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SHAPING THE MACRO-ECONOMY IN RESPONSE TO COVID-19:

**A responsible economic stimulus, a stable financial
sector and a revival in exports**

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LIST OF ACRONYMS

ADB	Asian Development Bank
AfDB	African Development Bank
BB	Bangladesh Bank
BBB	building back better
BMZ	Federal Ministry of Economic Cooperation and Development, Germany
BOT	Bank of Tanzania
CBK	Central Bank of Kenya
CBSL	Central Bank of Sri Lanka
CGAP	Consultative Group to Assist the Poor
CRBP	Central Reserve Bank of Peru
DAC	OECD Development Assistance Committee
DFI	development finance institution
EU	European Union
FDI	foreign direct investment
GDP	gross domestic product
GHG	greenhouse gas
GTAP	Global Trade Analysis Project
GVC	global value chain
HIPC	Heavily Indebted Poor Countries
IBRD	International Bank for Reconstruction and Development
IDRC	International Development Research Centre
IFC	International Finance Corporation
IFPRI	International Food Policy Research Institute
IIF	Institute of International Finance
ILO	International Labour Organization
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
LIDC	low-income developing country
LIE	low-income economy
LSE	London School of Economics
MDB	multilateral development bank
MDRI	Multilateral Debt Relief Initiative
MSMEs	micro, small and medium-sized enterprises
ND-GAIN	Notre Dame Global Adaptation Initiative
NPL	non-performing loan
NTB	non-tariff barrier
OCHA	UN Office for the Coordination of Humanitarian Affairs
ODI	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
PPE	personal protective equipment
QE	quantitative easing
SDG	Sustainable Development Goal
SIGI	Social Institutions and Gender Index
SMEs	small and medium enterprises
UNCTAD	United Nations Conference on Trade and Development
UNDESA	United Nations Department for Economic and Social Affairs
UNDP	United Nations Development Programme
UNWTO	United Nations World Tourism Organization
UN	United Nations
UNIDO	UN Industrial Development Organization
US	United States
VAT	value added tax

WDI	World Development Indicators
WFP	World Food Programme
WTO	World Trade Organization

EXECUTIVE SUMMARY

This paper discusses a broad methodology and detailed steps to analyse macroeconomic policy options to recover from the Covid-19 crisis at country level. It presents a range of variables and impact pathways that can be used to describe the macroeconomic context in the case study countries of Bangladesh, Kenya, Peru, Sri Lanka and Tanzania; the types of steps that could be undertaken in these five countries, covering fiscal, monetary and trade policies; and what outcome variables to look for. It also considers policy options, and finally the pros and cons of possible methods to assess the impact of the policy scenarios on the impact variables, among them economic, social and environmental variables.

The paper has a number of core tasks for researchers at country level:

- **describe the Covid-19 baseline** current impact, current macroeconomic policies and expected growth trajectories (gross domestic product, balance of payments, government balances) and discuss the complex background of the countries in terms of poverty, informality, climate change and gender equality
- **develop macroeconomic policy options** for assessment: fiscal, financial and/or trade policy
- use appropriate methods such as causal chain analysis and modelling to **analyse the impact of policy measures** on economic, social/gender and environmental variables.

This paper provides background to these steps including initial data and additional information. Table 4 in the text for example provides basic data for baseline trajectories, whilst table 10 provides a snapshot of the policies currently being considered for analysis by the country analysts. Table ES1 below (Table 11 in text) provides a range of considerations for the assessment of policy impacts.

Table ES1. Assessing impact of macroeconomic policies

	Main policy area	Key considerations	Social/gender	Climate
Fiscal policy	Additional fiscal stimulus and targeted better	<ul style="list-style-type: none"> • The level and sectoral and distributional focus of spending • Multiplier and indirect effects (including on trade, and climate change), which depend on e.g. level of initial public capital and debt, trade openness, elasticity of consumption, exchange rate regime • Debt sustainability and links with financial stability 	<ul style="list-style-type: none"> • Female employment intensity of targeted sectors • Direct or indirect support to female dominated sectors? What type of employment (fixed wage? Safe working conditions, skill level) prevail in the female-dominated sectors targeted by the stimulus? 	<ul style="list-style-type: none"> • What economic sectors are targeted by the stimulus: are they low or high greenhouse gas emissions for input and production process? Are they energy-intensive and what energy do they rely on? • Are the sectors targeted supporting adaptation to climate change (e.g. climate smart agricultural technology)?
Financial policy	Further monetary easing and directed credit	<ul style="list-style-type: none"> • Interest rate sensitivity of investment and consumption • Reach of targeted finance • Non-performing loans, debt levels and financial stability 	<ul style="list-style-type: none"> • Conditions of access to women at household and enterprise level? 	<ul style="list-style-type: none"> • Conditionality of access to credit for carbon-intensive industries and projects?
Trade policy and production	Tariff and non-tariff barriers, free trade agreements, production and investment support	<ul style="list-style-type: none"> • Impact on trade volumes and trade prices • Consumer prices, productivity • Sectoral value addition 	<ul style="list-style-type: none"> • What is the female intensity of economic sectors and sub-sectors affected by trade policy change? • Types of goods affected by relative price changes: who consumes them? 	<ul style="list-style-type: none"> • Does liberalisation affect low-carbon goods and services?

These analytical steps at country level will be complemented by cross-country modelling analyses (e.g. on bilateral trade agreements or shortening of value chains) and policy engagement activities.

1 INTRODUCTION

Ensuring a healthy macro-economy is crucial for a high-quality recovery from Covid-19. Engineering appropriate stimulus packages, keeping a stable financial sector and reviving high value-added exports are core tasks of governments across the world as they also try to recover from the economic effects of the pandemic in 2020–2023. Unfortunately, the context in low-income settings looks more depressed because of lack of finance and more vulnerable economies.

Informing policy options for a better macro-economy in lower-income settings is a core task of an International Development Research Centre (IDRC)-funded project undertaken by the Overseas Development Institute (ODI) and five other think-tanks. This paper presents a methodology and a range of methods to provide quality research and analysis that can underpin such policy advice.

The project aims to inform policy-makers in Bangladesh, Sri Lanka, Kenya, Peru and Tanzania on appropriate policies to address the Covid-19 recession and recovery over 2021–2023, with a focus on the interface between macroeconomic policies and economic, social (especially gender) and environmental outcomes. It has a focus on fiscal, financial and trade policies, including:

- What is an appropriate size and direction of fiscal stimulus, balancing increased spending to protecting people and firms now with increased debt and taxation later? What is the scope for increased fiscal spending towards achieving improved social and environmental outcomes?
- What other macroeconomic policies such as financial sector policies are needed to balance procyclical action, protecting the economy from a downturn now and promoting financial stability throughout?
- What is the role of trade policy in ensuring trade will lead a recovery to a better future that supports job, especially for women, reduces inequalities, and helps transition to a low-carbon economy?

A methodology to examine these questions needs to consider the following issues:

- *Context:* Assessing the current macroeconomic impact of and policy responses to Covid-19 and the current poverty and environmental context, and envisaging broad scenarios/trajectories for the coming three to five years (Section 3);
- *Policy design:* Designing a set of policy anchors to guide policy responses and suggesting policy simulations of specific macroeconomic policy packages, including fiscal, financial and trade policies (Section 4);
- *Impact assessment:* Assessing possible impacts of policies (economic, social and environmental) (Section 5).

This paper discusses these issues in turn. Section 2 presents the methodology in broad terms and Sections 3–5 present the individual building blocks. Section 6 discusses methods. Section 7 concludes.

2 PRESENTING THE BROAD METHODOLOGY

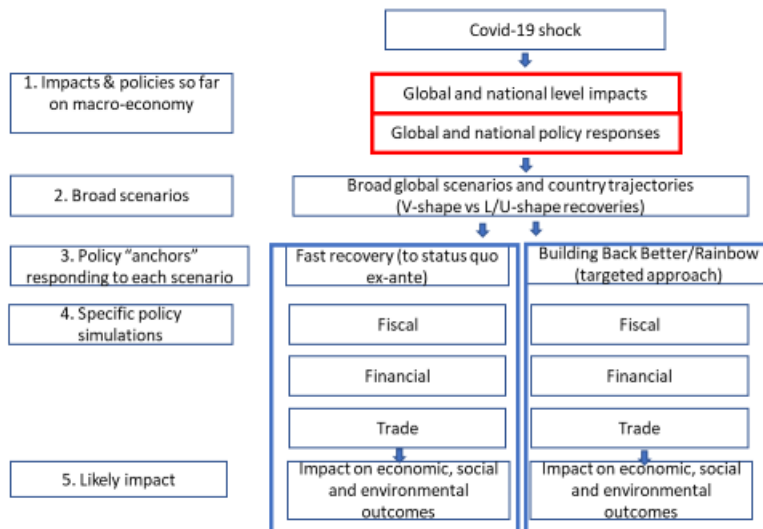
Informing future policy responses to Covid-19 requires a good understanding of the macroeconomic impact of Covid-19 and of the impact of policy responses so far. In order to analyse possible impacts of policy options over the coming three to five years, it is important to have a baseline against which to compare policy suggestions. The baseline in this case is the combination of impacts of Covid-19, policy responses so far and a set of basic projections in the case of no additional policies.

Once we know the baseline trajectories for each country, we can examine the impact of new policies. We divide policies into two main categories or anchors (which will be explained later): those policies facilitating a fast short-term economic recovery and those aimed at building back better, by taking into account long term economic, social and environmental objectives. Following [Te Velde \(2009\)](#), we also call the building back better anchor a “rainbow recovery”, as policies would be aimed at firms (blue), people and households (red) and environmental purposes (green).

The methodology focuses on fiscal, financial and trade policies, though it is not the case that each country will provide two sets of policies in each of these areas. The methodology aims to assess the broad economic, social and environmental impacts of the policies.

Figure 1 provides a summary of the five core building blocks in the methodology we use in this paper. The considerations in this paper have been informed by joint work with Southern Voice and southern think tanks (see Box 1).

Figure 1. Building blocks in the methodology for the analysis of impact of and macroeconomic policy responses to Covid-19



Source: Authors

Box 1. Uneven Covid-19 impacts in the Global South – Southern perspectives

The impacts of Covid-19 in the Global South have been different from those in the Global North. As of now, in some places in the Global South the health impacts have been less severe. However, these impacts are evolving and a final analysis in a couple of years may reveal a different picture. With vaccination campaigns currently prioritising countries in the Global North, the pandemic may last longer and have deeper impacts in the Global South as countries wait for access to the vaccine.

The Global South has been affected in terms of prospects of economic growth and social well-being. Pre-existing issues, such as high levels of economic informality, lack of fiscal space and increasing and persistent gender gaps, have made the policy response less effective. Covid-19 has severely affected economies. Gross domestic product (GDP) has been affected not only because of lockdowns but also because of the global slowdown and its effects on tourism, goods trade and capital flows. While the immediate health and direct economic impact appears to be lower for poorer economies, or similar to in richer countries, poorer countries are likely to be affected more in the medium term because of less well-resourced policy responses. However, the impact of the crisis also varies markedly among poorer countries.

The pandemic is having significant social impacts, such as rising inequalities and the creation of new vulnerable groups. In the short term, it is causing loss of wages and other sources of income. In the medium term, it is expected that a deep economic recession will exacerbate unemployment, poverty and inequality. The majority of the population in the Global South earns a living in the informal economy. Many policy measures are not helping workers who cannot benefit from any social protection system the country has in place.

Women worldwide, and particularly in developing countries, are affected more by the crisis than men. Women are overrepresented in the sectors most affected by lockdowns and economic recession, particularly in service provision, such as restaurants, tourism and entertainment. Domestic violence against women is expected to rise as a result of the Covid-19-related crisis. Meanwhile, the digital and technological divide within the Global South will have a large impact on children's learning opportunities in a distance education context.

Governments in the Global South have been able to provide only a limited response to Covid-19. Most countries have little room to increase fiscal spending, much needed during this crisis, owing to high debt, rising interest payments and limited tax revenues. One of the challenges for governments is to find ways to overcome the digital and technological divide within countries. Furthermore, programmes should consider technical assistance and cash components to provide support to the self-employed, including through soft skills and digital skills. It is key for policy responses to incorporate a gender perspective, given that the crisis is affecting women more severely than men. Since tax revenues remain low, further progressive reform is needed, to go hand-in-hand with the formalisation of the economy to expand the tax base.

The international development community was not prepared for this pandemic. The development cooperation architecture was more disadvantaged because of the current fractured state of the multilateral system. Absence of leadership to mount a rapid and vigorous global response has been felt acutely. In line with strengthening the multilateral system, a global response should not entail just the sum of existing and new facilities by the providers of development finance. This is a unique opportunity to secure coordination and coherence of these interventions and maximise their impact.

Source: Southern Voice (2021)

3 THE COVID-19 BASELINE: MACROECONOMIC IMPACT AND PROJECTIONS AND POLICY RESPONSES SO FAR

Covid-19 has had a major macroeconomic impact on economies globally. Section 3.1 discusses macroeconomic impacts globally. Countries across the world have also used macroeconomic policies to respond to the impacts of the pandemic (Section 3.2). International organisations have a range of projections of the macro-economy for the coming years (Section 3.3). Different countries are affected differently and have responded in differing ways. This reflects in part the overall background, including debt vulnerabilities, poverty levels and environmental degradation and pollution (Section 3.4). These background sections provide a range of suggestions that country-level assessments can use to describe what we call the Covid-19 baseline (Section 3.5) against which policy options can be assessed.

3.1 Macroeconomic impact

Covid-19 has so far had a major impact globally in terms of people's health and lives, repressed mobility, disrupted economic production, tempered consumption and investment and generated massive unemployment. In 2020, poor countries faced adverse economic spillover from the resulting global economic downturn, while having had to address the impact of domestic shocks from stringent measures implemented to contain the spread of the virus. Although there is some optimism for the 2021 outlook following recent multiple vaccine approvals, there may still be material downside risks for poor countries as a result of uncertainties around equitable and timely access to vaccines, potential renewed waves from the new Covid-19 variant mutation, debt sustainability and financial stability.

Recent forecasts by major organisations point to global output recovery in 2021 after severe economic fall-out from the pandemic last year. For instance, the International Monetary Fund (IMF, 2021a) has estimated that, after a sharp contraction of 3.5% in 2020, global output will grow at 5.5% in 2021. This projection is largely driven by the anticipated growth in advanced economies with wider vaccine availability and additional fiscal support measures, which is expected to spill over to developing countries through trade linkages.

The unprecedented declines in global GDP in 2020 led to major declines in global trade. Global trade fell sharply by 19% in Q2 2020 and continued to contract by 4.5% as of Q3 2020 (UNCTAD, 2020a). The World Trade Organization's (WTO) (2019) previous assumption of 3% global trade growth in 2020 was revised to 13–32% declines during the peak of the pandemic in April 2020 (WTO, 2020a). More recently, the WTO (2020b, 2020c) updated its estimate to a 9.2% contraction in global trade in 2020, following rebound in trade volumes (especially in electronics, textiles and automotive products) in Q3 2020 (WTO 2020b, 2020c). By 2021, trade is expected to grow by 7.2% (WTO, 2020b).

Meanwhile, prospects for services trade recovery remain weak: this is expected to fall by 24% in 2020 (WTO, 2021). By sector, the sharpest decline in Q3 2020 was recorded for travel services (-68%), followed by transport services (-24%) (ibid.). Specifically, international tourism arrivals recorded a 70% decline from January to August 2020 and are projected not to return to 2019 levels until 2023 (UNWTO, 2020). This translates to \$730 billion loss in tourism revenues (which is eight times the loss compared with the global financial crisis in 2009) (ibid.).

Table 1. Real GDP growth outlook: pre-Covid19 vs latest forecasts

International organisation	Coverage	2019 growth (%) 1/	Pre-Covid19 real GDP growth forecasts (%) 2/		Latest forecast (with Covid-19) real GDP growth (%) 1/		Difference from pre-Covid-19 to latest forecast (percentage points)	
			2020	2021	2020	2021	2020	2021
IMF	World	2.8	3.3	3.4	-3.5	5.5	6.8	-2.1
	Advanced economies	1.6	1.6	1.6	-4.9	4.3	6.5	-2.7
	Emerging market and developing economies	3.6	4.4	4.6	-2.4	6.3	6.8	-1.7
	Low-income developing countries	5.3	5.1	5.1	-0.8	5.1	5.9	0.0
OECD	World	2.7	2.9	3.0	-4.2	4.2	7.1	-1.2
	G20	2.9	3.2	3.3	-3.8	4.7	7.0	-1.4
	OECD	1.7	1.6	1.7	-5.5	3.3	7.1	-1.6
	Non-OECD	3.7	4.0	4.0	-3.0	5.1	7.0	-1.1
World Bank	World	2.3	2.5	2.6	-4.3	4.0	6.8	-1.4
	Advanced economies	1.6	1.4	1.5	-5.4	3.3	6.8	-1.8
	Emerging market and developing economies	3.6	4.1	4.3	-2.6	5.0	6.7	-0.7
	Low-income developing countries	4.0	5.4	5.5	-0.9	3.3	6.3	2.2
World Bank (Southern countries and respective regional grouping)	<i>Sub-Saharan Africa</i>	2.4	2.9	3.1	-3.7	2.7	6.6	0.4
	Kenya	5.4	6	5.8	-1	6.9	7.0	-1.1
	Tanzania	5.8	5.8	6.1	2.5	5.5	3.3	0.6
	<i>South Asia</i>	4.4	5.5	5.9	-6.7	3.3	12.2	2.6
	Bangladesh	8.2	7.2	7.3	2	1.6	5.2	5.7
	Sri Lanka	2.3	3.3	3.7	-6.7	3.3	10.0	0.4
	<i>Latin America and Caribbean</i>	1.0	1.8	2.4	-6.9	3.7	8.7	-1.3
Peru	2.2	3.2	3.5	-12	7.6	15.2	-4.1	

Notes: 1/ As indicated in latest forecasts in IMF (2021a), OECD (2020) and World Bank (2021). 2/ As indicated in pre-Covid-19 forecasts in IMF (2019), OECD (2019) and World Bank (2020c)

Table 2 provides a summary of the pre-Covid19 and latest global trade growth rate projections.

Table 2. Pre-Covid-19 and latest global trade growth projections

	Pre-Covid-19	Latest (amid Covid-19)	
	2020	2020	2021
WTO	3%	-9.2%	7.2%
IMF	3%	-9.6%	8.1%
UNDESA	2.3%	-7.6%	6.9%
World Bank	3.2%	-9.5%	5.0%

Sources: WTO (2019a, 2020b); IMF (2019, 2021a); UNDESA (2019, 2021); World Bank (2020c, 2021)

For 2020, goods trade is expected to decline by 9.2%, before rising by 7.2% in 2021 (WTO, 2020). International tourism arrivals declined by 70% from January to August 2020 and are projected not to return to 2019 levels until 2023 (UNWTO, 2020). This translates to \$730 billion loss in tourism revenues (which is eight times the loss compared with the global financial crisis in 2009) (ibid.).

Global foreign direct investment (FDI) fell by 42% in 2020, and is expected to remain weak in 2021 (UNCTAD, 2021). Developing country FDI (which is 72% of global FDI) fell by 12% in 2020, as FDI to China and India was up. FDI to Africa decreased by 18% in 2020 (from \$46 billion in 2019 to \$38 billion in 2020). Remittance flows to low- and middle-income countries are projected also to fall, by 7%, in 2020, and to further decline by 7.5% in 2021 (World Bank, 2020a).

Financial markets also experienced heightened risk aversion at the onset of the pandemic, with substantial capital outflows, equity price volatility, increased sovereign bond spreads, exchange rate depreciation

pressure and tightened financial conditions in many emerging and developing countries (OECD, 2020b; World Bank, 2020b). However, the swift and bold actions of monetary authorities to alleviate market stress contributed to the subsequent easing of financial conditions (IMF, 2020c). In addition, November 2020 data shows strong inflows for emerging market equities and debt, which reached \$76.5 billion following news on vaccines and certainty of the results of the US elections (IIF, 2020). Expectations for a global recovery underpinned by roll-out of the vaccines have lifted asset prices, and the ongoing rebound of portfolio flows can provide a source of funding for emerging economies in 2021 (IMF, 2021b).

While the current account surpluses and deficit are expected to narrow modestly by about 0.3% of world GDP in 2020, economies dependent on oil, tourism and remittances are severely affected, with negative effects on external current account that will imply balance of payment pressures (IMF, 2020b). This will necessitate large economic adjustment (e.g. allowing exchange rate to absorb the shock, with inflationary implications) or external borrowing (e.g. with fiscal sustainability implications). The worsening risk sentiment further increases the risks of an external crisis, especially for economies with a large current account deficit and foreign debt and low foreign reserves (*ibid.*).

With respect to the fiscal balance, the large increases in fiscal expenditures to provide immediate support to affected individuals, firms and sectors, as well as the foregone tax revenues from tax relief measures and general output contraction amid the pandemic, will put pressure on government accounts. The IMF (2021c) projects that government deficits will reach -11.8% of GDP in 2020 before slightly narrowing to -8.5% of GDP in 2021; government debt will hit 97.6% and 99.5% of GDP in 2020 and 2021, respectively. Governments may also face unprecedented risks from the provision of loan guarantees should the impact of Covid-19 remain protracted and force firms to default. These will take a toll especially on low-income countries, more than half (38 out of 70 countries) of which are already at high risk of debt distress or in debt distress (IMF, 2021c).

Throughout the pandemic, the International Labour Organization (ILO, 2021) estimates that labour market disruptions led to 225 million full-time equivalent job losses in 2020, with higher employment losses for women and young workers. Africa's losses amounted to 29 million full-time equivalents in 2020.

This deep downturn in the global economy is affecting low- and middle-income countries through their exposure to global trade (e.g. oil and commodity exports), tourism, financial and investment flows (Raga and te Velde, 2020). For instance, as a result of the Covid-19 pandemic, Africa's private sector is facing a large recession, the likes of which have not been seen for 25 years. This is putting more than 20 million jobs and many livelihoods at risk and is pushing millions of people into poverty.

International trade data as of Q2 2020 indicates sharp export declines, by 41% in West and South Asia; by 35%, in Africa; and by 21% in Latin America – although data as of July indicates easing export contraction (UNCTAD, 2020a). FDI flows to Africa, Latin America and the Caribbean and Asia fell by 18%, 37% and 4%, respectively, in 2020 (UNCTAD, 2021). Greenfield project announcements also dropped drastically in Africa (-63%), Latin America and the Caribbean (-51%) and Asia (-38%) in 2020 (*ibid.*). Remittances are likely to fall in Latin America and the Caribbean, South Asia and Sub-Saharan Africa by 0.2%, 4% and 9%, respectively, in 2020 (World Bank, 2020a).

The disruption in intra-regional trade in East Africa is reflected in the decline by 83% of Kenya's re-exports, driven by the sharp fall of Kenyan exports to Rwanda, Tanzania and Uganda (Mold and Mveyange, 2020). Between January and October 2020, tourist arrivals fell significantly in Africa (-69%), the Americas (-68%) and Asia and the Pacific (-82%) (UNWTO, 2020). In the financial sector, capital outflows from emerging and frontier markets surged at the onset of the crisis, as exhibited by the \$5 billion outflow from Sub-Saharan Africa between February and March. However, flow to the region started to slightly recover (\$1.3 billion) from June to September, consequently narrowing spreads (IMF, 2020d).

Despite the generally contracting economies, some sectors are recovering fast and are thriving amid the pandemic. Double digit growth was recorded in Q3 2020 global trade in clothing (24%), computers (11%) and computer parts (10%) (WTO, 2020c). Bangladesh's exports (mainly garments) are exhibiting a V-shape trend, falling initially by 2% in March and steeply by 83% in April and with an easing decline by 2.5% in June (Gelb et al., 2020). Kenya's tea exports reached a record high in April and fruit exports have

surpassed levels of past years (Mold and Mveyange, 2020), and demand for flowers had recovered to 85% of pre-pandemic demand as of July (Mohammed, 2020). Remittances in Zimbabwe increased by 33% to \$466 million from last year (Vinga, 2020), highlighting the countercyclical role of remittances as migrants help families by sending money at home during the pandemic.

3.2 Broad macroeconomic policy responses so far

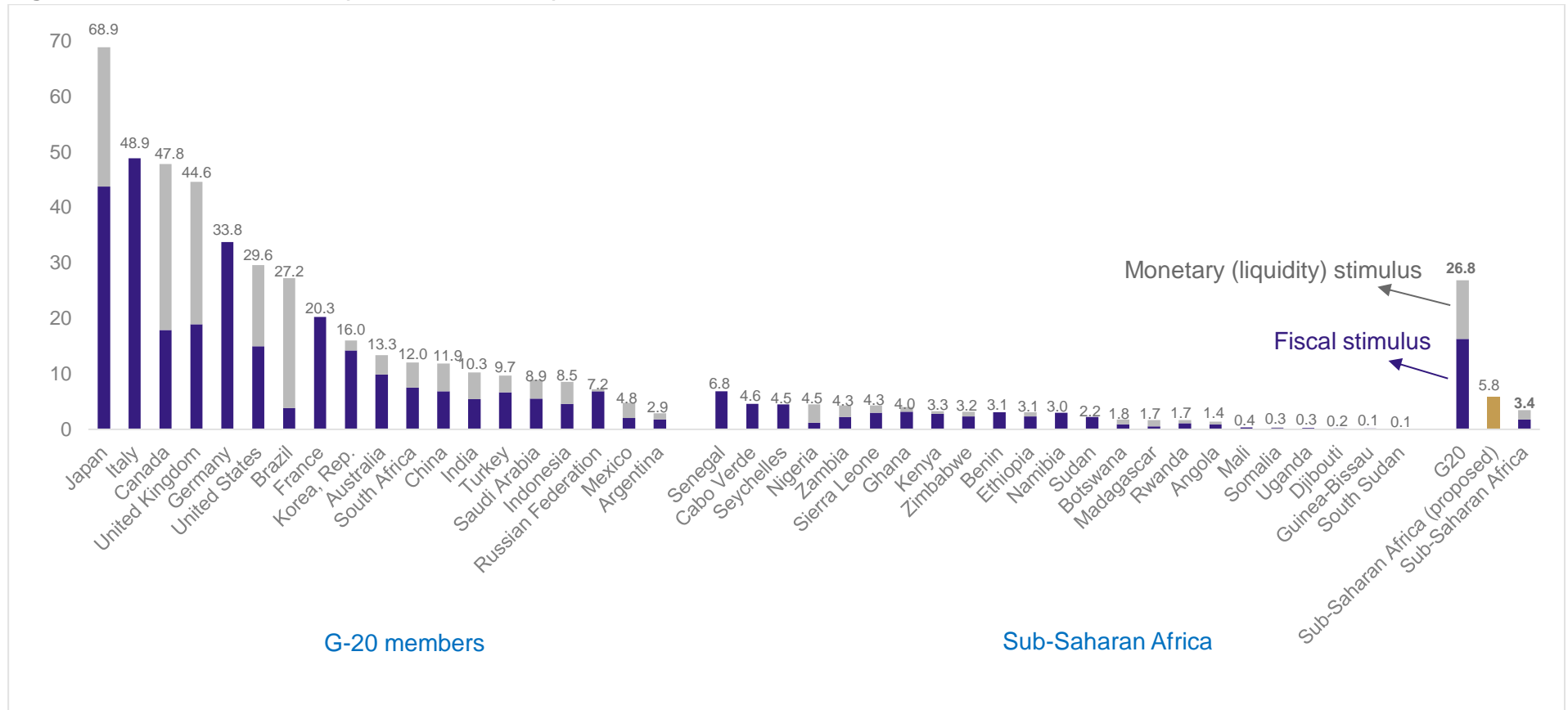
To contain the Covid-19 pandemic, governments worldwide have imposed stringent measures (e.g. national lockdowns, border closures, travel restrictions, social distancing), coupled with large fiscal and monetary stimulus packages to prevent massive economic fall-out. Many low- and middle-income countries have also implemented strict social distancing measures at similar or stricter levels than G20 members, despite not having ample government resources to provide expansionary fiscal stance to support halted businesses operations and people's lives and livelihoods during lockdown periods. For instance, by the autumn of 2020, government fiscal stimulus and liquidity injection packages amounted to 27% expressed in terms of 2018 GDP in G20 economies, compared with an average of 3.4% fiscal and central bank support in Sub-Saharan African countries (Figure 2). In per capita terms, this equates to more than \$27,000 government support per person in Japan compared with \$56 per person in Kenya, and less than a dollar support per person in South Sudan (ODI, 2020). More recent IMF (2021c) estimates suggest that global fiscal support to address the health and economic impact of Covid-19 has reach \$14 trillion.

With relatively more policy space than government budget, central banks have also utilised monetary and financial policy tools, such as lowering interest rates and cash reserve requirements, setting special loan facilities directly for affected sectors and encouraging and relaxing limits on digital money.

While a range of short- to medium-term policy options have been widely discussed and laid out to help developing countries navigate through the pandemic crisis, in the first few months of the pandemic most governments' immediate responses focused on supporting the domestic health system and extending aid to the most vulnerable individuals and groups. For example, 80% of the first economic stimulus package announced in Kenya in March 2020 were in tax relief, reductions and refunds (foregone tax revenue) and social protection (Figure 3 – characterised as 'red stimulus' – see te Velde, 2009), wherein government injects finance into the economy to stimulate consumption and demand and aim for short-term macroeconomic stabilisation.

International and bilateral donors and financial institutions (e.g. the IMF, the World Bank, the G20, the African Development Bank (AfDB)) have stepped up to provide aid, debt relief and special financing facilities to support government efforts in poor developing countries to finance Covid-19-related responses. However, the responses are not commensurate with the size of the crisis. According to an ODI blog (Humphrey and Prizzon, 2018), multilateral development banks (MDBs) have expanded lending by about 30% relative to 2019, compared with 70% after the global financial crisis, and lending is expected to revert to previous levels next year. Lending by the International Bank for Reconstruction and Development (IBRD) for middle-income borrowers rose to \$27.9 billion in FY2020, up 20% over the previous year and evidence of a fast but limited response. It should also be said that Chinese lending to the poorest countries has fallen rapidly in 2019 reducing the level of external finance for e.g. Africa. The policy responses are similar or less to those in the global financial crisis, even though the Covid-19 crisis is larger.

Figure 2. Economic stimulus (as % of 2018 GDP)



Notes: Economic stimulus packages announced in 2020 in response to Covid-19. Fiscal stimulus includes aid, grants and guarantees. Monetary stimulus includes only central banks' explicit monetary liquidity injection (e.g. through lending facilities, open market operations, purchase of government securities) and expected impact from lowering policy interest rates and other initiatives; does not reflect measures by regional central banks. See table below for details. Proposal for Sub-Saharan Africa is based on [ODI recommendation](#). G20 members excluding EU. Weighted average for G20 and Sub-Saharan African aggregates.

Sources: News reports, government and central bank press releases, [IMF policy tracker](#), [ODI country briefers](#). GDP data from WDI database and UN (for South Sudan only); exchange rates on the date/next business day of policy measure announcements based ON respective countries' central banks. See hyperlinked dates for specific sources.

A recent survey conducted by the World Bank suggests that only a fraction of businesses interviewed reported that they had access to public support, with the findings much worse in low-income settings. For example, only 4.6% of firms had access to public support measures in countries with a GDP per capita of less than \$2,500, but this increased to 37.9% in countries with a GDP per capita higher than \$10,000. The reasons are multiple, including that many firms in the private sector are in the informal sector and hence are difficult to reach. Additionally, there is a lack of finance for such support measures because low-income countries do not have access to large sources of finance; where they do, they may not channel such finance to the companies that need it. More attention is urgently needed in supporting national development banks that can reach the local private sector (te Velde, 2020).

Countries have also used policy levers of monetary policy, including the bank/discount rate, open market operations, the variable reserve ratio and changes in liquidity. As with the great financial crisis of 2008–2009, central banks have launched a range of new broad-based programmes, including to purchase riskier assets such as corporate bonds, in order to stem the cost of credit; central banks are ensuring that households and firms continue to have access to credit at an affordable price. To date, central banks have announced plans to expand their provision of liquidity – including through loans and asset purchases – by at least \$6 trillion and have indicated they will do more if needed. Table 3 provides examples of monetary responses in the five countries of interest to this project. Further details can be found in Appendix 1.

Trade policy since the start of Covid-19 has focused on securing the supply of critical products associated with the health response to the crisis. The revision of measures adopted by WTO members¹ suggests very limited adoption of trade policies aimed at supporting the economic recovery. Members introduced a series of export restrictions on the exports of protective personal equipment (PPE) and medical supplies. The response also included some liberalisation measures (tariff reduction) aimed at reducing the cost and increasing the supply of the same products.

A response to the health crisis, with significant long-term implications, is the ban on imports of non-essential products adopted by Sri Lanka. While the measure aims to reserve the foreign exchange to support the imports of essential goods (including all vehicles), the measure has extended for almost a year and it is expected to continue in 2021.²

Table 3. Developments in monetary policies, and financial indicators: illustrative country-level examples since start of Covid-19

	Monetary policies	Financial indicators	Trade policy
Bangladesh	Reductions in repo rate and cash reserve ratios. Increase in export development fund to \$5 billion, with fixed interest rate increased refinancing limit. Creation of several refinancing schemes including a 360-day repo facility and a credit guarantee scheme to support exporters, farmers and small and medium enterprises. Foreign exchange rules eased to allow foreign companies to access short-term loans. Bangladesh Bank continues to intervene in foreign exchange market to stem weakness in the taka against the US dollar.	Non-performing loans (NPLs) in Bangladesh are at a high level in private banks, development finance institutes and predominantly state-owned banks (ADB, 2019). At 12.7%, monetary growth has remained close to the target ceiling of 13%. Bangladesh’s currency stance poses a risk to its reserves position.	Stimulus packages focused on supporting the readymade garment-exporting sector Temporary export restrictions on medical supply products Temporary tariffs reductions on medical supply products and PPE

¹ /www.wto.org/english/tratop_e/covid19_e/covid19_e.htm & https://www.macmap.org/covid19

² https://www.thedailystar.net/business/news/sri-lanka-tightens-forex-controls-after-worst-gdp-decline-2022529

	Monetary policies	Financial indicators	Trade policy
Kenya	The Central Bank of Kenya has lowered its policy rate by 100 bps to 7.255, lowered banks' cash reserve ratio by 100 bps to 4.25% and raised the maximum length of repurchase agreements from 28 to 91 days, crucially. Plans are to operationalise the Credit Guarantee Scheme for vulnerable micro, small and medium sized enterprises.	At 13%, NPLs are high and rising in the manufacturing and trade sectors, owing to deteriorating profits. Total loans amounting to 29% of total bank loans were restructured by June. Inflation remains well anchored. The exchange rate depreciation has been more problematic. It reflects an outflow of investment, owing in part to risk aversion.	General reduction of VAT from 16% to 14% Prohibition of exports of face masks Temporary ban on imports of used textile products and used footwear
Peru	The Central Reserve Bank of Peru cut its policy rate by 200 basis points to 0.25%. It has reduced the reserve requirement, provided liquidity to the financial system through repo operations. Financial institutions have been allowed to change loan terms without changing classification of the loans. The Bank approved a package (of over 8.8% of GDP) in liquidity assistance (backed by government guarantees) to support lending. The Reactiva Perú Programme has provided loans to affected businesses: by August, 295,708 businesses had received loans within the framework, mostly small and medium enterprises.	Money growth has shown resilience and inflation is contained at just below 2%. Peru also does not have a high level of NPLs.	Temporary introduction of export licensing and permits for PPE Temporary reduction of import tariffs on pharmaceutical products and PPE
Sri Lanka	The Central Bank of Sri Lanka has cut policy rates by 200 bps since March, cutting the required reserves ratio of commercial banks by 3 percentage points and cutting the interest rate on Bank advances by 650 bps. It is supporting its reserves through foreign currency purchases and foreign currency swaps with the Reserve Bank of India and licensed banks (CBSL, 2020). Capital controls on investment outflows and remittances have been instituted, alongside import restrictions of certain goods, including agricultural produce and vehicles. Financial institutions are rescheduling NPLs, while loan classification rules have been relaxed.	Annual private sector credit growth decelerated in June 2020. Credit to the public sector has accelerated, causing an expansion of broad money in 2020. Interest rates on new lending by commercial banks, on average, have now reduced to single-digit levels. As of late July, there have been net capital outflows of around \$500 million (0.6% of GDP) since mid-February, mostly from the domestic treasury market. The Sri Lankan currency depreciated by around 2.7% against the US dollar in the half year since. Sri Lanka's EMBIG spread has more than doubled since mid-February.	Imports of non-essential goods (vehicles and plastic goods) suspended Reduction of tariffs and increase of quotas for masks and disinfectants Temporary export prohibition of masks Tighter forex controls

	Monetary policies	Financial indicators	Trade policy
Tanzania	The Bank of Tanzania reduced the discount rate from 7% to 5% and reduced collateral haircuts requirements on government securities. The Statutory Minimum Reserves requirement was reduced from 7% to 6%.	NPLs are being targeted by the Bank of Tanzania. At 10%, the share of NPLs is high and likely to rise if international lines of credit are not renewed and further defaults emerge. It has provided regulatory flexibility to banks to restructure its loans and other financial institutions that will carry out loan restructuring operations on a case-by-case basis.	Tariff reduction for medical supply products

Source: Appendix 1

3.3 Macroeconomic projections

Several international institutions provide macroeconomic forecasts that can be used as economic background. For example, the IMF estimated a recession in 2020 but projected a quick upturn for 2021 (looking similar to a V-shaped recovery) and sustained growth through 2022, underpinned by optimism on the vaccine roll-out coupled with economic activities that are adapting to socially distanced environments (IMF, 2021a). The forecast of the World Bank shows similar trends but is more pessimistic than the forecast of the IMF for 2020 to 2022. The WTO was very pessimistic about trade in 2020 but revised estimates upwards throughout the year. Table 4 provides a summary, including the latest World Bank (2021) macroeconomic projections for the five case studies.

While macroeconomic forecasts suggest that developed and G20 countries will be affected more than poorer countries, this is not true when considering the longer term. The World Bank (2021) suggests world growth will drop by 4.3% in 2020. GDP growth in emerging and developing economies and low-income countries will be lower by more than 6% in 2020 owing to Covid-19. However, the long-term GDP per capita effects are evident in poorer countries: 31% of emerging and developing economies and 16% of low-income countries are expected to lose at least 10 years of per capita income gains (ibid.). This is in part because the magnitude of policy responses is less. For example, Raga and Housseini (2020) suggest fiscal and to some extent monetary responses have been lower – fiscal stimulus packages as a share of GDP are 10 times less in low-income countries/Africa than in G20 countries. A substantial financing gap remains in Sub-Saharan Africa, estimated at between \$130 billion and 410 billion over 2020–2023 (IMF, 2020d)

Table 4. GDP growth and trade growth projections, 2020–2022

	Covered	GDP growth (%)			Trade volume growth ¹ (%)		
		2020	2021	2022	2020	2021	2022
IMF	World	-3.5	5.5	4.2	-9.6	8.1	6.3
OECD	World	-4.2	4.2	4.2	-10.3	3.9	4.4
World Bank	World	-4.3	4.0	3.8	-9.5	5.0	5.1
WTO	World	-4.8	4.9		-9.2	7.2	
AfDB	Africa	-1.7 to -3.4	3.0 to 2.4				
ADB	Developing Asia	-0.4	6.8				
Country projections ²	Bangladesh	2.0	1.6	3.4	-12.5	0.5	15.1
	Kenya	-1.0	6.9	5.7	-13.4	13.4	8.7
	Peru	-12.0	7.6	4.5	-13.4	7.5	4.3
	Sri Lanka	-6.7	3.3	2.0	-19.9	33.1	15.2
	Tanzania	2.5	5.5	6.0	-2.3	3.7	3.7

¹/Trade measures as follows: IMF: trade in goods and services; OECD: real trade; World Bank: goods and nonfactor services; WTO: merchandise trade. ²/ Country GDP projections are based on World Bank (2021); country trade growth projections are based on IMF (2020e).

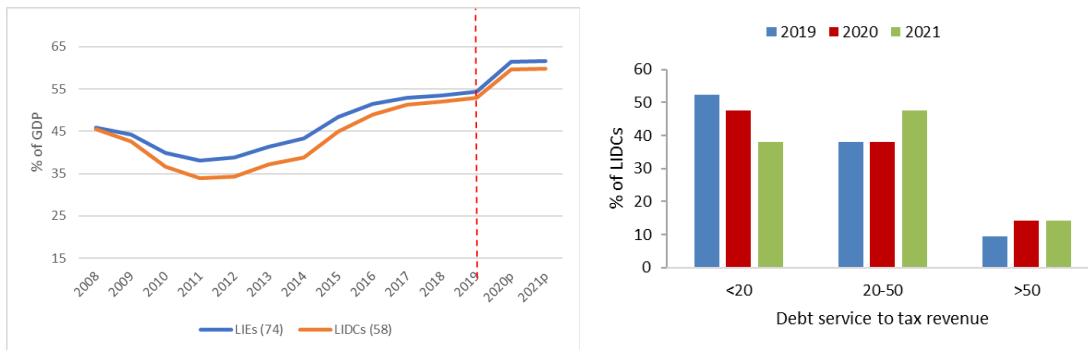
Sources of aggregate GDP and trade growth projections: IMF (2021a), OECD (2020), World Bank (2021), WTO (2020b), AfDB (2020) and ADB (2020).

3.4 The underlying socioeconomic and environmental context

3.4.1 Debt distress

The devastating macroeconomic impacts are happening at a time when many low-income countries were already suffering from debt distress. After Heavily Indebted Poor Countries (HIPC) and Multilateral Debt Relief Initiative (MDRI) debt relief in the 2000s, many poor economies began to borrow again. Debt (as a share of GDP) was already increasing prior to the crisis and will increase rapidly as a result of Covid-19 (Figure 3). Much of the additional debt is not from the traditional donors, but also from China and private creditors, thus increasing the non-concessional share of debt. This means that the debt service burden is expected to be greater than 20% as total tax revenues for two thirds of low-income economies. Other metrics such as debt as a share of export revenues are also increasing rapidly. Some countries such as Zambia have had unsustainable debt and have had to default; others such as Ecuador have had to restructure their debt. The five countries of interest vary in debt levels, and some such as Sri Lanka face major challenges in terms of debt sustainability.

Figure 3. Increased public debt (% of GDP) and debt service burden (% of tax revenues)

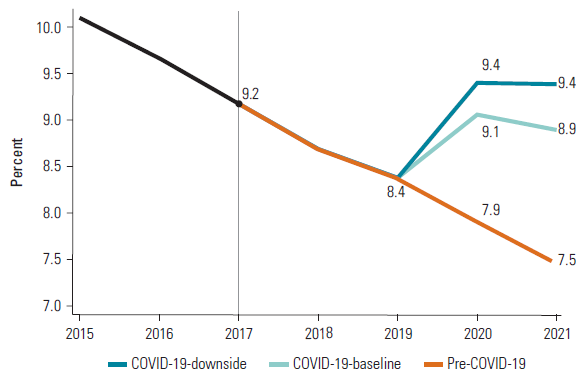


Source: Mustapha (2020), LIE = low-income economies. LIDC = low-income developing countries

3.4.2 Poverty levels

The effects in poorer countries are also different, as they have a large informal sector that is also affected in a major way, and levels of poverty are higher, even though they had declined substantially for many years. Poverty numbers (extreme poverty) are now expected to increase by between 88 million and 115 million in 2020 (World Bank, 2020d), setting back poverty reduction by around three years. Figure 4 shows how this translates into an increase into global poverty rates.

Figure 4. Global poverty (at \$1.90 per head a day), 2015-2021



Source: World Bank (2020d)

3.4.3 Gender

Many countries also face structural challenges in gender inequalities. Gender equality is defined as a situation where all forms of discrimination against women and girls have ended (UNDESA, 2015). The expected outcome of this situation would correspond, not only in increased women's participation or targeted policy programmes but also in women having greater control over resources (Elson, 1995).

Progress on gender equality has been slow and fragile. The most recent reporting of the High Level Political Forum, which monitors the Sustainable Development Goals (SDGs), finds 274 legal reforms have been passed in the past decade to support gender equality, there are more girls in school than ever before and maternal mortality is decreasing (UN, 2020). But much still needs to be done for women's empowerment – both economic and social: the OECD (2019) estimates that, at the current rate of change, it will take another 200 hundred years, equivalent to about nine generations, to achieve gender equality.

Furthermore, the Covid-19 crisis has reversed progress achieved to date while further entrenching inequalities. Evidence has started to emerge that, during the pandemic, cases of domestic violence have increased by 30% in some countries, and that women have disproportionately borne additional unpaid care work during lockdowns (three times as much as their male partner) while their jobs are 1.8 times more at risk than men's owing to the crisis (Azcona et al., 2020; McKinsey, 2020; UNDESA, 2020). Hence, a gender-sensitive recovery economic plan is key to ensuring women are not left behind in this crisis.

Box 2. Macroeconomic policies and gender

Coordinated macroeconomic policies may support gender equality. Indeed, macroeconomic policies are not gender-blind and their distributional impact is different depending on gender and socioeconomic status. Gender-responsive macroeconomic policies can affect paid and unpaid work and rebalance outcomes or deepen existing inequalities for women. Furthermore, macroeconomic policies that invest in gender equality raise economy-wide productivity, which can create fiscal space, and hence be self-sustaining. The mechanisms through which fiscal, monetary and trade policies can act on reducing the gender gap are outlined below:

- Fiscal policy

Fiscal policy is a tool to stabilise the macro-economy and can be used to promote full employment. Government spending can support employment levels and create the conditions for women to be working in secure and decent jobs at a decent wage and in decent working conditions. This can take many forms and encompass state work programmes and retraining programmes but also provision of childcare and other care work that befalls on women, tighter regulations and enforcement of employment laws.

- Monetary policy

Monetary policy can promote gender equality via credit availability to women entrepreneurs. Selective credit targeting with lowered interest rates and collateral requirements can expand access to credit for women entrepreneurs. In turn, this increased activity in the real economy can trigger job growth as productive assets are more accessible to women. Here, there is a case to make for coordinated monetary and fiscal policy so that government spending supports credit availability to enable decent job creation.

- Trade policy

Trade liberalisation creates or destroys jobs across production sectors and affects relative prices. This affects women differently depending on their socioeconomic status, which will determine their exposure to job losses or uptake of job opportunities and to a relative price change. Given that women in low-income countries represent a large share of the unskilled labour force, liberalisation in exports of unskilled labour-intensive goods can create more employment at fixed wages for women, while workers in import-competing sectors may need adjustment support.

Source: Seguino (2018, 2019); Elson and Seth (2019); Fontana (2020)

Table 5 (with data for the country case study) reviews indicators that provide background as to the current situation on gender equality:

- The Social Institutions and Gender Index (SIGI) of the OECD is a measure of discrimination against women in social institutions across four dimensions: discrimination in the family, restricted physical integrity, restricted access to productive and financial resources and restricted civil liberties. 0% indicates no discrimination; 100% corresponds to very high discrimination based on gender. World average discrimination in social institutions is 29% [8%–64%] (methodology is available in SIGI, 2019).
- The United Nations Development Programme (UNDP) Gender Inequality Index measures a complementary dimension of gender equity focusing on empowerment (education rate and political representation), labour market participation and reproductive health. The index ranges between 0 and 1, with higher values indicating higher inequalities (UNDP, 2019).
- Gender gaps in labour participation rates owing to social norms and barriers hinder economic growth. For example, it is estimated that, if the gender gap in labour participation rate between men and women is reduced by 25%, then the GDP growth in 2025 would be 9.2% higher in Southern Asia and 2.2% higher in Sub-Saharan Africa (ILO, 2017).

Table 5. Rapid review of indicators related to gender equality

	SIGI (OECD, 2019)	Gender Inequality Index (UNDP, 2019)	Gender gap in labour force participation rates in number of points (ILO, 2017)
Bangladesh	55%	0.536	46.8
Kenya	35%	0.545	6.1
Peru	24%	0.381	15.5
Sri Lanka	43%	0.38	39
Tanzania	46%	0.539	7.9
World	29%	0.439	26.5

Note: For all indicators, a higher figure indicates higher gender inequality.

These indicators provide contextual background to the recovery interventions. Bangladesh is a country with deeply entrenched unequal social norms, which is reflected across three indicators. Kenya and Tanzania present a relatively similar profile and score relatively well compared with the world average on women's participation in the workforce. Peru and Sri Lanka score below the world average on issues related to empowerment.

Beyond the basic human rights aspects, gender equality or inequality has positive or negative repercussions for the economy and countries' income. Indeed, if gender parity in social institutions was achieved by 2030, it is estimated that world GDP would increase by 0.4% every year until then (OECD, 2019a). Hence, the measured gender inequality presented above translates into lost economic growth. A gender equality drive could leverage growth for recovery.

3.4.4 Climate change

Another driver of worsening inequalities is climate change. The global and almost simultaneous lockdown resulted in a small decrease in greenhouse gas (GHG) emissions that has not altered the course of the planet's climate – on track to increase by at least 1.5°C by 2100 (IPCC, 2018). Indeed, estimates show that the effect expected from the worldwide lockdown would correspond to 0.01°C cooling effect by 2030 (Forster et al., 2020). In other words, adaptation and unlocking low carbon development pathways remains crucial in recovery plans for developing countries.

Box 3. Macroeconomic policies and climate change

Climate risks impact the macro-economy as climate-related physical, transitional and liability risks can affect output, investment and productivity, triggering negative consequences for livelihoods and prosperity. Conversely, macroeconomic policies can shift the economy towards a low-carbon and resilient economic development pathway.

- Fiscal policy

Fiscal policy can support less GHG emission-intensive sectors over high GHG intensity ones. For example, fiscal policy can support renewable energy projects over carbon-dependent ones such as coal power plants, thus contributing to the decarbonisation of the country's economic output.

- Monetary policy

Central banks and supervisors, by modifying regulatory frameworks, can steer investment fund allocation in projects and activities that emit low levels of GHG emissions. The regulator can take micro and macro prudential measures to align collateral frameworks and banks' portfolios with climate goals.

- Trade policy

Trade policies can support specific goods and services and processes such as standards that are low carbon or that can enhance the adaptive capacity of specific sectors (e.g. climate-smart agricultural technology).

Source: Dikau et al. (2020); Batten (2018); IMF (2019); Zenghelis (2011)

Table 6 reviews vulnerability and adaptation to climate change in case study countries and the climate finance flows received by each country for the year 2018.

- The Notre-Dame Global Adaptation Initiative (ND-GAIN) index (2018) is composed of an indicator evaluating countries' vulnerability to climate change and of one assessing 'readiness' to leverage investment for adaptation. The vulnerability assessment considers food, water, health, ecosystem services, human habitat and infrastructure, while the readiness to adapt assesses economic, governance and social enabling environment. A low score indicates poor performance.
- Climate finance for mitigation and adaptation actions as reported in OECD (2018) includes official development assistance, other official flows, private grants and private amounts. The data is for year 2018.

Table 6. Selected indicators related to climate change

	ND GAIN Index	Climate finance received in 2018 (\$ billion)	
		Adaptation	Mitigation
Bangladesh	36	1.27	0.26
Kenya	37.5	0.42	0.32
Peru	48.8	0.28	0.23
Sri Lanka	46.1	0.14	0.05
Tanzania	38	0.24	0.22
Non-OECD countries	n.r.	31.95	52.44

Bangladesh, Kenya and Tanzania all have high level of vulnerability to climate change and a low level of readiness to adapt. Peru and Sri Lanka both have high vulnerability but also a high level of readiness to channel adaptation. The countries studied, together, receive about 7% of global climate finance for mitigation and adaptation investments.

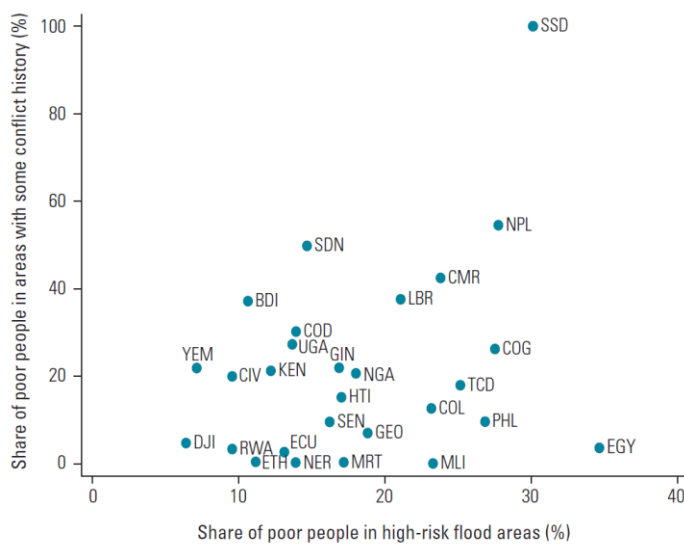
3.4.5 Multiple risks

Climate change impacts reinforce already existing socioeconomic vulnerabilities and other stresses. The climate shock intersects with issues related to poverty, migration, gender, health, social exclusion and

age. Covid-19 has further exacerbated any vulnerability groups, already marginalised by socioeconomic conditions reinforced by climate change. Preliminary evidence points to an increased number of people falling into extreme poverty globally, with women disproportionately affected. The pandemic is projected to push an additional 96 million persons into extreme poverty, of which 47 million are women and girls, bringing the total number of women living in extreme poverty to 247 million by 2021, compared with 236 million men (Azcona et al., 2020).

Among the many overlapping stresses, Figure 5 shows poverty hot spots where climate and conflict risks intersect. The share of poor people in countries with a history of conflict and in countries with flood risk is high in some countries. The Covid-19 shock that has come on top of this is one further problem to address. The five countries of interest may also face such overlapping risks.

Figure 5. Poverty hotspots where conflict and climate risks overlap



Source: World Bank (2020)

3.5 The Covid-19 baseline: background indicators for country level assessments

Considering the above, the Covid-19 baseline at country level consists of:

- *Economic indicators.* Current, past and projected GDP, sectoral structure of economies including sector employment and productivity, trade, balance of payments, fiscal balance and government debt, macroeconomic policies so far, initial macro projections. This includes high frequency indicators (Appendix 3) and long-term structural variables.
- *Social indicators.* Employment by group, gender and type of work, income inequality, gender inequalities. Apart from recent household surveys, many indicators are structural indicators that are not easily measured with high frequency (though see Appendix 3 on social trackers).
- *Environmental indicators.* Climate risks and vulnerability assessments at sectoral level to evaluate exposure of a policy choice to climate risks (e.g. flood risks of investing in a given hard infrastructure as part of fiscal stimulus), adaptation and mitigation indices.

4. ANCHORING FURTHER MACROECONOMIC POLICY RESPONSES

A major step in the methodology is policy design. We envisage two broad policy anchors (Section 4.1), a fast recovery and building back better, in which specific policy simulation can be designed, consisting of fiscal, monetary and trade policies (Section 4.2). Section 4.3 brings the policy descriptions together and provides policy options at the country level, linking with country experts.

4.1 Broad policy anchors

We envisage two broad policy anchors (see Table 7): (i) a fast recovery and (ii) building back better (BBB), or Rainbow Recovery. Countries can adopt a range of measures in response to the unprecedented macroeconomic challenges of Covid-19. Some of these are intended to achieve as fast a recovery as possible. Others are intended to achieve specific policy objectives, such as those envisaged in BBB in order to support broader advancement of the SDGs as well as the implementation and strengthening of commitments made under the Paris Agreement. An intersection of these policies can both achieve a fast recovery and contribute to a better, more equal and more sustainable future.

Policy-makers are tasked with returning to pre-Covid-19 levels of production and trade in order to mitigate the severe economic effects unleashed by Covid-19, but there is also a commitment to addressing the root causes of economic and environmental vulnerabilities, including through addressing sustainability and developmental concerns enshrined within the SDGs. From a BBB perspective, it is crucial for the longer term not to lock in unsustainable or inequality reinforcing measures in the current recovery, even though short-term popular pressures may favour those.

Table 7. Policy anchors

Fast (short-term) recovery	BBB/rainbow recovery
<p>This policy anchor involves getting the economy recovering faster in the short term (and back to where it was before crisis) but without much consideration of the longer-term implications (in economic, social and environmental terms).</p> <p>It focuses on (general) macroeconomic policies with some targeted protection to benefit short-term economic interests.</p>	<p>This policy anchor aims for a better recovery that considers not only long-term economic outcomes but also social outcomes (especially gender) and environmental outcomes.</p> <p>It includes macroeconomic policies, especially those aimed at BBB.</p> <p>It focuses on higher local value addition, which is greener and more inclusive over the long term.</p> <p>It embeds climate and gender objectives from the outset is critical.</p>

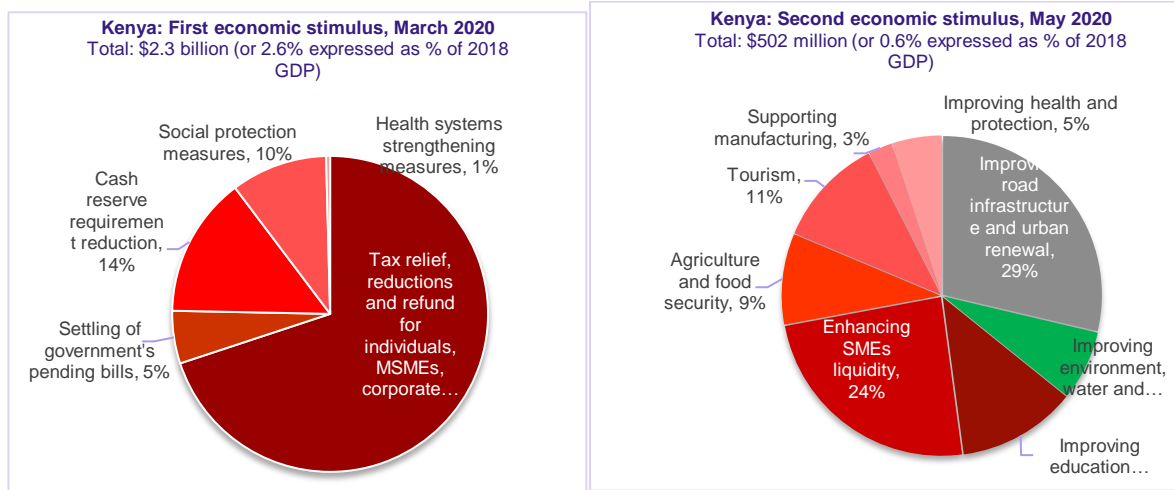
4.2 Designing policy simulations of specific macroeconomic policy packages

4.2.1 Fiscal policy options

Fiscal policies for the fast recovery increase the magnitude of the fiscal response, without considering the impact on fiscal sustainability, and allocate these to households and sectors in the same way as they have been allocated previously. For the BBB/rainbow recovery, the focus of the stimulus is on sectors that contribute to diversification, human capital, gender equality, digitalisation and renewable energy, and hence have a long-term horizon in mind.

With limited fiscal resources as discussed in Section 2, governments face competing priorities of financing immediate needs of the health systems and affected economic sectors, and of employing transformative measures to mitigate the pandemic’s long-term economic scarring effect from increased unemployment and poverty, and disruptions in production and human capital accumulation. This is illustrated in the case of Kenya, where the first tranche of the rescue package comprised mainly a red stimulus. While the second tranche started to consider blue (e.g. infrastructure) and green (e.g. improving environment, water, sanitation) (Figure 6, right hand side), this remains substantially small (\$180 million) compared with the total red stimulus (\$2.3 billion) (Figure 6).

Figure 6. From largely ‘red’ (state interventionist) fiscal stimulus to ‘rainbow’ stimulus



Data source: [State House of Kenya](#)

Thus, it is critical for governments to identify and tailor fiscal measures that have the highest multiplier effects and can result in most positive, transformative and sustainable economic outcomes (BBB).

4.2.2 Monetary and financial policy options

A protracted U-shaped global growth recovery could occur with isolated regional spread of Covid-19. The associated ‘uncertainty shock’ (Bloom, 2009) would continue to weigh on potential growth owing to the economic interruption. Regional outbreaks also suggest supply chain disruptions that would mean continued loss of foreign exchange revenue from exports and remittances. This would be particularly harmful for small, open and indebted economies, given that selective risk aversion would also hurt investment inflows – necessitating further rate cuts and targeted credit easing. It is likely that countries with an already high debt overhang would see their NPL positions worsen. To the extent that countries are able to withstand the inflationary effects of currency depreciation, more rate cuts would be warranted and further targeted credit to enterprises in hardest-hit sectors. In this context, there are two types of policy options:

- **Fast recovery/business as usual.** The first policy scenario is one in which central banks implement monetary policy in order to return their respective economies back to a pre-Covid-19 growth path, largely using conventional and previously used monetary policy tools. Under a baseline assumption of a U-shaped global macroeconomic recovery, these policies would entail a combination of further rate cuts, enhanced quantitative easing, and, in more extreme cases where there is limited policy space, accessing IMF and bilateral donor funding.
- **Building back better** entails a policy package that both returns economies back to their pre-Covid-19 growth path but does so within a context of greater gender equity and resilience to climate change. The pandemic has put women in particular in a vulnerable position given their roles in the care economy (Diallo et al., 2020). Government and central banks could allocate more spending

to public investment in the care economy, and to green finance, with central banks providing low-cost credit to stimulate private investment.

We examine examples of these policy options in each of the country contexts in Appendix 1.

4.2.3 Trade and production policy

We also distinguish between two types of trade and production policies. In the fast recovery, trade policies may succumb to protectionist tendencies. This may involve, for example, increasing economic activity in the short run by protecting domestic firms from foreign competition. This helps increase competitiveness in the local market of domestic firms in the short run. As a consequence of this focus on protection, efficiency and productivity do not grow, and local firms struggle to become internationally competitive. A focus on delivering short-term economic growth excludes considerations of developing greener and climate-friendly sectors. A comprehensive BBB/rainbow scenario with a focus on international competitiveness and social and climate objectives considers climate and socioeconomic development gains from a longer-term perspective. Table 8 provides some examples of policies in each of the scenarios. Appendix 2 provides further detail.

Table 8. Trade policy options in the two policy anchors

Fast recovery	BBB, rainbow recovery
Import restrictions (high tariffs, non-automatic import licences, abuse of contingent protection, increase of non-tariff barriers (NTBs) based on health grounds)	Reduction of import measures aimed to increase efficiency
Strategic devaluation of exchange rate and/or creation of segregated exchange rate markets	Targeted support to environmental/climate-friendly sector, products, processes and technologies
Prioritisation of domestic suppliers in government procurement	Measures to facilitate trade and investment
Tax incentives for labour-intensive and traditional sectors	Trade agreements aimed at increasing market access and domestic efficiency
Trade agreements aimed at increasing mutual trade diversion	Government intervention aimed at coordinating actions towards transformation of the economy and the adoption of climate-friendly practices
Incentives to the development of local/regional supply chains with little efficiency consideration	Measures to increase women’s participation and increase their labour supply
More government intervention in the domestic economy aimed at boosting economic activity (e.g. price-setting)	
Greater reliance on domestic savings (lower reliance on FDI)	

4.3 Policy matrix: summary and country applications

Table 9 summarises the main policies considered in this section, divided into the two policy anchors.

Table 9. Possible additional policy responses to Covid-19

	Back to business as usual asap, fast recovery	Building back better/rainbow recovery
Fiscal policy	Additional fiscal stimulus (e.g. 5% of GDP), allocated to sectors as previously (e.g. general tax relief)	Focus stimulus on renewable energy, sectors for diversification, human capital, gender, digitalisation
Financial policy	Further interest rate cuts, enhanced quantitative easing, accessing donor funding	Central banks providing low-cost credit to stimulate private investment (specific sectors, small and medium enterprises, climate); moral persuasion on climate change
Trade policy and production	Protecting growth in (politically aligned) domestic production through tariffs, NTBs and procurement	Open trade and investment rules; trade facilitation (including for environmental goods and services); target value addition in local production relevant for economic transformation, green growth and female economic empowerment

It will not be possible to analyse all policies in each country. It is likely that there is a need for detailed analyses of some policies that are currently being considered by policy-makers in the specific country context. Based on discussions with experts in countries, Table 10 summarises the key policies we are likely to analyse.

Table 10. Macroeconomic policy responses to Covid-19: country options

	Back to business as usual asap, fast recovery	Building back better / Rainbow recovery
Fiscal policy	Kenya: Increased stimulus as previously implemented (e.g. for households only) Sri Lanka: Stimulus of 5% of GDP as previously indicated	Kenya: Stimulus targeted at sectors with high economic or green multipliers, e.g. a life fund for business or a social/green fund Kenya: Better consideration of how fiscal stimulus is being financed (fiscal consolidation) Sri Lanka: Improved macro management (e.g. fiscal vulnerabilities, trimming a bloated public sector, improving tax administration, a debt standstill with private creditors and China, and a new IMF programme) and creating space for a fiscal stimulus; Policies for low carbon transition (increasing renewable energy investments, carbon taxes and improving public transport) Bangladesh: fiscal stimulus that promotes exports and value addition (with consideration of how it has been raised) Peru: Fiscal stimulus that reaches the informal sector and promotes green industrialisation and agricultural value chains Tanzania: manage public debt stocks, targeted support for MSMEs and digitalisation, and social protection
Financial policy	Kenya: More general financial liquidity constrained in use	Kenya: More targeted liquidity while dealing with NPL issues; lifting of interest rate cap Sri Lanka: Creating a resilient financial sector (e.g. reducing losses at state banks, consolidation of non-bank financial institutions, stock market reforms, and a new development bank for the poor) Tanzania: directed support to micro finance institutions

<p>Trade policy and production</p>	<p>Kenya: Import substitution in garments (ban second-hand clothing, more NTB, food) Sri Lanka: import substitution Tanzania: support domestic production</p>	<p>Kenya: Focus on integration, trade facilitation, free trade agreements with the US, promoting investment in diversification and manufacturing, retooling factories for personal protective equipment (PPE) Tanzania: Enhanced regional integration. Strategic plans on production to realise regional investment plans for more value addition; better trade facilitation; targeting exports and trade Sri Lanka: Enhanced trade and FTA strategy (limits to import substitution, streamlining the import regime, surveillance of non-tariff measures in overseas markets, and concluding FTAs with Asian trading partners), Promoting domestic agriculture and food security (increasing agricultural productivity, reducing post-harvest losses, and better distribution), Fostering inclusion and social protection (safer transport and childcare to boost female labour market participation, better targeting of social protection and a national pension scheme) Peru: promoting exports of high value-added agricultural goods</p>
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Source: Discussions with country teams. Country outlines.

5 ASSESSING POSSIBLE ECONOMIC, SOCIAL AND ENVIRONMENTAL IMPACTS OF POLICY RESPONSES

This section discussed how to assess the possible economic, social and environmental impacts of macroeconomic policy responses. This involves constructing a causal chain analysis from policy changes to impacts. We first discuss socioeconomic impacts (Section 5.1), before moving onto gender impacts (Section 5.2) and climate impacts (Section 5.3). Section 5.4 summarises the methodologies

5.1 Assessing the economic impacts of fiscal, monetary and trade policies

5.1.1 Fiscal policies

Most country studies will analyse an increased fiscal stimulus aimed at building back better. The economic effects depend on the size of the stimulus, how it is being financed (including the opportunity costs) and how it is being used. For example, public investment multipliers tend to be large in countries that are less open to trade, with fixed exchange rate regimes, or where central banks have hit their effective lower bound (Ilzetzki et al., 2013; Chodorow-Reich, 2019, as cited in IMF, 2020c). Countries with a low initial stock of public capital (as a proportion of GDP) also have significantly higher public investment multipliers than countries with a high initial stock of public capital, suggesting that public investment in developing countries would carry high returns (Izquierdo, et al., 2019). Fiscal multipliers are much higher during downturns (Gechert and Rannenberg, 2018).

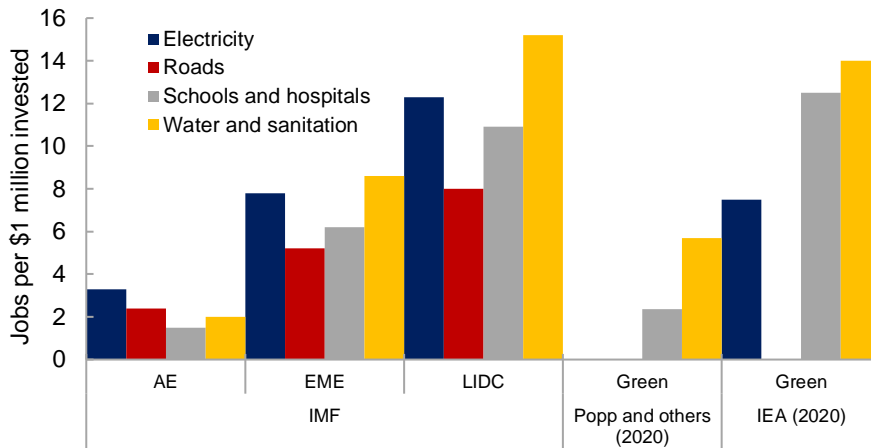
Meanwhile, multiplier effects are lower in countries with a weak fiscal position (e.g. a high level of public debt) since households lower their consumption in the expectations of fiscal consolidation and resulting increased borrowing costs from investor concerns on sovereign risk (Huidrom et al., 2019). For low-income country contexts in particular, if funding of public investment is sourced externally (e.g. aid), the multiplier effect is reduced as a result of real exchange appreciation and the subsequent negative impact on trade (Shen et al., 2015).

Public investment has the potential to boost growth and increase employment, with larger short-term multipliers than public consumption, taxes or transfers, and with medium- to long-term multipliers estimated to be larger than 1.0 (Abiad et al., 2016; Gechert and Rannenberg, 2018; IMF, 2020a). In the long term, public investment expansions (e.g. in the form of infrastructure) can also help reduce inequality especially in low-income countries, by increasing productivity, facilitating labour mobility and fostering structural transformation (Fabrizio et al., 2017; McMillan et al., 2017).

Recent IMF (2020c) estimates show that an unanticipated positive shock to public investment of 1% of GDP increases the level of output by between 0.25% and 0.5% in the first year, with a larger effect after two years (above 2.0) in periods of higher uncertainty.

It is important to identify the sector for which public investment can gain positive outcomes in the context of developing countries. IMF (2020c) estimates that public investment in water and sanitation and electricity displays greater job intensity than that in roads, schools and hospitals (Figure 7). Public investment in clean energy infrastructure can also be labour-intensive and create large employment in the short term, and is likely to crowd in private investment, but some jobs require specific skills, and this is not job-rich in the long term and has less straightforward distributional effect in low-income countries (ibid.).

Figure 7. Job intensity per \$1 million of additional public investment

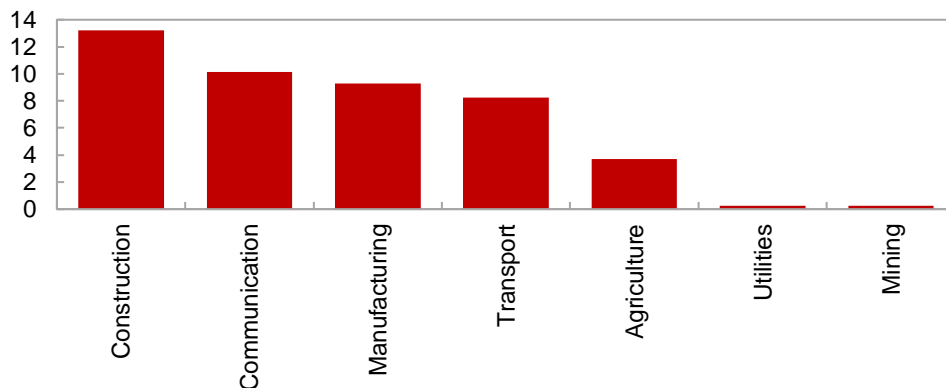


Source: IMF (2020c)

In terms of stimulating private investments, IMF (2020c) estimates show that public investment in the environment, health and social, and entertainment sectors can result in higher impacts on private investment than from public investments in other sectors. An increase in public investment will crowd in most investments in construction, communication and manufacturing sectors (Figure 8).

Figure 8. Effect of public investment on private firms’ net investment

(Effect, in percentage change, of an increase of public investment by 1 percent; one-year horizon, by sector of operation of firms)



Source: IMF (2020c)

As the pandemic is changing the shape of the recovery (e.g. more opportunities for e-commerce, shortening of global value chains, increasing domestic resilience and food security), governments will also need to allocate resources on physical and human capital according to post-pandemic production and employment requirements. Higher human capital, in the form of investment to improve education, will complement the increased utilisation of technologies and physical capital. Indeed, returns to education are especially high when technology is changing (World Bank, 2018), and this will be highlight relevant as economies continue to improve digital infrastructure in order to implement socially distanced production and working-from-home arrangements until a large part of the population gets vaccinated.

A fiscal stimulus has links with monetary and trade policies and outcomes. For example, in Bangladesh, part of the government stimulus is allocated to promoting exports. Sectoral support can be effective in increasing value addition, ramping up productivity and raising competitiveness and exports. Often, because governments are constrained fiscally, monetary options are used instead. But the use of fiscal stimulus has also had macro-stability implications and badly focused monetary expansions can lead to crises and worse fiscal revenues.

5.1.2 Monetary policies

A country's monetary policy response is crucial in underpinning economic recovery. Its effectiveness is often heightened during financial crises: if implemented quickly, it can have larger and quicker effects on output and inflation during recession (Jannsen et al., 2019). For emerging and developing economies, the macroeconomic uncertainty associated with the pandemic is likely to have impaired monetary transmission. Both developing and developed country central banks have cut policy rates, in many cases, to historic lows. They have also provided additional liquidity, including through open market operations and have instituted swap line arrangements.

Typically, the first transmission mechanism of monetary policy works through the official interest rate, which is larger the deeper the financial markets and the more sensitive investment and consumption is to rate changes. This rate then influences both money market rates and expectations. It is changes in the market rates that affect behaviour (such as bank deposit rates and inflation expectations). Therefore, the ability of the central bank to influence economic agents' behaviour depends on the interaction between official and market interest rates (Mariscal Biefang-Frisancho, and Howells, 2002). Changes in the money market rate, and in expectations, then feed through, to varying degrees, to asset prices, money, credit, bank rates and the exchange rate. The subsequent adjustment in supply and demand in both goods markets and the labour market will adjust with domestic wages and consumer prices. Changes in the official interest rate can have bigger or smaller effects depending on any one, or several, of these channels. If there is a large exchange rate reaction to an adjustment in interest rates (one which was unexpected), there could be a larger impact on imported prices and on overall inflation prospects.

Following the Covid-19 pandemic and its economic consequences, both developed and developing economies have implemented targeted unconventional monetary policy measures. These measures have sought to offset any impairments in the transmission mechanisms of monetary policy in the wake of the current economic recession. A dimension of the pandemic is that it also constitutes a deep economic shock: changes in fiscal policy have been accompanied by monetary policy adjustments. Most Sub-Saharan African central banks have opted to cut interest rates and to provide liquidity directly to sectors that are the most affected, whereas others have effectively started to monetise their fiscal deficits. This type of quantitative easing could circumvent any resistance in banks' willingness to lend – a key channel for conventional policy. If it is low, perhaps because of risk aversion, an interest rate change would have a smaller impact on actual lending, and consequently little influence on the real sector of the domestic economy.

The raft of unconventional measures notwithstanding, impaired credit transmission mechanisms amid the current pandemic could hinder policy stimulus in some emerging markets (Barajas et al., 2013; Mishra et al., 2016; Abuka et al., 2019). Effective liquidity provision could be hampered by high debt levels and the ongoing resolution of NPLs.³ What's more, the current pandemic's economic fallout is likely to bring about an increase in NPLs. Such an eventuality has tended to depress loan growth and the scope for economic recovery (Aiyar et al., 2015; Kalemlı-Ozcan et al., 2015). Typically, NPL levels peak at about 20% of total loans. And yet, in developing countries in particular, they can exceed and have exceeded 50% of total loans. They are a defining feature of crises: only less than a fifth of banking crises avoid high NPL levels (exceeding 7% of total loans). The current context is heightened by emerging markets seeing the sharpest portfolio flow reversal on record – about \$100 billion or 0.4% of their GDP (Adrian and Natalucci, 2020).

Trade policies

A protectionist and short-term response to economic downturns involves restricting trade and reserves the domestic market for domestic producers. This could be effective as long as there is significant competition in the domestic market. However, in small countries, this approach has obvious limits because of the upward pressures on domestic prices through inefficient production. As prices increase, growth in demand

³An NPL arises when payments of interest and/or principal are past due by 90 days or more.

slows and so does the recovery. Moreover, the measure affects the competitiveness of domestic firms in foreign markets by increasing input costs.

A BBB and long-run approach involves a substantially more open trade regime. Such a trade policy contributes significantly to the economic recovery by lifting barriers and reducing costs associated with exporting and importing. On the export side, measures aimed at streamlining operations in ports and borders can reduce transport costs and times of products exported. This affects competitiveness of domestic products in other markets. The elimination of taxes and restrictions on exports also have an important effect.

However, the most important channel through which trade policy operates is competitiveness and productivity of domestic firms operating in the domestic market. Actions aimed at reducing barriers to foreign competition can affect competitiveness when barriers are reduced in inputs and intermediate products. The reduction of tariffs and other trade facilitation measures reduce the marginal costs of intermediate inputs, leading to increases in output. This translates into more sectoral value addition and, eventually, general economic activity.

When barriers are reduced, increased foreign supply leads to an increase in competition in the domestic market that raises productivity. Increased competition generates the transformation of the domestic sector by increasing the output of efficient firms and decreasing output in inefficient ones. This increases the productivity of affected sectors.

The supply-side impact of trade policy is complemented by the impact on household consumption. The reduction of taxes and barriers to imports can generate adjustments in the households' consumption baskets that can lead to increases in demand for other products. As consumer prices fall in certain products, households reallocate some of the original budget for these products into other goods and services. This leads to a general boost of demand and economic activity.

Context matters a lot. The economic structure and social and political factors introduce conditions and limitations on both the evolution of the economy and the trade policy response. Undiversified and commodity-based exports, for example, make countries vulnerable to prices fluctuations. GVC governance, on the other hand, introduces additional considerations on the policy space of countries to enter into key markets.

An analysis of the evolution of the export diversification (e.g. Herfindahl index on HS 6 digit exports) as well as the product space indicators provides information about the economic transformation process in a country. An increase in diversification and a move towards more complex exports support economic transformation process associated with building back better. This can be supplemented by additional information such as the share of goods trade in GDP, the share of high-technological exports and the share of manufacturing in value added.

Data on trade in goods could be supplemented by data on services. Modern services, in particular, can also contribute to the economic transformation process as well as generate a particular type of response of the economy. A high share of services exports, dependent on the trade (e.g. transport), or tourism can indicate a special vulnerability in the current Covid-19 crisis. Consequently, a series of indicators that capture the importance of services in the economy and in trade, as well as specific types of services, can also help illustrate how the structure of the economy can affect the recovery. In this sense, indicators such as the share of services in GDP and on exports and the share of tourism/transport in GDP and exports should be considered.

The governance and structure of value chains bring additional dimensions to the recovery and policy response, as a significant component of the recovery may be dependent on decisions made elsewhere. Shortening or re-shoring of value chains may be the result of supply decisions made by whoever controls the value chains. In this sense, having an idea of the relevance of value chains in the trade of the country is of paramount importance. The share of foreign value added in exports can bring information about backward linkages and how import-to-export types of value chains may be affected. The share of intermediate inputs in total exports can shed information about forward linkages.

While the dynamics of regional value chain participation will be difficult to capture, any trends in changes in market orientation at more disaggregated levels should be described. Data on foreign direct investment around trends, sectors, origin of investor and destination within export-oriented sectors is also important.

Female participation in the economy can be reflected in the economic structure. The evolution of the economic cycle can have particular effects on women depending on the economic structure. In this sense, it is critical to capture the participation of women in the economy and in trade. Indicators such as employment rates by gender and the share of sectors in exports that employ a disproportionately high number of women (e.g. garments) can illustrate the participation of women in trade.

The structure of the economy and trade is a significant determinant of the climate and environmental effects. A high reliance on and growing use of fossil fuels indicate additional costs to be supported globally. Information about trade-related emissions can indicate how the recovery may impact the climate and the environment.

A summary of useful structural indicators related to trade is as follows:

- rate of growth of export and imports
- share of trade (goods) in GDP
- share of trade (services) in GDP
- share of tourism and transport services in GDP and exports
- evolution of the stock of FDI
- Herfindhall index of export diversification
- Hausman product-space
- share of high-tech in total exports
- share of foreign value added in exports
- share of intermediate/inputs in exports
- share of sectors with high employment of women in exports
- emissions in exports
- effectively applied tariff rate
- time and cost to export and import.

The following indicators could be used to track the transmission effects of Covid-19 and policy response measures.

- evolution of monthly exports (goods and services), prices and volumes
- evolution of monthly imports of machinery, parts, equipment and inputs, prices and volumes
- evolution of commodity prices of both exported and imported goods
- evolution of monthly travellers' arrivals
- evolution of monthly textiles and garments, fresh fruits and cut flowers, to assess the impact on women employment
- data on wages within export-oriented sectors (e.g. garments)
- evolution of the Grubel-Lloyd index on monthly data in certain chapters.
- evolution of exports of steel, aluminum, beef and other highly intensive emitting products and the imports of fossil fuel to assess the environmental impact.

5.2 Assessing the gender sensitivity of policy response

To act on economic gender inequalities, the policy responses can use different levers, such as social protection programmes, labour market measures and fiscal and economic measures. Social protection measures can increase women's ability to seize economic opportunities by acting on unpaid care. Labour market measures can increase women's economic security and open up new opportunities, while fiscal and other economic measures such as monetary and trade measures affect female-dominated economic

sectors and women-owned firms to enhance women's job and economic security. The macroeconomic policy packages here concern fiscal, monetary and trade measures and are examined in turn.

5.2.1 Fiscal stimulus

A fiscal economic stimulus holds the potential to affect gender outcomes since investment spending on economic sectors can be where women represent a large share of the labour force. Figure 8 shows there is a large difference between female share in accommodation and construction sectors – this also suggests that the large drop in tourism owing to the pandemic is disproportionately affecting women. There could be a case for primarily targeting sectors hard hit by the pandemic shutdown and that are female-dominated. In addition, promoting sectors where the labour force is not female-dominated, but which have linkages to sectors that are, can also deliver indirect benefits on female empowerment. Furthermore, investment in social infrastructure for health and care (i.e. current expenditure such as wages of school teachers, nurses, etc.) rather than physical infrastructure only (i.e. capital expenditure such as building schools, roads and hospitals) can also yield multiplier effects for equality that should be considered when choosing the target sector for the stimulus (De Henau et al., 2017).

Having an assessment of the employment structure per sector cross-checked with the sectors that the pandemic has hit hard can help determine where fiscal stimulus could be channelled. Furthermore, the type of job, low-skilled vs low-skilled, permanent vs temporary, fixed vs variable wages, and the working conditions are also parameters to take into account when assessing the sectors targeted.

Table 10. Share of women in paid employment, by sector

Year	2017	2013	2019	2018	2013
Country	Bangladesh	Kenya	Peru	Sri Lanka	Tanzania
Total for all sectors	24%	36%	40%	34%	32%
Agriculture; forestry and fishing	14%	37%	27%	39%	37%
Mining and quarrying	3%	19%	8%	4%	10%
Manufacturing	32%	28%	30%	44%	19%
Electricity; gas, steam and air conditioning supply	9%	27%	5%	11%	3%
Water sanitation utilities	28%	34%	22%	28%	22%
Construction	8%	18%	5%	2%	5%
Wholesale and retail trade; repair of motor vehicles and motorcycles	14%	25%	44%	20%	20%
Transportation and storage	9%	16%	17%	6%	18%
Accommodation and food service activities	21%	35%	65%	24%	60%
Information and communication	10%	38%	34%	31%	22%
Financial and insurance activities	18%	44%	50%	47%	15%
Real estate activities	7%	42%	35%	0%	56%
Professional, scientific and technical activities	13%	28%	49%	41%	49%
Administrative and support service activities	15%	25%	35%	31%	19%
Public administration and defence	15%	35%	34%	34%	29%
Education	40%	42%	58%	68%	44%
Human health and social work activities	50%	60%	69%	66%	60%
Arts, entertainment and recreation	17%	36%	38%	23%	19%
Other services	25%	38%	47%	29%	48%
Activities of households for own use	78%	63%	95%	40%	72%
Activities of extraterritorial organisations and bodies	13%	27%	n.a.	57%	28%
Other	45%	n.a.	n.a.	n.a.	28%

Source: Calculations based on ILOSTAT, 2021, employees by sex and economic activity ('000s) – annual

Finally, if the stimulus involves a direct cash transfer programme, these can also directly support women if they are designed in such a way that women can access them. If the recipient is the designated 'head

of household’, most often this will be a male household member and intra-household dynamics may preclude spending on women and girls, with the result that the cash programme may reach them less.

5.2.2 Monetary and financial stimulus

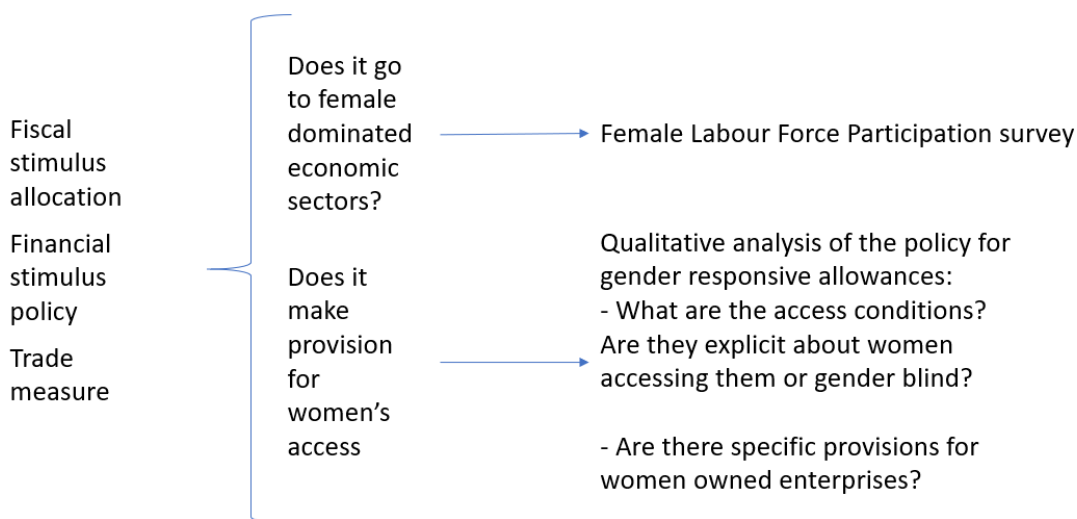
Monetary and financial policy packages affect credit and lending and, if accessible, can directly support female-led households and female-owned enterprises. Designing specific provisions to ensure women can access credit and low-cost lending schemes is key in ensuring this policy package reaches them. This can take the form of reduced difficulty in getting a loan, such as requiring for women lower levels of collaterals doubled with an awareness campaign about this change. Barriers to women accessing finance, however, may vary by country context and social norms and should be analysed to provide provisions that match the difficulty women experience.

5.2.3 Trade measures

Supporting trade in female-dominated sectors can feed into increased job security for women. Liberalising trade could in the long run favour women in the services sector but impact those in the manufacturing sector, while moves towards greater protectionism (from import restrictions to direct prioritisation of domestic production) may hold short-term benefits but ultimately will yield low long-term benefits.

Consequently, two main questions can guide the impact assessment of policy packages in view of gender equality advancement: (i) what are the female-dominated sectors, so that the policy packages can target them? and (ii) what are the specific provisions needed to ensure women can access the policy packages? The answer to these two questions will be context-specific, and each case study should analyse where women work (i.e. which economic sectors) and what barriers women face in accessing cash transfer programmes and financial credit so that specific provisions lowering these barriers can be applied.

Figure 9. Steps for gender-responsive macroeconomic recovery measure assessment



A gender responsive macroeconomic policy package would seek to directly address the economic challenges faced by women by supporting female-dominated economic sectors and ensuring women can access finance for their household and business needs.

5.3 Assessing the climate sensitivity of policy response

The macroeconomic policy packages can shape the recovery to be resilient and low carbon by acting on the type of investment the stimulus is allocated to and which sectors receive credit and are supported by trade measures. These levers, along with greater climate ambitions as countries submit their Nationally Determined Contributions at the United Nations Framework Convention on Climate Change, can have a sustainable impact on the recovery pathway.

5.3.1 Fiscal stimulus

The sector allocation of spending holds the potential to support or hinder investment that could either improve climate resilience or rather lock countries in carbon dependency pathways. This may have long-term consequences. A fiscal stimulus that includes infrastructure investment would need to be climate-informed. Infrastructure project feasibility would include climate information so that climate change impacts would not diminish the infrastructure's expected benefits. For a hydropower dam, this means including rainfall and runoff under climate change to ensure the project is viable at more than 10 years. For a road network, this means assessing the risk of floods and landslides under increased precipitations for the proposed route. Furthermore, a climate-compatible fiscal stimulus would not allocate spending to carbon-intensive projects such as coal power plants. Similarly, a bail-out could be made conditional to environmental performance.

5.3.2 Monetary and financial stimulus

In the case of financial stimulus, conditionality of access to low-cost credit can ensure that low-carbon over carbon-intensive enterprises and sectors are supported, or that the loan would need to serve for transitioning to low-carbon production processes. In other words, avoiding a blanket rule but ensuring provisions to either support already low-carbon sectors or sectors that, given investment, could be low carbon, would help support long-term decarbonised development pathways.

Dikau et al (2020) suggest that financial authorities and central banks can focus on the following areas to enhance environmental impact

- Collateral frameworks: The underlying risk assessment for collateral frameworks could be adjusted to better account for climate change-related and other environmental risks.
- Asset purchases, refinancing operations and crisis facilities: Central banks could better align their asset purchases with Paris Agreement goals.
- Prudential measures: In response to the current expansionary liquidity provision measures and the easing of countercyclical regulatory and supervisory instruments, it is necessary to adjust prudential measures to avoid a manifestation of transition risks on the balance sheets of financial institutions.
- Management of central bank portfolios: Central banks could adopt sustainable and responsible investment principles for portfolio management, including policy portfolios, such as the Principles for Responsible Investment (PRI).

Donors could also be encouraged to provide debt relief linked to a green and inclusive recovery (Volz et al, 2019) and consider issues such as debt for nature swaps.

5.3.3 Trade measures

Trade measures could support climate-compatible economic activities like the digital economy and services. Lifting of tariffs and NTBs on low-carbon technologies and products and more specifically on

environmental goods and services would provide countries the opportunity to move towards a low-carbon economy.

As a result, climate-responsive macroeconomic recovery can be guided by the issue of conditionality either of access or of performance in the case of credit or bail-out, and by the issue of ensuring clean development projects is supported over carbon-intensive ones.

5.4 Summarising policy impact pathways

Table 11 summarises a range of critical considerations when assessing the main impact pathways.

Table 11. Assessing the impact of macroeconomic policies

	Main policy area	Key consideration	Social/gender	Climate
Fiscal policy	Additional fiscal stimulus and targeted better	The level and sectoral and distributional focus of spending Multiplier and indirect effects (including on trade, and climate change), which depend on e.g. level of initial public capital and debt, trade openness, elasticity of consumption, exchange rate regime Debt sustainability and links with financial stability	Female employment intensity of targeted sectors Direct or indirect support to female dominated sectors? What type of employment (fixed wage? Safe working conditions, skill level) prevail in the female-dominated sectors targeted by the stimulus?	What economic sectors are targeted by the stimulus: are they low or high greenhouse gas emissions for input and production process? Are they energy-intensive and what energy do they rely on? Are the sectors targeted supporting adaptation to climate change (e.g. climate smart agricultural technology)?
			Can there be a double dividend where the sector supported employs a female labour force and contributes to a low-carbon economy?	
Financial policy	Further monetary easing and directed credit	Interest rate sensitivity of investment and consumption Reach of targeted finance Non-performing loans, debt levels and financial stability	Conditions of access to women at household and enterprise level?	Conditionality of access to credit for carbon-intensive industries and projects?
Trade policy and production	Tariff and non-tariff barriers, free trade agreements, production and investment support	Impact on trade volumes and trade prices Consumer prices, productivity Sectoral value addition	What is the female intensity of economic sectors and sub-sectors affected by trade policy change? Types of goods affected by relative price changes: who consumes them?	Does liberalisation affect low-carbon goods and services?

6 METHODS

During the first few months after the start of the Covid-19 pandemic, international organisations began to develop a range of trackers covering restrictions on mobility, socioeconomic indicators and economic and social policy responses (see Appendix 4). These trackers can be useful to compare, for example, fiscal policy responses across countries. However, such trackers cannot be used to assess impacts of policy responses. More detailed analyses are required for this.

Different methods can be used to assess the impact of policy at country level.

- *Causal chain analysis* is the most commonly used for policy analyses because of its comprehensiveness and relatively quick procedures, and is also likely to be the dominant method for country case studies. It involves constructing a causal chain from policy measures via intermediate channels to outcome variables. It describes the policy shock and examines the impact through behavioural assumptions and an understanding of the structure and context, usually aided by tables and charts. It can in principle include many different outcomes variables, including economic, social and environmental outcomes.
- *General equilibrium modelling* is often used to simulate changes in trade policy (e.g. through the Global Trade Analysis Project (GTAP)) or a fiscal policy (OECD, IMF). It can be useful in understanding the various interactions in an economy and also globally through a set of linkages and behavioural equations. Models tend to have a more comprehensive coverage of linkages, but may be focused on economic variables, and have less scope to understand gender and climate impacts. That said, GTAP can be linked to environmental outcomes, and household surveys can be linked to computable general equilibrium models to get disaggregated effects.
- *Econometric methods* are often used to assess relationships between variables. This may be useful, for example to understand how a change in trade barriers affects productivity. Other statistical analyses can be used to understand differences among firms or sectors.
- *Surveys* can be used to provide quick up-to-date information about stated impact or stated preferences. They are not that easy to implement for a one-off study, unless they are small and focused. There are World Bank surveys that can be used.
- *Expert interviews* can be very useful ways to obtain deeper insights into policy impacts.

The appropriateness of each method depends on the context of the question and the country and the availability of data and models. Table 12 summarises which methods could be used for which policy question.

Table 12. Assessing impact of macroeconomic policies

	Fiscal policy analysis	Monetary policy analysis	Trade policy analysis
Causal chain analysis	Yes	Yes	Yes
General equilibrium modelling	Country models when available		GTAP
Econometric methods	Use of multiplier effects	Use of interest rate sensitivity analysis	Use of elasticities
Surveys	Firm use of stimulus?	Are firms liquidity constrained?	Do firms face trade barriers?
Expert interviews	Yes	Yes	Yes

In addition, a range of cross-country or modelling analyses can be undertaken to complement country level analyses. For example, several countries are exploring the use of FTAs to promote trade. We will use GTAP to examine the economic effects of trade policies and use those to infer social and environmental effects. Specific analysis on implications of the shortening of GVCs within selected sectors of economic importance for case-studies, including a review of available data and trends may also be useful to inform policy implications. Finally, we will examine the gender impact of monetary policies, with reference to the countries of interest.

7 CONCLUSIONS

Effective macroeconomic policy responses to the Covid-19 crisis depend on good policy advice. In order to provide policy advice at country level, country researchers need to follow a broad methodology that connects to policy-makers and responds to the challenges the country is facing.

The **first task** is to construct a Covid-19 baseline, which is not easy because it is a combination of (i) current impacts, which are not yet fully measured; (ii) current policy responses (whose impact may not have been felt – e.g. there are time lags); and (iii) macroeconomic projections for the coming few years, on which there may not be a consensus (e.g. on whether the recovery will be U, L, or V shaped).

The **next task** is to select a set of policy responses that are subject to debate in a country context. We distinguish between policies that aim for a fast short-term recovery without long-term considerations and those that aim for a future that is more transformative, greener and socially more equal. Describing the measures is important – for example a fiscal stimulus targeted at a growth sector that may also be climate-friendly.

The **final task** is to use a set of methods such as causal chain analysis to assess the impact of a policy measure by taking into account intermediate factors or pathways. For example, the impact of a fiscal stimulus depends on the sector (e.g. with large shares of female employment) or whether the economy is open so that increased demand leads to much greater imports. The impact of monetary easing depends on how additional credit can be absorbed and how sensitive the economy is to interest rate changes. The impact of lower trade barriers will depend in part on how this changes prices and firm-level productivity.

For each policy, the impact assessment should go beyond direct economic effects and consider economic, social and environmental over the period 2020–2023. The sections and appendices in this paper will provide some inputs into this process.

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APPENDIX 1: MONETARY POLICY RESPONSES

This appendix discusses country-level monetary and financial policy responses to the COVID19 pandemic. It presents a range of variables that can be used to describe the macroeconomic context, and recent monetary policy responses in countries such as Bangladesh, Kenya, Peru, Sri Lanka and Tanzania. Within each of these country contexts, a number of potential policy scenarios is examined, particularly with reference to ‘building back better’ and achieving greater gender equity and resilience to climate change risks.

What has been the scope and nature of the monetary responses thus far

A country’s monetary policy response is crucial in underpinning economic recovery. Its effectiveness is often heightened during financial crises: if implemented quickly, it can have larger and quicker effects on output and inflation during recession (Jannsen et al., 2019). For emerging and developing economies, the macroeconomic uncertainty associated with the pandemic is likely to have impaired monetary transmission. Both developing and developed country central banks have cut policy rates, in many cases, to historic lows. They have also provided additional liquidity, including through open market operations and have instituted swap line arrangements.

As with the great financial crisis of 2008-2009, central banks have launched a range of new broad-based programs, including to purchase riskier assets such as corporate bonds, in order to stem the cost of credit; central banks are ensuring that households and firms continue to have access to credit at an affordable price. To date, central banks have announced plans to expand their provision of liquidity—including through loans and asset purchases—by at least \$6 trillion and have indicated they will do more if needed.

- **Bangladesh Bank (BB)** has announced a spate of monetary easing measures to ensure adequate liquidity through a series of reductions in its repo rate and in its cash reserve ratios.⁴ Lower remittances (over 5 percent of GDP in 2019) and lower export revenues from the garment sector (over eighty percent of exports) poses risks to the country’s foreign exchange revenues. The Export Development Fund was raised to \$5 billion, with the interest rate now fixed at 2 percent and the refinancing limit increased. BB has created several refinancing schemes including a 360-day repo facility and a credit guarantee scheme to support exporters, farmers and SMEs. Foreign exchange rules were eased to allow foreign companies to access short-term loans. BB continues to intervene in the foreign exchange market to stem weakness in the Taka against the US dollar.
- **Tanzania** has seen its central bank undertake a 200bp policy easing; On May 12, the Bank of Tanzania (BOT) reduced the discount rate from 7 percent to 5 percent and reduced collateral haircuts requirements on government securities. From June 8, the BOT Statutory Minimum Reserves requirement was reduced from 7 percent to 6 percent. There has been no confirmed foreign exchange intervention by the BOT despite recent currency volatility. NPLs are being targeted by the BOT; it has provided regulatory flexibility to banks to restructure its loans and other financial institutions that will carry out loan restructuring operations on a case-by-case basis, with an aim of protecting jobs and medium, small and micro-enterprises.
- **Kenya** has eased monetary policy significantly. The central bank of Kenya has lowered its policy rate by 100 bps to 7.25 percent, lowered banks’ cash reserve ratio by 100 bps to 4.25 percent, raised the maximum length of repurchase agreements from 28 to 91 days, crucially, plans to operationalise the Credit Guarantee Scheme for the vulnerable micro, small and medium-sized enterprises (MSMEs). To mitigate the impact on MSMEs, the Central Bank of Kenya (CBK) is working with banks, Government and development finance institutions (DFIs) on access to concessionary and affordable funds. This implementation will take place with a view to re-skilling and retooling of MSMEs for when the COVID-19 abates.

⁴ As of 13 August, BB announced it will buy treasury bonds and bills from banks (BB, 2020).

- **Peru** has seen historically low interest rates in response to the COVID19 pandemic shock; the Central Reserve Bank of Peru (CRBP) cut its policy rate by 200 basis points, bringing it to 0.25 percent.⁵ It has reduced the reserve requirement, provided liquidity to the financial system through repo operations. Financial institutions have been allowed to change loan terms (those affected by the Covid-19 outbreak) without changing classification of the loans. The CRBP approved a package (of over 8.8 percent of GDP) in liquidity assistance (backed by government guarantees) to support lending. The Reactiva Perú Program has provided loans to impacted businesses: as of August 19, a total of 295,708 businesses have received loans within the framework – 97 percent of them are small and micro enterprises (SMEs). The CRBP has been intervening since late February to mitigate disorderly conditions in the foreign exchange market.
- **Sri Lanka** has seen easing which has included the Central Bank of Sri Lanka (CBSL) cutting policy rates by 200 basis points since March, cutting the required reserves ratio of commercial banks by 3 percentage points and cutting the interest rate on CBSL advances 650 bps. The CBSL is supporting its reserves through foreign currency purchases and foreign currency swaps with the Reserve Bank of India and licensed banks (CBSL, 2020). Capital controls on investment outflows and remittances have been instituted, alongside import restrictions of certain goods, including agricultural produce and vehicles. The interest rate on credit cards will be capped, for transactions up to a certain amount, with a reduction in the minimum monthly repayment. Financial institutions are rescheduling NPLs, while loan classification rules have been relaxed.

Recent developments in key financial indicators

Typically, the parameters and policy levers of monetary policy include the bank/discount rate, open market operations, the variable reserve ratio and changes in liquidity provision. This section presents country-level monetary policy variables in the context of the country case studies discussed above. The variables and framework are discussed in the context of a structural impairment in the countries' monetary transmission mechanisms, particularly in bank lending as is often the case in some emerging markets (Barajas et al. 2013, Mishra et al. 2016, Abuka et al. 2019). In this context, monitoring and resolution of non-performing loans (NPLs)⁶ is of key importance when the credit channel is impaired. The current pandemic's economic fallout is likely to bring about an increase in NPLs, which will depress credit growth and the scope for economic recovery (Aiyar et al., 2015; Kalemli-Ozcan et al., 2015). Typically, NPL levels peak at about 20% of total loans on average. And yet, in developing countries in particular, they can and have exceeded 50% of total loans in the past. They are a defining feature of crises: only less than a fifth of banking crises avoid high NPL levels (defined as exceeding 7% of total loans). The current context is heightened by emerging markets seeing the sharpest portfolio flow reversal on record—about \$100 billion or 0.4 percent of their GDP to date (Adrian and Natalucci, 2020).

- **Bangladesh.** NPLs in Bangladesh are at a high level in its private banks, its DFIs and predominantly its state-owned banks (ADB, 2019). This is likely to hamper the transmission of monetary policy despite the central bank's measures to stimulate lending. It is clear from the BB monetary policy statement, that private sector credit growth and domestic credit growth have fallen short of the desired/targeted rate of growth. However, at 12.7%, monetary growth has remained close to the target ceiling of 13%. Bangladesh's currency stance⁷ poses a risk to its reserves position given the deterioration in foreign exchange revenues stemming from the economic slowdown. Bangladesh needs to safeguard its foreign exchange reserves. There is likely to be a shortfall in foreign exchange revenues from its export earnings. This is likely to make the operation of its managed currency policy difficult.

⁵The CRBP operates an inflation targeting regime which explicitly takes its financial dollarization into account. The implementation of its framework in its dollarized economy is a combination of a standard interest rate rule setting plus the active use of other instruments (such as the reserve requirement ratio) to control financial risks (Rossini et al., 2014).

⁶A non-performing loan arises when payments of interest and/or principal are past due by 90 days or more.

⁷ In the context of the foreign exchange market, BB has aimed to keep the Taka-Dollar exchange rate competitive, intervened by selling USD; To prevent any appreciating pressure on the local currency, BB is currently purchasing foreign exchange from the market while injecting additional liquidity in the local currency market.

- **Tanzania.** At 10%, Tanzania's share of NPLs is high and likely to rise if international lines of credit are not renewed and further defaults emerge. With less money to lend, banks may limit their regular operations, jeopardising financial stability. Additionally, slower growth in Tanzania's trade partners, coupled with the travel ban, reduced demand for its agricultural commodities and final manufactured goods and has hurt tourism (over 26 percent of total exports): main tourism operators forecast revenue contractions of 80 percent in 2020. However, Tanzania will benefit from lower oil prices and higher gold prices, and these price effects, even if the volumes do not change, will mitigate the deterioration of Tanzania's external position. Private consumption and investment growth are both expected to have halved from 5.2 percent in 2019 to 2.4 percent in 2020, and from 8.0 percent to 4.0 percent.
- **Kenya.** Unanticipated large-scale community spread of COVID-19 could disrupt domestic economic activity more severely, coupled with the risk of the potential for drought. COVID-19 has adversely affected the MSMEs. At 13 percent, NPLs are high and rising in the manufacturing and trade sectors, due to deteriorating profits. Total loans amounting to 29 percent of total bank loans, have been restructured as of the end of June. Other sectors such as trade (22.9 percent), real estate (19.5 percent), transport and communication (16.3 percent) and manufacturing (14.0 percent) have been restructured. Inflation remains anchored, and though it crept higher to 5.3% in November, it remains below the 7% peak earlier in the year. This is supported by lower food prices, the impact of the reduction of VAT and muted demand pressures.⁸ The exchange rate depreciation has been more problematic. It reflects, among other things, an outflow of investment from Kenya, owing in part to risk aversion.⁹
- **Peru** has largely seen stability in its monetary aggregates: both money growth has shown resilience and inflation is contained at just below 2%. Peru also does not have a high level of NPLs, though this could change with the economic fallout associated with the COVID19 pandemic. Peru's dollarization has typically reduced the impact of monetary policy on inflation and the output gap (Rossini et al., 2014). Currency depreciation stimulates exports – but it also can trigger a negative impact on the financial position of firms with currency mismatches. As a consequence, the expansionary effect of the exchange rate channel from an interest rate cut is significantly reduced with a sharp depreciation. Dollarization has declined since the implementation of its inflation targeting framework (Contreras et al., 2017) – but at 43%, the share of firms that have a negative currency mismatch is high and structural rigidities remain in the de-dollarization process for firms.
- **Sri Lanka.** Annual private sector credit growth decelerated in June 2020; By contrast, credit to the public sector has accelerated causing a notable expansion of broad money thus far in 2020. Government lending has been spurred by lower rates and government guarantees, notably for the construction sector. With the gradual reduction in market lending rates, interest rates applicable on new lending by commercial banks, on average, have now reduced to single digit levels. However, some market lending rates – for marginal borrowers – remain high. Some improvement in workers' remittances has been observed since June, in contrast to the declining trend observed in March 2020. As of July, there have been net capital outflows of over US\$500 million (0.6 percent of GDP). The Sri Lankan currency has also depreciated by around 2.7 percent against the US dollar since that time and has since been exacerbated by Fitch Ratings downgrade to Sri Lanka's long-term foreign-currency issuer default rating. Sri Lanka's EMBIG spread has more than doubled since mid-February.

Key directions for monetary responses to 'build back better'

A Protracted U-shaped global growth recovery could occur with isolated regional spread of COVID19. The associated 'uncertainty shock' (Bloom, 2009) would continue to weigh on potential growth due to the economic interruption. Regional outbreaks also suggest supply chain disruptions that would mean continued loss of foreign exchange revenue from exports and remittances. This would be particularly harmful for small, open and indebted economies given that selective risk aversion would also hurt

⁸ <https://www.centralbank.go.ke/2020/07/30/mpc-retains-cbr-at-7-00-percent-3/>

⁹ <https://fr.reuters.com/article/idAFKBN21715S-OZABS>

investment inflows – necessitating further rate cuts and targeted credit easing. It is likely that countries with an already high debt overhang, would see their NPL positions worsen. To the extent that countries are able to withstand the inflationary effects of currency depreciation, more rate cuts would be warranted and further targeted credit to enterprises in hardest hit sectors. In this context, this section examines two policy scenarios:

- **Business as usual.** The first policy scenario is one in which central banks implement monetary policy in order to return their respective economies back to a pre-COVID19 growth path, largely using conventional and previously used monetary policy tools. Under our baseline assumption of a U-shaped global macroeconomic recovery, these policies would entail a combination of further rate cuts, enhanced quantitative easing, and, in more extreme cases where there is limited policy space, accessing IMF and bilateral donor funding.
- **Building back better** entails a policy package that both returns economies back to their pre-COVID19 growth path but does so within a context of greater gender equity and resilience to climate change. The COVID19 pandemic has put women in particular in a vulnerable position due to their roles in the care economy (Diallo et al., 2020). Government and central banks could allocate more spending on public investment in the care economy, and in green finance, with central banks providing low-cost credit to stimulate private investment.

We examine each of these policy scenarios in each of the country contexts:

- **Bangladesh.** A policy package that would build back better would improve financial access and financial literacy for women, particularly in rural areas. To date, there is no national financial literacy plan in Bangladesh and 60% of its adult population is left out of formal access to finance – suggesting that banks and MFIs have yet to penetrate at the individual level (Khalily, 2016). Additional targeted credit for women-led small businesses would enhance the transmission of policy, particularly as the demand for microcredit among poorer households is interest rate sensitive (Dehejia et al., 2005). If female workplace participation becomes commensurate to men's, this would help bring about a 27% increase in gross domestic product (ADB, 2016). When it comes to climate risks, targeted credit to sustainable investments is crucial (Hossain, 2018). Given Bangladesh's extreme weather events, utilising a climate-risk-adjusted GDP figure in setting monetary policy would imply a lower (and more catalytic) natural rate of interest.
- **Tanzania.** Further cuts to its benchmark interest rate, below 5%, would help stimulate the consumption-sensitive sectors typically serviced by women. Financial literacy in Tanzania remains low and therefore needs to be a funding priority that is further resourced by the central bank. The recently merged Tanzania Women's Bank should receive extra funding from the BOT, alongside adjusted macroprudential requirements, in order to make finance more easily accessible and affordable for women entrepreneurs. The effects of climate change in Tanzania are widespread and particularly harmful to its agriculture sector (Shemsanga et al., 2010) and have largely been ignored in the context of an overriding policy goal of industrialisation (LSE, 2015). Crucially, Tanzania's discovery of natural gas, and its natural gas revenue fund, could be used to build expertise and green investments for sustainable finance to counter climate shocks.
- **Kenya.** In order to improve the credit transmission mechanism, there needs to be new forms of lending to women-owned SMEs; evidence suggests that both group-based and individual-based lending policies are not responsive to the financing needs of women vis-à-vis the changes in Kenya's business environment (Ouma and Rambo, 2013). Relaxing collateral requirements for women entrepreneurs or promoting particular types of investments that allow women to scale their businesses would create more possibility of gender equity.¹⁰ In terms of climate change and Green finance, its central bank – and Kenya's new sovereign wealth fund – can promote a greater pool of

¹⁰In addition, central banks can use their regulatory power to channel credit to uses that support the realization of rights and promote gender equality. Policies and regulations can also encourage credit to be extended to improve housing, stimulate job-creating investments or promote access to loans for self-employed workers in informal activities, many of whom are women (Heintz, 2015).

expertise in structuring green investments. The central bank should provide an incentive system whereby Kenyan Green bonds offer a higher return compared to conventional paper. This is because high returns on government bonds tend to “crowd out” investments in other asset classes, such as green finance, while lending to established sectors is supported by a better risk-return profile (Bjerborn and Kirima, 2015).

- **Peru.** The central bank should facilitate extra liquidity targeted to women-led rural MFIs in Peru, which have had consistently disproportionately less funding than urban-based MFIs. Peru has increased its transaction allowance limits on digital services, however, more liquidity, regulatory oversight and support and training for microentrepreneurs in the countryside need funding (IFC, 2013; CGAP, 2020). Authorities also need to continue to de-dollarise to prevent negative currency mismatches for the spectrum of businesses. The central bank is in a position to facilitate this. In terms of climate change, Peru has emerged as one of Latin America’s more active countries by making voluntary emission reduction pledges in its forestry, energy, and waste sectors. And yet, there is an element of risk aversion in investing in renewable energy (BMZ, 2014). The central bank could employ macroprudential regulations to facilitate investments in this arena/ The CRBP could develop the groundwork for Green quantitative easing (QE) in the light of the country’s historically low interest rates and its relatively developed financial markets.
- **Sri Lanka.** Microcredit and financial literacy is instrumental in improving the lives of women, and yet there is an under-provision of it in Sri Lanka (Yogendrarajah, 2016). The economy has seen its interest rate spread remain high. Against this backdrop, the cost credit for businesses, particularly that of MFIs, should be lowered for women entrepreneurs. Access to, and funding for mobile finance in the rural economy should be improved to become more widespread. The central bank could devote resources to this, or even make female employment an explicit target in its policy reaction function. When it comes to climate risks, Sri Lanka is highly vulnerable to the risks associated with climate change; central bank involvement in mitigating these risks linked to hotspots – that are subject to extreme weather conditions such as droughts and flooding – can involve a number of tools. Within the context of Sri Lanka’s Vision 2030, its initiatives for green loans, green leases and green bonds (CBSL, 2019) – green QE should be considered in order to further stimulate liquidity in targeted areas of the economy to build resilience.

APPENDIX 2: EXAMPLES OF TRADE POLICY RESPONSES

Fast recovery – trade policy options

Increase in import restrictions: A faster recovery in the short run could be achieved by boosting the domestic competitiveness of local businesses by increasing tariffs, non-automatic import licenses, enacting restricting regulations and other measures. This is likely to increase activity and employment in inefficient sectors and industries but not in productivity. Consequently, in the long run, economic growth is expected to be low in virtue of the inefficient allocation of resources.

Devaluation of exchange rates: In order to boost domestic activity, Central Banks may be inclined to devalue their currencies with the aim of increasing export and import prices in domestic currency. This complements the increase in import restriction measures and can generate, in the long run, an expansion effect. However, in the context of developing countries, these measures tend to be contracting in the long run.

Prioritisation of domestic suppliers in government procurement: to boost economic activity, the Government may favour domestic suppliers or restrict the participation of foreign suppliers in tendering processes. This is likely to generate inefficient expenditure and, although it may boost activity in the short run, will jeopardise economic growth by putting additional fiscal pressure in the long run.

Tax incentives in labour-intensive and traditional sectors: Tax incentives to sectors intensive in the use of labour (traditional services) can deliver higher employment but with little prospect of productivity growth. This could slow down economic transformation. The tax incentives will not consider any kind of environmental or gender impact.

Trade agreements aimed to increase mutual trade diversion. Trade diverting agreements can be considered with the aim of boosting activity. However, rather than focusing on increasing efficiency, these agreements will be set with the aim of mutually diverting trade away from efficient suppliers into domestic inefficient suppliers.

Incentives to the development of local/regional supply chains with little efficiency consideration: To reduce the reliance on global value chains, Governments may aim to develop and/or cooperate in the development of local or regional supply chains. If these actions are not aimed to address coordination issues that affect the exploitation of comparative advantages, this will lead to inefficiency.

More government intervention in the domestic economy aimed to boost economic activity (e.g. price setting): To speed up the recovery, intervention on key sectors such as energy production or transport, can be considered. For example, fixing or administering prices of critical inputs could contribute to the economic recovery in other sectors but it may damage the competitiveness of the intervened sector which could lead to lower future output.

Building back better – rainbow recovery trade policy options

This scenario involves the assumption of an attempt of using the crisis to generate substantial reforms to achieve economic transformation and a climate friendly economic growth path. This scenario involves a reallocation of economic resources from low into high productivity and from dirty to cleaner activities. In the long run, the productivity and the economy growth is higher with a smaller effect on the environment and climate. However, in the short run, the economic growth is lower as resources are mobilised to other sectors.

Reduction of import measures: This will contribute to increase efficiency and boost welfare in the long run. In the short run, it may create additional difficulties to inefficient industries that rely on protection. The

fall in barriers may not be generalised but enough to eliminate peaks and escalation in protection that grant protection to some sectors with respect to others.

Targeted support to environmental/climate-friendly sector, products, processes and technologies: Tax incentives and subsidies to key environmental/climate friendly sectors could contribute to generate a reallocation of resources towards the production in these sectors. This targeted measures articulate very well with a neutral trade policy. The neutral trade policy helps to protect consumers by bringing competition to the markets and the targeted support to these products contributes to offset some market failures affecting the production.

Measures to facilitate trade and investment: As the reduction of protection measures, this contributes to increase the efficiency and competitiveness of firms by reducing costs to procure imported inputs as well as reduce commercialisation costs of exports.

Trade agreements aimed to increase market access and domestic efficiency: In contrast to trade-diverting agreements, these type of agreements aim to increase competition in the domestic market, increase productivity and also increase market access for exports.

Government coordination: The action of the Government seeks to facilitate the coordination of actors and the provision of critical public goods in targeted sectors. This can be delivered through a series of actions including setting special economic zones and export promotion zones where similar firms can cluster. The Government engages with the private sector and seeks to address barriers and constraints faced by firms when operating.

Measures to increase women participation and increase labour supply: More women participation in the labour market contributes to higher economic activity. Therefore, actions aimed to reduce discrimination against women as well as creating instruments to facilitate the insertion of women in the market can be considered. The provision of childcare, for example, can contribute to increase the number of women in the labour market.

APPENDIX 3: HIGH-FREQUENCY INDICATORS

	Source and frequency	Comments on use	Hyperlinks and examples
Commodity prices, food prices and hunger			
Commodity prices (global prices)	Available immediately (e.g. Financial Times for oil/copper prices; IMF/World Bank weekly/monthly averages with a short time lag (a few weeks)	Variable reflecting many issues such as supply/demand and others	Oil price (paywall) IMF World Bank Price data (pink sheet) GroAgro
Food prices (domestic prices)	FAO food prices, monthly (a week time lag) IFPRI's Food Price Monitor covers daily price data for domestic markets in India, Rwanda, Uganda and Burundi National statistics offices	Localised data patchy	FAO food price index IFPRI dashboard
Hunger	WFP, number of people with insufficient food consumption, countries with very high levels of hunger, updated daily and weekly	Limited countries now (9 African now) but 16 more planned in coming weeks; it is a forecast. Weekly snapshots for 14 countries	WFP Food Hunger Map WFP daily report Weekly snapshots
COVID cases, deaths	Daily across countries	Available widely, commonly used sources but difficult to compare across countries	Johns Hopkins
High frequency telephone interviews around social and food security impacts	Monthly updates from May 2020. Cover topics including (i) knowledge of existence of and channels of transmission of COVID-19; (ii) knowledge of and compliance with preventive measures with specific emphasis on social distancing and self-isolation; (iii) prices and access to food and non-food necessities; (iv) employment; (v) food insecurity; and (6) subjective well-being – with a focus on understanding the dynamics of economic impacts	Once available will be very valuable, for Ethiopia, Malawi, Nigeria, Tanzania, Uganda	LSMS high frequency phone surveys ,
Global and bilateral trade, trade costs and mobility			
Trade costs	Baltic Exchange Dry Index Trading Economics, daily	Specific cost measure, does not cover many transport uses/modes	Trading Economics
World trade	CPB world trade indicator, monthly, available with a one- to two-month time lag IMF tracking of world trade using real-time shipping data	Partly a leading indicator, partly real data Uses data for dry bulk, contain,	CPB indicator described in FT IMF tracker

		vehicle, oil shipping data	
Bilateral trade	National statistics office and ITC trade map (monthly data for major countries such as UK, EU, US, China and Japan available with a six-week time lag; annual data for low-income country source) International data reported monthly with time lag (UN Comtrade)	Trade data variable but long-runs are available	UK monthly trade stats German monthly data Comtrade
Mobility and entertainment	Aircraft departures, bus and rail journeys; Google searches for entertainment, seated diners, retail footfall (updated daily) Google Mobility data for retail, grocery, parks, transit, workplaces, residential visits (weekly)	Not easily available beyond reports Google data for all countries on a weekly basis	Bank of England Monetary Policy Report Chart 2.26 COVID-19 Community Mobility Reports
Capital markets, finance flows and monetary statistics			
Remittances	Central banks, monthly data, available with one to three months time lag	Can vary much between months	Nigeria Kenya
Stock market prices, exchange rates, bond yields	Available daily and immediately, e.g. Financial Times or central bank Bond prices and bond spreads (yield difference countries and safe havens such as US/German bonds)	Varied sources but often subscription is needed Financial Times/Bloomberg often report statistics/figures	FT (paywall)
Private capital flows to emerging markets	IIF monthly updates on portfolio flow but not FDI flows, available with one to two years of lag (committed FDI data more recent)	Lacks country details	IIF
Bank lending statistics	BIF international bank lending, quarterly, available with five-month time lag		BIS
Monetary statistics (central bank)	Central banks maintain monthly and quarterly data on the monetary base and broad money, credit aggregates (e.g. to the private sector) and foreign assets and liabilities. Includes claims by banks on government	Quality data on a select number of variables	Kenya
Debt interest payments	Monthly/quarterly, central bank websites, lags can be six months		Kenya (Table 13) Nigeria debt service in 2019 Ethiopia
Aid flows	OECD DAC Humanitarian finance: COVID-19 Global Humanitarian Response Plan	DAC (and national) data are available with long time gaps (a year) but humanitarian finance data are updated weekly; announcements are available	OCHA ODI donor announcement tracker

Employment and production			
Employment	<p>ILOSTAT provides monthly and quarterly labour force statistics (with a time lag of at least two months)</p> <p>ILO Monitor presents results from a nowcast model that estimates hours of employment lost and job losses compared with 2019</p>	<p>Up-to-date data are patchy with respect to country coverage</p> <p>Data are simulation results; per country results are not publicly available; the analysis is updated bi-monthly</p>	<p>ILO Covid-19 and labour market statistics</p> <p>ILO Monitor: Covid19 and the world of work</p>
Production	<p>National accounts, quarterly, available with six-week time lag in developed countries, or a lag of three to five months in some poorer countries</p> <p>UNIDO has recent data on industrial production, e.g. for the US, China, Russia, Korea, Vietnam, Argentina, Chile, Poland</p>	<p>Data available with long time lag, and industrial production data cover few countries</p>	<p>UNIDO on impact of COVID-19 on manufacturing</p>
Others (selected)			
Data Portals	<p>World Bank, updated in an ongoing manner</p> <p>Several others exist</p> <p>ODI's tracker of trackers (tba)</p>		<p>Datasets from the World Bank</p> <p>World Bank: COVID and trade</p> <p>UN Global Partnership for Sustainable Development Data</p>

APPENDIX 4: COVID-19 TRACKERS

During the first half of 2020 a range of Covid-19 trackers and briefings appeared to understand socioeconomic conditions and policy responses. For example, there were a range of ODI country briefings

- **Africa:** [Angola](#); [Cape Verde](#); [Djibouti](#); [Ethiopia](#), [Egypt](#); [Ghana](#) ; [Guinea Bissau](#) ; [Kenya](#) ; [Liberia](#); [Madagascar](#); [Namibia](#); [Nigeria](#); [Philippines](#); [Rwanda](#); [Philippines](#); [Senegal](#); [Sierra Leone](#); [Somalia](#); [Somaliland](#); [South Africa](#), [South Sudan](#); [Sri Lanka](#); [Sudan](#); [Tanzania](#); [Uganda](#)
- **Asia:** [Afghanistan](#); [India](#) ; [Indonesia](#); [Nepal](#); [Sri Lanka](#) ; [Myanmar](#)
- **Europe:** [Albania](#)
- **Pacific:** [Fiji](#), [PNG](#) and [Vanuatu](#)
- **Latin America:** [Brazil](#); [Colombia](#)

Many international organisations such as the IMF, WB, ILO etc started tracking a range of impacts and policies:

- Economic (trade and production; financial markets) and social impacts
- Fiscal impacts
- Monetary, financial and fiscal policy
- Donor support

Tracker	Description	Coverage, frequency	Data sources	Quality*
Oxford-BSG coronavirus government response	Containment and closure policies (e.g., school closures and restrictions in movement), economic policies (e.g., income support or provision of foreign aid) and health system policies	Global; periodically (about weekly)	Publicly available sources: news articles, gov press releases, briefings	3: Clear search strategy and validation process. Frequent and wide coverage.
UN IOM Mobility Impact	Travel restrictions at the country and location level (airport, land border points, sea border points, internal transit points)	Global; daily to up to every 3 days	IATA, media reports, direct information from IOM missions	3: Limitations transparent, wide coverage, frequent.
IMF tracker of policy response to covid-19	Policy measures on fiscal, monetary, macro-financial, exchange rate and BOP	Global; periodically (about weekly)	'Publicly available measures', no further details	2: Frequent, wide coverage. Links provided but no methods
ODI economic stimulus tracker	Country fiscal and monetary stimulus, classified per BOP support, assistance to firms; social/health system support	G20 and low-income countries; ad-hoc	News reports, official press releases	2: Methods, source links provided, wide coverage. Less frequent.
IGC economic support measures	Fiscal stimulus package, with checklist on support for wage/employment, cash transfers, credit/business support, tax measures, interest/monetary measures	Global; not indicated	Government announcements cross-checked with 'other sources'	2: Source links provided, wide coverage, frequency unclear.
ADB covid-19 policy response tracker	Policy measures, sources of financing of measures, external assistance received	East-Asia Pacific countries; not indicated	IMF tracker, OECD tracker, New York FED + National/local sources (central banks, DoFs)	2: Source links provided, wide coverage, frequency unclear.
HBS/Harvard Coronavirus Economic Tracker	Monetary and fiscal policies, and lockdown measures	Global; frequent (as new info comes)	Publicly available media and government sources	1: Source links provided, limited coverage, frequency
Yale Covid-19 financial response tracker	Interventions by central banks, fiscal authorities and organisations aimed at restoring financial stability	Global (mostly advanced, middle-income countries); daily	Publicly available media and government sources	1: Source links provided, limited coverage, frequency
Institute of International Finance Global Policy Responses	Monetary and fiscal responses	Global (mostly advanced and emerging markets); not indicated	Not stated, appears to be media and government sources	1: Source links provided, limited coverage, frequency unclear
PWC Tax, Legal and Economic measures in response to covid-19	Measures covering corporate tax, tax payments/amnesties, indirect tax, tax reporting, etc.	Global; frequent (as new info comes)	Not stated, some source links provided	2: Frequent, wide coverage, search and sources unclear

Social policy and impact

Tracker (Entity)	Description	Coverage; freq.	Data sources	Quality
Social Protection and Jobs responses (WB, ILO)	Social protection (social assistance, cash and in-kind transfers, social insurance), labour market interventions	Global; weekly	Government websites, media reports, country-experts	3: Validated by WB & UNICEF, authors caution findings are preliminary.
Social security measures (ISSA)	Social security measures to address health, social and economic impact of crisis	Global; ongoing	Government statements, institutional websites, media articles	1: Frequency, coverage, and collection methods not specified. Source links provided.
Government Measures Dataset (ACAPS)	Data on social distancing, movement restrictions, public health measures, social and economic measures, lockdowns	Global; regular	Consulted government, media, United Nations, and other organisations	3. Authors note some measures may be missing. Frequent, wide coverage, sources provided
Oxford-BSG coronavirus government response	Containment and closure policies (e.g., school closures and restrictions in movement), economic policies (e.g., income support or provision of foreign aid) and health system policies	Global; periodically (about weekly)	Publicly available sources: news articles, gov press releases, briefings	3: Clear search strategy and validation process. Frequent and wide coverage.
Socioeconomic indirect impacts (UNICEF)	Indirect socioeconomic impacts on travel, lockdown, education, service disruptions (WASH etc), healthcare	Global; at least monthly	Survey completed by UNICEF Country Offices and National Committees	3: Authors note conflicting data, anomalies followed up. Wide coverage, frequent, sourced
<u>Tracker (Entity)</u>	<u>Description</u>	<u>Coverage; freq.</u>	<u>Data sources</u>	<u>Quality</u>
Education disruption & response (UNESCO)	School closures (localised, country-wide, open), number and percent of affected learners	Worldwide; daily	UIS data	3:Wide coverage, frequent, sourced
Food security: Hunger map (WFP)	Food security information, weather, population size, conflict, hazards, nutrition information and macroeconomic data	94 countries (mostly low-income and lower-middle-income countries); 'real-time'	CATI; global indicators, machine learning	3: Well referenced, timely, full coverage

Conflict: Disorder tracker (ACLEDE)	Impact on political violence and protest, demonstration activity, state repression, mob attacks, armed conflict, etc	World; updated at least bi-monthly	None stated, appears observational	2: Data sources unclear, wide coverage, frequent
Humanitarian: Protection (GPC)	Humanitarian exemptions, movement restrictions, public health, social/econ, social distancing; Vulnerable groups identification; Protection requirements	Active protection groups; ongoing	Some secondary (e.g. Johns Hopkins) others 'by consultation'	3: Sources referenced, frequent, wide coverage
Specific vulnerable groups: Various trackers & surveys	Resources on child poverty, gender, long-term care Various surveys. rapid assessment of informal workers (WIEGO), Evidence for Transformative Changes (UNRISD)	Worldwide; ongoing		
Research studies: Various	Mapping of research evidence including socioeconomic impacts: Food security & livelihoods (Caribbean), Citizens' Attitudes, Life with Corona Survey, International YouGov tracker, etc	Varied; ongoing		

Donor responses

Tracker	Description	Coverage, frequency
ODI donor response tracker	Global organisations, multilateral/regional/sub-regional development banks, bilateral donors, private sector donors	Global/regional/country level; ad-hoc
KFF Donor Funding for the Global Novel Coronavirus Response	Bilateral, private sector donors	Global; frequent
Forbes: Billionaire response tracker	Private sector donors	Global (mostly US-based); periodically
IMF COVID emergency financial assistance	IMF commitments	Low and middle income countries, daily
WB COVID operational responses	WB operational responses	Low and middle income countries, daily