

# Shaping the macro-economy of low- and middle-income countries in response to Covid-19

A synthesis of policy responses and options to build back better and promote a rainbow recovery from Covid-19

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## Key messages

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- Structural characteristics and policy responses shape the heterogeneity of impacts of Covid-19 in five low- and middle-income countries (L&MICs): Bangladesh, Kenya, Peru, Sri Lanka and Tanzania.
- Monetary responses were fast and substantial, but fiscal responses in L&MICs were constrained. Countries with high public debt relied largely on monetary policy instruments (Sri Lanka) or tax relief (Kenya).
- L&MICs face scarring effects and widening inequalities (including reduced women economic empowerment). Risks from accelerating inflation, debt pressures and financial stability need monitoring.
- More should be done to promote a rainbow economic recovery, which is more inclusive, climate compatible and transformative. Better targeted stimulus around health, education and social protection could lead to higher and more inclusive growth. Boosting regional trade and attracting foreign direct investment into the services sector can be a game changer for Sri Lanka, and implementing Kenya and Tanzania's recovery strategies reduces vulnerabilities to future shocks.
- There are untapped synergies among domestic policy instruments (e.g., targeting measures with high multiplier effects) and more ambitious donor support (e.g., green finance, debt restructuring, structural reforms and social safety nets) that can help L&MICs build back better from Covid-19.



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This synthesis paper is part of the project ‘Shaping the Macro-Economy in Response to Covid-19: A Responsible Economic Stimulus, a Stable Financial Sector and a Revival in Exports’. It draws from country case studies led by think tanks based in Bangladesh, Kenya, Peru, Sri Lanka and Tanzania including:

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- ESRF – Economic and Social Research Foundation (2022) ‘Shaping the macro-economy in response to Covid-19: a responsible economic stimulus, a stable financial sector and a revival in exports: Tanzania country report’.
- IEA Kenya – Institute of Economic Affairs, Kenya (2022) ‘Shaping macro economy in response to Covid-19 in Kenya: a responsible economic stimulus, a stable financial sector and a revival in exports’.
- Jaramillo, M. and B. Escobar (2021) ‘Building back better after the COVID-19 pandemic: a diagnostic and reactivation proposal for Peru’ GRADE.
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# Acronyms

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BBB	Build Back Better
BPS	basis points
CGE	computable general equilibrium
CMSMEs	micro and small and medium enterprises
CPC	Colombo Port City
FTE	full-time equivalent
HIC	High-income country
ILO	International Labour Organisation
IMF	International Monetary Fund
LIC	Low-income country
L&MICs	Low- and middle-income countries
NPL	non-performing loan
ODA	overseas development assistance
RMG	ready-made garment
ROE	return on equity
SEZ	special economic zone
WEO	World Economic Outlook
WHO	World Health Organisation
WTO	World Trade Organisation

# Executive summary

**There is heterogeneity in the magnitude of the pandemic's short-term impact across the five low- and middle-income countries**

(L&MICs) that are the focus of this synthesis paper: Bangladesh, Kenya, Peru, Sri Lanka and Tanzania. Based on pre-Covid-19 forecasts, Peru was supposed to grow by 3.6% but the pandemic led to an actual contraction of the Peruvian economy by 11% – suggesting 15 percentage points loss of growth due to the pandemic. Similarly, Sri Lanka was forecast to grow by 1.5% but the pandemic led to a -3.6% economic contraction in 2020 – the worst in the country's 73 years of independence. Meanwhile, Tanzania grew by 4.8% in 2020, which is only about 1 percentage point lower than pre-Covid-19 forecasts.<sup>1</sup>

**Structural characteristics, initial macroeconomic conditions, and the size and quality of policy responses largely shaped the absolute and distributional impact of Covid-19 in the five L&MICs.**

Impacts from sharp declines in tourism activities in 2020 were offset partly by increased global demand from their major exports of agricultural products (e.g., Kenya, Peru) and gold (e.g., Tanzania). Bangladesh benefitted from a quick recovery of major trading partners' demand for garments (comprising 90% of Bangladeshi export).

Meanwhile, the cases of Peru and Sri Lanka highlight the importance of initial economic conditions and fiscal space in responding to the pandemic. Peru benefitted from its years of fiscal discipline (e.g., low public deficit and debt) that enabled it to deploy fiscal packages (20% of GDP)<sup>2</sup> on par with the size of fiscal support deployed in G20 economies. On the other hand, Sri Lanka was still recovering from drought and the April 2019 Easter bombings when the pandemic emerged, further hurting economic activities while simultaneously increasing fiscal pressures.

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<sup>1</sup> Based on pre-Covid-19 forecasts in IMF World Economic Outlook (WEO) October 2019 compared to actual GDP growth data in IMF WEO October 2021.

<sup>2</sup> It should be noted that half of Peru's total fiscal measures for Covid19 is in the form of additional spending and foregone revenue; and the other half is in the form of guarantees for private sector loans (see IMF, 2021b).

Most of the five L&MICs' first line of defence against Covid-19 came in the form of social distancing and lockdown measures to mitigate the spread of the virus, combined with central bank measures to increase liquidity in the system (e.g., lowering policy rates and bank requirements; regulatory forbearance). As the virus continued to mutate and come in waves, governments with some fiscal space widened support to address the fall-out from major economic drivers (e.g., trade, tourism, informal sector). Countries with limited fiscal resources largely resorted to monetary instruments and import controls (Sri Lanka) or tax relief (Kenya).

**The five L&MICs have experienced and are likely to continue to suffer from 'scarring effects'<sup>3</sup> and widening inequalities.** The case studies highlight the potential long-term effects on income and productivity, based on evidence of reversal of economic transformation (e.g., employment shifts from industry to agriculture; from formal to informal sector), creation of new poor, disproportionate negative impact on employment and wages of women, youth and low-skilled, and disrupted children's learning from school closures or online classes. There is also an immense challenge on rising inequality within and among countries, depending on their access and deployment of Covid-19 vaccines, availability of infrastructure and skills to adjust to socially-distanced working, and potential shortening of global value chains and increasing protectionism. In general, International Monetary Fund (IMF) projections suggests that low-income countries and emerging markets are likely to suffer more persistent damage (or scarring effects) compared to advanced economies.

Despite these challenges, **there are untapped synergies among available policy instruments (e.g., better targeting of interventions to create high multiplier effects that cover gender- and climate sensitive fiscal spending), which can help countries build back better (BBB) from Covid-19.** The case studies, as well as reflections from discussions among country researchers, representatives from international organisations (e.g., World Trade Organisation (WTO)) and policymakers suggest that there is room to BBB from the pandemic if radical changes are to be taken up in the following areas:

- **Improve targeting of fiscal stimulus that would create higher distributional impacts (e.g., health, education, social protection sectors; women and youth).** This will require strong political support to re-allocate a higher share of the fiscal budget

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<sup>3</sup> The IMF (2021f, page 43) describes scarring effects as a 'persistent damage to supply potential. Such supply damage could result from the loss of economic ties in production and distribution networks arising from job destruction and firm bankruptcies.'



towards public expenditure on health sector, which was previously low (e.g., 1% of GDP in LICs, 2.8% in MICs as of 2019)<sup>4</sup>, or provide a gendered lens on fiscal budgeting and monetary policy instruments.

- **Improve institutional capacity to reduce operational inefficiencies and implement fiscal management in a sustainable way.** Options to achieve this include: expediting disbursement of fiscal support; re-examining relevance of existing distortionary fiscal policy (e.g., trade controls, tax/price subsidies); and explicitly incorporating fiscal discipline objectives in medium- to long-term national plans.
- **Proactively support an environment for resilient recovery,** including enhancing trade openness, deepening and diversification, nurturing innovation ecosystems, and harnessing digital and financial technology for value addition in production and expanding financial inclusion.
- **Strong and coordinated global support mechanisms for LICs/MICs** covering deployment of vaccines, restructuring of debt, implementing overseas development assistance (ODA) commitments, preserving trade openness (e.g., discourage protectionism), and developing tailored climate finance.

The challenges from Covid-19 are not over yet. While policy responses have thus far succeeded in supporting countries to get back to usual, there has been too little attention to BBB in the form of more productive, sustainable and equal economies. There is a need for a deeper understanding of the economic repercussions of the protracted effects of Covid-19, including issues on balancing continued support to a still weak environment against emerging risks around accelerating inflation, financial stability and debt dynamics. Continued knowledge generation from all perspectives (e.g., global, regional and country-level researchers and practitioners) would be valuable in identifying synergies and crafting effective policies for L&MICs that are transformative, gender and climate sensitive – during the Covid-19 and beyond.

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<sup>4</sup> Based on WDI data (<https://data.worldbank.org/indicator/SH.XPD.GHED.GD.ZS>)

# 1 Introduction

When Covid-19 first emerged in China, it was not immediately assumed that the outbreak would escalate to a global pandemic and subsequently continue to emerge in waves while undergoing various mutations, which we are still witnessing today. Two years into the pandemic, there have been 402 million confirmed cases of Covid-19, including 5.8 million deaths as of 10 February 2022 (WHO, 2022).

Raga and Te Velde (2020) had warned about the considerable economic impact in early February 2020. But the economic devastation that followed has been unparalleled. As countries implemented social distancing measures to mitigate the spread of the virus, about 384 million full-time equivalent jobs were estimated to have been lost between 2020 and 2021 (ILO, 2022). Trade in goods fell by 7.4%, and trade in services witnessed an even sharper contraction by 20% in 2020 (UNCTAD, 2021). The global economy registered a contraction in 2020 (-3.1%) that has been far worse than during the global financial crisis in 2009 (-0.1%) (IMF, 2021a).

In response, policy-makers in mostly high-income countries responded to Covid-19 with doing 'whatever it takes' fiscal support measures that reached up to 23% of GDP (or a total of \$16 trillion for 37 countries) as of September 2021 (IMF, 2021b). Meanwhile, in low-income countries (LICs), the response was about 'what is possible' within already limited fiscal resources, such that Covid-19 measures only amounted to 4% of GDP (or a total of \$63 billion in 37 countries) (ibid.). Whilst the economic consequences were worse than during the global financial crisis, the policy responses appeared more muted.

Social distancing started to ease as Covid-19 vaccines became available, but not necessarily readily accessible in LICs. Only 6.4% of the population in LICs has been fully vaccinated against Covid-19, compared to 70% in high-income countries (HICs) on average as of 11 February 2022 (WHO, 2022).

Globally, economic recovery remains uncertain because Covid-19 continues to mutate. For instance, the increasing cases of infection due to the Delta and Omicron variants led to renewed social distancing measures in some countries. There are important challenges around the deepening inequality between and within countries, as women, the unskilled and informal workers were disproportionately affected by Covid-19 in terms of employment and earning losses (World Bank 2022). It is estimated that up to additional

115 million people were pushed into extreme poverty as of 2021 (World Bank, 2020).

There are major scarring effects from disruptions in human capital accumulation (e.g., school closures, disrupted health services) and productivity and know-how losses from firms that permanently shut and weak investment (IMF, 2021a). More recently, there are elevated concerns from accelerating inflation, mounting public debts and growing geopolitical tensions (IMF, 2022; World Bank, 2022).

Against this background, ODI and five think tanks in Bangladesh, Kenya, Peru, Sri Lanka and Tanzania set out to explore the impact of Covid-19 on the macro-economy; understand current policy responses so far; and analyse what more can be done to promote a rainbow recovery that is more inclusive, greener and transformative through country case studies. We discussed and developed a common methodology that helped to frame the analysis of five think tanks (see Keane et al., 2020). The country case studies were backed by a set of themed papers on gender and macro-economic policies (Papadavid and Pettinotti, 2021) and fiscal multipliers (Raga, 2022), in addition to macro modelling, to underpin interactions amongst the think tanks.

This synthesis paper has two main objectives:

1. to highlight the Covid19 impact and policy challenges in five L&MICs—Bangladesh, Kenya, Peru, Sri Lanka and Tanzania
2. to offer policy options to BBB from the pandemic through sustainable, gender and climate sensitive -fiscal spending.

In general, many countries had ambitious policy responses, monetary more than fiscal, but much more ambition is needed around the targeting of stimulus, advancement of trade policies and improving institutional arrangements to really make a step-up in the pursuit of BBB (we also refer to BBB as ‘the rainbow recovery’ (Keane et al, 2021)).

The paper is structured as follows. Section 2 maps the socio-economic impacts of Covid-19 in five L&MICs. Section 3 highlights lessons from case studies as well from the fiscal multiplier literature. Section 4 concludes and offers policy suggestions.

# 2 Impact of Covid-19 in low- and middle-income countries

## 2.1 Covid-19 cases, deaths and vaccinations

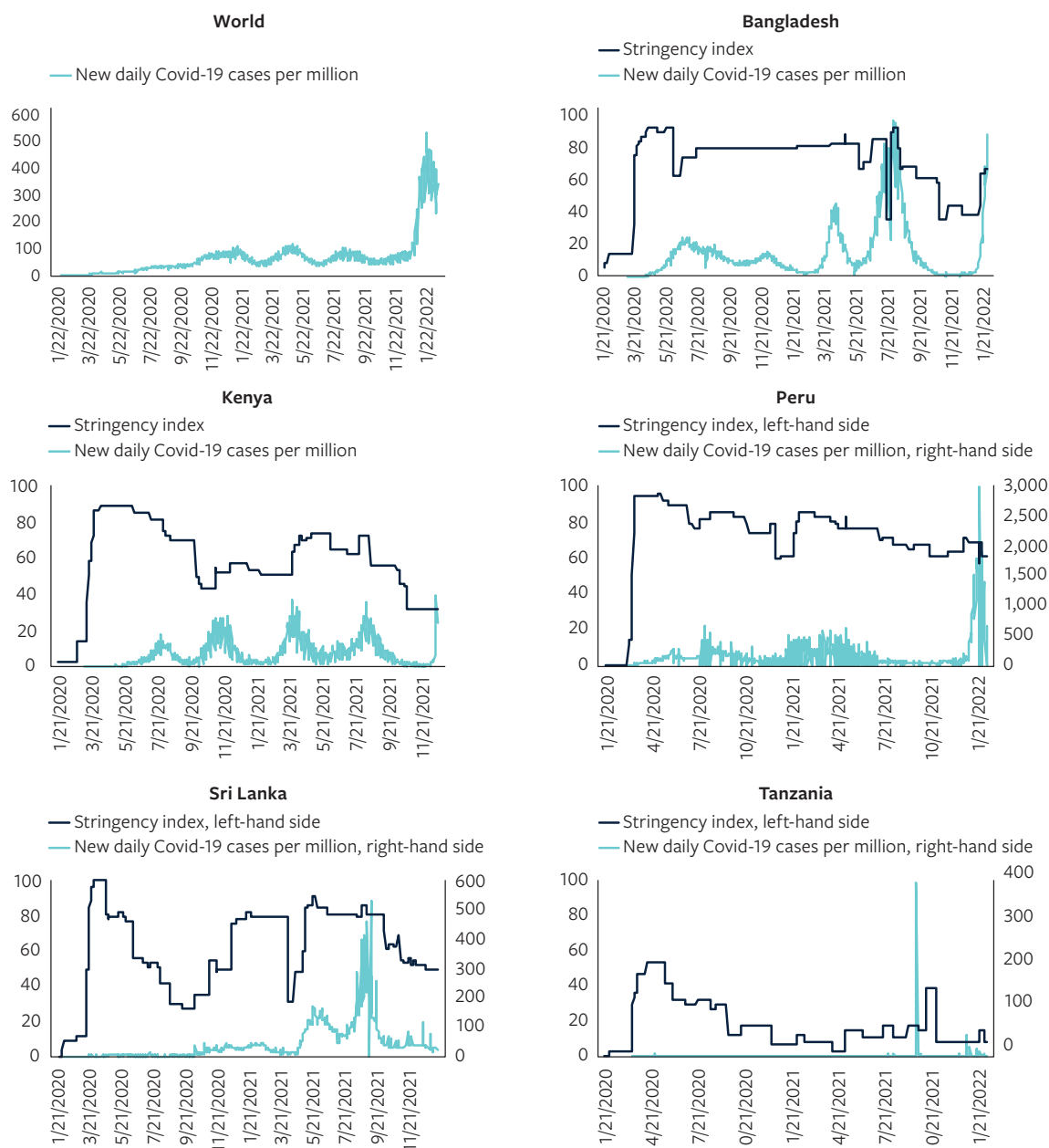
Since the World Health Organisation (WHO) classification of Covid-19 as a global pandemic in March 2020, the world has gone through waves of the virus' infections and mutations. Governments have implemented social distancing measures and lockdowns since the Covid-19 outbreak, easing and restricting measures following its global and local spread (Figure 1). The number of Covid19 cases and deaths had eased following the massive roll-out of vaccines especially in advanced economies, but has displayed recent surges following widespread transmissions of delta and omicron variants.

Multiple organisations highlight how access to vaccines will shape a stark disparity between recovery paths of advanced and low-income countries, as the former would be able to re-open their economies while the latter would continue to suffer from Covid19 infection and deaths and scarring effects (e.g., see WHO, 2021; IMF, 2021f; World Bank, 2021a; OECD, 2021). As of 11 February 2022, the share of population that has been fully vaccinated against Covid-19 is at 53% globally, but the rate is close to 90% in Chile (HIC) and as low as 0.1% in Burundi (LIC) as of 11 February 2022 (WHO, 2022).

Vaccination rates range from less than 3% in Tanzania, to 12% in Kenya, 38% in Bangladesh, 65% in Sri Lanka and 71% in Peru (ibid.).

The rising cases of the Delta and Omicron variants prove that as long as Covid-19 continues to circulate and mutate, global recovery – inclusive of all countries, including those in advanced economies with high vaccination rates – will remain uncertain. The WHO (2021) estimates that to vaccinate at least 70% of population of all countries by mid-2022, 11 billion doses of Covid-19 vaccines must be deployed. COVAX, a global platform aiming to facilitate global access to vaccines especially for LICs, has been able to ship about 1.2 billion doses as of February 2022 (UNICEF, 2022). Meanwhile, in February and June 2021, G7 announced commitments to provide a combination of one billion vaccine doses over 2022, as part of its international effort to vaccinate as many people as fast as possible, especially in poorest countries (G7, 2021).

**Figure 1 New daily Covid-19 cases and social distancing measures**



Source: Authors based on data from Our World in Data accessed on 11 February 2022.

## 2.2 Economic and social impact

### 2.2.1 Economic growth

After the very deep recession in 2020, the world economy was estimated to rebound by up to 5.9% in 2021, but growth in global output is expected to slow down in the following years to 2023 (Table 1), as the world continues to face risks and uncertainty related to

Covid-19 mutations, growing public debt and accelerating inflation in many countries (IMF, 2022; World Bank, 2022).

**Table 1 Latest real GDP % growth estimates and forecasts**

Coverage	2019	2020	2021e	2022f	2023f
<b>World Output</b>					
IMF (Jan. 2022)	2.8	-3.1	5.9	4.4	3.8
World Bank (Jan. 2022)	2.6	-3.4	5.5	4.1	3.2
OECD (December 2021)	2.7	-3.4	5.6	4.5	3.2
<b>By region and country group (World bank, 2022)</b>					
<i>Advanced economies</i>	<b>1.7</b>	<b>-4.6</b>	<b>5.0</b>	<b>3.8</b>	<b>2.3</b>
<i>Emerging and developing countries</i>	<b>3.8</b>	<b>-1.7</b>	<b>6.3</b>	<b>4.6</b>	<b>4.4</b>
<i>Low income countries</i>	<b>4.6</b>	<b>1.3</b>	<b>3.3</b>	<b>4.9</b>	<b>5.9</b>
<i>Sub-Saharan Africa</i>	<b>2.5</b>	<b>-2.2</b>	<b>3.5</b>	<b>3.6</b>	<b>3.8</b>
Kenya	5.0	-0.3	5.0	4.7	5.1
Tanzania	5.8	2.0	4.3	5.4	5.9
<i>Latin America and Caribbean</i>	<b>0.8</b>	<b>-6.4</b>	<b>6.7</b>	<b>2.6</b>	<b>2.7</b>
Peru	2.2	-11.1	13.2	3.2	3.0
<i>South Asia</i>	<b>4.4</b>	<b>-5.2</b>	<b>7.0</b>	<b>7.6</b>	<b>6.0</b>
Bangladesh	8.2	3.5	5.0	6.4	6.9
Sri Lanka	2.3	-3.6	3.3	2.1	2.2

Notes: e = estimate; f = forecast

Sources: IMF 2019 data is based on IMF (2021a) and data for 2021 onwards are based on IMF (2022); World Bank (2022); OECD 2019 data is based on OECD (2021a) and data for 2021 onwards are based on OECD (2021b).

There is heterogeneity in the magnitude of the pandemic's impact among the five L&MICs. Peru's economy was hit hardest with a contraction by 11.1% (13 percentage points lower than the 2019 growth rate), followed by the 3.6% decline in Sri Lanka (Table 1). While GDP growth slowed down in Bangladesh and Tanzania in 2020, they managed to register growth by 2.4% and 2.0%, respectively. Most of the five L&MICs are not expected to reach their pre-pandemic growth levels until 2023 (Table 1).

The evidence from country case studies highlights that the evolution of the GDP contraction and the expected recovery of the five L&MICs were largely attributed to the stringency of mobility restrictions put in place, the size of fiscal support packages deployed, and pre-existing economic and social vulnerabilities, among others.

The sharp economic contraction in 2020 in Peru, one of the largest in the world, is largely attributed to the impact of the government's deliberate choice to swiftly employ strict quarantine policies to relieve the stress from Peru's health sector (Jaramillo and Escobar, 2021). By April 2020, production in all sectors contracted substantially compared

to 2019 levels, led by declines in the construction (-90%), commerce (-64%) and manufacturing (-53.1%) sectors (ibid.). World Bank (2022) estimates more than proportional rebound in output by 13.3% in 2021, although Jaramillo and Escobar (2021) show that these may be optimistic, partly due to the surge of a second wave of infections and a second national lockdown implemented in Peru in the latter part of 2021. Slow growth is forecasted from 2022 onwards, following reinstating of fiscal rule and slowdown in China (a major export partner) (World Bank, 2022).

The Sri Lanka's pre-existing vulnerabilities amplified the impact of the pandemic to the economy, leading in the country's first economic contraction (-3.6% in 2020) for the first time in almost two decades. When the pandemic hit in 2020, Sri Lanka was still recovering from draught in 2017–2018 and the 2019 Easter bombings (Wignaraja, 2021). The implemented Covid-19 mobility and containment measures hit Sri Lanka's industrial activities the most (CBSL, 2021) and the constrained fiscal space limited the government support to address the economic fall-out. Sri Lanka's recovery may be further challenged by the resurgence of Covid-19 cases, severe fiscal pressures and depressed tourism activities (World Bank, 2021a).

The strong growth of Kenya's agricultural sector offset the declines in services activities in 2020. In addition, remittances continued to grow during the pandemic, against initial expectations. These factors helped cushion the Kenyan economy, which registered a marginal decline by 0.3% in 2020. World Bank (2022) projections indicate that Kenya's growth will reach its pre-pandemic (2019) growth rate at 5% in 2022. However, IEA Kenya (2022) flagged some downside risks to growth associated with public debt sustainability and financial stability (e.g., rising non-performing loans in the banking sector).

Meanwhile, Bangladesh and Tanzania both managed to register growth in 2020, albeit at rates slower than 2019. Bangladesh' growth was anchored by a quick rebound in exports (mostly garments) and continued strong growth of remittances in 2020 (ADB, 2021; WDI, 2021). Meanwhile, Tanzania's selective Covid-19 containment measures (e.g., not imposing a national lockdown) enabled continued growth in most economic activities (BOT, 2021). Amid some potential pressure from increasing Covid-19 cases, both countries are forecasted to have modest increasing growth over 2023 (Table 1).

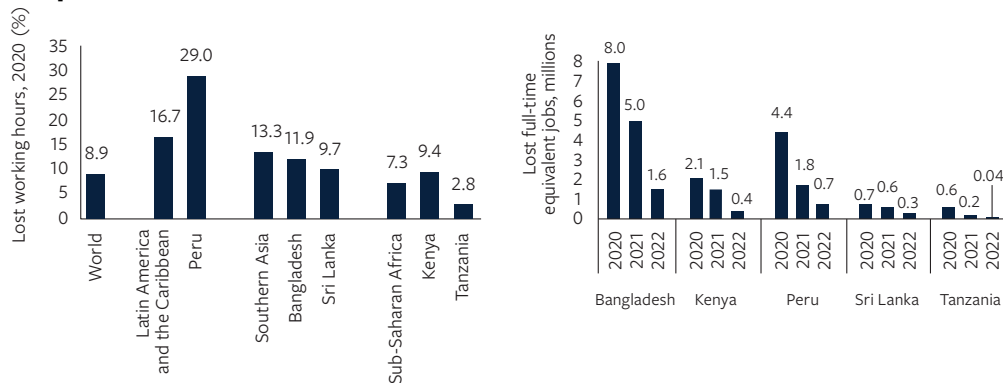
## 2.1.2 Employment

The Covid-19 pandemic has resulted in a massive loss of working hours worldwide. The International Labour Organisation (ILO) estimates that in 2020, 9% of global working hours were lost relative



to the fourth quarter of 2019, equivalent to 259 million full-time equivalent (FTE) jobs (ILO, 2022). Among the five L&MICs, it was estimated that Peru had the sharpest decline in working hours (29%) while Bangladesh lost the highest number of FTE jobs (8 million) in 2020 (Figure 2). ILO (2022) estimates that Tanzania had the lowest number of lost FTE jobs compared to L&MIC and regional counterparts, with official data suggesting that lost of employment were concentrated in mostly Dar es Salaam and Zanzibar (World Bank, 2021b).

**Figure 2 Working hours lost due to Covid-19 compared to pre-Covid-19 baseline**



Note: Pre-Covid-19 baseline refers to the last quarter of 2019

Source: ILO database. Data are ILO-modelled estimates based on 48 hours per week.

The country case studies highlight the disproportionate impact of the pandemic on those employed in service industries and the wider informal sector. In Kenya, workers in the service industry were disproportionately affected relative to industry and agricultural sectors between January and May 2020 (World Bank, 2021c). In Bangladesh, job losses during the first lockdown were estimated to reach up to 12.4 million, many of which were in the informal sector (UNESCAP, 2020). In terms of wage reductions, Kenyan informal workers experienced sharper declines (-32%) than those employed in the formal sector (3%) (World Bank, 2021c). The recovery of employment also signals a reversal of economic transformation, as demonstrated by Bangladeshi job seekers who have moved to agriculture and informal sectors with lower wages (Rahman, et al., 2021; Bhattacharya et al., 2021).

The employment of women among the five L&MICs also suffered more compared to employment of men. In Sri Lanka, an official labour survey suggests that unemployment rates were higher for women than men, and that more women have opted out of the workforce than men.<sup>5</sup> This could be partly explained by Sri Lankan women's

<sup>5</sup> Male labour force participation rates fell more moderately during the pandemic from 73.0% to 71.9% between 2019 and 2020, compared to participation rates of women (34.5% to 32.1%) (see Wignaraja, 2021).



heightened pressures from balancing work-related tasks (often through shift work or teleworking) with household chores and children's home schooling during the pandemic (IFC, 2020). In Kenya, women reported greater declines in working hours (-30%) compared to men (-18%) (World Bank, 2021c). In Peru, the sluggish recovery of employment in commerce and services (where 80% of employed women work) compared to other sectors may contribute to a less gender-sensitive economic recovery (Jaramillo and Escobar, 2021).

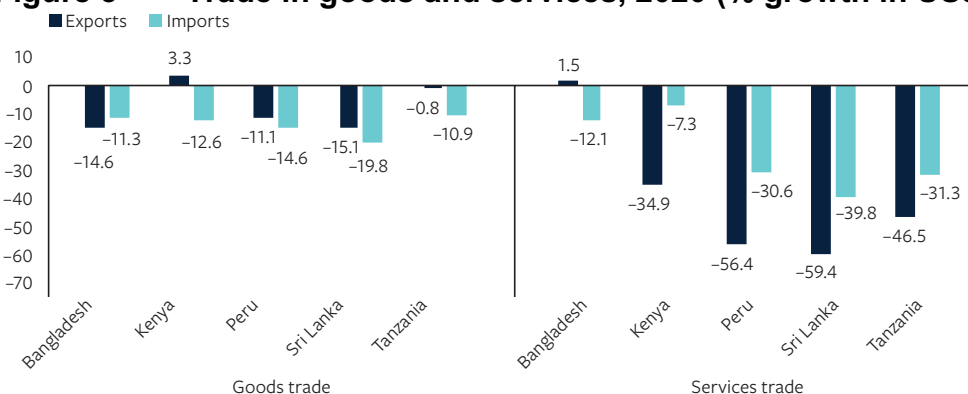
### 2.1.3 External sector

#### Trade

The mobility restrictions to mitigate the spread of Covid-19 had a negative impact on demand for goods and services worldwide. In 2020, trade in goods declined by 8% while trade in commercial services contracted by 21% (WTO, 2021a). Lockdowns drove the decline of international travellers' expenditure by 81% and transport services by 29% in Q2 in 2020 alone (ibid.).

Despite this, the WTO (2021b, page 6) indicates that the global trading system has been 'a source of flexibility, diversification and strength during the pandemic'. Trade has facilitated access to medical supplies, food and consumer goods necessary for recovery from the pandemic (ibid.). Trade in goods is estimated to recover to its pre-pandemic level by 2021, and impacts were smaller than were originally forecast. However, trade in services is expected to remain depressed (WTO, 2021b).

Similar to global trends, most of the five L&MICs experienced sharp declines in trade in services in 2020, but the impact on trade in goods varied (Figure 3) markedly. While Sri Lanka, Bangladesh and Peru's goods exports contracted by 11% to 15%, Tanzanian exports minimally declined (-1%) and Kenyan goods exports increased by 3% (Figure 3).

**Figure 3 Trade in goods and services, 2020 (% growth in US\$ value)**

Source: Authors' computations based on UNCTAD data.

The variation of trade performance among the five L&MICs during the pandemic is largely explained by the exposure of each respective countries' major export products to Covid-19 demand and supply shock. For instance, the increase in global demand and prices of commodity goods in 2020 led to increased value of exports of Kenya's black tea (9.1%), coffee (5%), avocados (13.5%) and pineapples (24.1%) in 2020.<sup>6</sup> These four products alone comprised more than a quarter of Kenya's total exports in 2020.<sup>7</sup> In Peru, the double digit-growth of value of exports for grapes (21%) and blueberries (22%) – where Peru is one of world's leading exporters of both products – as well as other fruits and vegetables partially offset the reduction of export values in other sectors (CRBP, 2020)

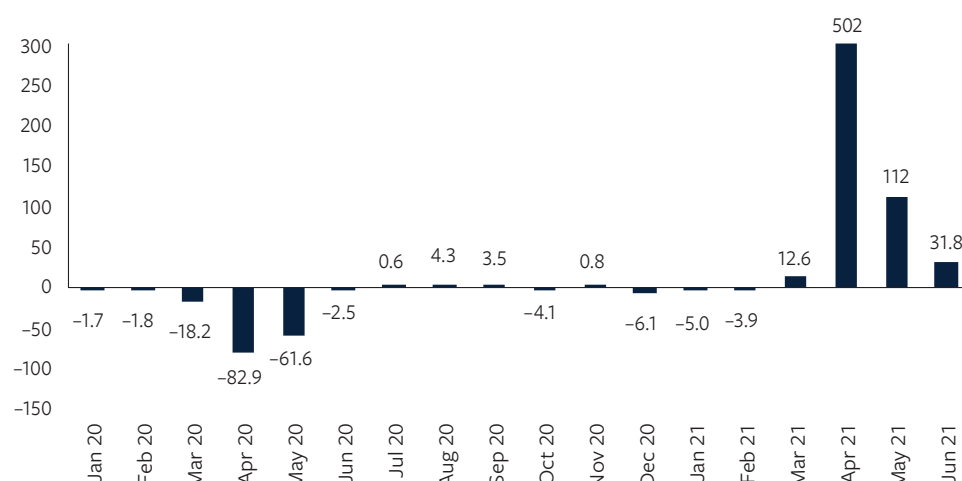
As the pandemic crisis heightened, investors turned to safe-haven metals, driving prices of gold in peak periods of Covid-19 infections and lockdowns. In July 2020, gold exports grew by 106% as global gold prices increased by more than 30%.<sup>8</sup> This has benefitted Tanzania, with gold comprising half of the country's goods exports, and partially offset the negative impact in Tanzania's export of travel services (42% of Tanzania's total export services).

Bangladesh benefitted from the quick rebound in global demand for garments during the pandemic. Bangladesh's exports are 90% textile and garments items, which fell sharply in April and May 2020, respectively (Figure 4). As some restrictions were lifted from major export destinations around July 2020, Bangladesh's exports rebounded to reach June 2019 levels (Figure 4). By April 2021, exports grew by 503% (to \$3 billion) compared to the 83% decline (to \$520 million) in April 2020, and has continued to increase by smaller margins in the following months (Figure 4).

<sup>6</sup> Authors' computations based on 6-digit product category data from WITS.

<sup>7</sup> (ibid.).

<sup>8</sup> Authors' computations based on monthly data on exports of goods and services from Bank of Tanzania, and World Bank commodity prices data ('pink sheet').

**Figure 4** Bangladeshi goods exports (% growth)

Source: Authors' computations based on data from Bangladesh Export Promotion Bureau.

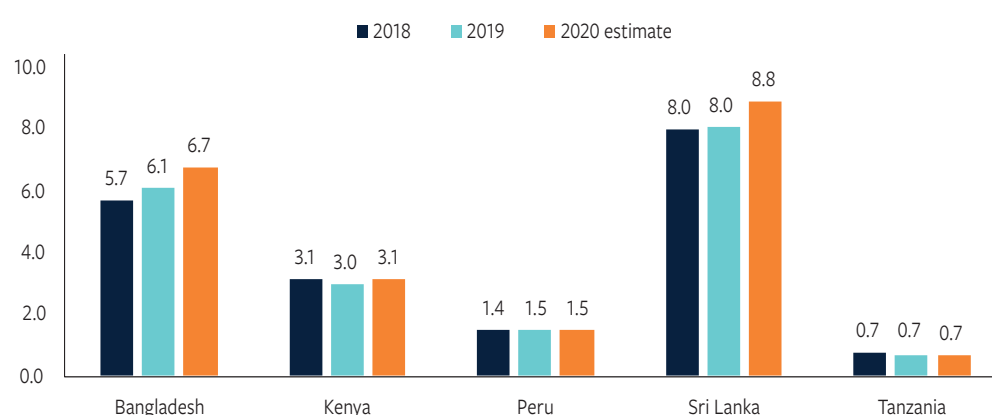
Sri Lanka registered the sharpest import declines among the five L&MICs (Figure 3), partly explained by the government's import suspensions for non-essential goods in 2020. The restrictive import policy put in place in March 2020 aims to avert a foreign exchange crisis, in view of falling foreign currency earnings from exports, remittances and tourism at the time (see Wignaraja, 2021). Thus, deficit in goods trade narrowed from US\$8 billion in 2019 to US\$6 billion in 2020.<sup>9</sup> However, Wignaraja (2021) highlights that the policy has potential drawbacks to the economy through disruption in importing intermediate goods for exporting activities, and the risk of retaliation from trading partners which may invoke violation of WTO rules.

## Remittances

Remittances have remained resilient despite Covid-19, registering a much smaller decline (-1.5%) than previously projected in April 2020 (-20%) (World Bank, 2020; 2021d). In addition, remittances to low- and middle-income countries at \$540 billion surpassed the sum of foreign direct investment (FDI) (\$259 billion) and ODA (\$179 billion) in 2020 (World Bank, 2021d).

The countercyclical role of remittances during the pandemic is also evident in the five L&MICs. Remittances were estimated to grow and account for 0.7% of GDP in Tanzania up to as much as 8.8% of GDP in Sri Lanka (Figure 5). In Bangladesh, the government imposed a 2% incentive for transferring money through formal channels, resulting to a surge in remittance inflows in June to July 2020 after the initial fall in April and May 2020 (Bhattacharya et al., 2021).

<sup>9</sup> Authors' computations/analysis based on UNCTAD data.

**Figure 5 Migrant remittances inflows (% of GDP)**

Source: Authors' calculations based on World Bank's remittances data as of May 2021.

### Current account balance

Overall, the developments in trade and remittances largely explained the current account balance of the five L&MICs (Table 2). The current account surplus in Peru is explained by the weak domestic demand for imports, recovery of terms of trade and reduction of profits of foreign companies in the country (CRBP, 2020). In Bangladesh and Kenya, strong remittances and recovery in exports resulted in the narrowing of the current account deficit in 2020. Similarly, remittance inflows and reduced imports following import controls contributed to the narrowing Sri Lanka's current account deficit.

**Table 2 Current account balance and foreign reserves**

Coverage	2019	2020	2021e	2022f	2023f
<b>Current account balance (% of GDP)</b>					
Bangladesh	-1.0	0.3	-2.8	-1.4	-1.6
Kenya	-5.8	-4.9	-5.4	-5.6	-5.8
Peru	-0.9	0.8	-0.3	-0.6	-0.7
Sri Lanka	-2.2	-1.3	-3.2	-2.6	-2.4
Tanzania	-2.3	-3.2	-4.4	-3.4	-3.0
<b>Gross international reserves (in months of imports)</b>					
Bangladesh	5.9	8.6			
Kenya	5.5	5.1			
Peru	12.7	17.7			
Sri Lanka	3.4	3.3			
Tanzania	5.9	5.3			

Notes: e = estimate; f = forecast

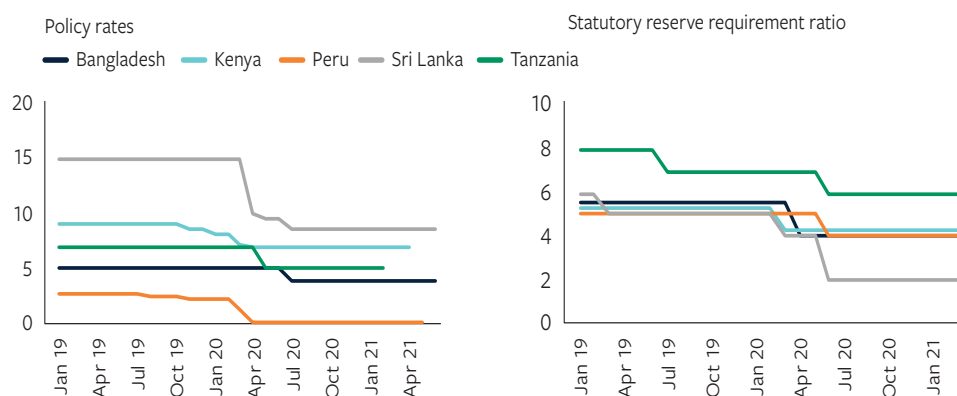
Sources: Current account balance 2020 data are based on World Development Indicators (WDI) for Bangladesh, Peru and Sri Lanka; IMF WEO October 2021 estimates for Kenya and Tanzania. Gross international reserves 2020 data are based on WDI for Bangladesh, Peru and Sri Lanka; Kenya National Treasury 2021 report for Kenya; Bank of Tanzania Monetary Policy Statement as of June 2021. All current account balance data from 2021 onwards are based on IMF WEO October 2021.

### 2.1.4 Financial sector

Central banks around the world responded quickly and deployed traditional and untraditional monetary policy instruments to support the pandemic-induced recession. Financial authorities in the five L&MICs reduced policy rates up to 650 basis points (bps) and bank reserve requirements by up to 300 bps in Sri Lanka between March and July 2020 in order to encourage banks to lend more to households and businesses during the pandemic (Figure 6).

In addition, most central banks in these L&MICs crafted accommodative stance around quantitative easing (e.g., buying of government bonds), regulatory forbearance (e.g., relaxation of criteria for non-performing loans (NPLs)), facilitating government-guaranteed lending facilities targeted for highly affected sectors and households (see Papadavid and Pettinotti, 2021). In Kenya, charges on mobile money were encouraged to be waived or reduced until January 2021 (ibid.). However, there are debates on the inclusiveness of these lending measures, especially due to risk averseness of banks in extending credit to women, as reported in the literature and experienced in the case of Bangladesh (Bhattacharya et al., 2021).

**Figure 6 Policy rates and bank reserve requirements (%)**



Notes: central bank policy rate per country refers to the following. Bangladesh: Discount rate offered by the Bangladesh Bank on loans to commercial banks; Kenya: the lowest rate that the Central Bank of Kenya charges on loans to banks; Peru: reference rate determined by CRBP to establish a benchmark interest rate for interbank transactions, impacting operations of the financial institutions with the public; Sri Lanka: discount rate charged by the CBSL on advances to commercial banks for their temporary liquidity needs; and Tanzania: rate charged by the BOT on loans to commercial banks and overdrafts to government deposit accounts.

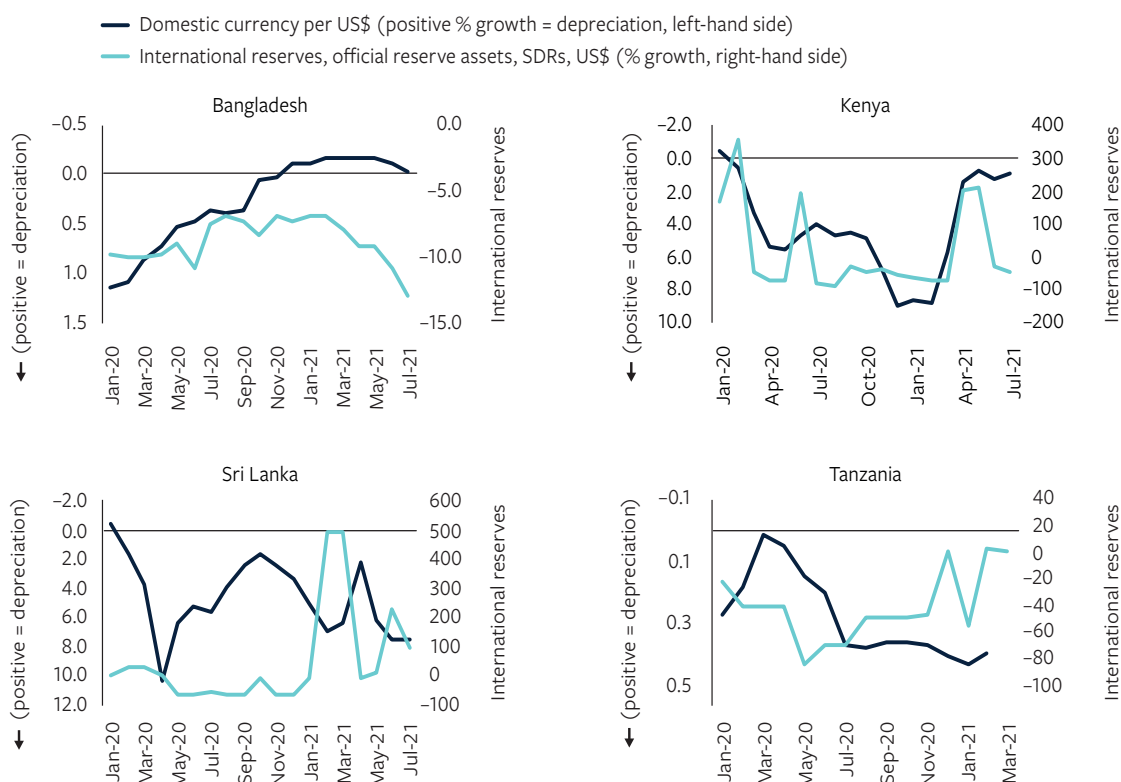
Sources: IMF Statistics and country metadata for the central bank policy rates; CEIC database for statutory reserve requirements of all countries except Tanzania; Minimum statutory reserves of Tanzania gathered from various news reports and BOT monetary policy statements.

Central banks in the five L&MICs appear to have intervened in the foreign exchange markets to preserve the stability of exchange rates and the financial system during the pandemic. Figure 7 shows that episodes of weakening domestic currency (against US\$) closely followed declines in reserves, indicating central bank intervention to curb depreciation.

Early warning indicators point to increasing vulnerabilities in some segments of the financial sector. In Kenya, the IMF (2021d) assessed that the pandemic has exacerbated the pre-existing weaknesses of asset quality in the banking sector. The banks' NPL ratio rose from 12.7% in February 2020 to 14.1% in December 2020, with NPLs particularly rising from transport and communications, trade, real estate, and agriculture sectors. Bank profits, in terms of return on equity (ROE), has fallen to 14% in December 2020 from 20% earlier in February 2020.

Similarly, bank profitability declined in Peru, as reflected in the fall of ROE to 4.6% in November 2020 from 18.1% a year ago (IMF, 2021e). This trend reflects lower interest rates, low demand for credit (government-guaranteed loans rising) and slight increases in NPLs to 4% in November 2020 (partly reflecting loan restructuring), and additional voluntary provisions by banks in Peru. The IMF's (2021e) top-down stress tests point to a resilient Peruvian financial system and limited solvency problems even under adverse scenarios, but default rate may rise significantly in the cooperative and microfinance sectors (holding 7% of financial system assets).

**Figure 7 Co-movements of exchange rates and foreign reserves**



Sources: IMF database for all countries, except for the period average exchange rates in Sri Lanka based on CBSL database.

## 2.1.5 Fiscal sector

The pandemic has revealed the importance of pre-existing fiscal space of the five L&MICs which largely shaped their ability to provide fiscal stimulus during the pandemic. Prior the 2019 Covid-19 outbreak, Bangladesh, Peru and Tanzania had relatively low public debt levels (below 39% of GDP) compared to an average middle- and low-income country (above 44% of GDP) (Table 3).

In contrast, Kenya and Sri Lanka had incurred high government debt even prior the pandemic (59% and 87% of GDP, respectively, in 2019) (Table 3). Kenya has been assessed by the IMF and World Bank to be at high risk of debt distress from May 2020, which is still the case as of March 2021 (IMF, 2021c). While the World Bank assessed that external debt servicing will be a major challenge for Sri Lanka's recovery from the pandemic, given that about half of public debt is denominated in foreign currency (Beyer et al., 2021).

**Table 3 Government accounts (% of GDP)**

Coverage	General government expenditure				General government net lending/borrowing				General government debt			
	2019	2020e	2021e	2022f	2019	2020e	2021e	2022f	2019	2020e	2021e	2022f
Bangladesh	15.4	15.3	16.1	16.3	-5.4	-5.5	-5.9	-6.1	35.7	38.9	39.9	41.0
Kenya	24.1	24.6	24.3	23.6	-7.3	-8.1	-8.0	-6.7	59.0	67.6	69.7	70.2
Peru	21.3	26.2	23.7	22.7	-1.4	-8.3	-5.4	-3.9	27.1	35.1	35.0	36.9
Sri Lanka	20.6	21.9	20.0	20.4	-4.8	-10.8	-8.4	-7.0	86.8	101.2	109.3	111.4
Tanzania	16.4	16.4	17.3	17.8	-1.7	-1.8	-3.3	-3.4	39.0	39.1	39.7	39.6
Advanced economies	38.6	46.7	44.8	41.3	-3.0	-10.8	-8.8	-4.8	103.8	122.7	121.6	119.3
Emerging markets and MICs	31.7	34.6	32.2	31.4	-4.7	-9.6	-6.6	-5.8	54.7	64.0	64.3	65.8
LICs	18.8	19.3	19.3	19.0	-3.9	-5.2	-5.4	-5.0	44.2	49.9	50.2	49.8

Notes: e = estimate; f = forecast

Sources: IMF Fiscal Monitor October 2021

Consequently, the fiscal space determined the size and types of fiscal measures among countries. In HICs, policymakers responded with 'whatever it takes' fiscal support measures that reached up to 23% of GDP (or a total of \$16 trillion for 37 countries) as of September 2021 (IMF, 2021b, Figure 8). Meanwhile, in LICs which were constrained by 'what is possible' within their limited fiscal resources deployed Covid-19 support measures that only amounted to 4% of GDP (or a total of \$63 billion in 37 countries) (ibid.).

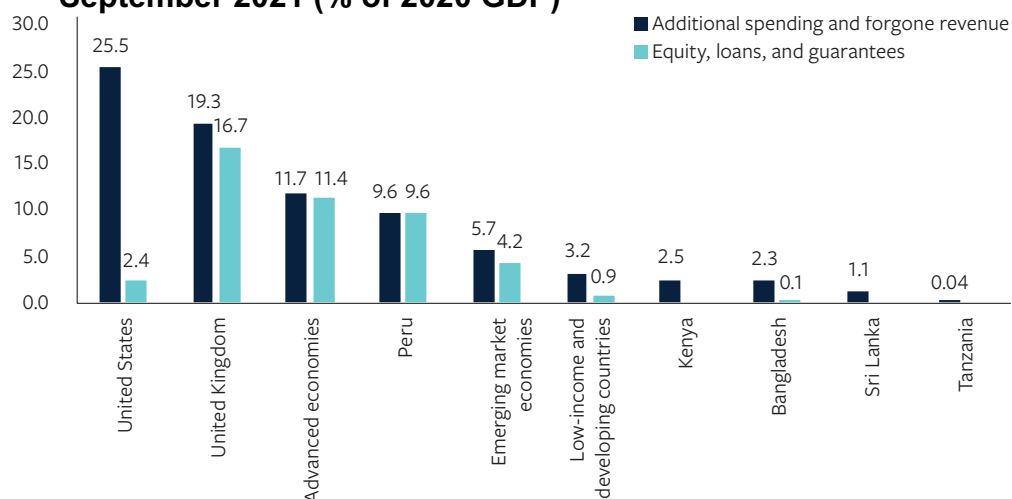
In most L&MICs where fiscal space is limited and/or sustainability is vulnerable, easing monetary policy instruments have been deployed first prior the government's announcements of fiscal stimulus



packages.<sup>10</sup> When governments stepped in to deploy fiscal measures, the size of the fiscal support was mostly below the level of what was deployed in counterparts within the same geographical location and income levels.

Backed by strong pre-Covid-19 fiscal performance, Peru was able to deploy fiscal stimulus equivalent to 20% of GDP which is not very far below from G20 countries' packages (Figure 8). While half of Peru's discretionary fiscal measures in response to the pandemic is in the form of additional spending and foregone revenues, the other half is in the form of largely loan guarantees to the private sector (Figure 8). Thus, announced fiscal spending in Peru worth nearly 10% of GDP is still far lower compared to the fiscal spending in some advanced economies such as the United States (26% of GDP) or United Kingdom (19% of GDP) (Figure 8). In other four L&MICs, fiscal spending is as low as 0.04% of GDP in Tanzania to 2.5% of GDP in Kenya (Figure 8).

**Figure 8 Fiscal measures in response to Covid-19, January 2020–September 2021 (% of 2020 GDP)**



Source: Authors based on data from IMF 2021b

The country case studies highlight issues regarding the effectiveness of targeting and implementation of these fiscal measures. In Bangladesh, the stimulus package that was first announced was directed to support its export-oriented industries (approximately \$588.9 million) in March 2020 (Bhattacharya et al., 2021). Fiscal measures gradually expanded, reaching \$14.6 billion by January 2021 plus an additional support (\$111 million) during the second lockdown in April 2021 (ibid.).

<sup>10</sup> Bangladesh: Bangladesh Bank announced a moratorium on loan payments until 31 December 2020 and reduction of policy rates in 19 and 23 March 2020, respectively, ahead of first fiscal support announced on 31 March 2020. Kenya: CBK announced reduction in policy rates and bank reserve requirement ratio on 23 March 2020, few days ahead of the Kenyan President's announcement of first fiscal support on 25 March 2020.

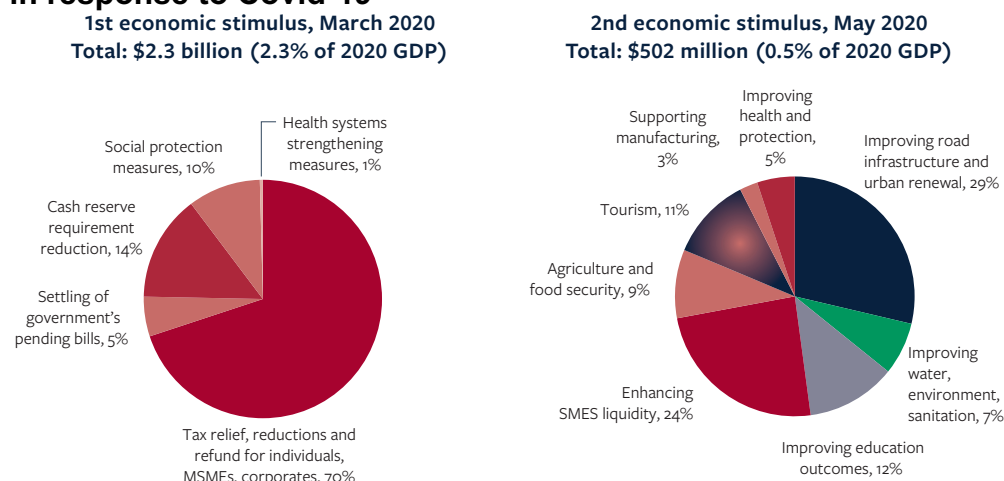


However, Bhattacharya et al. (2021) highlighted that 33% of the total stimulus packages have been allocated for large industries alone. The cottage, micro and small and medium enterprises (CMSMEs), which generate more than 30% of total employment and contribute to about one-fourth of GDP, have been allocated with only half the working capital loans extended for large firms (ibid.). The marginalised sectors were discouraged to take the loan support due to complex repayments systems to banks and lengthy disbursement procedure, or lack of awareness about eligibility (Bhattacharya et al., 2021). Overall, the authors raised the limited capacity of the government to scale-up public interventions, as exhibited by lack of transparency along the procurement process, low absorption of foreign assistance and inability to deliver programmed fiscal expenditures.

Meanwhile, evidence from Peru highlights some effective and less successful government responses to the pandemic. The Reactiva Peru programme (in the form of government-guaranteed loans equivalent to 12.4% of GDP) was assessed to have a progressive positive impact since 89% of business that accessed loans were micro- and small enterprises (Jaramillo and Escobar, 2021). However, there are some serious shortcomings on public interventions in the health sector. Jaramillo and Lopez (2021) provided empirical evidence that the country's high Covid-19 related deaths were largely explained by the error in using serological testing as an official diagnostic tool for most part of 2020 as well as the absence of contact tracing, isolation policy and epidemiological surveillance. Meanwhile, due to Sri Lanka's pre-Covid-19 constraints of having high fiscal deficits and external debt, the government's limited fiscal measures (0.7% of GDP) were largely focused on small cash payments for vulnerable groups, with some tax relief measures extended for affected individuals and SMEs (Wignaraja, 2021). The limited fiscal space somewhat pushed Sri Lankan policymakers to opt for an unconventional policy mix of monetary stimulus, currency swaps and import controls (ibid.).

Despite the limited fiscal space in Kenya, the government has gradually evolved the composition of its fiscal measures from deploying short-term measures largely to rescue the health system and prioritise social protection in March 2020, to slowly incorporating fiscal spending with medium- to long-term growth impact such as on infrastructure, environment and education in May 2020 (Figure 9). By December 2020, the government announced a post-Covid-19 Economic Recovery Strategy which sets policy priorities to recover from and beyond the pandemic, including investment in digital infrastructure, governance reforms, and increasing national capacity for disaster management.

**Figure 9. Evolution of Kenya’s economic stimulus packages in response to Covid-19**



**Priority areas for three-year post-Covid-19 economic recovery strategy, announced in December 2020 (1.2% of 2020 GDP)**

enhancing budgetary allocations to strengthen healthcare systems	investment in ICT and digital infrastructure	facilitating the private sector to play a larger role in the recovery strategy
facilitating a green and resilient recovery and growth	increasing the resilience of the economy to global supply chain shocks	support to MSMEs
full and timely implementation of the economic stimulus programmes	enhancement of targeted social protection	strengthening the national capacity for disaster risk management
mainstreaming diaspora financial and intellectual resources	enhanced budgetary support to police and security related services to enforce compliance to Covid-19 containment rules and regulations	strengthening governance and economic management
expediting the implementation of policy, legal and institutional reforms		strengthening monitoring and evaluation systems

Sources: State House of Kenya (official twitter account of the Office of Kenyan President) for the breakdown of 1<sup>st</sup> and 2<sup>nd</sup> economic stimulus; Office of Kenyan President website for the aggregate economic recovery strategy (3<sup>rd</sup> package) and IMF (2021c) for its corresponding policy priorities. Authors’ calculations on % of 2020 GDP based on IMF WEO April 2021 data, and authors’ own elaboration on colour-coding (of rainbow stimulus) following classification of te Velde (2009).

### 3 Promoting a rainbow recovery – lessons from the literature and country case studies

The socio-economic collapse induced by the Covid-19 pandemic has called for stronger government interventions to support the most vulnerable households, firms and sectors. Options on which to spend fiscal resources have evolved from measures to address immediate health needs, to addressing the economic fall-out from social distancing measures and lockdown, to building the foundation toward more resilient, climate compatible, gender-sensitive and transformative economic recovery.

To better recover from a crisis, te Velde (2009) suggests that a set of ‘rainbow’ stimulus can both achieve a fast recovery and contribute to a better, more equal and more sustainable future. A ‘red’ stimulus – Keynesian state intervention – aims to inject finance into the economy to stimulate consumption and demand and aim for short-term macroeconomic stabilization. Blue stimulus – markets – provides support for the private sector on the supply side by creating an appropriate framework for investment and by investing in infrastructure and green stimulus – environmental – encourages energy pricing, adoption of green technology, and encouraging growth that is efficient enough in its use of energy at the sector, firm and household level.

The country case studies have identified few attempts to build a rainbow recovery. In view of the limited fiscal resources available to low- and middle-income countries, this section identifies rainbow/BBB interventions with the most positive short-term impact but also long-term transformative measures based on the fiscal multiplier literature and country case studies.

### 3.1 Lessons from the fiscal multiplier literature<sup>11</sup>

Examining fiscal multipliers – output growth impact of fiscal intervention – in the context of developing countries can provide a useful guidance for policymakers. By examining 92 studies on fiscal multipliers, Raga (2022) finds that across countries and all else equal, a 1% increase in public expenditure tends to increase output by 1% on average, or a fiscal multiplier close to 1.

Structural factors can amplify or reduce the impact of fiscal spending on growth. Greater trade openness, more flexible exchange rate regime, high public debt, large automatic stabilisers, and low share of hand-to-mouth population and liquidity-constrained firms tend to decrease the size of fiscal multipliers. Meanwhile, economic downturns and financial crisis tend to increase the growth impact of fiscal interventions.

The literature points out that the composition of fiscal spending in LICs matters for fiscal multipliers. Public consumption tends to have a relatively high fiscal multiplier in the short-run, driven by the high marginal propensity to consume of hand-to-mouth population and liquidity-constrained firms pervasive in LICs, while public investment tends to have more long-lasting impacts on growth.

Other factors can also reinforce the positive impact of fiscal interventions, including monetary policy accommodation for 1 to 2 years. Fiscal multipliers in LICs also tend to increase with improved institutional efficiency, and if fiscal policy is externally financed (e.g., aid and debt).

Results of studies that estimate multipliers from sectoral public spending in the context of developing countries are mixed, but the most common growth-inducing sectoral public spending is on education and social protection with multipliers reaching close or more than 1. Most studies also indicate positive multipliers from public spending on health and defence sectors. The impact of green spending has a multiplier size of around 0.6 to 1.6 (more details in section 3.3). In terms of gender-sensitive public spending particularly on health and care sectors, size of multipliers ranges from 3 in Indonesia up to 5 in Costa Rica (more details in section 3.2).

While fiscal multipliers generally tend to be lower in developing countries compared to HICs (about 0.8 vs 1.8), country-level literature show that the growth impact of fiscal spending is even lower in Kenya, Sri Lanka and Tanzania (0.01 to 0.4) and Bangladesh (0.1 to 0.7). The fiscal multiplier estimates for Peru generally point to the relatively higher growth impact from public investment (1.5 to 2.5) than public

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<sup>11</sup> Section 3.1 summarises the key findings in the review of literature in Raga (2022).

consumption (0.3 to 1.0), and negative multiplier from tax-related stimulus.

The country-level studies<sup>12</sup> discuss key factors that drive the size of fiscal multipliers, highlighting issues such as absorptive capacity and institutional efficiency (Bangladesh and Kenya), source of financing for fiscal spending (Kenya and Tanzania) and time-varying factors and level of informality (Peru).

### **3.2 Gender-sensitive fiscal and central bank measures<sup>13</sup>**

In Africa, \$316 billion could be added to GDP by 2025 if each country matches the gender equality efforts of the region's best-performing country in terms of gender parity (Moodley et al., 2019). Most existing studies focus mostly on growth, productivity and distributional impacts of gender-balanced indicators (e.g., reduced gender bias in education, lower cost of care for dependents, higher female labour force participation, higher women's access to basic infrastructure).

Assessments of multipliers from gender-sensitive public expenditure on growth remain scarce. One such study is by Fabrizio et al (2019) who find that long-run impact of fiscal policy that aim to close educational gaps between men and women worth 0.4% of GDP annually will increase output by 8.8%; increasing spending on water sanitation infrastructure (that can free up women's time to participate in the labour force) by 0.7% of GDP will boost output by 13.2%; extending cash transfers to all working women below poverty line by 1% of GDP will increase output by 3.4%.

In the context of emerging countries, De Henau et al (2017) examine the output and employment multiplier effects of public investment in two highly gender-segregated sectors – public investment in the health and care sector and the construction sector—in the context of emerging countries. The authors find that public investment in either sector produces large fiscal multipliers, ranging from 3 in either sector in Indonesia to almost 5 in Costa Rica's health and care and South Africa's construction sectors. Investing 2% of GDP in the health and care and construction sectors would generate increases in employment in all the countries by 1.2% to 3.2% and 1.3% to 2.6%, respectively.

Aside from fiscal instruments, Papadavid and Pettinotti (2021) argue that there is room to incorporate a gender-equalising lens to monetary

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<sup>12</sup> See details in the following studies: Bhattacharya et al (2021) for Bangladesh; IEA Kenya (2022) for Kenya; Jaramillo and Escobar (2021) for Peru; Wignaraja (2021) for Sri Lanka and ESRF (2022) for Tanzania.

<sup>13</sup> Section 3.2 is largely based on Raga (2022) and Papadavid and Pettinotti (2021).

and financial policies. Based on their rudimentary calibrations, the authors find that monetary policy would have been more accommodative (i.e., lower policy rates) if female unemployment rate (rather than aggregate unemployment rate) is incorporated in standard Taylor rule in five L&MICs. Lowering policy interest rates that could stimulate investment and economic activity would benefit all. In this regard, the authors suggest complementary measures including easing lending terms, extending loan guarantees or earmarking lower interest rates to sectors (e.g., MSMEs, agricultural sector) in which women are disproportionately represented in terms of labour force.

### 3.3 Evidence on impacts of green spending<sup>14</sup>

International organisations such as the IMF and World Bank have been proactively encouraging countries to incorporate green investment into their recovery plans from the pandemic. As of 2020, announced stimulus packages to address the impact of Covid-19 reached \$14.6 trillion, but only \$368bn of which (or 2.5% of total) is expected to enhance sustainability (O’Callaghan and Murdock, 2021).

The existing empirical studies generally suggest the positive impact of growth, but there is mixed evidence over the short- and long-term impact. At the global level, IEA (2020) estimates that a \$1 trillion (or 0.7% of GDP) annual private and public spending on global sustainable recovery plan for the energy sector over 2021–2023 will increase GDP by 1.1% each year through 2023. The study finds stronger growth effects (1.3% annual GDP growth) in developing countries, with 420 million people gaining access to clean-cooking solutions in LICs, and nearly 270 million people gaining access to electricity.

Meanwhile, using available data in the context of 20 African countries, Batini et al. (2021) find that spending on climate smart land use tends to have a negative but insignificant short-term multiplier effect; but significant positive gains on output start to materialise in the medium term – ranging from 1.5 up to 6.7 after two and five years from the spending shock, respectively. The authors highlight that the increasing impact from climate smart land use spending in Africa is led by donor-driven spending which complement domestic resources; labour-intensity of beneficiary sectors such as hospitality and tourism; and resulting lift in prices paid to rural producers. This is in contrast with below 1 multiplier from non-climate smart land use investment, which is typically associated with low value added associated with high costs of machinery, fossil fuel energy and imported inputs (ibid.).

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<sup>14</sup> Section 3.1 summarises the key findings in the review of literature in Raga (2022)

Available evidence on 'job' multiplier effects are largely focused on advanced economies. In the United States (US), Garret-Peltier (2017) find that on average, a \$1 million spending in fossil fuels generates 2.7 FTE jobs, while the same amount of spending in renewables or energy efficiency creates 7.7 FTE jobs. This suggests that a shift of \$1 million spending from fuel to clean energy will result in net increase of five jobs. However, evidence from green stimulus deployed in the US during the global financial crisis highlighted suggest that while every \$1 million green stimulus resulted in 15 new jobs in the long term, these have no significant effect on employment in the short run (Popp et al, 2020). Green subsidies were also observed to be picking up winners by creating up to 26 jobs in communities with the highest level of pre-existing green skills (ibid.).

### **3.4 Lessons on promoting a rainbow recovery from country case studies**

The country case studies examine macroeconomic policies, such as fiscal and trade policies, to stimulate a rainbow recovery, aiming for a growth path that is more inclusive, green and transformative. We consider the importance of six policies:

- improved targeting of fiscal responses
- trade diversification
- free trade agreements and special economic zones
- cash transfers and remittances
- strengthening institutions
- ambitious donor support for climate-related technologies.

#### **3.4.1 Targeting and widening the distributional impact of fiscal support (Bangladesh and Peru)**

In Bangladesh, Bhattacharya et al. (2021) indicate that a third of fiscal stimulus packages largely in the form of capital loans have been allocated to large and export-oriented firms. This left less and often ineffective disbursements to marginalised groups, CMSMEs (cottage, micro, small and medium enterprises) and agricultural sector which are largely discouraged to take up loans due to lengthy disbursement procedures, limited access (unawareness) on their eligibility for fiscal support, and banks' risk aversion to extending loans to smaller enterprises and women. The government's job retention package was also disbursed fully for export-oriented and mostly for ready-made garment (RMG) workers, but workers in the other non-export sectors seemed to have been largely ignored.



The authors employed computable general equilibrium (CGE) simulations to examine the economy-wide impact of increasing government expenditure under two policy scenarios: (1) doubling public transfers to five selected household categories (i.e., landless farmer, marginal farmer, small farmer, rural non-farm poor, with low education); and (2) 50% increase in public spending for health and education.

The results suggest that in both scenarios, impacts on GDP, exports and factor income except on capital are positive. However, Scenario 2 has a larger positive impact on real GDP growth and export while Scenario 1 has a much larger positive impact on the real consumption of poorer households. Implementing both measures would widen the budget deficit up to 8% of GDP, which can be justified given Bangladesh' current low debt-to-GDP condition.

Peru has been able to deploy a relatively bigger size of fiscal stimulus measures relative to its peers, but Jaramillo and Escobar (2021) elaborate that there is still fiscal space to harness the short- and long-term socio-economic benefits from increased public spending on health and education. They assess the macroeconomic impact of two policy scenarios: 1) current government public investment plan; and 2) proposed alternative fiscal package with two main features: i) increased spending to steadily fully cover the Essential Plan for Health Insurance (PEAS) of the affiliates of the SIS (national integrated health insurance); and ii) expanded and increased efficiency in socially relevant public investment. Scenario 2 is expected to benefit more informal workers and women.

The policy simulations show that Scenario 2 can boost GDP, create more jobs, and improve gender-balanced employment compared to Scenario 1. Since Scenario 2 features a social protection system, which may also shield the poor from external shocks, and in turn enhance their productivity and reduce general income and social inequalities. With minor tax reforms, implementing Scenario 2 will result in public debt level that barely goes above 40% over 2025 and converges to 38% by 2030 – which the authors argued to be a reasonable public debt level that Peru can opt to maintain in order to BBB from the pandemic.

### 3.4.2 Trade diversification (Kenya and Tanzania)

Kenyan and Tanzanian economies performed better than other L&MIC countries, in part because of the offsetting impacts from their major exports of goods and services (see EIA Kenya, 2022; ESRF, 2022). These countries were fortunate in its specialisation in export goods (e.g., agricultural, mineral and clothing products) in which the demand



remained resilient during the pandemic, in turn managing an overall growth in export which helped offset the sharp declines in tourism activities.

Out of Kenya's top 50 export products, 30 have been hit relatively less by the pandemic in 2020 (Raga et al, 2021).<sup>15</sup> Kenya had a product mix with higher world demand (e.g., fruits, vegetables, coffee, tea) or which rebounded quickly (e.g., garments) during the pandemic (ibid). This helped mitigate the sharp negative impact of the pandemic on Kenya's tourism sector, which represented 15% of total exports of goods and services in 2019 prior the pandemic.

Meanwhile, Tanzania was also fortunate to have gold as its major export (about a third of total goods exports), which benefitted from favourable global prices as investors turn to safe-haven assets amid the uncertainty during the pandemic. Tanzania also exports agricultural products, including tea and coffee which had resilient demand in 2020. Similar to Kenya, the boost in goods exports offset the impact on Tanzania's tourism sector, which represented 27% of total exports of goods and services in 2019.

While both countries benefitted from favourable trends in the value of agricultural and mineral exports, the challenge moving forward is to increase value-addition that could facilitate economic transformation. Tanzania is addressing this through its Third Five -Year Development Plan 2021/22 – 2025/26 which focuses on: i) supporting private sector-led industrialisation to manufacture, process and add value to natural resources and products; ii) financing and implementing physical infrastructure to facilitate industrialisation and improve the standard of living; iii) strengthening climate change interventions and improving early warning systems; and iv) mainstreaming gender in country strategies and plans; and v) harnessing the potential of digitalization and e-commerce (ESRF, 2022).

### 3.4.3 Free trade agreements and special economic zones—potential game changers (Sri Lanka)

Policy simulations examining the impact of free trade agreements (FTA) removing all tariffs between Sri Lanka and China, or Sri Lanka and India or Sri Lanka and BIMSTEC (The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) suggest an increase in Sri Lanka's exports between 1.4% to 2.7% (Wignaraja, 2021). However, specific export products can benefit more—by up to 27% increase in tea, beverage and food exports, and 19% in textile

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<sup>15</sup> Resilience indicated by relatively subdued contraction of world demand for a certain Kenyan product relative to the contraction of total world imports (at 62.4%) in 2020 (Raga et al., 2021).

exports under FTA with BIMSTEC.

Another simulation was conducted to assess the impact of operationalising the special economic zone (SEZ) for the services sector in Colombo Port City (CPC) at 30% (low) and 80% (high) operational capacity scenarios (Wignaraja, 2021). The simulation results suggest that CPC SEZ could add 3.3% to 11% to Sri Lanka's GDP at low and high scenarios, respectively, with significant increase in terms of value addition in services sector, employment, foreign exchange and government revenues. A comprehensive and competitive SEZ framework and conducive national policies will markedly improve the CPC SEZ' chances of success.

#### 3.4.4 Strengthening formal financial channels for cash transfers and remittances (Bangladesh and Kenya)

Kenya leveraged its well-developed financial technology platforms as a channel to stimulate liquidity and widening financial inclusion during the pandemic. For the most part of 2020, charges for transactions up to KSh1,000 (\$8.8) were waived, the limit of daily mobile money transactions per person was increased up to KSh150,000 (\$1,326) from previous KSh70,000 (\$619) limit, and monthly mobile money transactions limit per month was eliminated (IEA Kenya, 2020).<sup>16</sup> In addition, fees on transfers between mobile money wallets and bank accounts was waived by payment service providers and commercial banks (ibid). These policies resulted in 87% increase in mobile money usage, 114% increase in transaction below KSh1,000 (\$8.8), and an additional 2.8 million mobile money users between February to October 2020 (ibid). Most of these measures were removed or amended by January 2021.

In Bangladesh, the surge in remittances (18.4% in 2020<sup>17</sup>) was largely driven by the government incentive of providing 2% of the value of remittances channelled through the formal financial channels, combined with restricted travel which may have affected remittances via informal channels (Bhattacharya et al, 2021). While the surge in remittances may be a considered as diversion from informal to formal channels, these contributed to increasing the central bank's foreign reserves and stabilise the exchange rates during the pandemic (ibid). The policy may also lay the foundation for migrants to use secure and cheaper remittance channels beyond the pandemic period.

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<sup>16</sup> Using CBK exchange rate reference as of 29 December 2021: KSh 113.1059 per US dollar.

<sup>17</sup> Authors' computation based on WDI data.

### 3.4.5 Strengthening institutions and economic fundamentals (all)

For Peru and Bangladesh which both exhibited institutional discipline through years of building fiscal buffers and foreign reserves prior the pandemic, the challenge in identifying effective responses are related to inefficiencies around targeting and implementation (section 3.3.1).

However, Kenya and Sri Lanka case studies highlight the complications of limited fiscal space and debt pressures in responding to domestic and external shocks. Due to these countries' pre-existing economic vulnerabilities (e.g., high debt), they were not able to provide swift and large fiscal measures to address the economic fall-out from the pandemic.

Both have also resorted to monetary policy as a first line of defence. Kenya was one of the first countries to lower its policy rates, while Sri Lanka substantially reduced its policy and reserve requirements by higher magnitudes compared to its counterparts. In Sri Lanka, a restrictive import policy was implemented to stabilise exchange rates, with potential irreversible long-term repercussions on the country's trade competitiveness (Wignaraja, 2021).

When governments stepped in, actions were mostly in the form of tax relief in Kenya, or very limited cash transfer support to only the most vulnerable members of the society in the case of Sri Lanka, without much room for expansionary fiscal expenditures. In addition, Kenya withdrew the tax relief measures by January 2021, which was assessed to be premature for businesses that were still recovering from the effects of the pandemic (IEA Kenya, 2022).

Policy simulation exercises by IEA Kenya (2022) and Wignaraja (2021) point out that additional fiscal measures, left untargeted, would generate minimal impact on Kenya and Sri Lanka's short-term economic growth. However, growth in Kenya and Sri Lanka may be enhanced by targeting public spending to mostly health, social protection, education and to some extent green investment. The challenge is to secure that financing of fiscal policy is efficient and sustainable (e.g., responsible debt management) and that other imbalances in the economy (e.g., exchange rate and price stability) are well managed.

### 3.5.6 International donor community support to increase adoption of climate-sensitive policies (all)

Amongst the five case studies, only Kenya was able to explicitly reflect environment-related fiscal spending in its Covid-19 rescue packages,

albeit still significantly lower (1.3% share of total first and second stimulus package) compared to other measures.<sup>18</sup>

Researchers for the country case studies, as well as other experts who participated in events where these studies were disseminated,<sup>19</sup> expressed that while public spending for the environment or global climate goals is less priority for LICs mainly due to the following:

- Developing countries are still addressing basic economic challenges, such as reducing poverty, providing infrastructure and improving health services.
- Political buy-in and take-up for increased green spending might be challenging, given significant pressures to meet demand for basic public services as well as a likely lack of understanding on risks and opportunities for green transition at the country level.
- There are ongoing debates around de-linking climate goals from trade especially in the context of low domestic capacity in LICs that mostly depend on exports (e.g., the proposed European Union's carbon adjusted mechanism might pose serious challenges for Bangladesh).
- There is a need for serious consideration to have a more ambitious and scale up globally coordinated response (e.g., ODA, liquidity support, debt restructuring and conditionalities, trade rules, access to green technology, global targets in climate agenda) for a green recovery.

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<sup>18</sup> Authors' computations based on Kenya's announced first (March 2020) and second (May 2020) stimulus packages.

<sup>19</sup> These include the following events: Impact of Covid-19 on long-term economic transformation organised by Southern Voice on 11 November 2021; Macroeconomic policy for a rainbow recovery organised by ODI on 22 September 2021; Macro-policy responses to Covid19 organised by United Nations University on 7 September 2021.

## 4 Conclusion and policy suggestions

The economic and social impact of Covid-19 in low- and middle-income countries has been unprecedented. The evidence of the impact of the pandemic in Bangladesh, Kenya, Peru, Sri Lanka and Tanzania underscores important issues around initial macroeconomic conditions, structural characteristics and institutional capacity (e.g., fiscal space) that shapes the magnitude, type, and absolute and distributional impact of fiscal responses to Covid-19.

As Covid-19 continues to mutate, its economic impact will continue to evolve, and the recovery path remains uncertain for many L&MICs. More recently, international organisations have been highlighting emerging risks around accelerating inflation, complex debt dynamics and financial stability (rising NPLs) worldwide. Policymakers will continue to be challenged by the long-term impact ('scarring effects') of the pandemic on income and productivity losses – from small firms that permanently shut, jobs that shifted from formal to informal and agricultural sectors, disproportional impact of the pandemic on women and youth, to children's disrupted learning from school closures or online classes.

There is also a great challenge on rising inequality within and among countries, depending on their access and deployment of Covid19 vaccines, availability of infrastructure and skills to adjust to socially-distanced working, and potential shortening of global value chains and increasing protectionism.

Despite the challenges, the literature, the country case studies, as well as reflections from discussions among country researchers, international organisations representatives and policymakers suggest that fiscal stimulus has been appropriate in the Covid19 context, but that there is definitely room to BBB from the pandemic if radical changes are to be taken up in the following areas:

- Improve targeting of fiscal stimulus that would create higher distributional impacts (e.g., health, education, social protection sectors; women and youth). This will require strong political support to re-allocate higher share of fiscal budget towards previously low

public expenditure on health sector (e.g., 1% of GDP in LICs, 2.8% in MICs as of 2019).<sup>20</sup>

- Improve institutional capacity to reduce operational inefficiencies (e.g., expedite disbursement of fiscal support) and manage fiscal accounts in a sustainable way. One way to achieve this is by explicitly incorporating fiscal discipline objectives in medium- to long-term national plans.
- Proactively support environment for resilient recovery, including enhancing trade openness, deepening and diversification, nurturing innovation ecosystems, and harnessing digital/financial technology for value addition in production and expanding financial inclusion.
- Coordinate global support mechanisms for expedited deployment of vaccines, restructuring debt, implementing ODA commitments, preserving trade openness (e.g., discourage protectionism), and developing tailored climate finance for LICs/MICs.

The challenges from Covid-19 are not yet over. There is a need for a deeper understanding of the economic repercussions of the protracted pandemic, including issues related to balancing continued support to a still weak environment against emerging risks around accelerating inflation, financial stability and debt dynamics. Continued knowledge generation from all perspectives (e.g., global, regional and country-level researchers and practitioners) would be valuable in identifying synergies and crafting effective policies that are transformative, gender and climate sensitive for L&MICs amid both the Covid-19 crisis and beyond.

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<sup>20</sup> Based on WDI data (<https://data.worldbank.org/indicator/SH.XPD.GHED.GD.ZS>)

# References

- Beyer, R.C.M., K.W.N. Abeygunawardana, Y. Kim Soo and N. Sarma (2021) 'Economic and Poverty Impact of COVID-19: Sri Lanka Development Update 2021'. Washington, D.C.: World Bank Group. (<http://documents.worldbank.org/curated/en/284901624350168752/Sri-Lanka-Development-Update-2021>).
- Bhattacharya, D., T.I. Khan and M.M.H. Rabbi (2021) 'Covid-19 and Bangladesh: macroeconomic impacts and policy choices'. Centre for Policy Dialogue (<https://cpd.org.bd/publication/covid-19-and-bangladesh-macroeconomic-impact-and-policy-choices/>).
- Bank of Tanzania (2021) 'Monetary policy statement 2021/2022' June 2021. ISSN 0856-6976. (<https://www.bot.go.tz/Publications/Regular/Monetary%20Policy%20Statement/en/2021062416483067.pdf>).
- Batini, N., Di Serio, M., Fragetta, M., et al. (2021) *Building back better: how big are green spending multipliers?* IMF Working Paper No. WP/21/87. Washington DC: IMF ([www.imf.org/en/Publications/WP/Issues/2021/03/19/Building-Back-Better-How-Big-Are-GreenSpending-Multipliers-50264](http://www.imf.org/en/Publications/WP/Issues/2021/03/19/Building-Back-Better-How-Big-Are-GreenSpending-Multipliers-50264)).
- CBSL – Central Bank of Sri Lanka (2021) 'Recent economic development 2021'. (<https://www.cbsl.gov.lk/en/publications/economic-and-financial-reports/recent-economic-developments/recent-economic-developments-2021>).
- CRBP – Central Reserve Bank of Peru (2020) *Annual report 2020*. (<https://www.bcrp.gob.pe/eng-docs/Publications/Annual-Reports/2020/annual-report-2020.pdf>).
- De Henau, J., Himmelweit, S. and Perrons, D. (2017) 'Investing in the care economy. Simulating employment effects by gender in countries in emerging economies'. International Trade Union Confederation.
- ESRF – Economic and Social Research Foundation (2022) *Shaping the macro-economy in response to Covid-19: a responsible economic stimulus, a stable financial sector and a revival in exports: Tanzania country report*. (<https://esrf.or.tz/index.php/research-reports-2/>).
- Garrett-Peltier, H. (2017) 'Green versus brown: comparing the employment impacts of energy efficiency, renewable energy, and fossil fuels using an input-output model' *Economic Modelling* 61: 439–447 (<https://doi.org/10.1016/j.econmod.2016.11.012>).
- G7 (2021) 'Our shared agenda for global action to Build Back Better'. Carbis Bay G7 Summit Communiqué (<https://www.g7uk.org/wp-content/uploads/2021/06/Carbis-Bay-G7-Summit-Communique-PDF-430KB-25-pages-3-1.pdf>).
- IEA – International Energy Agency (2020) *Sustainable Recovery*. IEA World Energy Outlook Special Report. ([https://iea.blob.core.windows.net/assets/c3de5e13-26e8-4e52-8a67-b97aba17f0a2/Sustainable\\_Recovery.pdf](https://iea.blob.core.windows.net/assets/c3de5e13-26e8-4e52-8a67-b97aba17f0a2/Sustainable_Recovery.pdf)).



- IEA Kenya – Institute of Economic Affairs, Kenya (2022) ‘Shaping macro economy in response to Covid-19 in Kenya: a responsible economic stimulus, a stable financial sector and a revival in exports’. (<https://protect-eu.mimecast.com/s/IYh6CG52Bt8gGzTKm0o9?domain=ieakenya.or.ke>).
- IFC – International Finance Corporation (2020) ‘Gendered Impacts of Covid-19 on employment in the private sector, Sri Lanka’. ([https://www.ifc.org/wps/wcm/connect/region\\_ext\\_content/ifc\\_external\\_corporate\\_site/south+asia/resources/gendered+impact+of+covid19+on+employment+in+the+private+sector+in+sri+lanka](https://www.ifc.org/wps/wcm/connect/region_ext_content/ifc_external_corporate_site/south+asia/resources/gendered+impact+of+covid19+on+employment+in+the+private+sector+in+sri+lanka)).
- IMF – International Monetary Fund (2021a) ‘Download WEO Data: October 2021 Edition’. World Economic Outlook database. (<https://www.imf.org/en/Publications/WEO/weo-database/2021/October>)
- IMF (2021b) ‘Fiscal Monitor October 2021’ database (<https://www.imf.org/en/Publications/FM/Issues/2021/10/13/fiscal-monitor-october-2021>).
- IMF (2021c) *Requests for an extended arrangement under the extended fund facility and an arrangement under the extended credit facility – debt sustainability analysis*. IMF Country report No. 21/72. (<https://www.imf.org/-/media/Files/DSA/external/pubs/ft/dsa/pdf/2021/dsacr2172.ashx>).
- IMF (2021d) ‘First reviews of the extended arrangement under the extended fund facility and an arrangement under the extended credit facility and requests for modifications of performance criteria and structural conditionality. Press Release; Staff Report; and Statement by the Executive Director for Kenya’ IMF Country Report No. 21/137. (<https://www.imf.org/en/Publications/CR/Issues/2021/06/25/Kenya-First-Reviews-of-the-Extended-Arrangement-Under-the-Extended-Fund-Facility-and-an-461274>).
- IMF (2021e) ‘2021 Article IV Consultation’. Press Release; Staff Report; And Statement By The Executive Director For Peru’ IMF Country Report No. 21/63. (<https://www.imf.org/-/media/Files/Publications/CR/2021/English/1PEREA2021001.ashx>).
- IMF (2021f) ‘IMF World Economic Outlook April 2021’ (<https://www.imf.org/en/Publications/WEO/Issues/2021/03/23/world-economic-outlook-april-2021>),
- IMF (2022) ‘World Economic Outlook January 2022 Update’ (<https://www.imf.org/en/Publications/WEO/Issues/2022/01/25/world-economic-outlook-update-january-2022>).
- IFC – International Finance Corporation (2020) ‘Gendered Impacts of Covid-19 on employment in the private sector, Sri Lanka’ ([https://www.ifc.org/wps/wcm/connect/region\\_ext\\_content/ifc\\_external\\_corporate\\_site/south+asia/resources/gendered+impact+of+covid19+on+employment+in+the+private+sector+in+sri+lanka](https://www.ifc.org/wps/wcm/connect/region_ext_content/ifc_external_corporate_site/south+asia/resources/gendered+impact+of+covid19+on+employment+in+the+private+sector+in+sri+lanka)).
- ILO – International Labour Organisation (2022) ‘Covid-19 and labour statistics’ Data (<https://ilostat.ilo.org/topics/covid-19/>).
- Jaramillo, M. and B. Escobar (2021) ‘Building back better after the Covid-19 pandemic: a diagnostic and reactivation proposal for Peru’ GRADE (<https://www.grade.org.pe/en/publicaciones/building-back-better-after-the-covid-19-pandemic/>).



- Jaramillo, M. & López, K. (2021) 'Políticas para combatir la pandemia de COVID-19' Documento de Investigación, 112. Lima: GRADE. (<https://www.grade.org.pe/en/publicaciones/politicas-para-combatir-la-pandemia-de-covid-19/>)
- Keane, J., Mendez-Parra, M., Papadavid, P, Pettinotti, L. Raga, S. and te Velde, D.W (2021) 'Shaping the macroeconomy in response to Covid-19: a responsible economic stimulus, a stable financial sector and a revival in exports'. Methodology paper. SET, ODI. (<https://set.odi.org/shaping-the-macro-economy-in-response-to-covid-19-methodology-paper/>).
- O'Callaghan, B. and Murdock, E. (2021) 'Are we building back better? Evidence from 2020 and pathways for inclusive green recovery spending' United Nations Environment Programme (<https://wedocs.unep.org/bitstream/handle/20.500.11822/35281/AWBBB.pdf>).
- OECD – Organisation for Economic Co-operation and Development (2021a) 'OECD Economic Outlook, May 2021' ([https://www.oecd-ilibrary.org/economics/oecd-economic-outlook/volume-2021/issue-1\\_edfbca02-en](https://www.oecd-ilibrary.org/economics/oecd-economic-outlook/volume-2021/issue-1_edfbca02-en)).
- OECD (2021b) 'OECD Economic Outlook, December 2021' (<https://www.oecd.org/economic-outlook/>).
- Papadavid, P. and Pettinotti, L. (2021) 'A gender approach to monetary and financial policies in the Covid-19 recovery' SET, ODI (<https://set.odi.org/a-gender-approach-to-monetary-and-financial-policies-in-the-covid-19-recovery/>).
- Popp, D., Vona, F., Marin, G. and Chen, Z. (2020) 'The employment impact of green fiscal push: evidence from the American recovery act'. NBER Working Papers 27321, National Bureau of Economic Research ([www.nber.org/papers/w27321](http://www.nber.org/papers/w27321)).
- Raga, S. (2022) 'Fiscal multipliers: a review of fiscal stimulus options and impact on developing countries'. SET, ODI. (<https://set.odi.org/fiscal-multipliers-a-review-of-fiscal-stimulus-options-and-impact-on-developing-countries/>).
- Raga, S., Mendez-Parra, M. and te Velde, D.W. (2021) 'Promoting Kenya's exports: a country- and product-specific analysis'. SET, ODI (<https://set.odi.org/promoting-kenyas-exports-a-country-and-product-specific-analysis/>).
- Raga, S. and Te Velde, D.W. (2020) 'Economic vulnerabilities to health pandemics: Which countries are most vulnerable to impacts of coronavirus'. SET, ODI (<https://set.odi.org/economic-vulnerabilities-to-health-pandemics-impact-of-coronavirus/>).
- Rahman, S. H., Razzaque, A., Rahman, J., and Shadat, W. B. (2020) 'Socio-economic impact of Covid-19 and policy implications for Bangladesh'. Policy Brief. Brac Institute of Governance and Development (<https://bigd.bracu.ac.bd/wp-content/uploads/2020/09/Socio-Economic-Impact-Of-COVID-19-and-Policy-Implications-for-Bangladesh.pdf>)
- UNCTAD (2021) 'Global merchandise trade exceeds pre-Covid-19 level, but services recovery falls short' (<https://unctad.org/news/global-merchandise-trade-exceeds-pre-covid-19-level-services-recovery-falls-short>).
- UNESCAP (2020) 'Covid-19 and South Asia: national strategies and sub-regional cooperation for accelerating inclusive, sustainable and resilient recovery'

[https://www.unescap.org/sites/default/files/South%20Asia%20Covid-19%20Paper\\_5.pdf](https://www.unescap.org/sites/default/files/South%20Asia%20Covid-19%20Paper_5.pdf)

UNICEF (2022) 'Covid-19 vaccine market dashboard'

(<https://www.unicef.org/supply/covid-19-vaccine-market-dashboard>).

Velde, D.W. te (2009) 'Blue, green or red? A rainbow stimulus to tackle global recession' ODI (<https://odi.org/en/insights/blue-green-or-red-a-rainbow-stimulus-to-tackle-global-recession/>).

Wignaraja, G. (2021) 'Macroeconomic impact of Covid-19 and policy choices for Sri Lanka'. LKI and Pathfinder Foundation (<http://counterpoint.lk/pathfinder-occasional-paper-macroeconomic-impact-covid-19-policy-choices-sri-lanka/>).

World Bank (2020) 'Covid-19 to add as many as 150 million extreme poor by 2021' Press release, 7 October (<https://www.worldbank.org/en/news/press-release/2020/10/07/covid-19-to-add-as-many-as-150-million-extreme-poor-by-2021>).

World Bank (2021a) 'Global Economic Prospects June 2021' Washington, D.C.: World Bank Group.

World Bank (2021b) 'Transforming Tourism: Toward a Sustainable, Resilient, and Inclusive Sector'. Tanzania Economic Update. Issue 16. (<http://documents.worldbank.org/curated/en/794611627497650414/Transforming-Tourism-Toward-a-Sustainable-Resilient-and-Inclusive-Sector>).

World Bank (2021c) 'Socioeconomic impacts of Covid-19 in Kenya on Households: rapid response phone survey, round 1'. World Bank, Washington, DC.: World Bank (<https://openknowledge.worldbank.org/handle/10986/35173>).

World Bank (2021d) 'Defying predictions, remittance flows remain strong during Covid-19 Crisis' (<https://www.worldbank.org/en/news/press-release/2021/05/12/defying-predictions-remittance-flows-remain-strong-during-covid-19-crisis>).

World Bank (2022) 'Global Economic Prospects, January 2022' (<https://openknowledge.worldbank.org/handle/10986/36519>).

WHO – World Health Organisation (2021) 'WHO Director-General's opening remarks at the 8th meeting of the IHR Emergency Committee on Covid-19 – 14 July 2021' (<https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-8th-meeting-of-the-ih-er-emergency-committee-on-covid-19-14-july-2021>).

WHO (2022) 'WHO Coronavirus (Covid-19) Dashboard' (<https://covid19.who.int/>).

WTO – World Trade Organisation (2021a) World Trade Statistical Review 2021. ([https://www.wto.org/english/res\\_e/statis\\_e/wts2021\\_e/wts2021\\_e.pdf](https://www.wto.org/english/res_e/statis_e/wts2021_e/wts2021_e.pdf)).

WTO (2021b) 'World Trade Report 2021. Economic resilience and trade' ([https://www.wto.org/english/res\\_e/booksp\\_e/wtr21\\_e/00\\_wtr21\\_e.pdf](https://www.wto.org/english/res_e/booksp_e/wtr21_e/00_wtr21_e.pdf))