

The impact of foreign debt service on social and economic rights

Introduction

External debt service is one of the strongest barriers to international development. Low- and middle-income countries allocate a large proportion of their budget to paying debt service. In many countries, the spending on debt service exceeds spending on public services, including social and health care sectors. Many low- and middle-income countries have struggled to make the structural reforms necessary to accrue tax revenue as a result of high debt service, which is impacting countries' ability to provide the determinants of health and lower mortality rates (Shandra et al., 2010; Daoud et al., 2017). Even prior to the Covid-19 pandemic, low-income countries were accumulating an increasing amount of bilateral and multilateral debt (International Monetary Fund, 2019b). This has only intensified throughout 2020 and 2021, during which the pandemic has put pressure on economies (Arellano, Bai, and Mihalache, 2021) and stretched already weakened healthcare systems in low- and lower-middle-income countries to unmanageable capacities (Bolton et al., 2020). In response to the pandemic, the IMF has issued \$1 trillion in emergency loans and asked bilateral creditors to suspend debt service for low-income countries. Both bilateral and multilateral creditors have been requested to offer debt moratoria to hinder debt crises in countries with high levels of debt (International Monetary Fund, 2021). This would also avoid the creation of further debt, allowing for the economic breathing space to focus on building effective political and socioeconomic structures, which will eventually lead to the provision adequate health services (Takwonda, Hall, and O'Hare, 2020). However, due to scepticism of creditors and subsequential low participation rates, this initiative has failed to have a significant impact on debt (Nye, 2020). This paper would like to demonstrate the potential impact of suspending or cancelling external debt on country's ability to accrue necessary revenue to provide the determinants of health and reduce mortality rates.

Background

After the Great Depression in the 1920s and 1930s, countries began to sell their debts to private foreign investors and banks (Broeck et al., 2018). The Paris Club, a partnership of mainly Western European government creditors, was initially established as an emergency response to the financial crises following World War II but is now an established body for providing loans to countries in need (George, 1988). Debt relief from the Paris Club was often linked with political motivation, meaning that countries which provided economic resources and thus, more profitable partnerships, received more lenient and manageable repayment agreements. As a result of this, multilateral organisations, such as the World Bank and the IMF, were invited to act as impartial advisers. Between 1977 and 1981, low interest rates led countries to heavily borrow from creditors. However, around 1980, interest rates rose to unprecedented levels, whilst exchange rates oscillated in response to rising inflation levels (Cosio-Pascal, 2008). Simultaneously, oil prices collapsed (Oryema et al., 2017), particularly affecting Africa, which is dependent on imported oil (Bacon and Mattar, 2005). Elevated oil prices, alongside an increase in interest rates, triggered a global debt crisis (Cosio-Pascal, 2008). Many low-income countries were forced to increase their already unsustainable level of debt (Oryema et al., 2017). The repayment of debt service led to struggling countries creating

an increasingly high level of deficit. In many cases, these debts were created by unelected leaders, posing questions on the democratic process surrounding the establishment of debt (George, 1988). In the 2000s and 2010s, private investors stepped in to support countries in need (Bulow et al., 2020). These private creditors often charged a higher interest rate than the multilateral bodies, increasing the strain of annual repayments. This means that at the end of the 2010s, many economies were already on the verge of a debt crisis. The covid-19 pandemic triggered this already volatile situation (Arellano, Bai, and Mihalache, 2021). Economies which were already struggling to accrue revenue 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 thus, more vulnerable to collapse following lockdown measures (Bolton et al., 2020). In response to this, the IMF to provide \$1 trillion in emergency debt relief funds (International Monetary Fund, 2021 a). It also initiated the Debt Service Suspension Initiative (DSSI), calling for the largest bilateral creditors to suspend debts temporarily. The initial end date for this was April 2021, but this has been extended to December 2021 (International Monetary Fund, 2021b).

Literature review

Debt cancellations have been a common response to the negative impact of foreign debt service on a country's ability to increase government revenue. Investors might see the potential of new trade contracts with states rather than the inverse effects on the economy caused by debt services (Balibar, 2013). However, bilateral lenders, particularly private bodies, may not be as agreeable towards this option. Debt suspension may be a more appealing option to these creditors, despite some creditors expressing concerns about a lower rating from credit agencies if allowing a suspension (Fabricius, 2020). The limited participation rate in the DSSI reflects the difficulties of encouraging lenders to suspend debt service: only 1.6% of debt service within low-income countries was suspended within this initiative (European Network on Debt and Development, 2021). Bolton et al. (2020) suggest that these concerns surrounding debt suspension are unfounded. Additionally, the authors state that it is the contractual duty of the creditor to allow debtors to request a modification of repayments due to unanticipated circumstances. Whilst debt cancellation would provide a clean slate for countries to rebuild their economies, debt suspension could provide a vital timeframe for countries to regain stability prior to repaying their debts (Bolton et al., 2020). Problematic, however, are not only the economic difficulties that arise from indebtedness, but also the conditionalities that are linked to the creation of debt.

HIPC	Heavily indebted poor country
DSSI	Debt Service Suspension Initiative
IMF	International Monetary Fund
LiC	Low-income country
LMIC	Lower-middle income country
SDG	Sustainable Development Goals

Box 1 Acronyms

Sovereign debt: A country's inability to repay debts at a certain point in time (BLANTON)

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): If a country applies for the HIPC Initiative, it must prepare a PRSP, which outlines the country's strategies for poverty-reducing public spending (GUPTA)

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

Box 2 Definitions

The HIPC initiative and structural adjustment programmes

Reductions in education and health care budgets due to the prioritizing of debt services motivated non-governmental Organisations (NGOs) to advocate for debt relief (Oryema et al., 2017). These reliefs were granted by the World Bank and the International Monetary Fund (IMF) by establishing the Highly Indebted Poor Countries (HIPC) Initiative (Oryema et al., 2017). The HIPC Initiative was launched in 1996 to support nations that struggle with the burden of debt repayments and came in tandem with the introduction of conditions for structural adjustment policies and offering grants which must be repaid as well (Buchmann, 1996; Curtis, 1998; Gupta et al., 2002). The aim of the initiative was to:

"provide faster, deeper, and broader debt relief and strengthened the links between debt relief, poverty reduction, and social policies" (International Monetary Fund, 2021).

As of 22 June 2006, the HIPC initiative comprises of 40 countries, 33 of which are in Africa. The HIPC Initiative originally focussed on supporting HIPC to achieve the Millennium Development Goals (MDG) and subsequently the Sustainable Development Goals (SDG) (Dessy & Vencatachellum, 2007; Stubbs et al., 2020). Countries eligible for the HIPC initiative are mainly sub-Saharan African countries. Conditions for the programme include high debt burdens and the willingness to commit to policy reforms. These conditionalities are called structural adjustment programmes (SAPs) – negotiated on an international level (Kentikelenis, 2017). Structural adjustment programmes comprise of four main policy reforms and arrangements: reducing government spending, liberalizing trade, privatise government resources, and devaluing currency (Kentikelenis, 2017; Pandolfelli et al., 2014; C. L. Shandra et al., 2012). Cut offs in government spending are oftentimes required which leads to the debate whether structural adjustment policies have adverse effects on health outcomes (Daoud & Reinsberg, 2019; Pandolfelli et al., 2014). After committing to SAPs, countries must develop a three-year Poverty-Reduction Strategy paper (PRSP) indicating the willingness to change the country's macroeconomic and social policies (Gupta et al., 2002; Oryema et al., 2017). If the

IMF and World Bank decide on the countries' eligibility, a record of accomplishment towards debt reduction must be established (Gupta et al., 2002). Countries that achieve economic stability and implemented strategies mentioned in the PRSP reach the so called completion point (Gupta et al., 2002; Oryema et al., 2017). By the end of 2018, 39 countries were eligible for the HIPC initiative and 36 of them had reached the completion point. The main points essential to reach the completion point include monitoring of policy implementations, clear arrears, develop a PRSP, assessing the debts after receiving debt relief. The countries and the IMF have to agree on these points (International Monetary Fund, 2019b).

Besides monetary support, as part of the HIPC initiative, the World Bank and IFC provide technical assistance to federal and state governments in several areas related to HIPC. This technical support includes strengthening data collection, analysis and monitoring and assistance in the preparation of a National Development Plan. In addition, support to strengthen public financial management systems was provided, such as audit and fiscal reporting systems. Other interventions include improving revenue mobilization by supporting customs and revenue authorities and support to strengthen the business and the financial sector regulatory framework and governance strengthening and management aspects (International Monetary Fund, 2019b). Furthermore, the initiative aims to reduce debt and poverty with the aim of increasing government resources. The surplus should be spent on debt-reducing activities (Gupta et al., 2002). Governments should be supported in making policy adjustments by stabilizing the amount of payments, liberalizing trade and foreign investment policies, deregulating the involvement of the government in the free market, and privatising of state-owned resources (Kentikelenis, 2017). This results in reduced expenditure for public services and therefore allow countries to service their debts (Buchmann, 1996). Changes in social policies should address the population living in poverty by offering access to health care and primary education, increase the monetary resources for water, sanitation, road maintenance, rural development and housing programmes (Gupta et al., 2002). However, despite these measures, debt and structural adjustment programmes have significant implications for the economy, health and human rights.

Impact of debt on health

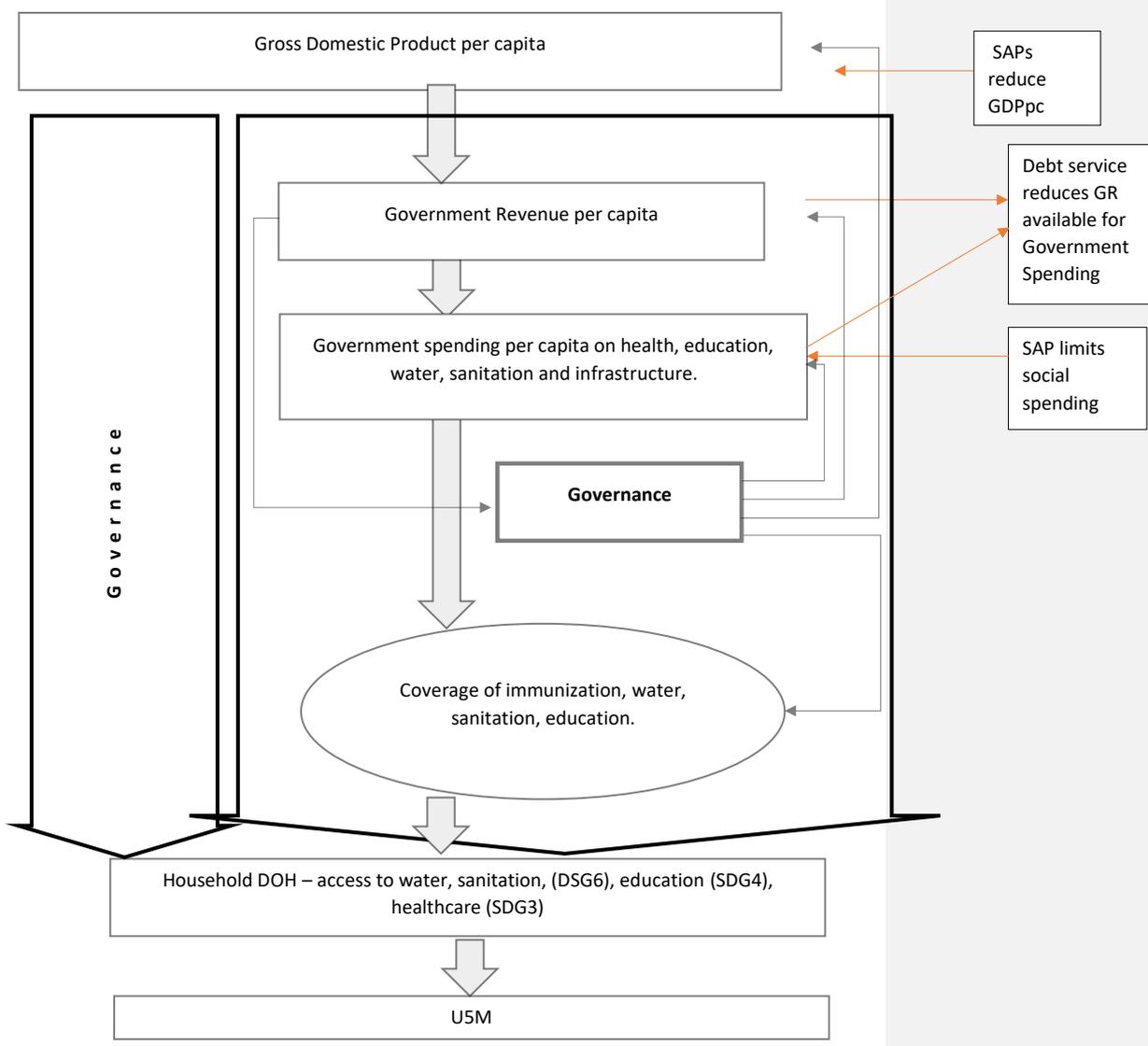
Countries with high debt repayments oftentimes cut back on expenses in the social and health care sector (Curtis, 1998). A decrease in government revenue through government leaks has been shown to have a negative effect both on infant and maternal mortality rates, as well as the determinants of health (Hall et al., 2020). Higher infant mortality rates correlate strongly with maternal mortality (Buchmann, 1996). Many of these austerity measures are linked to SAPs, which dictate how much money can be spent on each spending sector. SAPs have been shown to negatively impact children's health by inhibiting a country's ability to provide the determinants of health (Daoud et al., 2017). For instance, Shandra et al. (2010) found that sub-Saharan African countries which were subjected to structural adjustment programmes through the IMF had higher rates of child mortality than those who did not. This was attributed to the requirement of nations to reduce government spending in vital sectors in an effort to liberalise trade. These findings support the dependency theory, which argues that countries with lower income, who are subjected to unequal power relationships within the global economy, are harmed through exchanges with wealthier nations. This theory has developed further in relation to foreign debt. For instance, Susan George (1988) argues that this impacts a

country's ability to be a true democracy, as countries are subjected to regulations, such as SAPs, through foreign bodies. Additionally, the economic burden of debt, as well as the knock-on effects of conditionalities linked to these debts, have determinantal social and economic consequences. These consequences inhibit the ability of humans to access fundamental and basic needs, thus impairing human rights of individuals in countries with high levels of debt.

Pandolfelli, Shandra and Tyagi (2014) demonstrate that structural adjustment has adverse effects on maternal mortality rates: the rate of mothers dying during pregnancy is twice as high in Sub-Saharan African countries with structural adjustment programmes present compared to countries not participating in these programmes. Shandra et al. (2012) argue that this is linked to the lack of women's rights organisations, education and health care, which are vital towards maternal survival. Even though health outcomes are a legitimate indicator of effective public spending, increasing the spending for public sectors other than health care also benefit the health outcomes of the population (Gupta et al., 2002). For instance, research has shown that IMF programmes diminish the positive relationship between parents' education and children's health – especially in rural areas (Daoud et al., 2017). Kentikelenis (2017) introduced a framework which explains the effects of structural adjustment programmes on health outcomes (see figure 1). The framework indicates that some effects of debt are directly apparent within health systems as health spending is directly impacted. Debt also impacts health indirectly by impairing economic development and, thus, the ability of households to maintain a healthy lifestyle. The indirect consequences are also apparent within the wider availability of NGOs and services. Shandra et al. (2012) propose greater leniency of foreign debt, particularly in Sub-Saharan Africa, which is particularly struck by the impact of foreign debt service.

Kentikelenis, Stubbs and King (2015) examine the relationship between participation in IMF programmes and the spending on health. Through regression analyses, the authors reveal a significant decrease in public spending for health in non-Sub-Saharan African countries. Additional agreed conditions linearly reduce government health spending of almost 1 USD per capita (Stubbs et al., 2017b). Reasons for declining health spending are seen in the conditionalities regarding macroeconomic adjustments, decrease in wage bills and in numbers of publicly employed health care personal, and decentralisation processes (Stubbs et al., 2017b). Programmes funded by the IMF reduce the share of revenue spent on health and usually do not negatively affect economic growth. These programmes introduce priority spending floors; however, it seems they are less important than budget balance ceilings. International donations oftentimes do not affect the health sector and the allocated money is prioritised for debt servicing (Stubbs et al., 2017b, 2017a; Thomson et al., 2017).

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Whilst SAPs limit health spending, evidence demonstrates that Sub-Saharan African countries tend to experience a significant increase in health spending following debt relief programmes, such as the HIPC (Gupta et al., 2002; Oryema, Gyimah-Brempong and Picone, 2017). This trend slows down over the years, indicating short- and long-term benefits on health spending (Daoud & Reinsberg, 2019; Kentikelenis et al., 2015). Some evidence suggests that significant increased public spending on health care following debt relief initiatives is only present when the quality of governance has improved (Dessy & Vencatachellum, 2007). These findings underline the importance of shifting towards debt amnesty.

The social and economic determinants of health and child survival

Social and economic factors play a large role in a country's ability to provide determinants of health and reduce mortality rates. The most critical determinants for child health and survival are water, sanitation, education, and health care. Increased coverage of these health determinants resulted in a reduction of child mortality rates by more than 50% (World Health Organisation, 2015a) and maternal mortality rates by 44% between 1990 and 2015 (World Health Organisation, 2015b). In this timeframe, the Millennium Development Goals had hoped to reduce child mortality by two thirds and maternal mortality by 75%, meaning these margins were significantly missed (World Health Organisations, 2015a; World Health Organisation, 2015b). Reducing mortality rates and increasing access to health determinants belong to the Sustainable Development Goals (SDGs) as set out by the UN (United Nations, 2021). They are also fundamental economic and social human rights.

Whilst quality of governance plays a role in the adequate allocation of government resources, research has demonstrated that an increase in fiscal capacity is associated with an increase in governance (Baskaran and Bigsten, 2013). This means that Baldacci et al. (2015) demonstrated that an increase of spending on education by 1% of GDP leads to an average increase of three more years of schooling and an increase of spending on health by 1% leads to an increase of 0.5% of child survival. An increase in tax revenue is particularly effective in increasing health expenditure in low-income countries. Tamarapoo et al. (2016) found that in low-income countries, a 10% increase in tax revenue results in a 17% increase in health expenditure (compared to a 4% increase in lower-middle income countries and 3% in upper-middle-income countries). The authors suggest that the mobilization of tax revenue may be used more strongly for priority areas in low-income countries.

An econometric model (the GRADE) was developed to measure the relationship between government revenue per capita (GRpC) and child mortality. It demonstrated that whilst the relationship between GRpC and child mortality is highly non-linear, an increase in government revenue can have a significant impact on child mortality when GRpC is small at the onset. The model uses government revenue over health

spending to demonstrate the impact on determinants of health for advocacy purposes. Bilateral and multilateral creditors can impact government revenue but are unlikely to impact government spending. This paper looks at the impact of debt service on children's right to health, because debt service has a significant impact on government revenue, which consequently affects the ability of a government to provide the determinants of health and reduce mortality.

Methodology

Data sources

To accurately measure the impact of debt service on children's right to health, we used the IMF's Debt Sustainability Analyses, as these provide the most recent figures on a country's level of foreign debt. These are provided as reports on individual countries. From these reports, we used the figures on "External debt service (percent of revenue excl. grants)". These are also available on the Jubilee Debt website (Jubilee Debt, 2021). We used the most recent percentages available for each country. These were available for 2020. We used this figure instead of an average, as debt is at its highest in this year. Total debt has increased significantly following the covid-19 pandemic (Bolton et al., 2020; Arellano, Bai and Michalache, 2020). Because of this, we would like to demonstrate the impact of these higher repayments on right to health.

We used reports on the income classifications by the OECD in 2020 (Organisation for Economic Co-operation and Development, 2020) and the HIPC list by the IMF (International Monetary Fund, 2021) to categorise the countries. 56 countries were eliminated from the analysis due to a lack of data on either debt, GRpC, or DOH (see appendix).

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Time selected

We selected a projection period of 10 years for this analysis (2008-2017). In the GRADE tool, we analyse from 2003, as the model does not assume any effects from the changes in government revenue for the first 5 years. We select 2017 as the end date because this is the most recent year with data for most of the required variables. In few cases, data was not available for 2017, so we adjusted the timeframe from 2002-2017. Due to changes in governance quality, the impact on the determinants of health varies annually. Therefore, we present the average number of individuals who have increased access to the determinants of health as a result of the increase in revenue. For mortality rates, we present the total number of deaths averted over the ten-year projection period.

How to use 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 GRADE tool. The GRADE uses economic modelling based on 30 years' worth of data to provide realistic estimates on how a change in government revenue would impact the determinants of health and

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mortality rates within that country. The model assumes that the increase in income would be spent in the same way it has been done previously, meaning that it does not assume that all increase in government revenue would go to a specific sector and some revenue may be lost through various leaks. The relationship between government revenue and mortality is non-linear, meaning that countries with low-income are more likely to demonstrate a change in mortality rates following an increase in revenue (Hall et al., 2020). In some cases, the results show a negative number. This is due to changes in governance quality during that timeframe, in which the determinants of health would be negatively impacted through e.g., corruption or other revenue leaks.

Percentages

The figures within the GRADE are based on UNU Wider data (2021). In addition to the total number of individuals who would have increased access to the determinants of health and the total number of child and maternal deaths averted, we calculated percentages as a means of providing context in proportion to the country's total population. For the increased access to determinants of health, we calculated the average population over the projection period of 2008 to 2017, as the GRADE provides us with an average figure of individuals who have increased access to these health determinants, then used our figures from the GRADE tool (Tables 1 and 2) as a percentage of the total average population within that country. For mortality rates, we used the figures on deaths averted from Tables 1 and 2 as a percentage of total deaths within the respective country from 2008 to 2017. These percentages are available in Table 4.

Aim

This study aims to provide an insight into realistic numbers of individuals who would have increased access to the determinants of health, and the realistic number of child or maternal deaths that could be averted if the government revenue losses due to external debt service were curtailed. It aims to provide a basis for advocacy groups to demonstrate the realistic impact that debt service has on human rights and the ability to achieve the Sustainable Development Goals as set out by the United Nations.

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; in the writing of the report.

Findings

We have presented the findings for the impact of external debt service on the determinants of health (basic/safe drinking water, basic/safe sanitation), additional school years, under-5 mortality rates and maternal mortality rates. We have presented the figures by income classification groups. We have 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 can be found in the appendix.

The tables show external debt as a percentage of government revenue. These figures were taken from the IMF's debt sustainability analyses. We also present the risk classification by the Jubilee Debt Campaign. We chose these classifications over IMF classifications, as they were available for all countries (see figure 2).

In debt crisis: A large financial imbalance with the rest of the world: either a net international investment position of -30% of GDP or worse, or a current account deficit averaging over 3% per year for three years. AND Large government payments on external debt: government external debt payments are greater than 15% of government revenue.

Risk of private debt crisis: A large financial imbalance with the rest of the world: either a net international investment position of -30% of GDP or worse, or a current account deficit averaging over 3% per year for three years. AND A large private external debt: private sector external debt stock over 40% of GDP or 150% of exports.

Risk of public debt crisis: A large financial imbalance with the rest of the world: either a net international investment position of -30% of GDP or worse, or a current account deficit averaging over 3% per year for three years. AND External government debt payments projected by the IMF to exceed 15% of government revenue (over several years) with one economic shock OR government external debt over 40% of GDP or 150% of exports OR government external debt payments over 10% of revenue.

Figure 2 Debt risk classifications. Source: Jubilee Debt Campaign, 2021.

Low-income countries	External debt as % of GR 2020	JDC Risk 2020	Basic drinking water	Basic drinking water (U5)	Basic drinking water (Women 15-49)	Basic sanitation	Basic sanitation (U5)	Basic sanitation (Women 15-49)	Extra school years	Child deaths averted	Maternal deaths averted
Afghanistan	1.9	High	2,393	391	540	15,066	2,548	3,335	1,409	699	150
Burkina Faso	5.6	Risk of private debt crisis	40,262	7,086	9,189	45,303	7,978	10,331	3,633	1,264	217
Central African Republic	10.5	Risk of public debt crisis	998	169	234	4,793	801	1,116	622	382	65
Chad	11.5	In debt crisis	15,669	2,974	3,405	94,605	18,081	20,496	9,056	4,833	514
Congo, the Democratic Republic of the	11.1	Risk of public and private debt crisis	4,380	811	970	106,000	19,720	23,546	n/a	9,089	1,261
Gambia, The	26.6	In debt crisis	16,351	2,897	3,936	25,640	4,542	6,174	n/a	554	71
Guinea	4.4	No risk identified	7,200	1,223	1,724	17,004	2,900	4,065	n/a	764	144
Guinea-Bissau	4.7	Risk of private debt crisis	337	57	83	1,368	228	339	n/a	90	11
Haiti	14.1	Risk of public and private debt crisis	3,278	464	877	57,021	7,035	14,954	n/a	4,133	319
Liberia	10.4	Risk of public and private debt crisis	6,442	1,026	1,515	6,110	971	1,437	n/a	674	89
Madagascar	8.2	Risk of private debt crisis	22,480	3,535	5,345	29,745	4,660	7,078	2,862	1,242	162

Malawi	5.4	Risk of public and private debt crisis	30,972	5,361	7,232	25,399	4,391	5,929	2,258	797	100
Mali	9.1	Risk of private debt crisis	50,616	9,586	11,118	70,308	13,284	15,458	7,496	2,899	440
Mozambique	12.7	In debt crisis	113,100	19,588	26,592	139,058	23,979	32,718	12,306	4,519	746
Niger	10.2	Risk of public and private debt crisis	39,474	8,090	8,236	50,737	10,405	10,592	5,027	1,800	313
Rwanda	19.2	In debt crisis	128,443	19,361	32,166	116,843	17,655	29,273	4,776	1,761	351
Sierra Leone	18.1	In debt crisis	12,928	2,040	3,074	14,979	2,375	3,555	2,067	1,061	118
Sudan	24.5	In debt crisis	237,629	37,703	56,025	1,003,084	158,703	236,687	65,501	30,632	3,484
Togo	6.9	Risk of private debt crisis	10,610	1,687	2,567	16,453	2,629	3,977	1,739	844	84
Uganda	14.1	Risk of public and private debt crisis	181,394	33,957	41,904	343,332	64,242	79,324	n/a	4,938	605
Yemen	26.4	In debt crisis	284,840	44,737	68,208	1,016,681	158,545	245,147	60,396	21,637	2,569
Zambia	33.5	In debt crisis	473,995	84,227	111,891	483,334	85,549	114,228	n/a	14,559	1,637

Table 1 Impact of debt service on determinants of health in low-income countries

Lower-middle income countries	External debt as % of GR 2020	JDC Risk 2020	Basic drinking water	Basic drinking water (U\$)	Basic drinking water (Women 15-49)	Basic sanitation	Basic sanitation (U\$)	Basic sanitation (Women 15-49)	Extra school years	Child deaths averted	Maternal deaths averted
Algeria	0.2	No risk identified	5,466	620	1,500	21,614	2,465	5,933	n/a	473	19
Angola	45.9	In debt crisis	1,535,012	289,202	348,671	2,568,120	480,590	583,242	n/a	115,555	6,067
Bangladesh	11.9	No risk identified	494,958	48,408	136,699	734,127	71,851	202,622	33,072	11,148	1,905

Benin	10	Risk of public and private debt crisis	50,898	8,479	11,899	47,170	7,867	11,032	4,297	1,485	230
Bhutan	49	In debt crisis	37,121	3,494	9,676	20,768	1,928	5,435	2,048	682	92
Bolivia	8.4	Risk of private debt crisis	115,510	13,175	28,838	202,257	23,036	50,520	14,915	3,605	574
Cambodia	6.9	Risk of private debt crisis	36,621	4,168	9,980	86,796	9,884	23,663	n/a	1,002	123
Cameroon	17	In debt crisis	207,578	34,699	49,368	482,867	80,633	114,825	n/a	10,185	1,286
Cape Verde	14.4	In debt crisis	13,003	1,359	3,469	10,276	1,075	2,742	974	219	20
Comoros	8.4	Risk of public debt crisis	699	106	171	574	87	140	286	183	16
Congo, Republic	34.1	In debt crisis	204,971	33,341	50,117	469,736	76,300	114,793	n/a	14,529	862
Côte d'Ivoire	14.1	Risk of public and private debt crisis	136,156	21,783	32,033	252,024	40,357	58,934	19,750	7,636	1,156
Djibouti	19.5	In debt crisis	12,621	1,380	3,284	21,333	2,326	5,554	972	403	46
El Salvador	16.5	In debt crisis	132,344	12,610	36,618	241,703	22,978	66,922	9,283	1,983	286
Eswatini	4.5	No risk identified	5,809	795	1,556	11,124	1,525	2,982	n/a	300	23

Ghana	50.2	In debt crisis	1,385,506	199,336	346,101	1,431,334	205,749	357,524	75,120	19,230	2,646
Honduras	15.7	In debt crisis	148,428	17,244	39,030	322,297	37,511	84,707	15,114	3,956	472
India	2.8	No risk identified	4,045,060	391,191	1,035,822	6,905,606	666,153	1,769,020	210,645	45,453	7,555
Kenya	14.5	Risk of public debt crisis	379,107	57,538	95,215	843,970	128,521	211,807	n/a	9,422	1,651
Kiribati	2.4	No risk identified	412	55	109	- 55	- 8	- 15	n/a	18	1
Kyrgyzstan	10.4	Risk of public and private debt crisis	40,553	4,972	10,888	105,907	12,910	28,502	4,515	1,291	169
Lao People's Democratic Republic	31.1	In debt crisis	121,513	14,529	32,450	230,227	27,639	61,452	6,809	2,870	359
Lesotho	7.4	No risk identified	23,337	2,855	6,090	22,932	2,802	5,984	2,098	640	69
Mauritania	14.8	In debt crisis	51,604	8,071	12,557	107,596	16,833	26,188	7,349	2,545	284
Micronesia, Federated States of	4.5	N/A	887	101	223	- 286	- 30	-74	n/a	23	2
Moldova, Republic of	6.5	Risk of private debt crisis	27,432	1,468	7,386	56,668	3,032	15,271	1,580	324	24
Mongolia	19.4	In debt crisis	77,493	8,701	22,573	177,675	20,128	51,560	n/a	2,370	151
Morocco	15.8	In debt crisis	562,196	55,535	152,081	1,034,101	102,160	278,895	70,185	14,718	1,113

Myanmar	6.4	Risk of private debt crisis	85,516	7,503	23,899	210,230	19,044	58,761	12,972	6,527	721
Nepal	3.2	Risk of public and private debt crisis	29,178	3,102	8,224	39,373	4,204	11,022	2,304	848	132
Nigeria	7.1	No risk identified	646,730	112,838	147,789	1,820,609	318,294	416,124	n/a	50,690	7,304
Papua New Guinea	22.3	In debt crisis	159,186	21,322	39,428	317,990	42,693	78,716	n/a	4,955	618
Philippines	6.6	No risk identified	629,655	72,299	162,297	1,361,581	156,303	350,914	51,718	10,017	2,250
Sao Tome and Principe	8.4	Risk of public and private debt crisis	1,009	161	237	324	53	76	103	40	9
Senegal	16.1	In debt crisis	201,535	34,088	49,552	216,458	36,608	53,215	15,821	4,718	656
Solomon Islands	1.9	Risk of private debt crisis	1,493	229	364	433	66	106	n/a	71	7
Sri Lanka	37.5	In debt crisis	921,452	78,672	240,083	1,349,839	116,505	353,574	46,882	10,559	1,165
Tanzania, United Republic of	13.1	Risk of public and private debt crisis	289,789	41,465	55,979	271,270	46,844	63,352	21,324	7,226	970
Timor-Leste	1	Risk of private debt crisis	781	109	179	544	76	124	155	61	10

Tunisia	21.5	In debt crisis	76,475	6,526	21,213	345,368	31,006	95,114	n/a	7,155	319
Ukraine	13.5	Risk of public and private debt crisis	646,155	34,026	160,898	1,505,608	79,068	374,793	n/a	13,759	680
Uzbekistan	6.9	Risk of private debt crisis	203,167	21,391	57,163	164,257	16,702	46,634	16,441	6,065	709
Vanuatu	8.2	Risk of public and private debt crisis	4,651	669	1,162	2,285	326	570	n/a	101	10
Viet Nam	8.5	No risk identified	898,537	73,716	250,905	1,238,070	101,617	346,620	n/a	8,308	1,098

Table 2 Impact of debt service on determinants of health in lower-middle income countries

	All		U5		Women 15-49		All		U5		Women 15-49		Extra school years	Child deaths averted	Maternal deaths averted
	Basic drinking water	Safe drinking water	Basic drinking water	Safe drinking water	Basic drinking water	Safe drinking water	Basic sanitation	Safe sanitation	Basic sanitation	Safe sanitation	Basic sanitation	Safe sanitation			
LICs	1,683,791	130,315	286,970	23,979	396,831	30,196	3,682,863	4,287	611,221	817	869,759	937	179,148	109,171	13,450
LMICs	14,647,604	6,505,124	1,743,331	861,927	3,703,776	1,648,462	25,252,700	393,936	3,015,711	37,474	6,389,875	101,331	646,732	403,348	43,859
UMICs	4,534,550	5,961,484	430,283	459,755	1,218,133	1,557,871	9,345,005	2,377,277	877,081	179,272	2,512,954	618,511	1,126,329	112,498	3,855
HICs	1,602	2,300	107	124	428	582	33,638	4,521,837	2,404	255,464	8,368	1,053,925	6,697,195	9,254	7
TOTAL	20,867,547	12,599,223	2,460,691	1,345,785	5,319,168	3,237,111	38,314,206	7,297,337	4,506,417	473,027	9,780,956	1,774,704	8,649,404	634,271	61,171

Table 3 Total figures on determinants of health and mortality rates by income classification groups

If the losses to debt service were curtailed globally, 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, 634,271 under-5 deaths and 61,171 maternal deaths could be averted.

	Basic drinking water	Safe drinking water	Basic drinking water (U5)	Safe drinking water (U5)	Basic drinking water (Women 15-49)	Safe drinking water (Women 15-49)	Basic sanitation	Safe sanitation	Basic sanitation	Safe sanitation	Basic sanitation	Safe sanitation	Child deaths averted	Maternal deaths averted
LMICs	0.45	0.27	0.45	0.27	0.45	0.27	0.81	0.01	0.81	0.01	0.8	0.01	0.9	2
LMICs	1.42	3.62	1.42	5.72	1.42	3.43	2.2	0.13	2.2	0.13	2.2	0.13	5.08	14
LMICs (HIPC)	1.56	4.29	1.55	4.29	1.55	4.14	2.54	0.03	2.54	0.03	2.54	0.03	3.44	7
LMICs (non-HIPC)	1.37	3.48	1.37	6	1.37	1.54	2.08	0.05	2.08	0.16	2.08	0.16	5.69	17
LMICs and LICs (HIPC)	0.82	2.68	0.82	2.68	0.82	2.59	1.34	0.01	1.34	0.01	1.34	0.02	1.73	3
LICs and LMICs (non-HIPC)	1.36	3.48	1.36	6.00	1.36	3.29	2.14	0.14	2.14	0.16	2.14	0.16	5.66	17
UMICs	0.81	3.01	0.8	3.01	0.81	3.01	2.04	0.52	2.04	0.67	2.04	0.67	*	*
HICs	0.01	0.07	0.01	0.06	0.01	0.23	0.51	0.32	0.51	0.41	0.51	0.41	*	*

Table 4 Average percentages of the population that would have access to determinants of health and percentages of deaths that would be averted in losses due to debt service were to be curtailed

As seen in table 4, we calculated the percentages of the population that would have increased access to the determinants of health if the leaks in revenue to foreign debt service were curtailed. We also calculated the percentage of total child and maternal deaths that would be averted if these leaks were curtailed. We did not calculate the percentages of deaths averted for UMICs and HICs as the mortality rates are very low, so any increases would be likely shown as a higher percentage. This would skew the data and allow for a misrepresentation of true effect.

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, demonstrating that LICs are almost entirely classified as HIPCs and receive the respective support as such. LMICs, on the other hand, tend to primarily non-HIPCs (12 HIPCs out of 44 total).

Discussion

These figures demonstrate that suspending or cancelling debt service could have a tremendous impact on the health of individuals living in low- and lower-middle-income countries. The figures demonstrate that if losses in government revenue to external debt service were curtailed, over 38 million people would have access to basic sanitation, 20 million people would have access to basic drinking water, 8.6 million children would attend school for an additional year, more than half a million child deaths and more than 60,000 maternal deaths would be averted. When converted to a percentage, as presented in Table 4, the numbers may seem small in terms of the increased percentages of the population that will gain access to the determinants of health, having access to basic drinking water and basic sanitation are human rights. Whilst further analysis would be required to support these claims, these figures imply that LMICs would be impacted more heavily than LICs from debt relief, and non-HIPCs more heavily impacted than HIPCs. 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. Lower-middle income countries and non-HIPC countries are most strongly affected. This is possibly because many HIPCs already have a significant amount of their debt cancelled or reduced. For instance, many of these countries received 100% reduction of their multilateral debt (IMF, IDA and AfDB) through the [MDRI](#).

Realistically, it is unlikely that private investors will cancel debt. In some cases, such as in the DSSI, creditors have been sceptical even to suspend their debts, for instance out of fear of being downgraded by credit rating agencies (Fabricius, 2020; Nye, 2020). However, the figures presented within this paper demonstrate the devastating impact these repayments have on the economic and social rights of human beings. Additionally, multilateral creditors have the power to cancel debt, in which case this option would be recommended.

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 maternal deaths and 5.6% of under-5 deaths in non-HIPC

Commented [ML4]: Check literature review.

LICs and LMICs 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 is congruent 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 organisations, 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, had a negative impact on the education women received on reproductive rights and other maternity-related health issues. In line with this, Gakidou et al. (2010) found that women's level of education has a strong negative correlation with child and maternal mortality. 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 in a multitude of ways.

Rethinking conditionalities

The covid-19 pandemic has led to an increase of debt for many of the already heavily indebted countries (Bolton et al., 2020; Arellano, Bai and Mihelache, 2020). 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. (2020), or even the reduction or cancellation of foreign debt service as previously done by multilateral creditors (Oryema et al., 2017), 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 (George, 1988; Shandra et al., 2010; Shandra et al, 2012; Pandolfelli et al., 2014). 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 (Bolton et al., 2020). Additionally, many Western countries, including the UK, have suspended overseas development aid, reducing vital sources of income for many countries (___). The repercussions of this could be disastrous, therefore 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 in a sustainable fashion. Pandolfelli et al. (2014) suggest lobbying to eliminate bodies that privatise and monetise healthcare and education in low-income countries, often leading to unaffordable prices for locals. Furthermore, NGOs must highlight the connection between debt repayment, structural adjustment programmes, and infant mortality and advocate for greater debt relief in Sub-Saharan African countries. The

influence of women's NGOs on decreasing levels of infant mortality rates are noteworthy (J. M. Shandra et al., 2010). 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 does not take into account whether the past spending pattern of the country is influenced by SAPs. SAPs can impact the ability of a government to allocate funds towards certain sectors, including education and healthcare. They also restrict overall spending capacity, which further diminishes capability to spend on vital sectors (Kentikelenis, 2017; Pandolfelli et al., 2014; C. L. Shandra et al., 2012). Low-income countries have previously been found to spend a significantly higher proportion of government revenue on essential sectors such as health and education when presented with more resources (Tamarapoo et al., 2016). Considering these findings in congruence with possible funding cuts in these vital sectors, the numbers presented within this paper likely underestimate the true impact of suspending or cancelling debt on the determinants of health and mortality rates.

Conclusion

This paper calls for governments and credit bodies to consider the impact of debt service on child and maternal mortality. Previous research has demonstrated that debt negatively impacts child and maternal survival, and this paper can provide figures to support theory. 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. It would also significantly reduce child and maternal mortality rates. To achieve the Sustainable Development Goals after the economic and health crisis presented through covid-19, it is imperative that credit bodies consider alternative options to debt service as it is a matter of human rights.