector response to the COVID-19 crisis (World Bank forthcoming).
As countries pursue deeper efficiency reforms, it is important to recognize that interventions typically increase operational efficiency, that is, the quantity of goods and services produced with given resources. Efficiency improvements rarely generate savings that can be reallocated to priority expenditure programs. Hence, efficiency improvements can facilitate but not substitute for decisions to invest in health.
CONCLUSIONS

Most countries fighting COVID-19 have faced a public-health disaster and a severe economic downturn simultaneously. With this double shock, health spending choices have become both more complex and more critical. Nations’ health security and economic recovery depend on getting the choices right.

This paper has analyzed the forces influencing health spending during the pandemic and described different scenarios that may result from leaders’ decisions about health spending. The paper has two core messages. The first is that most countries will need to maintain ambitious levels of health spending for the period 2021-2022 to control COVID-19, protect other health goals, and create conditions for economic recovery. The second is that countries have workable health-financing options to achieve these aims.

The scenarios in Part I showed that, despite a projected return to economic growth in most parts of the world in 2021, government expenditure in the large majority of countries will likely fall. This means that, unless governments deliberately direct a higher share of their spending to health, government health spending will also decline. Even if policy makers protect the share of health in government spending, government health expenditures per capita are expected to shrink on average in all country income groups in 2021 and 2022, dropping by about 3 percent in low-income countries and by more than 6 percent in high-income settings. An additional caveat is that the IMF macroeconomic projections that underpin these estimates are likely to prove optimistic, such that downward pressures on per capita health spending may actually be even stronger. Importantly, declines in health spending will be most damaging in poorer countries that already had low levels of government health spending to begin with.

It is understandable and even desirable that general government spending in many countries may fall in the next years, following large outlays on crisis response, including substantial economic rescue packages in many settings. However, there are good reasons why health spending in most countries should not fall yet. The longer-range agenda of “building back better” in health systems lies beyond the scope of this paper. But even focusing only on the period 2021-2022, it is clear that most countries need to maintain strong levels of health spending during this time.

First, COVID-19 itself is not yet over, despite the rapid development of several vaccines and their partial roll-out (to date, largely in wealthier countries). Second, the crisis has provoked or unmasked a wide array of other health problems that demand urgent action. This includes the backlog of essential health services that were put on hold during spikes in COVID-19 transmission, notably in maternal and child health and maintenance care for non-communicable diseases. Finally, countries need to reignite progress toward universal health coverage. Both public-health and economic arguments back up this point. Without a robust health recovery, countries can’t get back on the path of sustainable economic growth.

In many settings, health recovery will require boosting government health budgets. Countries have tools at their disposal to achieve this. This paper has discussed several, including spending reviews, performance budgeting, and macro-fiscal analysis. Some countries also have options to expand their overall fiscal space—the total pie from which the health sector’s spending share is carved out. These efforts will be especially important in countries that had a low pre-pandemic ratio of government revenue to GDP. Approaches in which the health sector can take co-leadership with the ministry of finance include taxing health-damaging products, such as tobacco, alcohol, sugar-sweetened beverages, and carbon.
For some lower-income countries, expansion of overall fiscal space will have to come through external financing. Currently, the IMF projects that external grants to the governments of low- and middle-income countries will fall as of 2021, after rising in 2020 to support pandemic emergency response. A responsibility for the international community is to return to a growth path in external financing for health. Debt relief can contribute, but current efforts are insufficient. Collaboration between donors and beneficiaries is needed to ensure that debt relief yields additional resources for the health sector.

Finally, countries need not only more health spending but also better spending—investments that can improve equity and efficiency in health systems. Demonstrating equity and efficiency gains can bolster the case for more health funding down the road.

Equity must be front and center, in cases where health leaders find themselves forced to make sector budget cuts. The challenge for policy makers is not only to cut where it does the least harm, but also to protect spending critical for health-system performance. Priority spending categories to protect include those crucial for poor people, mothers, children, and other vulnerable populations, in particular essential medicines, immunization and nutrition programs, and primary health care. The current crisis has also highlighted the need to protect spending on essential public-health functions.

Countries did not choose COVID-19. But leaders have choices about how to deal with it. In particular, they must make high-stakes decisions about how best to mobilize and spend health resources to save lives and protect livelihoods. This paper has analyzed factors likely to shape countries’ health-spending options in the years ahead and the tools and strategies that policy makers can avail. The challenges are vast, and the tools are far from perfect. But evidence suggests that, if they apply these instruments skillfully, countries can control COVID-19, check its collateral health impacts, and advance towards an inclusive health and economic recovery.
BIBLIOGRAPHY


ANNEX 1. DATA AND METHODS: PROJECTING PER CAPITA GOVERNMENT HEALTH SPENDING EXPENDITURE (GHE) PER CAPITA

This annex provides details about data and methods underpinning the different scenarios for per capita government health spending from 2020 to 2025 presented in part I (pages 13-17).

Scenario 1
To forecast GHE per capita during the years 2020-2025 this scenario uses the most recent IMF projections (IMF 2020c) and linear regression to quantify past co-movements between GHE per capita and GDP per capita. A double log functional form of the regression is suggested by the following identity:

\[
\text{GHE per capita} = \frac{\text{GHE}}{\text{GGE}} \cdot \frac{\text{GGE}}{\text{GDP}} \cdot \text{GDP per capita}
\]

A binary indicator of GDP per capita contraction and its interaction term allow for the possibility of an asymmetric relationship in times of GDP per capita decline. Parameters were estimated using a panel fixed effects regression model. The estimated income elasticity of per capita public spending on health produces GHE per capita forecasts for the years 2020-2025 when combined with current GHE per capita levels and IMF forecasts of GDP per capita.

Data were available for 184 countries between 2000 to 2025. Table A.1 shows the regression results from three different regression specifications. The first column shows results from the simple regression of GHE per capita on GDP per capita. Globally, public health expenditure has been procyclical with an estimated income elasticity of per capita public spending on health close to 1.3: implying that each percentage change in GDP per capita is associated on average to a change in public health expenditures per capita of about 1.3 percent. The second column includes the contraction indicator and its interaction with GDP per capita. The results show that the elasticity is slightly higher in periods of GDP per capita decline.

The third column shows the results when the share of general government expenditure (GGE) and its interaction with GDP per capita contraction are included in the regression. It shows that significant variation in GHE per capita is captured by variation in GGE per capita. Most of the effect of GDP on public health expenditures is mediated through the positive relationship between overall general government expenditures and GDP. The elasticity of public health expenditure with government expenditures is close to 0.7, indicating that on average public health expenditures move in the same direction as the general government budget (though less than proportionally), changes in GDP per capita remain positively associated with government health expenditure per capita. This effect may capture the extent to which richer countries are better able to increase the degree to which health is prioritized in the government budget compared to poorer countries (Tandon et al. 2018).27 This regression specification is not used further because it leads to GHE per capita forecasts that are very similar to the more intuitive scenario 2. However, this regression specification serves to infer missing GHE per capita values in the year 2019. These values are not yet available in the most recent WHO GHED database and complement the GHE per capita projections of the four scenarios.

27 Changes in public health expenditure per capita can be decomposed into (i) changes in the share of health expenditure over government budget, (ii) changes the share of government budget over GDP, and (iii) changes in GDP per capita.
Table A.1. Panel fixed effects regression results for estimating income elasticity of government spending for health

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<tr>
<th>Dependent variable: Per capita government spending on health</th>
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<th>(3)</th>
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<td>1.29***</td>
<td>1.18***</td>
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<td>(0.02)</td>
<td>(0.02)</td>
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<td>Interaction of log of per capita GDP and contraction</td>
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</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.01)</td>
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</tr>
<tr>
<td>Log of government spending share of GDP</td>
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<tr>
<td>Interaction of log of government spending share of GDP and contraction</td>
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<td></td>
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<tr>
<td></td>
<td>(0.02)</td>
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</tr>
<tr>
<td>Contraction indicator</td>
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<td>-0.18**</td>
<td></td>
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<tr>
<td></td>
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<td>(0.07)</td>
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<td>Observations</td>
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</table>

**Scenario 2**
This scenario forecasts GHE per capita based on the assumption that governments protect the share of health in general government spending. The protected share is based on the most recent WHO GHED data and is calculated as the average share of the years 2016-2018. Multiplication of this share with IMF’s projected government share of income and GDP per capita produces the GHE forecasts.

**Scenario 3**
In this scenario governments are either able to maintain positive trends in GHE per capita growth or stop negative trends. Trends in GHE per capita are defined as the average annual growth rate during the years 2009-2018. Out of the 178 countries 22 showed a negative growth trend. For example, South Sudan, Greece, or Jordan saw shrinking GHE per capita during this time period. To forecast health spending in this scenario it assumed that positive trend growth continues after the year 2019 or that 2019 levels of GHE per capita remain constant. IMF projections play no role in this scenario.

**Scenario 4**
Here governments either protect positive trend growth of the total of per capita government health spending and per capita out-of-pocket health payments or are able to stop negative trend growth. 26 out of 178 countries showed a negative growth trend. Total trend growth is defined as the average annual total growth rate during the years 2009-2018. If OOP per capita growth decreases an increase in government spending would need to compensate the shortfall. As OOP per capita values are not available for the years 2019-2025 it is necessary to project them. Using IMF projections and extrapolating past co-movements between OOP per capita and GDP per capita to the relevant years produces the needed OOP per capita projections.
Similar to scenario 1 linear regression is combined with IMF’s GDP per capita projections to forecast OOP per capita during the years 2019-2025. Again, the contraction indicator and its interaction term are included to accommodate an asymmetric relationship in times of GDP per capita decline. Parameters were estimated using a panel fixed effects regression model. Table A.2 presents the regression results. The income elasticity of OOP with respect to GDP was estimated as 0.88 (column 1). Inclusion of the contraction indicator leaves the coefficient essentially unchanged (column 2). When combined with current OOP per capita levels and IMF forecasts of GDP per capita the estimated income elasticity of OOP per capita spending produces GHE per capita forecasts for the years 2020-2025. Projected GHE per capita spending is then calculated as the difference between the projected total of health spending and projected OOP per capita.

Table A.2. Panel fixed effects regression results for estimating income elasticity of OOP spending for health

<table>
<thead>
<tr>
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<td>Log of per capita GDP</td>
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<td>Interaction of log of per capita GDP and contraction</td>
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</tr>
<tr>
<td>Contraction indicator</td>
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<td>(0.06)</td>
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</table>
ANNEX 2. IMPLICATIONS OF THE PROJECTED CHANGES IN PER CAPITA GENERAL GOVERNMENT EXPENDITURE (GGE) FOR GGE/GDP

Figure 2 in the main text showed that GGE per capita was projected to be substantially higher in 2020 than in 2019 despite falls in general government revenue. Subsequently, it was projected to fall for at least 2 years in each income group, before starting to rise again.

The implications for GGE/GDP are shown here. GDP is expected to start rising again in all income groups in 2021. The fall in per capita GGE combined with the rise of GDP means that GGE/GDP falls in 2021 and 2022. Subsequently, even though GGE begins to rise again, it is projected to rise more slowly than GDP, meaning that after 2020, GGE/GDP would continually fall in all income groups.

The 2025 figures need to be seen. They are there and I cannot seem to bring them into the picture by making the columns narrower.

<table>
<thead>
<tr>
<th>Income</th>
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ANNEX 3. IMPLICATIONS OF THE GOVERNMENT HEALTH SPENDING SCENARIOS

Part 1: Implications of the scenarios of the possible changes in per capita government health spending (GHE) for the share of government health expenditure in GDP

Not surprisingly, scenario 1 shows a fall in GHE/GDP in 2020, followed by increases thereafter. Scenario 2 show increases in 2020, followed by subsequent falls as GDP starts to rise but GHE does not keep pace. Scenarios 3 and 4 show continual increases in the ratio, with the increases greater in Scenario 4 than 3.

### Scenario 1

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Part 2: Implications of the scenarios for GHE as a share of general government expenditure (GGE) over time

Scenario 1 would result in lower shares of GHE in GGE in 2020 and 2021, followed by increases thereafter. Scenario 2 is based on the assumption of holding the ratio observed from 2016-2018 constant. Scenarios 3 and 4 show continual increases in the ratio, with the increases greater in scenario 4.

GHE-to-GGE ratio

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Scenario 4

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