



DIVERGING FISCAL PRESSURES, UNEVEN CONSTRAINTS

Government Health
Spending Outlook -
Projections Through
2029

Double Shock, Double Recovery Series

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Diverging Fiscal Pressures, Uneven Constraints

Double Shock, Double Recovery Paper Series

**Christoph Kurowski, Martin Schmidt, David B. Evans, Ajay Tandon, Patrick Hoang-Vu Eozenou,
Jewelwayne Salcedo Cain, and Eko Setyo Pambudi**

November 2024

Health, Nutrition and Population Discussion Paper

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Abstract

This paper examines the implications of the IMF's April 2024 macro-fiscal forecast updates on government health expenditure (GHE) across 170 economies through 2029, covering nearly all years remaining to achieve the Sustainable Development Goals (SDGs). The findings reveal wide disparities in governments' capacities to increase health spending, with differences not only observed across income groups but also within them. Primary concerns focus to two groups of low- and lower middle-income countries: the first group is projected to experience a contraction in real per capita GHE from 2019 and 2029, threatening to reverse progress toward the health SDG targets, while the other group faces stagnation in real per capita GHE, greatly limiting advancement. The insights presented are crucial for health policymakers and their external partners to respond to evolving macro-fiscal circumstances and stabilize investment growth in health. While increasing the priority of health in spending is a key policy option, it will not be sufficient on its own. Effective responses also require improving spending efficiency and addressing broader fiscal challenges. Without decisive action, many countries have little chance of achieving the health SDGs.

Keywords: COVID-19, macro-economic crisis, inflation, debt distress, government health expenditure,

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ACKNOWLEDGEMENTS

The authors are grateful to the World Bank for publishing this report as a Health, Nutrition and Population (HNP) Discussion Paper.

This paper was prepared under the overall guidance of Mamta Murthi, Human Development Vice President, and Juan Pablo Uribe, Global Director for HNP.

The authors are deeply grateful for the insightful comments and valuable suggestions by the peer reviewers: Francisca Ayodeji Akala, Edson Correia Araujo, Alaka Holla, Marc-Francois Smitz, and Srinivas Gurazada (all from the World Bank). Sincere thanks also to Mauricio Soto and Nick Carroll from the International Monetary Fund (IMF) for their unwavering engagement and support.

The authors would like to acknowledge the contributions of people, organizations, and events that supported earlier issues of this report series, which also benefited the current report. The HNP GP Leadership Team also offered valuable feedback. We also appreciate the input from discussions with organizations such as the Bill and Melinda Gates Foundation, the International Health Economics Association, the Joint Learning Network, PAHO, P4H, SEARO, the Sustainable Health Financing Accelerator of the Global Action Plan, WPRO, and the UK's Foreign, Commonwealth & Development Office. Finally, the 7th Annual Health Financing Forum in Washington, DC, in April 2024 contributed valuable perspectives that informed this report series.

The authors sincerely appreciate Karunia Silitonga's coordination and administrative support in finalizing the report. Julie Luvisa Bazolana and Alexandra Beith also made valuable contributions to its production. Special thanks to Alexandra Humme for her assistance with external communications, and to Andres de la Roche for designing the cover.

The authors gratefully acknowledge the generous financial support of the Bill & Melinda Gates Foundation, Gavi, the Vaccine Alliance, and the Government of Japan's Policy and Human Resources Development Fund (PHRD) UHC Window, which made this work possible.

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ACRONYMS AND ABBREVIATIONS

COVID	Corona Virus Disease
GDP	Gross Domestic Product
GGE	General Government Expenditure
GGR	General Government Revenue
GHE	Government Health Expenditure
GNI	Gross National Income
HIC	High-Income Country
IMF	International Monetary Fund
LIC	Low-Income Country
LMIC	Lower Middle-Income Country
OOP	Out-of-Pocket
SDG	Sustainable Development Goal
UHC	Universal Health Coverage
UMIC	Upper-Middle-Income Country
WHO	World Health Organization
WHO GHED	WHO Global Health Expenditure Database

EXECUTIVE SUMMARY

This paper presents projections of government health expenditure (GHE) through 2029, covering 170 countries and representing 95 percent of the world's population. The analysis places special emphasis on low- and lower middle-income countries (LICs and LMICs), given their profound challenges in financing health as the world approaches the decisive period for the Sustainable Development Goals (SDGs). The paper updates the earlier World Bank Health Spending Outlook, *Old Scars, New Wounds* (Kurowski et al. 2022).

The IMF's macro-fiscal forecasts released in April 2024 indicate a moderate increase in overall government spending across all income groups from 2023 to 2029. However, this growth is expected to lag significantly behind the marked expansion observed in the pandemic years and the preceding two decades.

Diverging fiscal pressures

Although average government spending is expected to grow slowly, countries' fiscal capacities vary widely with significant differences in per capita expenditure within and across income groups. Of the 170 countries, 74 are expected to experience substantial growth in real per capita general government expenditure (GGE) between 2019 and 2029. Meanwhile, 67 countries are projected to experience sluggish growth, while 29 countries are anticipated to see a contraction in per capita spending over the same period.

Uneven constraints

Differences in government spending projections create distinct fiscal pressures on funding for health. To examine these challenges, the analysis considers three possible pathways for future real per capita government health expenditure (GHE). The first two scenarios use the IMF projections of general government expenditure (GGE) per capita to assess how these trends shape future GHE per capita, applying two different fixed shares of GHE within GGE: the pre-pandemic share and the elevated pandemic-era share. In contrast, the third scenario assumes that GHE per capita continues growing according to historical trends observed in the two decades leading up to the pandemic, independent of GGE per capita projections.

The scenarios highlight uneven constraints in growing per capita government health spending under longer-term fiscal pressures. If the health share in GGE reverts to pre-pandemic levels—or even if it remains at the higher shares seen during the pandemic—real GHE per capita in countries with contracting GGE is projected to decline between 2019 and 2029. For countries with stagnating GGE, per capita GHE is projected to grow only modestly by 2029. In both cases, spending remains well below the levels in scenario 3, where GHE per capita is projected to grow at the historical rates observed from 2000 to 2019.

The situation is especially precarious for the LIC and LMICs in the groups with contracting and stagnating general government expenditure. The concurrently published Health Spending Review shows that many LICs and LMICs did not maintain the higher shares of GHE in GGE observed during the crisis, instead experiencing negative growth in the share of GHE between 2019 and 2023 (Kurowski et al. 2024). Additionally, in many of these countries, rising or high interest payments on public debt limit their capacity to allocate larger shares of government spending to health.

Navigating difficult choices

The current spending trajectories in LICs and LMICs are, with few exceptions and regardless of the macro-fiscal outlook, insufficient to meet the per capita government health spending levels needed to achieve the global health goals by 2030. Without decisive policy action, especially in low-income

countries with contracting or stagnating fiscal space, government health spending will continue falling far short of the necessary minimum levels.

To counter these financing shortfalls, one critical option for governments is to increase the priority of health in spending decisions. Other domestic policies will also be crucial, including fiscal reforms to boost government revenues and measures to improve spending efficiency, such as eliminating ineffective subsidies and combating corruption.

As the macro-fiscal landscape shifts, insights from this report provide policymakers with critical information to adapt domestic policies to anticipated declines in GGE or to expand ambitions if trends improve. Regular updates of this analysis can also help external partners anticipate requests for additional Development Assistance for Health (DAH) and refine targeting criteria to better support countries facing significant challenges in expanding health spending through domestic resources.

Time for a rethink

The current spending outlook does not bode well for achieving global health goals. If the expected funding shortfalls are not addressed, the consequences will be profound. Ministries of Health and other sector agencies will face rapidly increasing unmet health needs with inadequate, stagnant budgets, limiting their ability to strengthen health systems, improve population health, and enhance financial protection. Insufficient health investments will also undermine human capital development and weaken the foundation for long-term growth and revenue generation (World Bank 2019). Meanwhile, development partners risk seeing gains from past Development Assistance for Health (DAH) diminish and progress on global priorities, including pandemic prevention and preparedness, stall.

While the SDG era has been envisioned as a transformative decade for global health, the current government health spending outlook threatens to make this period one of missed progress for many countries. This outlook calls for a critical reassessment of financing strategies to achieve the health-related SDGs amid fiscal headwinds and multiplying development challenges. The stakes extend beyond the health sector to include Ministries of Finance and development partners, who risk missing vital opportunities without collaboration to forge new paths. Encouragingly, the analyses also show that some countries are pursuing strategies to sustainably expand health investments, proving that progress is possible.

INTRODUCTION

Countries are entering a critical phase in achieving the health Sustainable Development Goals (SDGs), with Universal Health Coverage (UHC)—ensuring that all people have access to essential health services without financial hardship—at the core of these efforts. Only six years remain to meet these goals, yet global progress toward UHC has been slow, and the COVID-19 pandemic has caused significant setback (WHO and World Bank 2023). The current rate of progress is now estimated to be only a quarter of the pace necessary to achieve the health-related SDGs (WHO 2022).

Accelerating progress is particularly challenging in low- and lower middle-income countries. Many of these countries face diverse disease burdens, including maternal and child mortality, major epidemics such as HIV/AIDS, tuberculosis, and malaria, as well as the growing impact of non-communicable diseases, injuries, and environmental threats. Strengthening pandemic preparedness and building climate-resilient health systems also remain critical to safeguarding future gains.

Multiple expert bodies have suggested minimum spending levels to meet global health goals, and when these estimates are disaggregated and adjusted to reflect only the government health expenditure component¹, they consistently point to, in terms of current 2023-dollar values, about US\$80 per person on health in low-income countries (LICs) and at least US\$100 in lower middle-income countries (Commission on Macroeconomics and Health, 2001; HLTF, 2009; McIntyre, Meheus, & Røttingen, 2017; Stenberg et al., 2017; Jamison et al., 2024). These estimates reflect only recurrent spending, excluding the capital investments required to expand service delivery infrastructure and reach the entire population, and assume that resources are spent efficiently. Yet, in 2019, government health expenditure was far below these thresholds, averaging, again in 2023-dollar values, US\$12 in LICs and US\$80 in LMICs, with spending growth over the previous two decades insufficient to even approach the minimum levels needed by 2030, especially in LICs.

Closing these shortfalls in government health spending by 2030 presents considerable financing challenges. On the one hand, the IMF's macro-fiscal projections released in April 2024 indicate better-than-expected economic growth for the next five years, creating opportunities for increased government revenue (IMF 2024a). On the other hand, public debt remains at record levels globally, and rising interest payments may divert resources away from essential priorities like health.

Purpose

In light of these recent dynamics, this paper has two main objectives: first, to summarize the implications of the IMF's April 2024 macro-fiscal projections for real per capita general government expenditure, and second, to explore how these projections are likely to shape the future trajectory of government health expenditure (GHE) under various scenarios, with a focus on low-income and lower middle-income countries (LICs and LMICs).

As in the previous health spending outlook, the analysis centers on government health expenditure. This component of health expenditures sets the limits of what countries can achieve in providing their populations with essential health services and financial protection. As the primary source of prepaid funding for health systems, GHE enables individuals—especially those less well-off—to access necessary health services without facing financial distress. It is also critical for maintaining public health functions and fostering health system resilience, thereby making it a central consideration in fiscal planning.

To ensure timely insights on government health expenditure trends for decision-makers, the study excludes analyses of non-governmental spending sources, such as out-of-pocket payments and off-

¹ As defined in the system of health accounts (OECD 2011).

budget donor contributions. It also does not assess how changes in government spending levels impact progress toward Universal Health Coverage (UHC) or other global health goals.

Timeframe and coverage

The analysis focuses on the period from 2019 to 2029, with an emphasis on the outlook from 2023 to 2029. The earlier years of the decade, including the pandemic response and recovery years from 2019 to 2023, provide essential context for understanding the trends in government health expenditure (GHE).

The study includes 170 countries, representing 95 of the world's population. It encompasses all World Bank regions and includes fragile and conflict-affected countries (FCV) as well as small island developing states (SIDS). Special emphasis is placed on low-income and lower middle-income countries (LICs and LMICs), which face the most significant in sustainably financing health.

Methods

This paper builds on the methodology used in previous health spending outlooks, with a focus on categorizing countries into those with contracting, stagnating, or expanding fiscal space (Kurowski et al. 2021a, 2021b, 2022). However, several modifications have been introduced. First, the analysis emphasizes average annual growth rates across different periods, moving away from simple comparisons of start and end points. Additionally, the scenarios have been streamlined to focus on three pathways for future government health expenditure (GHE) per capita: two driven by macro-fiscal trends and one based on historical growth rates prior to the pandemic.

Notes to the Reader

Following this introduction, the report moves to an overview of trends in general government per capita expenditure, distinguishing countries by their fiscal outlook—contracting, stagnating, or expanding resource envelopes. Annex 1 provides complementary summaries of trends in economic growth and general government revenue. The subsequent section explores how these fiscal trends affect government per capita health expenditure under different scenarios for each country category, as well as the impact of changes in interest payments on public debt. The report concludes with final insights.

The findings section is intentionally concise, allowing readers to quickly grasp the main trends and shifts. Whether scrolling through the text or navigating through maps, tables, or figures, readers can easily explore the data. The figures have been designed to clearly highlight individual country performances, making it simple to identify both overarching patterns and country-specific details at a glance.

Finally, readers should bear in mind that unless stated otherwise, all dollar values in the paper are expressed in constant 2023 US\$. This ensures that the analysis accounts for inflation, providing a clearer view of real changes in spending over time.

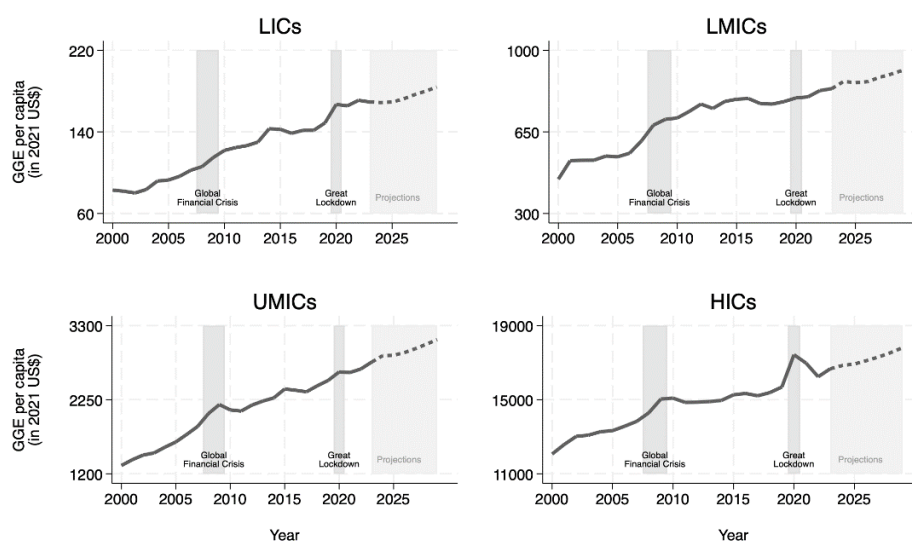
GENERAL GOVERNMENT EXPENDITURE

This section explores past trends and future projections for general government per capita expenditure. Understanding these trends is essential, as they are central to assessing the implications of the macro-fiscal trends on government health spending. The analysis considers real general government expenditure (GGE) per capita to account for changes in both prices and population numbers. As a brief reminder, general government expenditure (GGE) derives from revenues generated through taxes, social security contributions (including social health insurance), other levies and charges, on-budget external assistance², and public borrowing.

General government per capita expenditure: From increases to declines to modest growth

Across all income groups, average real GGE per capita is projected to grow between 2019 and 2029. Initially, spending increased in response to the COVID-19 health and economic crisis, followed by a temporary decline (Figure 1). In LICs and MICs, this pattern is subdued, while in HICs, it is pronounced. From 2025 onward, all income groups are expected to return to steady growth through 2029.

Figure 1: Average per capita general government expenditure (GGE), by income group, 170 countries, 2000-2029. (Constant 2021US\$)



Source: Data from IMF, World Economic Outlook, April 2024

Table 1: Annual average growth rates of real GGE per capita, by income group, 2000-2029.

Income Group	2000-2009	2009-2019	2019-2029	2019-2023	2023-2029
LICs	6.4	3.5	2.4	4.0	1.4
LMICs	6.1	2.7	2.1	1.7	2.3
UMICs	5.9	2.4	2.2	2.7	1.9
HICs	3.2	1.0	1.9	2.9	1.3

Source: Data from IMF, World Economic Outlook, April 2024

Despite the general upward trend, average growth in GGE per capita between 2019 and 2029 is expected to be more modest than in the previous two decades, with high income countries as the exception (Table 1). Additionally, from 2023 onward, annual growth rates are projected to slow further, falling below the decade's average in all income groups.

² This means either being channeled through the government's financial system or being part of the budget process but distributed in parallel by the external partner.

Country-specific trends: Diverging trajectories

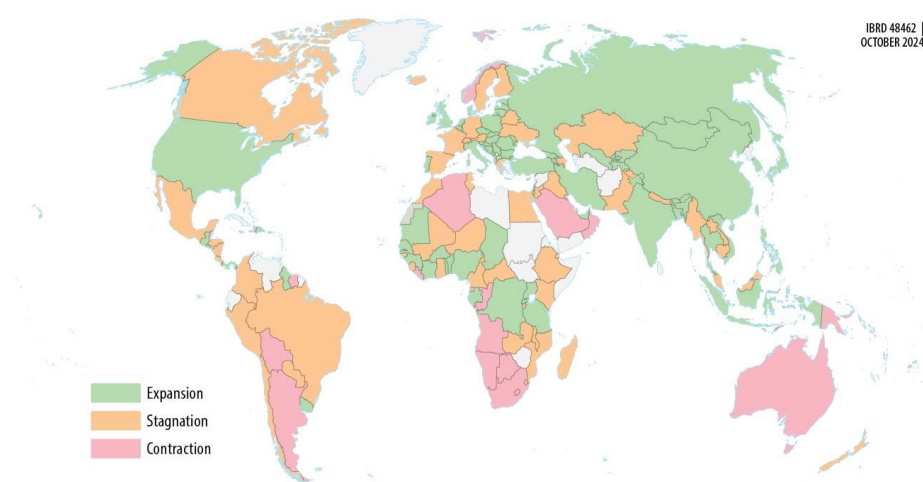
While average real per capita GGE is set to increase across all income groups from 2019 to 2029, many nations are expected to follow different pathways. Based on their per capita GGE growth between 2019 and 2029, countries fall into three categories:

Contraction: Countries projected to experience a decline in real GGE per capita (29 countries);³

Stagnation: Countries expected to see sluggish, albeit positive, growth in real GGE per capita (67 countries);⁴⁵

Expansion: Countries forecast to record strong growth in real GGE per capita (74 countries)⁶⁷

Map 1. Countries covered in study based on per capita GGE growth.



³ **Countries projected to experience a decline in real GGE per capita:** **LICs:** Burundi, Liberia; **LMICs:** Algeria, Angola, Bolivia, Comoros, Congo, Rep., Haiti, Lesotho, Papua New Guinea, Solomon Islands, Timor-Leste, Vanuatu; **UMICs:** Argentina, Belize, Botswana, Equatorial Guinea, Namibia, South Africa, Suriname; **HICs:** Australia, Bahrain, Brunei Darussalam, Kuwait, Norway, Oman, Qatar, Saudi Arabia, Trinidad and Tobago

⁴ **Countries expected to see sluggish, albeit positive, growth in real GGE per capita:** **LICs:** Central African Republic, Ethiopia, The Gambia, Guinea-Bissau, Madagascar, Malawi, Mali, Mozambique, Niger, Sierra Leone; **LMICs:** Cabo Verde, Cambodia, Cameroon, Djibouti, Egypt, Arab Rep., Eswatini, Ghana, Honduras, Jordan, Kenya, Kiribati, Lao PDR, Micronesia, Fed. Sts., Morocco, Myanmar, Nepal, Nicaragua, Pakistan, Sao Tome and Principe, Tunisia, Ukraine, Zambia; **UMICs:** Azerbaijan, Belarus, Brazil, Colombia, Costa Rica, Dominica, Fiji, Iraq, Jamaica, Kazakhstan, Malaysia, Maldives, Marshall Islands, Mauritius, Mexico, Paraguay, Peru, St. Lucia, St. Vincent and the Grenadines, Tonga, Tuvalu; **HICs:** Antigua and Barbuda, Austria, Canada, Chile, Finland, France, Germany, Greece, Iceland, New Zealand, San Marino, Spain, Sweden, Switzerland

⁵ A country falls into the stagnation group, if its average annual growth rate of GGE per capita from 2019-2029 is projected to be below the average annual growth rate of countries in its income group during the decade before COVID-19 (2010 – 2019). In other words, these countries will not achieve their respective income group's pre-COVID growth path. The average annual growth rate during 2010-2019 was 3.0 percent for LICs, 2.7 percent for LMICs, 2.4 percent for UMICs, and 1.3 percent for HICs.

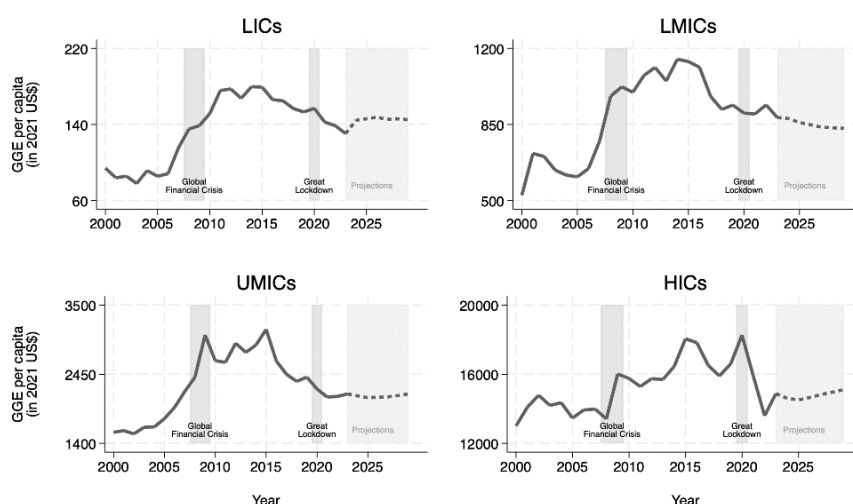
⁶ **Countries forecast to record strong growth in real GGE per capita:** **LICs:** Burkina Faso, Chad, Congo, Dem. Rep., Rwanda, Togo, Uganda; **LMICs:** Bangladesh, Benin, Bhutan, Cote d'Ivoire, Guinea, India, Iran, Islamic Rep., Kyrgyz Republic, Mauritania, Mongolia, Nigeria, Philippines, Senegal, Tajikistan, Tanzania, Uzbekistan, Vietnam; **UMICs:** Albania, Armenia, Bosnia and Herzegovina, Bulgaria, China, Dominican Republic, El Salvador, Gabon, Georgia, Grenada, Guatemala, Indonesia, Moldova, Montenegro, North Macedonia, Russian Federation, Serbia, Thailand, Turkey; **HICs:** Bahamas, The, Barbados, Belgium, Croatia, Cyprus, Czechia, Denmark, Estonia, Guyana, Hungary, Ireland, Israel, Italy, Japan, Korea, Rep., Latvia, Lithuania, Luxembourg, Malta, Netherlands, Panama, Poland, Portugal, Romania, Seychelles, Slovak Republic, Slovenia, St. Kitts and Nevis, United Arab Emirates, United Kingdom, United States, Uruguay.

⁷ In this group, projected growth 2019-2029 exceeds the average annual growth rate of the relevant income group during the decade before COVID-19.

Contraction countries

Countries in the contraction category are projected to experience absolute declines in real GGE per capita between 2019 and 2029. All income groups in the category saw substantial declines during the period from 2019 to 2023. From 2023 to 2029, most income groups are projected to experience average annual growth rates just below zero, with the exception of LICs, which are expected to recover slightly starting in 2023, with an average annual growth rate of 1.2%.

Figure 2: Per capita general government expenditure (GGE), by income group, 29 countries, 2010-2029. (Constant 2021 US\$)

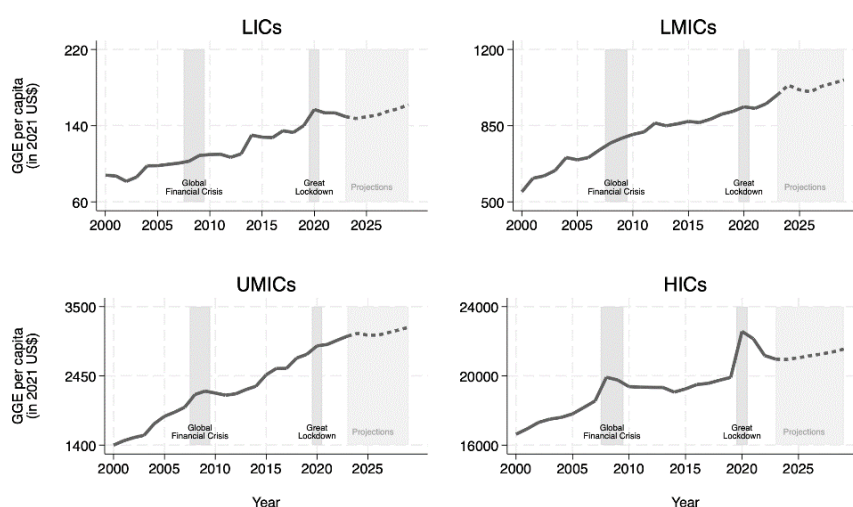


Source: Data from IMF, World Economic Outlook, April 2024

Stagnation countries

In the stagnation category, countries are projected to experience sluggish growth in real GGE per capita over the decade from 2019 to 2029. In LICs, average GGE per capita growth remains relatively steady after a 2020 surge followed by a short downturn (Figure 3). LMICs are expected to see growth pick up after 2023, following slower increases earlier in the period. In contrast, UMICs and HICs are projected to experience slower growth after 2023, following faster gains in previous years.

Figure 3: Per capita general government expenditure (GGE), by income group, 67 countries, 2000-2029. (Constant 2021 US\$)

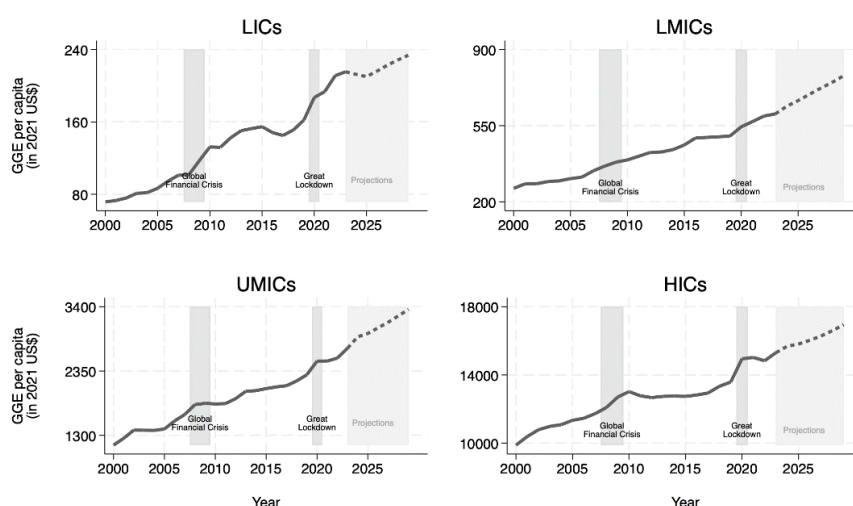


Source: Data from IMF, World Economic Outlook, April 2024

Expansion countries

Countries in the expansion category are projected to experience substantial growth in real GGE per capita between 2019 and 2029. All income groups saw rapid increases during the 2019–2023 period. However, after 2023, growth rates are expected to decelerate across all groups—moderately in LMICs and UMICs, but more sharply in LICs and HICs (Figure 4).

Figure 4: Per capita general government expenditure (GGE), by income group, 74 countries, 2000-2029. (Constant 2021 US\$)



Source: Data from IMF, World Economic Outlook, April 2024

Most countries in the expansion group are expected to maintain rapid growth in GGE per capita throughout the decade. Nevertheless, some countries may face challenges in the later years. After 2023, 17 countries are projected to experience sluggish growth, while four countries are likely to face negative growth rates. Despite these challenges, the average growth over the decade remains substantial, driven by strong performance in the early years.

Distribution of countries across GGE growth categories

Significant differences exist in the distribution of countries across the contraction, stagnation, and expansion categories. Most notably, low-income countries are overrepresented in the stagnation category, while LMICs are prominent in both the contraction and stagnation categories. However, some LICs and LMICs can also be found in the expansion category. In contrast, HICs are more concentrated in the expansion category, although they also appear in the contraction and stagnation groups.

This pattern also extends to fragile and conflict-affected countries (FCVS) and Small Island Developing States (SIDS), which tend to cluster in the contraction and stagnation categories, with a limited representation in the expansion category.

Disparities in the distribution of countries are also evident across World Bank regions (Table 2). Countries in East Asia & Pacific, Latin America & the Caribbean, Middle East & North Africa, and Sub-Saharan Africa are overrepresented in the contraction and stagnation categories, where, on average, prospects for GGE per capita growth remain subdued. In the East Asia & Pacific region, this pattern largely results from the high concentration of SIDS, all of which fall into the contraction and stagnation groups.

In contrast, Europe & Central Asia and South Asia have a stronger presence in the expansion category, reflecting more favorable GGE per capita growth trajectories in these regions. Notably, the world's two most populous countries, China and India, both fall into the expansion category.

Table 2. Distribution of countries across contraction, stagnation, and expansion categories, by income group and regional group, 170 countries.

Income Group	N	Contraction	Stagnation	Expansion
All countries	170	17%	39%	44%
LICs	18	11%	56%	33%
LMICs	50	22%	44%	34%
UMICs	47	15%	45%	40%
HICs	55	16%	26%	58%
FCV	24	29%	54%	17%
SIDS	30	30%	47%	23%

Regional Group	N	Contraction	Stagnation	Expansion
All countries	170	17%	39%	44%
EAP	25	24%	44%	32%
ECA	48	2%	29%	69%
LAC	30	20%	47%	33%
MENA	16	38%	38%	25%
SAR	6	0%	50%	50%
SSA	43	23%	42%	35%

Abbreviations: LICs – Low-Income Countries; LMICs – Lower Middle-Income Countries; UMICs – Upper-Middle-Income Countries; HICs – High-Income Countries; FCV – Fragility, Conflict, and Violence; SIDS – Small Island Developing States; EAP – East Asia and Pacific; ECA – Europe and Central Asia; LAC – Latin America and the Caribbean; MENA – Middle East and North Africa; SAR – South Asia Region; SSA – Sub-Saharan Africa.

Note: The 170 study countries include 2 countries of the North America Region.

GOVERNMENT HEALTH EXPENDITURE

This section explores three potential pathways for future government health expenditure per capita (GHE per capita). As a reminder, GHE consists of two main components: the first is derived from general government revenues, borrowing, and on-budget external funding from development partners, while the second comes from compulsory social health insurance (SHI) contributions.

The first two scenarios build on the earlier analysis of general government expenditure (GGE) per capita. They explore how trends in GGE per capita will shape future GHE per capita, using two different fixed shares of GHE within GGE: the pre-pandemic share and the elevated pandemic-era share.

In contrast, the third scenario assumes that GHE per capita continues to grow according to the historical trends observed in the two decades leading up to the pandemic, independent of GGE per capita projections.

Possible pathways for government health spending

This section provides a detailed look at the three scenarios under consideration. As discussed, scenarios 1 and 2 are linked to GGE per capita projections, while Scenario 3 is not.

Scenario 1: Maintaining pre-pandemic priorities. This scenario assumes that countries maintain the pre-pandemic share of GGE allocated to health. Projections apply this fixed share, with 2019 as the base year, to subsequent levels of GGE per capita. This scenario serves as the baseline.

Scenario 2. Sustaining pandemic response priorities. This scenario retains the higher share of GGE allocated to health during the pandemic. Projections start in 2021, a period when the health share of GGE had risen on average across all income groups. Recent data show that these shares have been declining in many countries, but this scenario is used to explore whether the levels of spending would be sufficient to return to the pre-pandemic growth paths if they were maintained to 2029 (Kurowski et al. 2024).

Scenario 3: Continuing pre-COVID trends. Unlike the first two scenarios, Scenario 3 is not based on GGE per capita projections. Instead, it extrapolates GHE per capita based on the average growth rates for each income group observed from 2000 to 2019. This scenario assumes that these trends continue uninterrupted, projecting, in general, a more optimistic trajectory for GHE per capita growth compared to Scenarios 1 and 2.

The following sections examine the implications of these scenarios for countries classified as contraction, stagnation, and expansion cases, analyzing both average trends across income groups and country-specific patterns within each group.

Country-level explorations focus on Scenario 1. This approach is chosen for several reasons. First, Scenario 1 provides projections based on detailed GGE per capita data for individual countries, making it well-suited for country-specific analysis. In contrast, Scenario 3 relies on income group averages, which limits its applicability for detailed assessments at the country level. Second, the differences between Scenario 1 and Scenario 2 are minimal, with the key distinction being that Scenario 1 uses 2019 as the base year, while Scenario 2 starts from 2021.

Contraction countries

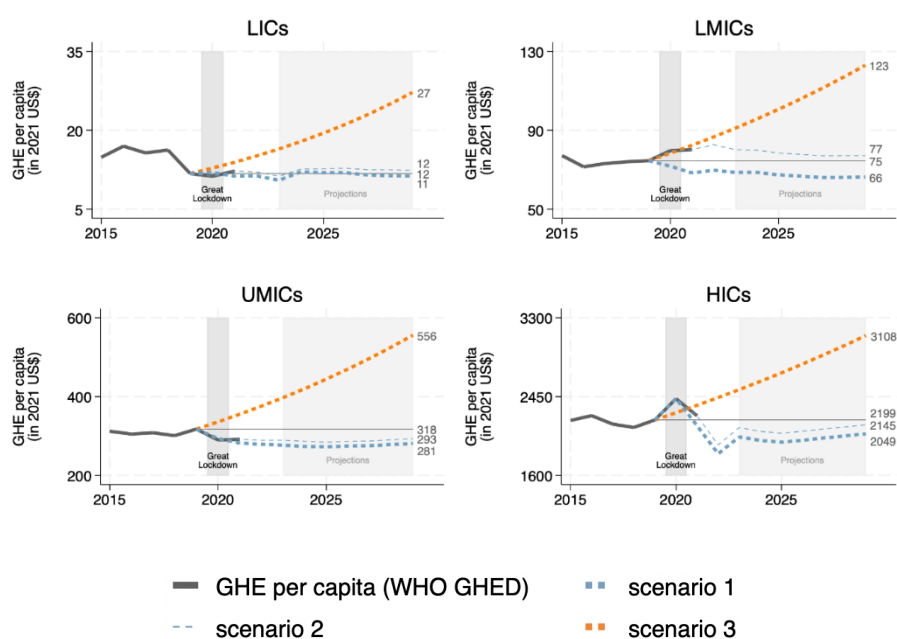
In Scenario 1, all income groups are projected to experience declines in GHE per capita from 2019 to 2029, driven by the negative trend in GGE per capita among contraction countries. The declines are modest in LICs but become more pronounced in LMICs, UMICs, and HICs.

In Scenario 2, most income groups still face negative growth despite the higher share used for the analysis, though the declines are generally less severe than in Scenario 1. On average, LICs, UMICs, and HICs experience modest declines, with LICs seeing rates just below zero. By contrast, LMICs are projected to achieve small positive gains on average.

Scenario 3, which is independent of GGE trends, presents a much more optimistic outlook. GHE per capita grows significantly across all income groups, with LICs seeing the largest increases, followed by strong gains in LMICs and UMICs, and more moderate annual growth rates in HICs.

The stark contrast between the robust growth projected in Scenario 3 and the declines in Scenarios 1 and 2 highlights the wide range of possible government health spending levels in 2029, dependent on assumptions about spending growth.

Figure 5: Per capita government health expenditure (GHE), by income group, 29 countries, 2015-2029. (Constant 2021 US\$)



Source: Authors' calculations using data from IMF, World Economic Outlook, April 2024 and WHO, Global Health Expenditure Database, 2024

Note: Scenario 3 reflects average GHE per capita growth from 2000 to 2019. This long-term trend may differ from the shorter-term pre-COVID trend depicted here.

Achieving the outcomes of scenario 3

Achieving the spending levels of Scenario 3 by 2029 requires contraction countries to dramatically boost the share of government spending dedicated to health, even as overall government expenditure declines (Table 3). In LICs, the health share must grow by an average of 1.3 percentage points annually, meaning it more than doubles between 2019 and 2029. A similar pace of growth is required in UMICs, while LMICs and HICs need to increase their health allocations at about half that rate.

For comparison, these elevated growth rates mean sustaining the rapid increase in health budget shares observed during the pandemic years (2019 to 2021), but this time extended over an entire decade. Achieving this requires an extraordinary commitment to prioritize health spending.

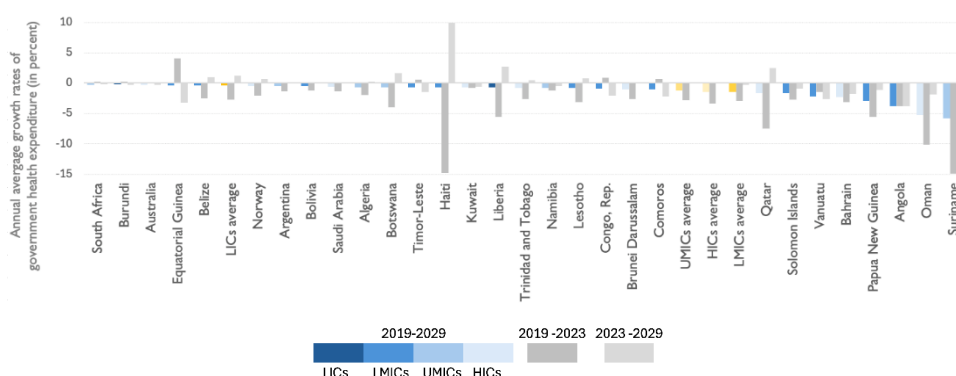
Table 3: Health shares in government spending required to move from Scenario 1 to Scenario 3 in 2029 and comparison with health share growth during the pandemic response, by income group, 29 countries, 2019-2029.

Income Group	N	2019	2021	2029	Annual growth rate 2019 - 2021	Annual growth rate 2019 - 2029
LICs	2	9.4	11.3	22.4	0.95	1.30
LMICs	11	8.6	10.6	16.3	1.00	0.77
UMICs	7	12.4	16.2	25.5	1.90	1.31
HICs	9	11.0	12.3	17.6	0.65	0.66
All countries	29	10.3	12.5	19.4	1.10	0.91

Source: Authors' calculations using data from IMF, World Economic Outlook, April 2024 and WHO, Global Health Expenditure Database, 2024

moderating to an annual average of -1.3 percent between 2023 and 2029. Meanwhile, seven countries that saw modest growth from 2019 to 2023 are now projected to face contractions averaging -1.4 percent during the same period. On a more positive note, twelve countries that experienced significant declines from 2019 to 2023 are expected to see modest gains, with GHE per capita increasing by an average of 1.7 percent from 2023 to 2029. However, despite this recovery, the decade-long trend remains negative also for these countries, reflecting the lingering impact of earlier declines.

Figure 6: Annual average growth rates in real GHE per capita, by country and income group, 29 countries, 2019-2029.



Source: Authors' calculations using data from IMF, World Economic Outlook, April 2024 and WHO, Global Health Expenditure Database, 2023

Country-specific trends

While previous sections focused on averages, these masked important variations within the contraction group across three key periods: the full decade from 2019 to 2029, the onset of COVID-19 to its aftermath, and the projected outlook for 2023 to 2029. This analysis draws on Scenario 1 to explore these variations, driven by individual country prospects for general government expenditure (GGE) growth.

Over the entire period, government health expenditure (GHE) per capita showed significant variation across countries, with declines ranging from slight negative growth to average annual drops exceeding 5 percent (Figure 6). Breaking it down further, ten countries are expected to experience contractions in GHE per capita during both sub-periods, with declines

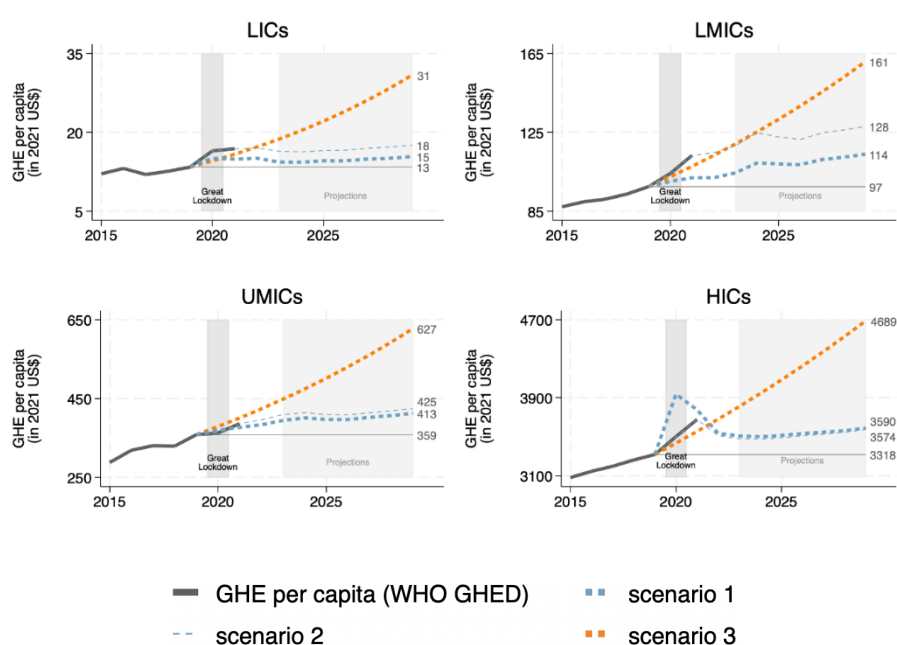
Stagnation countries

In Scenario 1, all income groups experience modest growth in GHE per capita between 2019 and 2029, driven by the slow growth of GGE per capita trends in stagnation countries. LICs grow at an average annual rate of 1.4 percent, while LMICs and UMICs experience slightly slower growth. HICs see the slowest growth, averaging about half the rate of LICs.

In Scenario 2, growth improves across all income groups, with LICs leading at 3.3 percent annually. LMICs and UMICs achieve similar gains, though slightly lower than LICs. HICs experience more moderate growth, trailing behind the other income groups.

In Scenario 3, all income groups have a more optimistic outlook, similar to contraction countries, with significant increases in GHE per capita. Though the differences between Scenario 1 and Scenario 3 are more moderate for stagnation countries, they still illustrate the varied possibilities for government health spending by 2029 based on different spending growth assumptions.

Figure 7: Per capita government health expenditure (GHE), by income group, 67 countries, 2015-2029. (Constant 2021 US\$)



Source: Authors' calculations using data from IMF, World Economic Outlook, April 2024 and WHO, Global Health Expenditure Database, 2023

Note: Scenario 3 reflects average GHE per capita growth from 2000 to 2019. This long-term trend may differ from the shorter-term pre-COVID trend depicted here.

Achieving the outcomes of scenario 3

Achieving the outcomes of Scenario 3 by 2029 requires stagnation countries to significantly increase the share of government spending allocated to health, while GGE per capita grows slowly (Table 4). In LICs, the health share must rise by just over 1 percentage point annually, more than doubling between 2019 and 2029. LMICs, UMICs, and HICs will need to expand their health allocations at roughly half that rate.

Although the necessary growth rates are lower than those in contraction countries, they still represent a substantial challenge, pushing health shares on average to levels that remain exceptional, particularly in LICs, UMICs, and HICs. Again for comparison, these growth rates generally exceed those

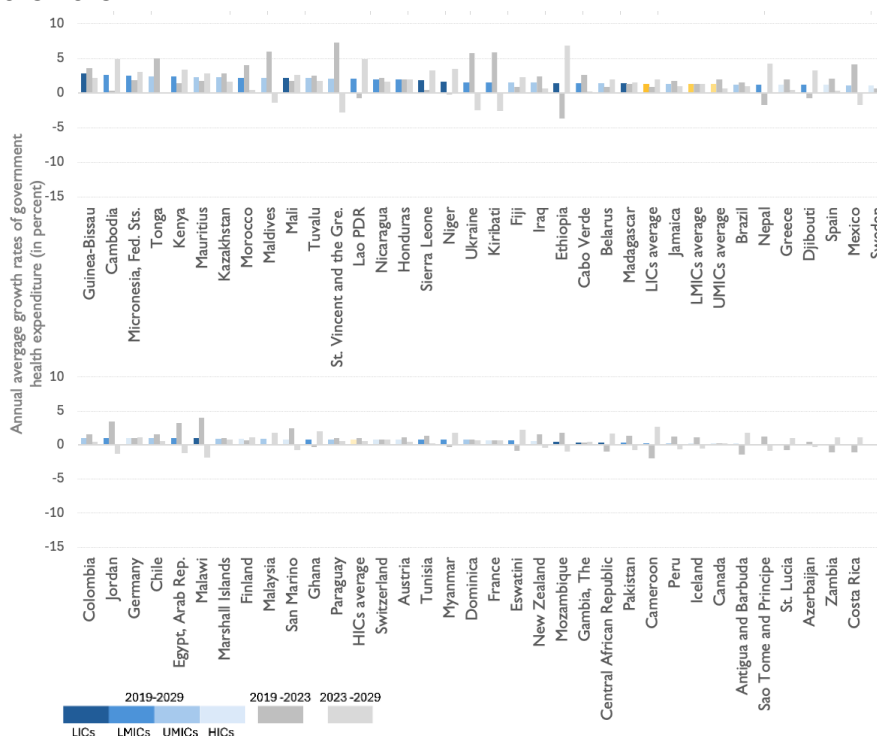
Table 4: Health shares in government spending required to move from Scenario 1 to Scenario 3 in 2029 and comparison with health share growth during the pandemic response, by income group, 67 countries, 2019-2029.

Income Group	N	2019	2021	2029	Annual average growth rate 2019-2021	Annual average growth rate 2019-2029
LICs	10	9.9	10.7	20.1	0.40	1.02
LMICs	22	9.6	10.2	13.8	0.30	0.42
UMICs	21	12.1	13	18.7	0.45	0.66
HICs	14	16.8	15.6	21.9	-0.60	0.51
All countries	67	11.9	12.3	18.0	0.20	0.61

Source: Authors' calculations using data from IMF, World Economic Outlook, April 2024 and WHO, Global Health Expenditure Database, 2023

A closer examination reveals that 32 countries are expected to see positive GHE growth across both sub-periods, although this is projected to slow to an annual average growth of 1.2 percent between 2023 and 2029. Additionally, 19 countries that experienced sharp reductions in GHE per capita between 2019 and 2023 are expected to recover, with annual average growth of 3.0 percent during the outlook period. On the other hand, 16 countries that had shown strong growth from 2019 to 2023 are now anticipated to encounter contractions, with annual average declines of -1.0 percent between 2023 and 2029.

Figure 8: Annual average growth rates in real GHE per capita, by country and income group, 67 countries, 2019-2029.



Source: Authors' calculations using data from IMF, World Economic Outlook, April 2024 and WHO, Global Health Expenditure Database, 2024

observed during the pandemic response. Sustaining this level of growth over an entire decade, especially in LICs, remains unprecedented.

Country-specific trends

As with contraction countries, focusing on averages for stagnation countries can miss important differences across the decade from 2019 to 2029, as well as between the sub-periods from 2019 to 2023 and the projected outlook from 2023 to 2029. This analysis draws on Scenario 1 to delve into these variations in greater detail.

Throughout the entire period, average annual growth in government health expenditure (GHE) per capita in stagnation countries ranged from just above zero to nearly 3 percent (Figure 8). A

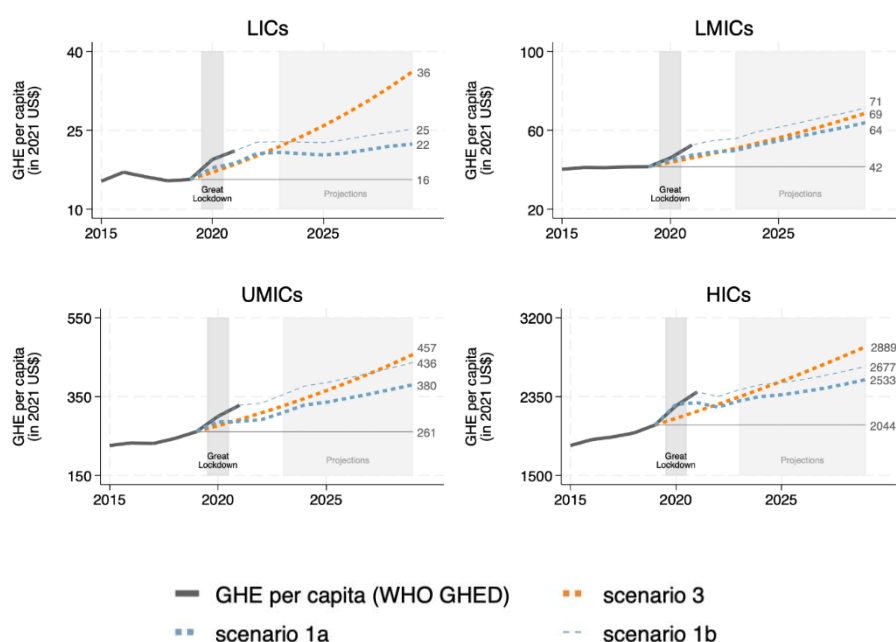
Expansion countries

In Scenario 1, all income groups experience steady growth in GHE per capita from 2019 to 2029, mirroring the trends in GGE per capita for expansion countries. LICs see the fastest growth, with an average annual increase of 3.8 percent, while LMICs and UMICs follow closely behind. HICs grow more slowly, averaging 2.8 percent annually.

In Scenario 2, all income groups see even higher growth, with LICs leading at 5.6 percent annually. LMICs and UMICs experience strong gains, though slightly below LIC levels. HICs continue to grow more moderately, remaining the slowest-growing group.

In Scenario 3, all income groups benefit from the same optimistic outlook seen in contraction and stagnation countries, with significant increases in GHE per capita. The contrast between Scenario 1 and Scenario 3 is least pronounced for expansion countries, reflecting more consistent growth patterns. However, Scenario 3 illustrates the potential for higher government health spending by 2029 under more ambitious growth assumptions.

Figure 9: Per capita government health expenditure (GHE), by income-group, 74 countries, 2015-2029. (Constant US\$ 2021)



Source: Authors' calculations using data from IMF, World Economic Outlook, April 2024 and WHO, Global Health Expenditure Database, 2024

Note: Scenario 3 reflects average GHE per capita growth from 2000 to 2019. This long-term trend may differ from the shorter-term pre-COVID trend depicted here.

Achieving the outcomes of scenario 3

Achieving the outcomes of Scenario 3 by 2029 also requires expansion countries to increase the share of government spending allocated to health, even though overall GGE grows substantially (Table 5). In LICs, the health share must rise by an average of 0.6 percentage points annually, resulting in a 6 percentage point increase between 2019 and 2029. UMICs need to increase their health share by about half that rate, while LMICs and HICs will require smaller increases.

Although the required growth rates in health shares are lower than those in contraction and stagnation countries, they still represent a considerable effort, especially in LICs. Sustaining these gains over a full decade remains a significant challenge. Once again for comparison, average growth in the share allocated to health in response to the pandemic has been minimal or even negative across all income groups.

Table 5: Health shares in government spending required to move from Scenario 1 to Scenario 3 in 2029 and comparison with health share growth during the pandemic response, by income group, 74 countries, 2019-2029.

Income Group	N	2019	2021	2029	Annual average growth rate 2019 - 2021	Annual average growth rate 2019 - 2029
LICs	6	9.3	9.4	15.0	0.05	0.57
LMICs	17	8.2	8.1	8.9	-0.05	0.07
UMICs	19	11.7	11.9	14.1	0.10	0.24
HICs	32	14.6	13.9	16.3	-0.35	0.17
All countries	74	11.9	11.7	13.9	-0.10	0.20

Source: Authors' calculations using data from IMF, World Economic Outlook, April 2024 and WHO, Global Health Expenditure Database, 2024

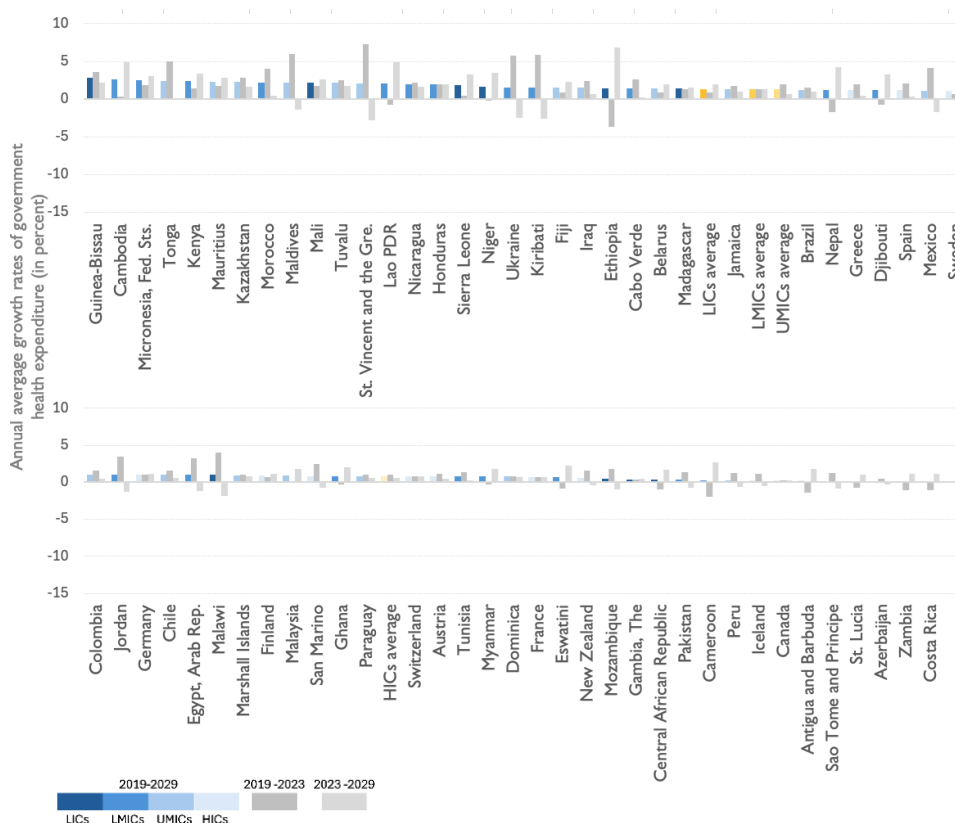
with two facing mild reductions from 2019 to 2023 before rebounding strongly to an average of 4.1 percent annual growth. In contrast, four countries that experienced rapid growth from 2019 to 2023 are now projected to face contractions, with GHE per capita declining by an average of -1.3 percent annually between 2023 and 2029.

Country-specific trends

As with contraction and stagnation countries, the averages presented for expansion countries can conceal important variations across the full period from 2019 to 2029, as well as the sub-periods from 2019 to 2023 and 2023 to 2029. This analysis once again draws on Scenario 1 to explore these variations.

Throughout the entire period, average annual growth in government health expenditure per capita in expansion countries ranged from 1.2 percent to nearly 20 percent (Figure 10). Most countries in this group are projected to maintain positive growth in both sub-periods. However, these 68 countries are expected to see a slowdown in growth during the outlook period, averaging 3.0 percent annually between 2023 and 2029. Negative growth is expected in only a small number of countries during either period,

Figure 10: Annual average growth rates in real GHE per capita, by country and income group, 74 countries, 2019-2029.



Source: Authors’ calculations using data from IMF, World Economic Outlook, April 2024 and WHO, Global Health Expenditure Database, 2024

Note: Guyana is not shown because of very high growth rates: 19.7 in 2019-2029, 35.3 percent in 2019-2023, and 5.9 percent in 2023-2029

Interest payments on public debt

Interest payments on public debt are an important component of government budgets, directly affecting the resources available for health. Governments base their expenditures on a mix of revenues, grants, and borrowing, but as the share of interest payments rises, the funds for other priorities, like health, are increasingly constrained (Wendling, Pedastsaar, and Rahim 2022). Therefore, interest payment dynamics are especially important when considering future government health spending, particularly in countries with large shares allocated to debt servicing.

The average share of interest payments in GGE is projected to intensify across all income groups from 2019 to 2029 (Table 6). In LICs and LMICs, this share will rise to a peak in 2025 before starting to decline, but it will remain higher in 2029 than in 2019, and also higher than in 2000, when major debt relief efforts, such as the HIPC initiative, were underway.

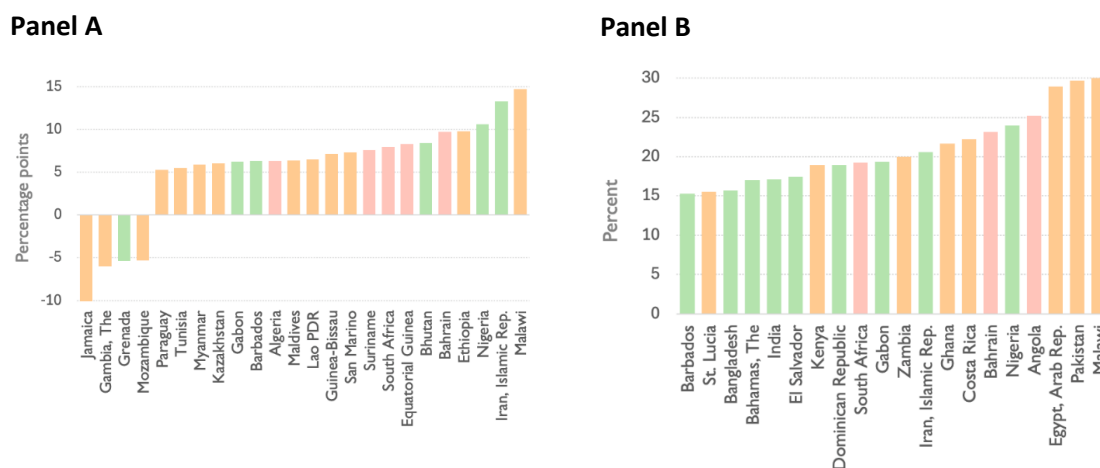
Although these increases are modest on average, their impact varies widely across countries. For most, the projected shifts will have only a minor effect on GHE per capita. However, twenty out of 170 countries are expected to see an increase of more than five percentage points in their share of interest payments in GGE between 2019 and 2029 (Figure 11). In these countries, where government spending is either contracting or stagnant, maintaining or raising GHE per capita will be especially challenging.

Table 6: Projected share of interest payments on public debt in GGE, 2019-2029.

Income group	N	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
All countries	170	6.2	6.0	6.3	6.4	7.2	7.8	7.9	8.0	7.8	7.8	7.7
LICs	18	7.3	6.8	7.4	7.5	8.7	10.1	10.4	10.4	9.7	9.4	8.9
LMICs	50	8.1	7.9	8.0	8.0	9.3	10.2	10.3	10.1	9.7	9.6	9.5
UMICs	47	7.0	6.9	7.3	7.4	8.0	8.3	8.5	8.7	8.7	8.8	8.7
HICs	55	3.6	3.4	3.5	3.8	4.1	4.4	4.5	4.5	4.6	4.6	4.6

Source: Authors' calculations, using data from IMF, World Economic Outlook, April 2024

Figure 11: Countries with more than a five-percentage point change in the share of interest payments in GGE (Panel A) and countries with shares greater than 15 percent in 2029 (Panel B).



Source: Authors' calculations, using data from IMF, World Economic Outlook, April 2024

While the share of interest payments is projected to rise in many countries, by the end of the projection period 20 countries are expected to have interest payments exceeding 15 percent of GGE (Figure 12). Among them, Angola, Egypt, Ghana, Pakistan, and Zambia will see their interest shares peak and decline after 2023. In contrast, other countries are expected to face steady increases or remain at near-peak levels, raising concerns about the sustainability of their health spending.

Conversely, four countries—Jamaica, The Gambia, Grenada, and Mozambique—are projected to see declines of more than five percentage points in their share of interest payments. This reduction is expected to ease budgetary pressures, enabling these countries to prioritize health more effectively and potentially increase GHE per capita.

CONCLUSIONS

This paper presents projections of government health expenditure (GHE) through 2029, covering 170 countries and representing over 95 percent of the world's population. The analysis places special focus on low- and lower middle-income countries (LICs and LMICs), which face profound challenges in financing health as the world enters the decisive period for the Sustainable Development Goals (SDGs). The paper updates the earlier World Bank Health Spending Outlook, *Old Scars, New Wounds* (Kurowski et al. 2022).

The IMF's macro-fiscal forecasts from April 2024 indicate that, on average, overall government spending will increase across all income groups from 2023 to 2029. However, this growth is expected to be slower than during the rapid expansion seen in the pandemic years and the preceding two decades. This shift signals a more constrained fiscal environment, raising critical questions about how countries will prioritize health spending in the coming years.

While average government spending is expected to grow slowly, countries' fiscal capacities vary widely, leading to significant differences in per capita expenditure both within and across income groups. Among the 170 countries, 74 are expected to experience substantial growth in real per capita general government expenditure (GGE) between 2019 and 2029. In contrast, 67 countries are projected to experience slow or sluggish growth, while 29 countries are expected to see a contraction in per capita spending over the same period. Contraction and stagnation trends are more common to low-income and lower middle-income countries, FCVS, SIDS, and regions such as Latin America, the Pacific, and Sub-Saharan Africa.

Diverging fiscal pressures

The varied outlook for government spending creates diverging fiscal pressures on the sustainability of health financing. If the health share in GGE reverts to pre-pandemic levels—or even if it remains at the higher shares seen during the pandemic—real GHE per capita in countries with contracting GGE is projected to decline between 2019 and 2029. For countries with stagnating GGE, per capita GHE is expected to grow only modestly by 2029. In both cases, spending is expected to remain well below the levels in scenario 3, where GHE per capita is projected to grow at the historical rates observed from 2000 to 2019.

The situation is especially precarious for the LIC and LMICs within these two groups. The concurrently published Health Spending Review shows that many LICs and LMICs did not sustain the higher shares of GHE in GGE seen during the crisis and instead experienced negative growth in the share of GHE between 2019 and 2023 (Kurowski et al. 2024). Additionally, in many of these countries, rising or high interest payments on public debt further constrain their ability to allocate larger shares of government spending to health.

Facing severe funding shortfalls

Regardless of the macro-fiscal outlook, expected spending trajectories in LICs and LMICs are, with few exceptions, insufficient to reach the minimum annual per capita government health spending levels needed to meet global health goals by 2030. These levels have been estimated at about US\$80 in LICs and US\$100 in LMICs (in 2023-dollar values). It is also important to recall that these estimates are conservative, covering only the recurrent costs of delivering essential health services and assuming efficient use of resources. Without decisive policy action, especially in low-income countries with contracting or stagnating fiscal space, spending will remain well below necessary levels.

Navigating difficult choices

To address these financing shortfalls, one critical option for governments—especially where health represents a relatively small share of government budgets—is to increase the priority given to health in spending decisions. However, this is especially difficult when overall budget envelopes are shrinking or stagnant, particularly now, as development priorities are multiplying and placing growing demands on governments across sectors (Kurowski et al. 2021a). Further exploration is necessary to better understand effective strategies and approaches that countries can adopt in this evolving context.

Increasing the share of health in government spending is only one approach to raise health spending for faster progress toward broader coverage with essential health services and financial protection. A range of complementary domestic policies will also play an important role. Some policies fall under the remit of Ministries of Finance and monetary authorities rather than Ministries of Health. These include fiscal reforms to enhance government revenue, alongside fiscal and monetary measures to manage public debt, control inflation and stimulate growth.

Other policies have an economy wide scope and require the active involvement of all government sectors, including health. These strategies build on spending reviews to identify measures that improve spending efficiency, such as eliminating ineffective subsidies and combating corruption (Kurowski et al. 2020). For guidance with these measures, countries can draw on an extensive body of publications detailing successful experiences (Barroy et al. 2018; Mathauer et al. 2019; World Bank 2019; Jowett et al. 2020; Mathauer et al. 2020; Kurowski et al. 2021a; Barroy, Blecher, and Lakin 2022).

As the macro-fiscal landscape shifts, insights like those in this report are critical for policymakers, who often lack access to this level of information. They enable them to adapt domestic policies in response to anticipated declines in GGE—or to expand ambitions if macro-fiscal trends are more favorable. Regular updates of this type of analysis can also help external partners anticipate requests for additional Development Assistance for Health (DAH) and reconsider targeting criteria to better support countries facing the greatest challenges in increasing health spending through domestic resources.

Time for a rethink

The current spending outlook does not bode well for achieving global health goals. Without decisive policy action, spending levels in most LICs and LMICs in 2029 are expected to fall significantly short of the per capita government health spending required to meet the Sustainable Development Goals (SDGs) by 2030, particularly in countries where GHE per capita is projected to be contracting or sluggish. Even with the higher spending growth rates observed during the first two decades of the century, most LICs and LMICs have struggled to make adequate progress toward the necessary levels of health spending. (World Bank 2019; WHO 2022).

If these funding shortfalls are not addressed, the consequences will be profound, impacting all stakeholders. Ministries of health and other sector agencies will be tasked to address large and rising unmet health needs with inadequate and stagnant budgets, severely impeding their ability to strengthen health systems, improve population health, and enhance financial protection. Insufficient health investments will undermine human capital development, and as stressed by the G20 Ministers of Finance, erode the foundation for long-term growth and revenue generation (World Bank 2019). Meanwhile, development partners will eventually see gains from past Development Assistance for Health (DAH) diminish and progress on global priorities, including pandemic prevention and preparedness, stall.

The SDG era has been envisioned as a transformative period for global health, however, following pandemic setbacks, the government health spending outlook, if unaddressed, threatens to turn it into an era of limited gains and unfulfilled promises. The situation demands a critical reassessment of

financing strategies to achieve the health-related SDGs in light of the macro-fiscal headwinds and multiplying development demands. The stakes are high, not only for those in the health sector but also for Ministries of finance and development partners, who risk missing vital opportunities unless they collaborate to forge new paths forward. Encouragingly, the analyses also show that some countries are successfully navigating these obstacles and have embarked on strategies to sustainably expand health investments, demonstrating that progress is possible even amid significant macro-fiscal constraints.

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ANNEX 1. MACRO-FISCAL FORECASTS

This annex summarizes the IMF projections for real per capita gross Domestic Product (GDP) and General Government Revenues (GGR) that directly influence the projections of general government expenditure (GGE) described in the body of the text. It also briefly describes the projected trends in the share of interest payments on public debt in GGE which was used in the discussion of the scenarios for real per capita government health expenditure (GHE) to 2029.

Countries included

The IMF regularly provides macro-fiscal projections for 196 countries/territories. From this group, 26 are excluded from the analysis in this paper, either because the IMF currently did not project government spending up to 2029 (Afghanistan; Ecuador; Eritrea; Lebanon; Sri Lanka; Syria; Venezuela; West Bank and Gaza) or because WHO's Global Health Expenditure Database does not contain health expenditure data for these jurisdictions (Aruba; Hong Kong SAR, China; Kosovo; Libya; Macao SAR, China; Puerto Rico; Somalia; Taiwan, China; Yemen). Furthermore, South Sudan, Sudan, and Zimbabwe are dropped from the analysis because recent periods of very high inflation render intertemporal comparisons unreliable. Finally, six countries where the data needed to project health spending, taking into account interest payments on public debt, were unavailable were also excluded (Andorra, Nauru, Palau, Samoa, Singapore, and Turkmenistan). The analysis reported here focuses on the remaining group of 170 countries/territories: 18 LICs, 50 LMICs, 47 UMICs, and 55 HICs.

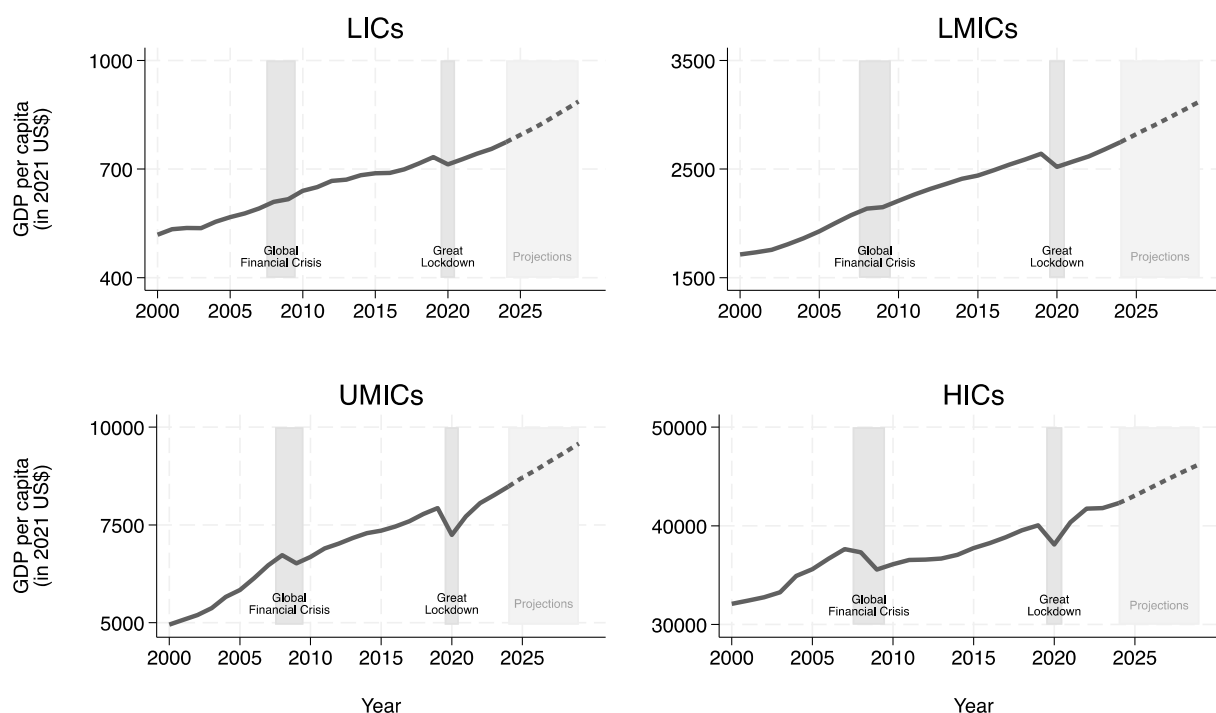
Gross Domestic Product

Immediately after the onset of the pandemic, average real per capita GDP fell - globally and in all country income groups on average (Figure A1.1). By 2021, it had already returned to pre-COVID-19 levels in HICs, but it did not do so until 2022 in LICs and UMICs, and until 2023 in LMICs.

In April 2024, the IMF revised global growth prospects upward. Between 2024 and 2029, the average annual growth rate in real per capita GDP is expected to be 2.3 percent across all countries, with growth rates at 2.6 percent for LICs, 2.4 percent for LMICs, 2.4 percent for UMICs, and 2.1 percent for HICs. This marked a significant improvement compared to the period from 2019 to 2024, where the average annual growth rates were 1.4 percent across all countries, with LICs and LMICs at 1.1 percent, UMICs at 1.6 percent, and HICs at 1.7 percent.

However, macroeconomic scars persist in the low and middle-income groups in 2024. The GDP per capita growth for these groups has not met the original projections for the period 2019 to 2024. GDP per capita was originally forecast to grow, on average, by 13.5 percent but now is expected to grow only by 4.9 percent in LICs. In LMICs, the growth forecast for the period was 13.6 percent, but expected growth now is only 4.5 percent. In UMICs, the original forecast of 12.3 percent was revised down to 6.8 percent. In contrast, in HICs, GDP per capita growth fully converged with the original projections after the initial recession, with an original forecast of 11.3 percent compared to the current expectation of 12.0 percent.

Figure A1. 1. Real GDP per capita



Source: Data from IMF, World Economic Outlook, April 2024

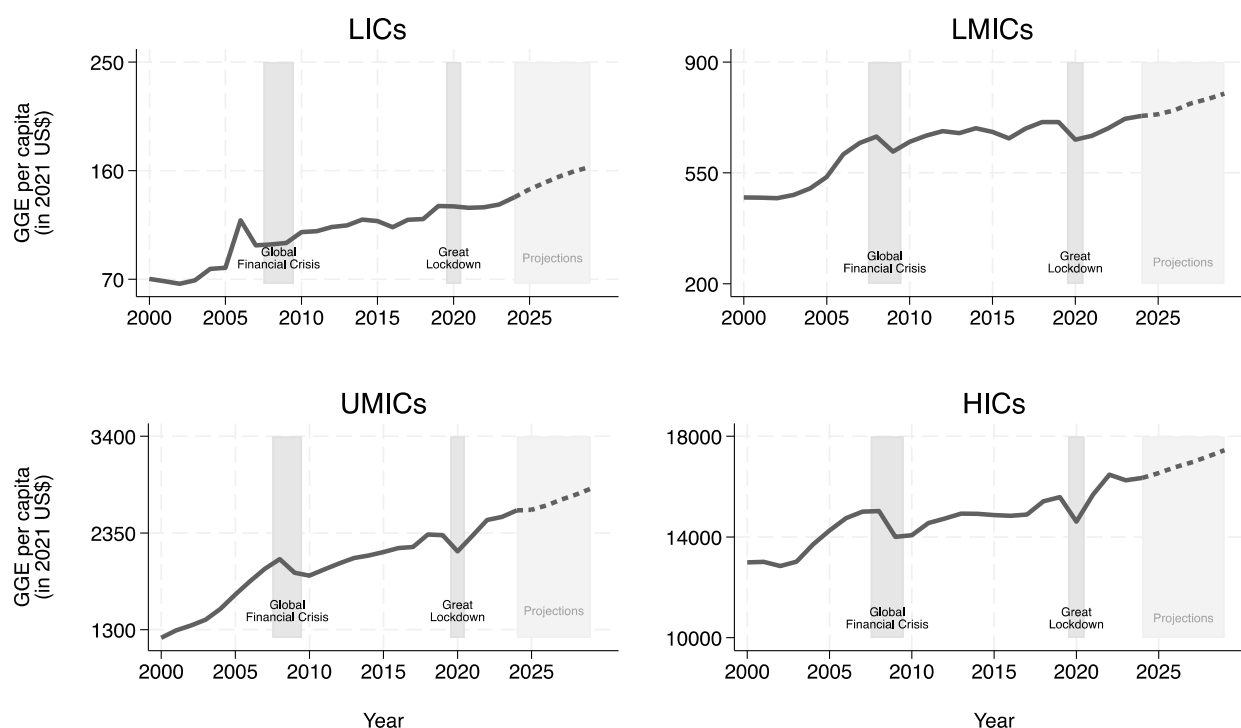
Note: The figure compares the IMF real GDP per capita projections to 2024 that had been made immediately before the pandemic (fall 2019) with the actual trends and the latest projections up to 2029. The light blue dotted line represents the projections from 2019 as a proxy for the path that per capita GDP would likely have taken in the absence of the pandemic and other global economic shocks. The dark blue filled line shows the actual GDP growth trend from 2019 to 2024, with the dotted extension representing the most recent IMF projections up to 2029.

General government revenues

General government revenue (GGR) comprises income from taxes, levies and charges, social contributions and any on-budget development assistance. Economic growth increases the capacity of countries to raise domestic revenues whereas revenues often fall during periods of economic contraction. All income groups saw falls in the average real general government revenue (GGR) per capita during the great lockdown in 2020 (Figure A1.2). GGR per capita started growing in 2021, and all groups are now projected to experience consistent growth to 2029, with values exceeding the pre-COVID-19 levels in all years during that period.

Between 2024 and 2029, the average annual growth rate in real GGR per capita is expected to be 2.0 percent across all countries. Growth rates are projected to be 3.0 percent for LICs, 2.4 percent for LMICs, and 1.7 percent for both UMICs and HICs. This marks an improvement for LMICs compared to 2019 to 2024, where the average annual growth was 1.7 percent. Growth rates for LICs and UMICs are expected to slow from 3.6 and 2.6 percent. GGR per capita growth is very similar to the 1.9 percent of the previous period. By 2029, GGR per capita is projected to be, on average, 23.4 percent higher than in 2019. The average increase in LICs would be 24.0 percent in LICs, 24.0 percent in LMICs, 22.3 percent in UMICs, and 23.0 percent in HICs.

Figure A1. 2. Real general government revenue (GGR) per capita



Source: Data from IMF, World Economic Outlook, April 2024

Interest payments on public debt

Globally, average real per capita interest payments on public debt surged during the COVID-19 crisis and continued to rise through 2024, with further increases projected to 2029 (Table A1.1). By 2024, the average interest payments per capita are expected to be 32 percent higher than in 2019 and projected to increase another 14 percent by 2029. In LICs, these payments are projected to be 55 percent higher in 2024 than in 2019, and then stagnate through 2029. In LMICs, they are expected to rise to a peak in 2026, 40 percent higher than in 2019, but then fall slightly by 2029. In UMICs and HICs, on the other hand, real per capita interest payments on public debt are projected to continue to increase each year over the forecast period: by 2029 they are expected to be approximately 50 percent higher than in 2019 on average in both UMICs and HICs.

Table A1. 1. Average interest payments per capita on public debt in government expenditure (GGE), 2019-2029 (Constant 2021 US\$)

Income group	N	2019	2024	2025	2026	2027	2028	2029
All countries	170	194	255	263	271	277	285	291
LICs	18	11	18	18	18	18	17	17
LMICs	50	53	73	74	75	73	73	74
UMICs	47	157	208	215	224	226	232	235
HICs	55	414	540	556	572	592	611	624

Source: Authors' calculations.

Shares of interest payments in GGE

The average share of interest payments in GGE also increased after the onset of the pandemic, but it is then projected to fall after 2026 for all countries taken together (Table A1.2). Similar to the patterns

of interest payments per capita, the share in GHE peaks – in 2026 for LICs and 2024 for LMICs - before falling slightly by 2029. On the other hand, the average share rises to 2028 in UMICs, then falls slightly, and rises until 2027 in the HICs before stabilizing. The result is that the average shares in 2029 will remain substantially above those in 2019: 1.6 percentage points higher in LICs, 1.4 points higher in LMICs, 1.7 points higher in UMICs, and 1.0 points higher in HICs.

Table A1. 2. Average share of interest payments on public debt in government expenditure (GGE), 2019-2029 (Percent)

Income group	N	2019	2024	2025	2026	2027	2028	2029
All countries	170	6.2	7.8	7.9	8.0	7.8	7.8	7.7
LICs	18	7.3	10.1	10.4	10.4	9.7	9.4	8.9
LMICs	50	8.1	10.2	10.3	10.1	9.7	9.6	9.5
UMICs	47	7	8.3	8.5	8.7	8.7	8.8	8.7
HICs	55	3.6	4.4	4.5	4.5	4.6	4.6	4.6

Source: Authors' calculations based on IMF (2024a).

Trends in the average shares hide cross-country variation in each income group. By 2029, the shares of 47 countries are projected to surpass 10 percent, and in ten of them, rise above 20 percent. Most of these countries are LICs and LMICs. In addition, the growth in interest shares between 2019 and 2029 varies widely between countries, ranging from a decrease of more than 10 percent to an increase close to 15 percent.

Average real interest payments per capita as well as the share of GGE taken by interest payments differs as well across the contraction, stagnation and expansion groups. This is illustrated using per capita interest payments below.

Contraction countries

In the 29 contraction countries, real interest payments per capita increased after 2019 and are projected to continue rising through 2029. These payments are expected to increase steadily each year in all income groups in this category, except UMICs, where they are projected to peak in 2026 before slightly falling until 2029.

Stagnation countries

As in the contraction countries, real per capita interest payments in the 67 stagnation countries rose on average in all income groups after 2019. They are projected to continue to rise steadily to 2029 in the stagnation HICs. In the other three income groups, average per capita interest payments are projected to rise to 2026, then fall, but they will still be substantially higher in 2029 than they had been before the outbreak of the pandemic.

Expansion countries

Average real per capita interest payments on public debt are projected to rise in the 74 expansion countries as a group. The increases occur continuously across all income groups except for LICs where interest payments peak in 2026 and then fall: though their interest payments will be, on average, 60 percent higher in 2029 than in 2019. Despite the increase in interest payments on public debt, both per capita GGE and the GGE remaining after interest payments are expected to rise relatively rapidly in the expansion countries. These data provide the basis of the discussion about the impact of interest payments on public debt on per capita GHE in the body of the text.

ANNEX 2. IMPLICATIONS OF THE GOVERNMENT HEALTH SPENDING SCENARIOS BY COUNTRY

Table A2.1. GHE per capita and GHE-to-GGE ratios for 29 contraction countries

Country	GHE per capita (in constant 2021 US\$)					GHE-to-GGE ratio (in percent)				
	2019 WHO GHED	2021 WHO GHED	2029 scenario 1	2029 scenario 2	2029 scenario 3	2019 WHO GHED	2021 WHO GHED	2029 scenario 1	2029 scenario 2	2029 scenario 3
LICs										
Burundi	11	9	10	8	24	13.1	10.2	13.1	10.2	30.5
Liberia	13	16	12	17	30	5.8	7.9	5.8	7.9	14.3
LMICs										
Algeria	142	120	133	133	235	8.8	8.8	8.8	8.8	15.6
Angola	28	39	19	31	47	5.7	9.2	5.7	9.2	13.8
Bolivia	180	205	171	217	297	13.6	17.3	13.6	17.3	23.6
Comoros	25	30	22	29	41	8.6	11.0	8.6	11.0	15.8
Congo, Rep.	30	41	28	40	50	5.9	8.6	5.9	8.6	10.7
Haiti	13	19	12	20	21	6.9	11.5	6.9	11.5	12.2
Lesotho	104	88	96	85	172	15.8	13.9	15.8	13.9	28.4
Papua New Guinea	58	38	43	38	95	8.8	7.9	8.8	7.9	19.5
Solomon Islands	87	91	74	84	144	11.6	13.1	11.6	13.1	22.5
Timor-Leste	66	120	62	98	109	2.6	4.2	2.6	4.2	4.6
Vanuatu	87	91	70	75	143	6.5	6.9	6.5	6.9	13.3
UMICs										
Argentina	671	665	638	652	1174	16.2	16.5	16.2	16.5	29.8
Belize	195	204	188	216	342	12.2	14.0	12.2	14.0	22.2
Botswana	340	366	319	382	595	12.7	15.3	12.7	15.3	23.8
Equatorial Guinea	62	58	59	83	108	3.9	5.4	3.9	5.4	7.0
Namibia	221	236	205	227	386	11.1	12.3	11.1	12.3	21.0
South Africa	348	348	348	348	609	15.3	15.3	15.3	15.3	26.8
Suriname	386	166	212	146	675	15.1	10.4	15.1	10.4	48.2
HICs										
Australia	4699	5400	4631	4836	6641	19.2	20.1	19.2	20.1	27.6
Bahrain	624	735	495	620	883	7.1	8.8	7.1	8.8	12.6
Brunei Darussalam	646	653	585	643	913	6.4	7.0	6.4	7.0	10.0
Kuwait	1429	1489	1332	1445	2020	9.2	9.9	9.2	9.9	13.9
Norway	8196	7684	7846	7862	11582	17.8	17.9	17.8	17.9	26.3
Oman	639	749	373	457	903	8.6	10.5	8.6	10.5	20.8
Qatar	1783	1609	1518	1517	2520	8.4	8.4	8.4	8.4	13.9
Saudi Arabia	1158	1296	1092	1313	1636	12.0	14.4	12.0	14.4	17.9
Trinidad and Tobago	616	578	570	617	870	10.3	11.1	10.3	11.1	15.6

Table A2.2. GHE per capita and GHE-to-GGE ratios for 67 stagnation countries

Country	GHE per capita (in constant 2021 US\$)					GHE-to-GGE ratio (in percent)				
	2019 WHO GHED	2021 WHO GHED	2029 scenario 1	2029 scenario 2	2029 scenario 3	2019 WHO GHED	2021 WHO GHED	2029 scenario 1	2029 scenario 2	2029 scenario 3
LICs										
Central African Republic	7	13	7	12	16	7.8	12.5	7.8	12.5	17.4
Ethiopia	12	14	14	17	29	9.0	10.8	9.0	10.8	17.9
Gambia, The	11	13	11	15	25	5.4	7.5	5.4	7.5	12.0
Guinea-Bissau	17	26	22	25	38	9.8	11.1	9.8	11.1	17.0
Madagascar	6	9	7	12	14	7.1	12.2	7.1	12.2	14.2
Malawi	22	22	24	20	50	19.4	16.4	19.4	16.4	40.4
Mali	13	16	16	18	29	5.8	6.7	5.8	6.7	10.9
Mozambique	23	28	24	28	53	15.5	18.1	15.5	18.1	34.3
Niger	17	18	20	19	39	12.9	12.2	12.9	12.2	25.4
Sierra Leone	6	10	8	9	15	5.8	6.9	5.8	6.9	11.2
LMICs										
Cabo Verde	131	204	151	250	216	11.0	18.1	11.0	18.1	15.7
Cambodia	33	46	43	51	55	8.3	9.9	8.3	9.9	10.6
Cameroon	11	15	11	17	18	3.5	5.2	3.5	5.2	5.6
Djibouti	38	52	43	61	63	4.6	6.7	4.6	6.7	6.8
Egypt, Arab Rep.	54	73	60	83	89	5.0	6.9	5.0	6.9	7.4
Eswatini	192	198	205	229	316	14.1	15.7	14.1	15.7	21.7
Ghana	62	63	67	56	102	11.0	9.1	11.0	9.1	16.6
Honduras	86	110	104	121	142	11.7	13.7	11.7	13.7	16.0
Jordan	131	125	146	132	216	10.3	9.3	10.3	9.3	15.3
Kenya	46	60	58	75	76	8.8	11.2	8.8	11.2	11.4
Kiribati	220	250	256	362	362	8.9	12.6	8.9	12.6	12.6
Lao PDR	37	18	45	26	61	7.8	4.6	7.8	4.6	10.5
Micronesia, Fed. Sts.	447	435	571	463	737	19.7	16.0	19.7	16.0	25.5
Morocco	82	95	102	106	135	7.5	7.8	7.5	7.8	10.0
Myanmar	10	14	11	15	17	3.5	4.6	3.5	4.6	5.3
Nepal	14	26	16	30	24	4.2	7.8	4.2	7.8	6.2
Nicaragua	108	138	131	140	179	19.7	20.9	19.7	20.9	26.8
Pakistan	16	16	16	17	26	5.3	5.4	5.3	5.4	8.5
Sao Tome and Principe	89	153	90	139	146	16.4	25.2	16.4	25.2	26.5
Tunisia	148	165	160	169	244	12.1	12.7	12.1	12.7	18.4
Ukraine	155	199	181	236	256	7.8	10.1	7.8	10.1	11.0
Zambia	35	39	35	39	57	10.0	11.3	10.0	11.3	16.4
UMICs										
Azerbaijan	59	82	59	83	103	3.3	4.6	3.3	4.6	5.8
Belarus	294	357	338	403	514	11.0	13.1	11.0	13.1	16.8

Country	GHE per capita (in constant 2021 US\$)					GHE-to-GGE ratio (in percent)				
	2019 WHO GHED	2021 WHO GHED	2029 scenario 1	2029 scenario 2	2029 scenario 3	2019 WHO GHED	2021 WHO GHED	2029 scenario 1	2029 scenario 2	2029 scenario 3
Brazil	324	369	367	453	567	8.4	10.4	8.4	10.4	13.0
Colombia	341	408	380	438	596	16.5	19.1	16.5	19.1	26.0
Costa Rica	649	661	652	685	1135	24.2	25.4	24.2	25.4	42.1
Dominica	288	353	311	276	504	7.6	6.7	7.6	6.7	12.3
Fiji	162	170	189	217	283	8.8	10.1	8.8	10.1	13.2
Iraq	126	130	146	170	220	6.0	7.0	6.0	7.0	9.1
Jamaica	231	277	264	318	403	13.5	16.3	13.5	16.3	20.7
Kazakhstan	175	266	220	309	307	8.3	11.6	8.3	11.6	11.5
Malaysia	237	282	258	305	414	8.5	10.1	8.5	10.1	13.7
Maldives	960	1181	1193	1396	1679	18.2	21.3	18.2	21.3	25.6
Marshall Islands	846	673	929	707	1480	21.5	16.4	21.5	16.4	34.2
Mauritius	292	292	366	374	511	10.2	10.4	10.2	10.4	14.3
Mexico	278	301	312	335	487	10.3	11.1	10.3	11.1	16.1
Paraguay	180	244	195	245	314	14.7	18.5	14.7	18.5	23.7
Peru	227	273	234	258	397	15.4	16.9	15.4	16.9	26.1
St. Lucia	256	333	260	349	447	8.4	11.3	8.4	11.3	14.5
St. Vincent and the Grenadines	234	295	288	289	409	9.9	9.9	9.9	9.9	14.0
Tonga	186	241	237	244	326	10.1	10.4	10.1	10.4	13.9
Tuvalu	1189	930	1470	1065	2080	19.0	13.8	19.0	13.8	26.9
HICs										
Antigua and Barbuda	476	584	488	665	673	11.3	15.4	11.3	15.4	15.6
Austria	4369	5094	4732	4953	6174	16.1	16.9	16.1	16.9	21.0
Canada	4091	4710	4212	4410	5782	18.9	19.7	18.9	19.7	25.9
Chile	754	836	839	723	1066	18.0	15.5	18.0	15.5	22.9
Finland	3938	4505	4313	4709	5565	13.8	15.1	13.8	15.1	17.8
France	3853	4205	4147	4339	5445	15.1	15.8	15.1	15.8	19.8
Germany	4693	5239	5225	5200	6633	20.1	20.0	20.1	20.0	25.5
Greece	815	1094	919	1042	1151	8.3	9.4	8.3	9.4	10.4
Iceland	5242	5640	5402	5401	7408	16.3	16.3	16.3	16.3	22.3
New Zealand	3474	3795	3688	3678	4910	18.6	18.6	18.6	18.6	24.8
San Marino	3709	3617	4040	2237	5242	32.2	17.9	32.2	17.9	41.8
Spain	2096	2321	2361	2349	2963	15.3	15.2	15.3	15.2	19.1
Sweden	5500	5888	6165	6432	7773	19.2	20.0	19.2	20.0	24.2
Switzerland	3436	3946	3722	3900	4855	11.6	12.2	11.6	12.2	15.2

Table A2.3. GHE per capita and GHE-to-GGE ratios for 74 expansion countries

Country	GHE per capita (in constant 2021 US\$)					GHE-to-GGE ratio (in percent)				
	2019 WHO GHED	2021 WHO GHED	2029 scenario 1	2029 scenario 2	2029 scenario 3	2019 WHO GHED	2021 WHO GHED	2029 scenario 1	2029 scenario 2	2029 scenario 3
LICs										
Burkina Faso	26	32	35	36	60	12.8	13.1	12.8	13.1	21.6
Chad	9	10	13	12	21	8.2	7.9	8.2	7.9	13.3
Congo, Dem. Rep.	8	9	11	12	18	9.7	10.1	9.7	10.1	15.6
Rwanda	32	40	43	47	74	13.7	14.8	13.7	14.8	23.3
Togo	13	14	23	18	31	8.5	6.6	8.5	6.6	11.2
Uganda	6	22	8	26	14	3.1	9.9	3.1	9.9	5.2
LMICs										
Bangladesh	10	12	19	22	17	3.3	3.7	3.3	3.7	2.9
Benin	9	11	16	14	14	4.6	3.9	4.6	3.9	4.1
Bhutan	98	92	156	105	162	10.7	7.2	10.7	7.2	11.1
Cote d'Ivoire	27	32	44	43	45	6.5	6.4	6.5	6.4	6.6
Guinea	14	14	21	19	24	8.9	8.2	8.9	8.2	10.3
India	23	26	37	39	38	3.9	4.1	3.9	4.1	4.0
Iran, Islamic Rep.	90	109	121	138	148	19.7	22.5	19.7	22.5	24.1
Kyrgyz Republic	34	38	46	54	56	7.4	8.6	7.4	8.6	9.0
Mauritania	35	58	53	80	57	8.6	13.0	8.6	13.0	9.2
Mongolia	102	204	148	272	168	6.9	12.7	6.9	12.7	7.8
Nigeria	11	12	16	17	19	4.2	4.5	4.2	4.5	4.9
Philippines	66	84	103	113	108	7.9	8.6	7.9	8.6	8.3
Senegal	30	24	43	32	50	7.9	5.8	7.9	5.8	9.1
Tajikistan	17	21	26	31	27	6.9	8.0	6.9	8.0	7.2
Tanzania	25	21	37	28	42	13.3	10.1	13.3	10.1	15.1
Uzbekistan	43	61	70	83	71	8.3	9.9	8.3	9.9	8.4
Vietnam	74	74	129	123	121	10.2	9.7	10.2	9.7	9.6
UMICs										
Albania	175	184	263	237	307	10.2	9.2	10.2	9.2	11.9
Armenia	69	104	128	172	121	5.8	7.8	5.8	7.8	5.4
Bosnia and Herzegovina	408	448	566	595	714	15.7	16.5	15.7	16.5	19.8
Bulgaria	491	667	758	910	859	11.7	14.1	11.7	14.1	13.3
China	340	366	524	532	595	8.8	8.9	8.8	8.9	10.0
Dominican Republic	229	299	309	378	401	14.7	18.0	14.7	18.0	19.1
El Salvador	212	293	294	341	370	17.3	20.1	17.3	20.1	21.8
Gabon	163	159	245	258	286	9.6	10.1	9.6	10.1	11.2
Georgia	133	226	232	350	233	14.3	9.5	14.3	9.5	
Grenada	227	233	333	264	398	9.5	7.5	9.5	7.5	11.3
Guatemala	110	119	144	151	192	17.7	18.6	17.7	18.6	23.7

Country	GHE per capita (in constant 2021 US\$)					GHE-to-GGE ratio (in percent)				
	2019 WHO GHED	2021 WHO GHED	2029 scenario 1	2029 scenario 2	2029 scenario 3	2019 WHO GHED	2021 WHO GHED	2029 scenario 1	2029 scenario 2	2029 scenario 3
Indonesia	62	99	93	136	108	8.6	12.6	8.6	12.6	10.0
Moldova	192	272	339	411	335	12.3	14.9	12.3	14.9	12.1
Montenegro	500	610	648	809	875	11.5	14.4	11.5	14.4	15.6
North Macedonia	288	311	424	407	504	13.6	13.0	13.6	13.0	16.1
Russian Federation	419	662	556	825	733	10.2	15.1	10.2	15.1	13.4
Serbia	440	576	708	772	770	12.4	13.5	12.4	13.5	13.4
Thailand	207	262	280	289	362	13.3	13.7	13.3	13.7	17.2
Turkey	294	347	382	458	514	9.7	11.7	9.7	11.7	13.1
HICs										
Bahamas, The	1019	1132	1205	1102	1440	15.0	13.8	15.0	13.8	18.0
Barbados	560	747	671	779	792	10.8	12.6	10.8	12.6	12.8
Belgium	4210	4410	4960	4901	5949	15.6	15.5	15.6	15.5	18.8
Croatia	919	1211	1326	1458	1299	12.7	14.0	12.7	14.0	12.5
Cyprus	1230	2562	1678	3067	1738	10.2	18.6	10.2	18.6	10.5
Czechia	1734	2191	1987	2228	2450	15.7	17.6	15.7	17.6	19.3
Denmark	5696	6290	6550	6959	8049	17.1	18.2	17.1	18.2	21.0
Estonia	1318	1595	1607	1716	1863	12.9	13.7	12.9	13.7	14.9
Guyana	168	328	1016	1252	237	10.5	13.0	10.5	13.0	2.5
Hungary	782	998	1000	1183	1105	9.3	11.0	9.3	11.0	10.3
Ireland	4216	5206	5564	5674	5958	20.5	20.9	20.5	20.9	22.0
Israel	2352	2811	2897	3210	3323	13.4	12.1	13.4	13.9	13.9
Italy	2334	2529	2650	2484	3299	12.3	13.2	12.3	16.4	16.4
Japan	3737	3657	4448	3865	5282	21.5	24.7	21.5	29.3	29.3
Korea, Rep.	1605	1991	2133	2239	2268	22.0	21.0	22.0	22.3	22.3
Latvia	793	1317	1020	1416	1121	14.6	10.5	14.6	11.6	11.6
Lithuania	1028	1254	1420	1489	1452	14.2	13.5	14.2	13.8	13.8
Luxembourg	6164	6638	7223	7619	8711	11.5	10.9	11.5	13.1	13.1
Malta	2016	2455	2669	2729	2849	16.3	15.9	16.3	17.0	17.0
Netherlands	3909	4563	4743	5014	5524	16.8	15.9	16.8	18.5	18.5
Panama	773	803	885	881	1093	21.8	21.9	21.8	27.1	27.1
Poland	790	837	1258	1203	1117	10.5	11.0	10.5	9.8	9.8
Portugal	1484	1738	1768	1911	2098	14.7	13.6	14.7	16.2	16.2
Romania	663	729	1048	1005	936	13.2	13.7	13.2	12.3	12.3
Seychelles	551	598	653	658	778	10.2	10.1	10.2	12.0	12.0
Slovak Republic	1172	1344	1578	1590	1657	13.6	13.5	13.6	14.1	14.1
Slovenia	1763	2039	2294	2276	2491	14.0	14.2	14.0	15.4	15.4
St. Kitts and Nevis	540	636	620	780	764	8.6	6.9	8.6	8.4	8.4
United Arab Emirates	992	1477	1213	1973	1402	12.9	7.9	12.9	9.2	9.2
United Kingdom	3855	4804	4551	4949	5448	22.4	20.6	22.4	24.7	24.7
United States	5954	6749	7193	6679	8414	22.2	23.9	22.2	28.0	28.0

Country	GHE per capita (in constant 2021 US\$)					GHE-to-GGE ratio (in percent)				
	2019 WHO GHED	2021 WHO GHED	2029 scenario 1	2029 scenario 2	2029 scenario 3	2019 WHO GHED	2021 WHO GHED	2029 scenario 1	2029 scenario 2	2029 scenario 3
Uruguay	1087	1161	1242	1378	1536	22.4	20.2	22.4	25.0	25.0