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The impact of external debt service on progress towards the Sustainable Development Goals

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GRADE

Government Revenue and Development Estimation

Abstract

Low- and lower-middle-income countries have accrued an unsustainable amount of external debt. The additional pressure of the pandemic has stretched already weakened healthcare systems within indebted nations. Debt service reduces government revenue, which is necessary for post-pandemic recovery, and thus poses a significant barrier to progress towards the Sustainable Development Goals, which are fundamental economic and social rights. Figures on external debt service were used with an econometric model of the relationship between government revenue and the determinants of health to analyze the potential of an increase in government revenue equivalent to losses to external debt service over ten years. 21 million people could gain access to basic drinking water, 38 million to basic sanitation, and 8.6 million children would attend school for an additional year. Additionally, two thirds of a million under-5 deaths and over 60,000 maternal deaths could be averted. This equates to 17% of maternal deaths and 6% of child deaths in non-HIPC lower-middle income countries. To achieve the Sustainable Development Goals, it is imperative that credit bodies consider alternative options to debt service as a matter of human rights.

Introduction

Low- and lower-middle-income countries (LICs and LMICs) allocate a large proportion of their budget to debt service, and in many countries, expenditure on debt exceeds spending on public services. Even before the COVID-19 pandemic, low-income countries accumulated an increasing amount of external debt [1], and this was recognized as a barrier to achieving the Sustainable Development Goals (SDGs) [2]. The 17 SDGs are linked goals established by the United Nations General Assembly in 2015, to succeed the Millennium Development Goals, to achieve a sustainable future for all by 2030 [3]. However, the pandemic has put additional pressure on economies [4] and stretched already weakened healthcare systems [5]. Thus, debt service could pose a significant barrier to progress towards the SDGs [6].

The most critical determinants for child and maternal health and survival are water, sanitation, education, and health care. Increased coverage of these resulted in reduced child mortality rates by more than 50% and maternal mortality rates by 44% between 1990 and 2015 [7,8]. Clean water, sanitation, and education are SDGs 4 and 6. Accessing these determinants of health would, in turn, reduce child and maternal mortality rates and contribute to progress towards SDGs 3 and 5 (see box 1). An increase in government revenue and spending, for example, if debt service is reduced (as outlined in target 17.4 of the SDG 17, see box 1), accelerates progress towards the SDGs in low-income countries. For example, a 10% increase in revenue results in a 17% increase in health expenditure[9], and an increase of health spending by 1% leads to child survival increasing by 0.5% [10]. Whilst the quality of governance plays a role in the efficient use of government resources [11], research has demonstrated that an increase in fiscal capacity is associated with an increase in governance over time[12]. This means that increasing fiscal capacity should lie at the forefront of development strategies.

The Office of the High Commissioner of the United Nations Human Rights has stated that human rights principles and standards are strongly reflected in the SDGs [6]. Therefore, we frame progress towards fundamental economic and social rights as progress towards the SDGs. Thus, this paper aims to analyze the impact of an increase in government revenue equivalent to current debt service on countries' (with data) ability to progress towards the SDGs, specifically SDG 3,4,5 and 6. We also discuss those responsible for potential remedies within the context of international human rights law.

Background

Modern debt

In the late 70s, low interest rates drove high rates of external debt. Around 1980, interest rates rose to unprecedented levels [13] and oil prices collapsed [14], triggering a global debt crisis [13], which particularly affected Africa [15]. Many low-income countries had to increase their already unsustainable debt levels [14]. Debt relief from the Paris Club (an informal group comprising representatives from 22 major creditor countries but with no legal basis[16]) was often associated with political motivation, meaning that countries providing more profitable partnerships received more lenient and manageable

Box 1: The Sustainable Development Goals referred to in this paper

SDG 3 - Good health and wellbeing

Ensure healthy lives and promote well-being for all at all ages
Targets:
-> By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births
-> By 2030, end preventable deaths of new-born's and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births
Indicators used in this study: Child and maternal mortality rates

SDG 4 – Quality education
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
Targets:
-> By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
*Indicators used in this study: Additional school years**

SDG 5 – Gender equality
Achieve gender equality and empower all women and girls
Targets:
-> End all forms of discrimination against all women and girls everywhere
-> Ensure universal access to sexual and reproductive health and reproductive rights
*Indicators used in this study: Maternal mortality rates and access to drinking water/sanitation for women (see SDG 6) **

SDG 6 – Clean water and sanitation
Ensure availability and sustainable management of water and sanitation for all
Targets:
-> By 2030, achieve universal and equitable access to safe and affordable drinking water for all
-> By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
*Indicators used in this study: Access to basic drinking water and basic sanitation**

* See appendix for further information

SDG 17 Partnership for the Goals

Target 17.4

Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress repayment agreements[17,18]. Sometimes, credit was requested by unelected leaders, posing questions on the democracy of debt creation [17]. This issue prevails to date. The effectiveness of debt on strengthening public services is highly dependent on levels of democracy and governance [11]. Private investors, including commercial banks, increased their loans to low-income countries in the 2000s and 2010s.

Thus high-risk loans are becoming more commonplace, putting countries at risk of economic collapse [19]. meaning that by the end of the 2010s, many economies were already on the verge of a debt crisis (see box 3). Moreover, private creditors often charge a higher interest rate than multilateral bodies, increasing the strain of annual repayments. Finally, while international banks create credit out of thin air in foreign currency to create a profit on return, and debt service is also in foreign currency, local currencies tend to depreciate with time, which increases the burden [20,21].

Debt and COVID-19

The COVID-19 pandemic escalated this volatile debt situation [4]. As a result, economies came to a standstill. This particularly affected low- and lower-middle-income countries, which are more reliant on small and medium businesses than higher-income countries and are therefore more vulnerable to collapse following lockdown measures [5].

In response to the COVID-19 pandemic, the IMF provided $1 trillion in emergency debt relief [22]. Along with other multilateral development banks (MDBs), it initiated the Debt Service Suspension Initiative (DSSI), calling for the largest creditors to temporarily suspend debt service with plans to repay debts over three years from 2022 [23]. Yet, the response rate to this initiative has been low. Paris Club members and G20 creditors have agreed to push for the scheme. Conversely, many MDBs, such as the IMF and the World Bank, only provide "technical support" to the initiative [22], rather than actively offering debt suspension. They argue that this would endanger their status as high standard lenders, causing mistrust and concerns amongst other creditors [5,24]

One of the conditions of the DSSI is that countries may not access other loans when participating in the initiative, which has led governments to opt out, as this would restrict their access to private loans. Additionally, countries fear being downrated by credit agencies should they participate, despite assurances that this would not be the case [24]. These factors combined have resulted in a low participation rate, meaning that many low- and lower-middle-income countries face a risk of a debt crisis in an already volatile economic period [5]. The concerns linked to these difficulties surrounding debt have a knock-on effect on countries' abilities to provide for their citizens. In the final decade to secure the SDGs, measures must be taken by the global community will need to demonstrate partnership and adopt a coordinated response to foreign debt [25].

Box 2 Acronyms

HIPC	Heavily indebted poor country
DSSI	Debt Service Suspension Initiative
IMF	International Monetary Fund
LIC	Low-income country
LMIC	Lower-middle income country
MDB	Multilateral development bank
MDRI	Multilateral Debt Relief Initiative
SDGs	Sustainable Development Goals

Box 3 Definitions

Sovereign debt: A national government's debt issued in a foreign currency to finance economic development.

External debt: Term for all debt held with foreign bodies

Highly Indebted Poor Countries (HIPC) Initiative: International initiative which aim to reduce poverty and grant debt relief among highly indebted poor countries (GUPTA)

Poverty-Reduction Strategy paper (PRSP): A paper prepared by a country when applying for the HIPC Initiative, which outlines the country's strategies for poverty-reducing public spending

Structural adjustment programmes (SAPs): A set of economic parameters and policies administered by international financial institutions. The aim is to reduce poverty and sovereign debts

Debt crisis: A debt crisis is where debt payments threaten a country's economy and/or the ability of its government to protect the basic economic and social rights of its citizens. Debt crises can be caused by debt owed by governments, or by debts owed by the private sector, that is, businesses and banks. Private debt can lead to a financial crisis, which then passes debt on to the public.

The HIPC initiative and structural adjustment programmes

The purpose of the Highly Indebted Poor Countries (HIPC) Initiative, launched in 1996, was to support nations struggling with debt repayments. Conditions for structural adjustment programmes (SAPs) were introduced simultaneously [26–28]. Out of the 37 participating countries to date, 31 are in Africa[29,23]. The HIPC Initiative initially focussed on supporting HIPCs to achieve the Millennium Development Goals (MDGs) and subsequently the SDGs [30,31]. In 2005, the Multilateral Debt Relief Initiative (MDRI) was introduced and allowed for total debt relief from three key MDBs: the World Bank, the African Development Fund, and the IMF [1]. Conditions for the programme include high debt burdens and the willingness to commit to SAPs[29]. SAPs comprise four main policy reforms and arrangements: reducing government spending, liberalizing trade, privatize government resources, and devaluing currency [29,32,33].

While debt relief programmes can increase government revenue, countries that have participated in HIPC or MDRI programmes have subsequently taken out higher risk loans with private investors following debt relief as SAPs can exclude the countries from further multilateral loans, pushing them to seek other options. This trend is concerning as these countries reach high levels of debt-to-GDP ratio, highlighting the importance of coupling internal structural measures alongside debt relief to ensure sustainable economic development [34]. Debt and SAPs have significant implications for the economy, health, and human rights.

Debt and human rights

When debt service diverts expenditure from public services, this slows progress towards the SDGs. On the other hand, an increase in government revenue is associated with increased child and maternal survival [35] and progress towards the SDGs and thus economic and social human rights [36].

In 2012 the Human Rights Council called upon the international community to make every effort to alleviate the external debt burden of developing countries so they could realize their economic and social human rights. They also noted the impact of SAPs on the potential for sustainable economic growth, further compromising rights [37].

International human rights law assigns duties to states, not companies, and international tribunals rarely extend jurisdiction over legal persons (which includes companies). However, the United Nations Committee on Economic Social and Cultural Rights' General Comment Number 24 makes it clear that states are responsible for the action of companies, including banks domiciled on their territory [38]:

> *"States Parties are required to take the necessary steps to prevent human rights violations abroad by corporations domiciled in their [...] jurisdiction [...] without infringing the sovereignty or diminishing the obligations of the host States under the Covenant."*

Furthermore, in 2011 the United Nations Human Rights Council endorsed the UN Guiding Principles that addresses the roles of businesses (including banks) concerning human rights and states that all companies should respect human rights. Respect includes expressing their commitment, conducting human rights due diligence reviews and providing a remedy for human rights abuses [39]. In addition, when a business causes or contributes to human rights abuses, it must cease the harmful actions [40].

Thus, to meet their human rights obligations, state parties must make every effort to alleviate the external debt burden of developing countries. They must act when banks based on their territory cause human rights abuses overseas. When debt service reduces government revenue which impacts human rights, banks must cease or prevent this action.

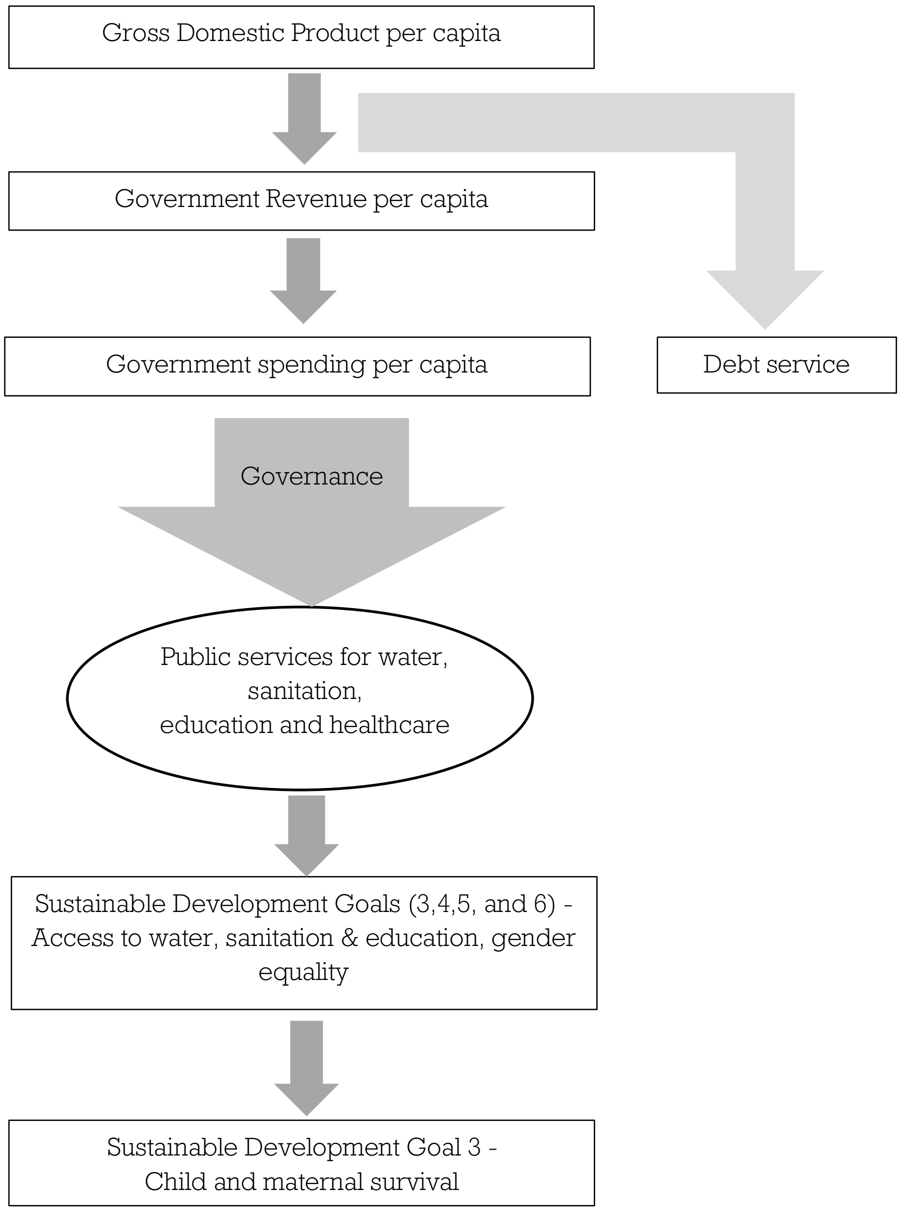
Impact of debt and structural adjustment programmes on health

The dependency theory argues that lower-income countries are subjected to unequal power relationships within the global economy and harmed through exchanges with wealthier nations. External debt impacts a country's ability to be a true democracy, as governments must comply with conditions applied by foreign bodies[17]. Thus, the economic burden of debt and the knock-on effects of conditionalities linked to these debts have determinantal social and economic consequences. These consequences inhibit progress towards the SDGs and thus economic and social human rights.

Programmes funded by the IMF reduce the share of revenue spent on health[41]. Reasons for declining health spending include the conditionalities such as decreases in public sector salaries. Researchers have shown SAPs to be associated with a reduction in government health spending by almost 1 USD per capita[42]. SAPs focus on accruing revenue and cutting costs through austerity measures[43]. Countries with high debt repayments frequently cut back on expenses in the social and health care sector [27] and sectors that impact the determinants of health, which particularly affects children. This is because SAPs focus on accruing revenue and cutting costs through austerity measures[43]. Sub-Saharan African countries subjected to SAPs have higher rates of child mortality than those who do not[43], which can be attributed to the requirement to reduce government spending in vital sectors.

Another issue surrounding SAPs is that women are disproportionately affected through spending cuts. Women generally work in more precarious employment sectors with lower wages in the public sector, which may be more susceptible to job losses due to austerity measures [44,45]. Women are also more likely to carry out unpaid work, such as household and caring duties as a result of cuts in public provisions of services, limiting their ability to partake in the labor market, affecting their ability to access the determinants of health, and, consequently, affecting survival rates [45]. SAPs have adverse effects on maternal mortality rates: the rate of mothers dying during pregnancy is twice as high in Sub-Saharan African countries with SAPs than those not participating in these programmes [32]. Shandra et al. (2012) argue that this is due to the lack of women's healthcare, education, and support from rights organizations that contribute to maternal survival. Even though health outcomes are a legitimate indicator of effective public spending, increasing expenditure on sectors other than healthcare also benefit the health outcomes of the population[28]. Debt impacts health directly through reduced healthcare spending and indirectly by diverting revenue from other vital sectors, including education (see figure 1).

Figure 1 A framework for losses from government revenue and the impact on the Sustainable Development Goals



Solutions for indebted nations – debt suspensions and cancellations

Debt suspensions, cancellations and restructuring options are the most common responses to the negative impact of foreign debt service on a country's ability to provide public services. Private lenders may not agree to cancel debt, and suspension may be a more appealing option, despite some creditors expressing concerns about a lower rating from credit agencies [24]. The limited participation rate in the DSSI reflects the difficulties of encouraging lenders to suspend debt service: only 1.7% of debt service in low-income countries was suspended with this initiative [46]. Bolton et al. suggest that these concerns surrounding debt suspension are unfounded. It is the contractual duty of the creditor to allow debtors to request a modification of repayments due to unanticipated circumstances [5]. Additionally, debt suspension or participation in debt relief programmes has been found to not deter creditors from lending to affected countries[47]. Whilst debt cancellation would provide a clean slate for countries to rebuild their economies, debt suspension could offer a vital timeframe for countries to regain stability before repaying their debts [5]. However, the HIPC Initiative demonstrated that debt relief alone could not support a country's progress towards the SDGs. Debt relief must be coupled with further structural measures for countries to generate a stable revenue stream and achieve these goals [25].

Aim

This paper aims to provide a realistic estimate for the number of individuals who would have access to education, water and sanitation (SDGs 4 and 6) and the number of maternal and child deaths averted (SDGs 3 and 5) if government revenues increased equivalent to external debt service. The numbers will also be presented as percentages of those who do not have access to these fundamental rights.

Methodology

Data sources

To accurately measure the impact of debt service on women and children's right to health, we used the IMF's Debt Sustainability Analyses. These provide the most recent figures on a country's level of foreign debt for individual countries[48]. We used the statistics on "External debt service (percent of revenue excl. grants)" from these reports. These are also available on the Jubilee Debt website[49]. We used the most recent percentages available for each country which was 2020. We used this figure instead of an average, as debt levels have risen in this year due to the COVID-19 pandemic and it is expected to increase over the next five years [5,50]. We used reports on the income classifications by the OECD in 2020 [51] and the HIPC list by the IMF [23] to categorize the countries. We did not analyze 56 countries due to a lack of data (see appendix).

The GRADE

To estimate the impact of debt service on a country's ability to provide determinants of health and reduce mortality rates, we used the Government Revenue and Development

Estimations (GRADE) tool. The government revenue figures within the GRADE are from the UNU Wider data[52], and the data on the SDGs are from the World Development Indicators dataset [53]. See the appendix for the definitions. The GRADE uses econometric modelling based on 30 years' worth of data to provide realistic estimates on how a change in government revenue would impact the SDGs in that country. The model assumes that the increase in government revenue would be spent in the same way it has been done previously, which is what would realistically happen, and there are no gains from the increase for the first five years. It also does not assume money would all go to a specific sector. The relationship between government revenue and mortality is non-linear, which means countries with low income are more likely to demonstrate a substantial change in coverage of the SDGs following an increase in revenue. Higher-income countries will experience improved coverage at a much lower rate because the coverage for many SDGs in the model is already close to 100% [36,54].

We present the increased progress towards the SDGs if there was an increase in revenue equivalent to debt service. For mortality rates, we present the total number of deaths averted over a ten-year projection period. We selected a projection period of 10 years for this analysis (2008-2017). We choose 2017 as the end date because this is the most recent year with data for most of the required variables. In few cases, data were not available for 2017, so we adjusted the timeframe from 2002-2016. Due to changes in governance quality, the impact on the SDGs varies annually. In some cases, the results show a minimal effect (especially regarding basic water) despite increased revenue due to deterioration in the governance quality during that timeframe [36,54].

In addition to the totals discussed above, to provide context, we calculated those who would access SDGs as a percentage of the population without access. For SDGs 4 and 6, we used the figures of those with increased access to drinking water and sanitation as a percentage of those without access. For SDGs 3 and 5, we used the figures on child and maternal deaths averted as a percentage of total deaths within the respective country from 2008 to 2017, see table 4. We only present the figures for LICs and LMICs as the numbers of individuals who would gain access in higher-income countries is close to zero as the coverage of SDGs, for water and sanitation, is close to 100% in higher-income countries.

Role of the funding source

The funders of the GRADE project had no role in the study design, in the collection, analysis, and interpretation of data, or the writing of the report.

Findings

We have presented the progress towards SDGs 3,4,5, and 6 if government revenue increased equivalent to the debt service in countries with data over ten years. We have presented the figures by income classification groups and included the overview for low- and lower-middle-income countries in this section (see Tables 1 and 2). The upper-middle- and high-income countries are in the appendix.

Table 1 Increased access to SDGs 3,4,5 and 6 associated with additional government revenue equivalent to debt service in low-income countries

Low-income countries	External debt as % of GR 2020	HIPC	Number of individuals with increased access to basic drinking water (SDG 6)			*as % of those w/o access*	Number of individuals with increased access to basic sanitation (SDG 6)			*as % of those w/o access*	Number of children who attend school for an additional year (SDG 4)	Child deaths averted (SDG 3)	*as % of total deaths*	Maternal deaths averted (SDG 3 and 5)	*as % of total deaths*
			All	U5	Women 15-49		All	U5	Women 15-49						
Afghanistan	1.9	Yes	2,393	391	540	*0.0*	15,066	2,548	3,335	*0.1*	1,409	699	*0.1*	150	*0.2*
Burkina Faso	5.6	Yes	40,262	7,086	9,189	*0.5*	45,303	7,978	10,331	*0.3*	3,633	1,264	*0.2*	217	*0.9*
Central African Republic	10.5	Yes	998	169	234	*0.0*	4,793	801	1,116	*0.1*	622	382	*0.2*	65	*0.4*
Chad	11.5	Yes	15,669	2,974	3,405	*0.2*	94,605	18,081	20,496	*0.8*	9,056	4,833	*0.6*	514	*0.7*
Congo, the Democratic Republic of the	11.1	Yes	4,380	811	970	*0.0*	106,000	19,720	23,546	*0.2*	n/a	9,089	*0.3*	1,261	*0.8*
Gambia, The	26.6	Yes	16,351	2,897	3,936	*3.7*	25,640	4,542	6,174	*2.3*	n/a	554	*1.1*	71	*1.4*
Guinea	4.4	Yes	7,200	1,223	1,724	*0.2*	17,004	2,900	4,065	*0.2*	n/a	764	*0.2*	144	*0.5*
Guinea-Bissau	4.7	Yes	337	57	83	*0.1*	1,368	228	339	*0.1*	n/a	90	*0.1*	11	*0.2*
Haiti	14.1	Yes	3,278	464	877	*0.1*	57,021	7,035	14,954	*0.8*	n/a	4,133	*1.7*	319	*2.4*
Liberia	10.4	Yes	6,442	1,026	1,515	*0.5*	6,110	971	1,437	*0.2*	n/a	674	*0.5*	89	*0.9*
Madagascar	8.2	Yes	22,480	3,535	5,345	*0.2*	29,745	4,660	7,078	*0.1*	2,862	1,242	*0.3*	162	*0.5*
Malawi	5.4	Yes	30,972	5,361	7,232	*0.6*	25,399	4,391	5,929	*0.2*	2,258	797	*0.2*	100	*0.4*

Mali	9.1	Yes	50,616	9,586	11,118	*1.1*	70,308	13,284	15,458	*0.6*	7,496	2,899	*0.3*	440	*0.9*
Mozambique	12.7	Yes	113,100	19,588	26,592	*0.8*	139,058	23,979	32,718	*0.7*	12,306	4,519	*0.5*	746	*2.0*
Niger	10.2	Yes	39,474	8,090	8,236	*0.4*	50,737	10,405	10,592	*0.3*	5,027	1,800	*0.2*	313	*0.6*
Rwanda	19.2	Yes	128,443	19,361	32,166	*2.6*	116,843	17,655	29,273	*2.8*	4,776	1,761	*0.9*	351	*3.0*
Sierra Leone	18.1	Yes	12,928	2,040	3,074	*0.4*	14,979	2,375	3,555	*0.3*	2,067	1,061	*0.3*	118	*0.4*
Sudan	24.5	Yes	237,629	37,703	56,025	*1.5*	1,003,084	158,703	236,687	*4.0*	65,501	30,632	*3.4*	3,484	*7.6*
Togo	6.9	Yes	10,610	1,687	2,567	*0.4*	16,453	2,629	3,977	*0.3*	1,739	844	*0.4*	84	*0.8*
Uganda	14.1	Yes	181,394	33,957	41,904	*0.9*	343,332	64,242	79,324	*1.2*	n/a	4,938	*0.5*	605	*1.0*
Yemen	26.4	No	284,840	44,737	68,208	*2.8*	1,016,681	158,545	245,147	*9.2*	60,396	21,637	*4.6*	2,569	*17.2*
Zambia	33.5	Yes	473,995	84,227	111,891	*7.6*	483,334	85,549	114,228	*4.4*	n/a	14,559	*3.4*	1,637	*10.5*

Table 2 Increased access to SDGs 3,4,5 and 6 associated with additional government revenue equivalent to debt service in lower-middle-income countries

Lower-middle income countries	External debt as % of GR 2020	HIPC	Number of individuals with increased access to basic drinking water (SDG 6)			*as % of those w/o access*	Number of individuals with increased access to basic sanitation (SDG 6)			*as % of those w/o access*	Number of children who attend school for an additional year (SDG 4)	Child deaths averted (SDG 3)	*as % of total deaths*	Maternal deaths averted (SDGs 3 and 5)	*as % of total deaths*
			All	Children < 5 years	Women 15-49 years		All	Children < 5 years	Women 15-49 years						
Algeria	0.2	No	5,466	620	1,500	*0.2*	21,614	2,465	5,933	*0.4*	n/a	473	*0.2*	19	*0.2*
Angola	45.9	No	1,535,012	289,202	348,671	*12.6*	2,568,120	480,590	583,242	*18.0*	n/a	115,555	*9.9*	6,067	*18.6*
Bangladesh	11.9	No	494,958	48,408	136,699	*9.7*	734,127	71,851	202,622	*0.8*	33,072	11,148	*0.8*	1,905	*2.7*
Benin	10	Yes	50,898	8,479	11,899	*1.5*	47,170	7,867	11,032	*0.6*	4,297	1,485	*0.4*	230	*1.4*
Bhutan	49	No	37,121	3,494	9,676	*98.2*	20,768	1,928	5,435	*8.3*	2,048	682	*13.7*	92	*31.0*
Bolivia	8.4	Yes	115,510	13,175	28,838	*10.8*	202,257	23,036	50,520	*4.1*	14,915	3,605	*4.0*	574	*12.1*
Cambodia	6.9	No	36,621	4,168	9,980	*0.9*	86,796	9,884	23,663	*1.1*	n/a	1,002	*0.7*	123	*1.6*
Cameroon	17	Yes	207,578	34,699	49,368	*2.4*	482,867	80,633	114,825	*3.6*	n/a	10,185	*1.2*	1,286	*2.7*
Cape Verde	14.4	No	13,003	1,359	3,469	*16.4*	10,276	1,075	2,742	*5.9*	974	219	*8.8*	20	*28.0*
Comoros	8.4	Yes	699	106	171	*0.5*	574	87	140	*0.1*	286	183	*0.9*	16	*2.0*
Congo, Republic	34.1	Yes	204,971	33,341	50,117	*14.4*	469,736	76,300	114,793	*12.5*	n/a	14,529	*15.3*	862	*11.5*

Côte d'Ivoire	14.1	Yes	136,156	21,783	32,033	*2.2*	252,024	40,357	58,934	*1.6*	19,750	7,636	*1.0*	1,156	*2.1*
Djibouti	19.5	No	12,621	1,380	3,284	*5.9*	21,333	2,326	5,554	*5.8*	972	403	*2.7*	46	*8.1*
El Salvador	16.5	No	132,344	12,610	36,618	*29.5*	241,703	22,978	66,922	*28.4*	9,283	1,983	*9.5*	286	*46.3*
Eswatini	4.5	No	5,809	795	1,556	*1.5*	11,124	1,525	2,982	*2.3*	n/a	300	*1.3*	23	*1.6*
Ghana	50.2	Yes	1,385,506	199,336	346,101	*23.0*	1,431,334	205,749	357,524	*6.5*	75,120	19,230	*3.8*	2,646	*9.7*
Honduras	15.7	Yes	148,428	17,244	39,030	*22.4*	322,297	37,511	84,707	*15.9*	15,114	3,956	*8.9*	472	*32.5*
India	2.8	No	4,045,060	391,191	1,035,822	*2.9*	6,905,606	666,153	1,769,020	*1.0*	210,645	45,453	*0.4*	7,555	*1.6*
Kenya	14.5	No	379,107	57,538	95,215	*1.9*	843,970	128,521	211,807	*2.7*	n/a	9,422	*1.2*	1,651	*2.8*
Kiribati	2.4	No	412	55	109	*1.1*	- 55	- 8	- 15	*-0.1*	n/a	18	*1.0*	1	*3.1*
Kyrgyzstan	10.4	No	40,553	4,972	10,888	*5.1*	105,907	12,910	28,502	*46.2*	4,515	1,291	*3.3*	169	*15.7*
Lao People's Democratic Republic	31.1	No	121,513	14,529	32,450	*7.0*	230,227	27,639	61,452	*9.7*	6,809	2,870	*2.8*	359	*8.6*
Lesotho	7.4	No	23,337	2,855	6,090	*3.6*	22,932	2,802	5,984	*1.7*	2,098	640	*1.1*	69	*2.1*
Mauritania	14.8	Yes	51,604	8,071	12,557	*3.7*	107,596	16,833	26,188	*4.6*	7,349	2,545	*2.1*	284	*2.6*
Micronesia, Federated States of	4.5	No	887	101	223	*4.2*	- 286	- 30	-74	*-1.2*	n/a	23	*2.5*	2	*7.8*
Moldova, Republic of	6.5	No	27,432	1,468	7,386	*7.6*	56,668	3,032	15,271	*8.0*	1,580	324	*6.4*	24	*33.0*
Mongolia	19.4	No	77,493	8,701	22,573	*13.1*	177,675	20,128	51,560	*14.4*	n/a	2,370	*13.3*	151	*37.5*
Morocco	15.8	No	562,196	55,535	152,081	*8.9*	1,034,101	102,160	278,895	*19.7*	70,185	14,718	*7.4*	1,113	*19.2*
Myanmar	6.4	No	85,516	7,503	23,899	*0.6*	210,230	19,044	58,761	*1.2*	12,972	6,527	*1.1*	721	*2.9*
Nepal	3.2	No	29,178	3,102	8,224	*0.8*	39,373	4,204	11,022	*0.3*	2,304	848	*0.3*	132	*0.8*

Nigeria	7.1	No	646,730	112,838	147,789	*1.1*	1,820,609	318,294	416,124	*1.7*	n/a	50,690	*0.6*	7,304	*1.1*
Papua New Guinea	22.3	No	159,186	21,322	39,428	*3.4*	317,990	42,693	78,716	*4.9*	n/a	4,955	*4.1*	618	*17.4*
Philippines	6.6	No	629,655	72,299	162,297	*7.5*	1,361,581	156,303	350,914	*4.9*	51,718	10,017	*1.4*	2,250	*7.2*
Sao Tome and Principe	8.4	Yes	1,009	161	237	*2.7*	324	53	76	*0.3*	103	40	*1.5*	9	*10.2*
Senegal	16.1	Yes	201,535	34,088	49,552	*6.0*	216,458	36,608	53,215	*3.1*	15,821	4,718	*1.6*	656	*3.3*
Solomon Islands	1.9	No	1,493	229	364	*0.9*	433	66	106	*0.1*	n/a	71	*1.6*	7	*2.9*
Sri Lanka	37.5	No	921,452	78,672	240,083	*34.2*	1,349,839	116,505	353,574	*91.0*	46,882	10,559	*29.3*	1,165	*87.6*
Tanzania, United Republic of	13.1	Yes	289,789	41,465	55,979	*1.2*	271,270	46,844	63,352	*0.7*	21,324	7,226	*0.6*	970	*0.9*
Timor-Leste	1	No	781	109	179	*0.2*	544	76	124	*0.1*	155	61	*0.3*	10	*1.5*
Tunisia	21.5	No	76,475	6,526	21,213	*11.9*	345,368	31,006	95,114	*26.7*	n/a	7,155	*20.1*	319	*34.9*
Ukraine	13.5	No	646,155	34,026	160,898	*25.5*	1,505,608	79,068	374,793	*81.2*	n/a	13,759	*26.3*	680	*57.8*
Uzbekistan	6.9	No	203,167	21,391	57,163	*21.6*	164,257	16,702	46,634	*78.2*	16,441	6,065	*3.2*	709	*33.9*
Vanuatu	8.2	No	4,651	669	1,162	*15.8*	2,285	326	570	*1.6*	n/a	101	*4.4*	10	*14.9*
Viet Nam	8.5	No	898,537	73,716	250,905	*10.9*	1,238,070	101,617	346,620	*5.6*	n/a	8,308	*2.4*	1,098	*15.3*

Table 3 Increased access to SDGs 3,4,5 and 6 associated with additional government revenue equivalent to external debt service in by income level

	Number of individuals with increased access to basic drinking water (SDG 6)			Number of individuals with increased access to basic sanitation (SDG 6)			Number of children who attend school for an additional year (SDG 4)	Child deaths averted (SDG 3)	Maternal deaths averted (SDGs 3 and 5)
	All	Children < 5 years	Women 15-49	All	Children < 5 years	Women 15-49			
LICs	1,683,791	286,970	396,831	3,682,863	611,221	869,759	179,148	109,171	13,450
LMICs	14,647,604	1,743,331	3,703,776	25,252,700	3,015,711	6,389,875	646,732	403,348	43,859
UMICs	4,534,550	430,283	1,218,133	9,345,005	877,081	2,512,954	1,126,329	112,498	3,855
HICs	1,602	107	428	33,638	2,404	8,368	6,697,195	9,254	7
TOTAL	20,867,547	2,460,691	5,319,168	38,314,206	4,506,417	9,780,956	8,649,404	634,271	61,171

If government revenue was increased by an amount equivalent to external debt service, 21 million people could gain access to basic drinking water, 38 million people could gain access to basic sanitation, and 8.6 million children would attend school for an additional year (see Table 3). Additionally, two thirds of a million under-5 deaths and over 60,000 maternal deaths could be averted.

Table 4 Increase in access to SDGs 3,4,5 and 6 associated with additional government revenue equivalent to external debt service by income level and indebted status.

	Increased access to basic drinking water (as % of the total population who do not have access) (SDG 6)	Increased access to basic sanitation (as % of the total population who do not have access) (SDG 6)	Child deaths averted (as % of total children <5 years deaths 2008-2017) (SDG 3)	Maternal deaths averted (as % of total maternal deaths 2008-2017) (SDGs 3 and 5)
LICs	1.1	1.3	0.9	2.4
LMICs	10.4	11.9	5.1	14.5
LIC and LMICs (HIPCs)	3.5	2.5	1.7	3.8
LIC and LMICs (non-HIPCs)	11.1	14.5	5.7	17.1

Table 4 shows the increased access to the SDGs associated with additional government revenue equivalent to external debt service as a percentage of the population that do not have access to these SDGs. We also show the percentage of deaths that would be averted as a percentage of the total deaths over this time period.

We included separate analyses for HIPCs and non-HIPCs, because HIPCs are more likely to already receive debt relief. It is important to note that only one LIC (Yemen) is not classified as an HIPC. On the other hand, LMICs are mainly non-HIPCs (12 out of a total of 44).

Discussion

The impact of debt on the Sustainable Development Goals

These figures demonstrate that if government revenue was increased by an amount equivalent to external debt service, over 38 million additional people would have access to basic sanitation (SDG 6), 20 million would have access to basic drinking water (SDG 6), 8.6 million children would attend school for an additional year (SDG 4), and over a ten year period this would be associated with the survival of more than 600,000 children and 60,000 mothers (SDG 3 and 5). When we consider these as a percentage of those who do not have access to these SDGs, in table 4, the figures demonstrate that an increase in government revenue equivalent to debt service would contribute significantly to progress towards SDGs 3,4,5 and 6, which are fundamental rights. The figures also indicate that a significant proportion of child and maternal deaths would be averted if government revenue lost to external debt service were to be curtailed. These figures imply that LMICs would gain more than LICs and non-HIPCs more than HIPCs from debt relief. This is possibly because most LICs are HIPCs and HIPCs already have had a significant amount of their debt cancelled or reduced through the MDRI [14].

External debt service and the right to health for women and children

Particularly striking are the number of child and maternal deaths averted in non-HIPC LICs and LMICs. 17.1% of total maternal deaths and 5.6% of total under-5 deaths in non-HIPC LICs and LMICs over the ten years studied could be averted if debt service were to be curtailed. This highlights that reducing external debt service is a matter of both children's and women's rights and in tandem with findings of previous research. The strong impact on particularly maternal mortality rates could be linked to a multitude of factors. For instance, Shandra et al., (2012) found debt to have an impact on the existence of women's rights non-governmental organizations, meaning that groups which typically push government for rights on healthcare and reproductive education, ceased to exist following spending cuts through SAPs. This, in turn, has a negative impact on the education women received on reproductive rights and other maternity-related health issues.

Previous pandemics have demonstrated that women are disproportionately affected during and in the aftermath of a pandemic and a recession [44,45]. Girls in lower income countries who have left school during lockdowns may not return to the classroom as the economic impact may force them to assist with unpaid labor in the household[55]. With the additional impact of debt distress, the burden on health systems and on women's health poses a significant threat to women's survival and, therefore, to the rights of women and the achievement of SDG 5. As women's level of education has a strong negative correlation with child and maternal mortality [56], it is vital that measures are taken to ensure women gain full access to education and health systems. This evidence demonstrates that whilst losses are not necessarily fully attributable to losses in health spending, the impact of curtailing losses in revenue to debt service could affect women's rights through a multitude of revenue pathways.

Debt relief and human rights

International banks create credit 'out of thin air' and the opportunity costs of servicing debt (not including the impact of the SAPs on human rights) has resulted and continues to result in millions not accessing their human rights. The United Nations Committee on Economic Social and Cultural Rights mandates that businesses and governments should ensure that their activity does not lead to the restriction of human rights, either at home or overseas. This includes MDBs and private banks. State parties must ensure that banks which are domiciled within their territory adhere to these mandates and cannot remain passive[57].

The key takeaway from this study is that debt service negatively impacts SDGs 3,4,5, and 6, which are fundamental human rights. Revenue allocated to servicing debt since the 1980s, has massive opportunity costs and resulted in substantial injustices for the generations who did not access their rights. Low-income countries have been shown to spend a significantly higher proportion of government revenue on essential sectors such as health and education when presented with more resources [9], but both the volume of spending and the allocation of many countries have been constrained by SAPs over many years [29,32,33]. Considering this, the numbers presented within this paper likely underestimate the true impact of debt on the progress towards the SDGs and fundamental rights.

Particularly concerning are the rise of high-risk bonds through private investors to struggling countries, which have already been deemed unable to repay debt service to MDBs through the HIPC or MDRI [34]. This poses a considerable threat to the rights of the individuals within the affected nations [58].

Addressing debt

Realistically, it is unlikely that private investors will cancel debt. In cases such as in the DSSI, both private creditors and MDBs have been sceptical about debt suspension out of fear of being downgraded by credit rating agencies and losing cash flows [24,59]. Despite offering solutions such as grants to support lower income countries, the consistent loss of revenue through external debt service has a significant impact on the revenues of many countries. This is recognized by bodies such as the IMF[23]. Therefore, it is disappointing that MDBs, as the largest advocates of debt suspension, are not leading by example. There are alternatives to suspension and cancellation. Haughton and Keane advocate for debt swaps to assist in achieving the SDGs. Debt swaps refer to the purchasing of sovereign debt by a lender in exchange for equity, which may be the more appealing option for private lenders, or the implementation of a certain project within that country, such as one that drives the SDGs [25]. This differs from SAPs as the conditionalities do not focus on spending caps and economic development, but rather in the development of areas such as healthcare or education. The inclusion of civil society and respecting the wishes of the country's citizens would be an essential point to consider [60]. Whilst debt cancellation in tandem with international financial support towards achieving the SDGs would arguably be the largest force to create progress, debt swaps offer potential alternatives that creditors may be more agreeable towards.

Additionally, domestic resource mobilization is a strategy to secure long-term and sustainable economic stability within countries. Developing sustainable tax systems to fund key sectors could significantly assist lower income countries to become more independent from credit bodies [61]. Coupled with good governance, efficient domestic resource mobilization could stimulate inclusive growth and increase democratic engagement within lower income countries [62]. Debt relief under the HIPC or MDRI has resulted in countries turning to potentially higher risk and high interest loans with private investors, reaching worrying levels of debt-to-GDP ratio [34]. This means that debt relief alone will not be sufficient in achieving sustainable economies that can effectively provide fundamental rights, as countries will continually rely on loans until they have recovered from indebtedness and achieved the economic stability to become self-sufficient. A more holistic and sustainable model of debt relief coupled with restructuring and strengthening of domestic revenue platforms must be sought to achieve sustainable economies that can ensure human rights are being met.

The COVID-19 pandemic has led to an increase of debt for many of the already heavily indebted countries [4,5]. It is vital to ensure that countries are provided appropriate support to deal with the aftermath of the pandemic. This paper would recommend a suspension of debt service as suggested by Bolton et al. [5], or even the reduction or cancellation of foreign debt service as previously done by multilateral creditors [14], to allow countries to rebuild their economies in an incredibly volatile era and, most importantly, to allow individuals to access the determinants of health and hinder further child and maternal deaths.

The complex history of the creation of external debt demonstrates a great economic injustice towards indebted nations. The dependency theory evolved to consider the impacts of debt service on low- and lower-middle income countries, by widening the economic gap and driving unequal power relationships [17, 33,63]. These inequalities have only deepened throughout the pandemic. Not only have debts increased, but economies have come to a standstill, particularly impacting lower income countries who are constituted of high levels of small businesses [5]. Additionally, the UK, as one of the largest providers of development funds, have suspended overseas development aid, reducing vital sources of income for many countries [64]. Despite a temporary increase in funds from MDBs [22,24], the repercussions of this could be disastrous. Eliminating the cost of debt service could provide a low-cost and minimal intervention strategy of preventing economic crises.

The suspension of debt would provide a temporary safety net; however, it is vital to also ensure structural changes that allow economic development to occur sustainably. The privatization of healthcare and education in low-income countries through leads to unaffordable prices. Lobbying to eliminate these could contribute to fairer access[32]. The influence of women's NGOs on decreasing levels of infant mortality rates[63] demonstrate that NGOs could be utilized to advocate for greater debt relief in Sub-Saharan African countries. It is vital that a comprehensive approach is taken to ensure that countries can effectively rebuild after recovering from high levels of debt.

Limitations

The GRADE estimates the relationship between revenue and outcomes and cannot take the influences on the amount spent into account. The spending capacity and allocation decisions of many countries have been influenced by SAPs.

A significant limitation is the period studied. Large amounts of government revenue have been allocated to debt service for four decades. We study a snapshot of ten years due to data limitation. A further limitation is the fact that we projected the debt service as a percentage of government revenue from 2020 when this will have varied over this time. However, as many countries had much higher debt service prior to the initiatives to reduce debt, the overall impact is likely to be a significant underestimation.

Conclusion

Governments, MDBs, and commercial banks are negatively impacting human rights in many countries in the world. United Nations Committee on Economic Social and Cultural Rights makes it clear that businesses and governments should ensure that their activity does not negatively impact human rights either at home or overseas. Previous research has demonstrated that debt negatively impacts child and maternal survival, and this paper provides figures to support theory. This system is designed to generate profit from money that is created out of nothing. It is not only a crude representation of the still very apparent unequal power relations between higher and lower income countries, but also has real implications for human rights. Suspending or cancelling external debt service could have a significant impact on the ability of individuals living in low- and lower-middle income countries to access the determinants of health and, importantly, to survive. MDBs have the power to cancel debts and the board of private creditors are obliged to consider the same. To achieve the SDGs after the economic and health crisis presented through COVID-19, it is imperative that credit bodies consider alternative options to debt service as a matter of human rights.

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Appendix

Countries with missing data

Lack of debt data	Lack of GRpC data	Lack of DOH data	Lack of governance data
Antigua and Barbuda	Argentina	Dominica	Montenegro
Aruba	Burundi		
Bahrain	China		
Barbados	Croatia		
Brunei Darussalam	Ecuador		
Equatorial Guinea	Egypt		
Hong Kong	Eritrea		
Iraq	Ethiopia		
Kuwait	Georgia		
Libya	Iran		
Macao	Jamaica		
Malaysia	Kosovo		
Malta	Marshall Islands		
Namibia	Mexico		
Nauru	Nicaragua		
Oman	Pakistan		
Palau	Romania		
Panama	Seychelles		
Puerto Rico	South Sudan		
Qatar	Tajikistan		
Saint Kitts and Nevis	Turkmenistan		
San Marino	Turkey		
Saudi Arabia	Tuvalu		
Singapore	Venezuela		
Somalia	Zimbabwe		

Definitions (World Bank definitions)

Basic drinking water services – the percentage of the population drinking water from an improved source, provided collection time is not more than 30 minutes for a round trip. Improved water sources include piped water, boreholes or tube wells, protected dug wells, protected springs, and packaged or delivered water.

Basic sanitation services - the population using at least, that is, improved sanitation facilities not shared with other households. This indicator encompasses both people using basic sanitation services as well as those using safely managed sanitation services. Improved sanitation facilities include flush/pour flush to piped sewer systems, septic tanks or pit latrines, ventilated improved pit latrines, compositing toilets or pit latrines with slabs.

School life expectancy (primary and secondary), both sexes (years) - the number of years a person of school entrance age can expect to spend within the specified education level. For a child of a certain age, the school life expectancy is calculated as the sum of the age-specific enrolment rates for the levels of education specified. The part of the enrolment not distributed by age is divided by the school-age population for the level of education they are enrolled in, multiplied by the duration of that level of education. The result is added to the sum of the age-specific enrolment rates. A relatively high school life expectancy indicates a greater probability for children to spend more years in education and higher overall retention within the education system. Note that the expected number of years does not necessarily coincide with the expected number of education grades completed because of repetition. Since school life expectancy is an average based on participation in different levels of education, the expected number of years of schooling may be pulled down by the magnitude of children who never go to school. The GRADE uses the percentage of the maximum school life expectancy, both primary and secondary, for both sexes, globally, which is 17 years.

Increased access to fundamental rights associated with increased government revenue equivalent to debt service in upper-middle-income countries

Upper-middle income countries	Basic drinking water			Basic sanitation			Extra school years	Child deaths averted	Maternal deaths averted
	All	Children <5	Women 15-49	All	Children <5	Women 15-49			
Albania	49,234	2,942	12,294	79,090	4,745	19,776	6,330	994	46
Armenia	28,940	2,028	8,100	35,915	2,574	9,831	5,380	1,012	65
Azerbaijan	29,346	2,401	8,553	2,345	194	681	24,650	2,849	89
Belarus	126,627	7,034	32,318	288,983	16,255	73,152	43,757	5,315	45
Belize	8,965	1,004	2,423	22,610	2,546	6,098	2,419	437	24
Bosnia and Herzegovina	6,675	316	1,639	18,447	875	4,534	0	439	10
Botswana	99	13	27	5,370	680	1,468	n/a	354	3
Brazil	567	43	158	13,935	1,082	3,896	n/a	9,962	8
Bulgaria	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Colombia	47,940	3,942	13,147	40,695	3,372	11,170	102,028	9,149	180
Costa Rica	3,026	232	822	106,597	8,119	28,864	21,830	2,032	22
Dominican Republic	221,531	22,262	58,514	473,380	47,567	124,981	27,245	5,363	353
Fiji	20,828	2,213	5,379	39,045	4,144	10,048	n/a	726	53
Gabon	35,782	5,210	9,012	55,401	8,091	14,005	n/a	6,654	314
Grenada	537	45	137	5,295	442	1,347	461	60	2
Guatemala	172,858	22,426	44,273	n/a	n/a	n/a	18,676	5,214	1,035
Guyana	3,147	311	821	11,907	1,177	3,108	n/a	129	8
Indonesia	3,325,389	313,883	901,078	7,392,788	697,788	2,004,293	n/a	n/a	n/a
Jordan	77,876	10,065	19,879	189,345	24,428	48,346	37,882	7,645	593
Kazakhstan	30,372	3,070	8,259	8,456	831	2,348	40,171	5,007	160
Lebanon	104,715	9,268	28,759	78,336	7,079	21,518	n/a	6,251	203
Maldives	2,590	226	672	6,259	554	1,647	1,424	197	6
North Macedonia	13,253	722	3,327	24,984	1,356	6,299	4,444	592	18
Paraguay	81,828	8,712	21,043	201,229	21,300	51,800	n/a	2,567	231
Peru	76,627	7,440	20,213	118,869	11,655	31,376	18,468	2,678	183

Russian Federation	12,170	741	3,164	322	21	81	565,777	21,172	41
Saint Lucia	162	10	46	2,860	180	812	168	22	1
Saint Vincent and the Grenadines	200	16	51	3,840	306	982	320	41	1
Samoa	4,230	606	952	3,890	558	874	n/a	102	8
Serbia	6,891	362	1,607	35,879	1,903	8,380	19,513	1,633	15
South Africa	3,052	326	845	28,631	3,042	7,927	172,985	12,133	55
Suriname	2,336	225	603	24,067	2,328	6,237	3,490	399	9
Thailand	36,353	2,136	9,920	21,574	1,289	5,947	8,911	1,306	69
Tonga	404	53	98	4,661	600	1,128	n/a	64	5

Increased access to fundamental rights associated with increased government revenue equivalent to debt service in high-income countries

High-income countries	Basic drinking water			Basic sanitation			Extra school years	Child deaths averted	Maternal deaths averted
	All	Children <5	Women 15-49	All	Children <5	Women 15-49			
Australia	0	0	0	0	0	0	141,413	47	0
Austria	0	0	0	0	0	0	79,175	3	0
Bahamas	0	0	0	4,088	301	1,138	2,650	138	0
Belgium	0	0	0	0	0	0	96,236	3	0
Canada	0	0	0	0	0	0	257,073	59	0
Chile	24	2	6	439	31	116	16,175	1,131	2
Cyprus	0	0	0	0	0	0	10,502	27	0
Czech Republic	0	0	0	0	0	0	35,995	260	0
Denmark	0	0	0	0	0	0	25,443	0	0
Estonia	0	0	0	0	0	0	771	12	0
Finland	0	0	0	0	0	0	32,128	3	0
France	0	0	0	0	0	0	441,571	21	0
Germany	0	0	0	0	0	0	229,183	37	0
Greece	0	0	0	0	0	0	169,988	125	0
Hungary	0	0	0	0	0	0	35,349	475	0
Iceland	0	0	0	0	0	0	1,435	0	0
Ireland	0	0	0	0	0	0	73,094	20	0
Israel	0	0	0	0	0	0	14,242	5	0
Italy	0	0	0	n/a	n/a	n/a	462,325	37	0
Japan	0	0	0	0	0	0	n/a	149	0
Korea, Republic of	0	0	0	0	0	0	63,437	657	0
Latvia	0	0	0	0	0	0	1,650	45	0
Lithuania	0	0	0	1	0	0	6,258	186	0
Luxembourg	0	0	0	0	0	0	2,726	0	0
Mauritius	1,560	104	418	1,560	104	418	1,289	151	3
Netherlands	0	0	0	0	0	0	34,022	3	0

New Zealand	0	0	0	0	0	0	30,177	54	0
Norway	0	0	0	0	0	0	30,184	0	0
Poland	n/a	n/a	n/a	61	3	15	108,508	2,557	1
Portugal	0	0	0	0	0	0	63,036	298	0
Slovakia	0	0	0	0	0	0	15,799	228	0
Slovenia	0	0	0	0	0	0	10,251	36	0
Spain	0	0	0	0	0	0	273,962	363	0
Sweden	0	0	0	0	0	0	43,923	1	0
Switzerland	0	0	0	0	0	0	3,492	0	0
United Kingdom	0	0	0	0	0	0	223,241	120	0
United States	n/a	n/a	n/a	0	0	0	3,652,699	1,578	0
Uruguay	18	1	4	27,489	1,965	6,681	7,793	425	1