27. Fiscal and monetary responses to the COVID-19 pandemic: Current conditions and future scenarios in developing countries

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Our 2020 report on responses to COVID-19 discussed national pandemic response plans in developing countries (Díaz-Bonilla 2020). Those integrated plans, it was argued, would require a centralized crisis-management office led by the president, prime minister, or equivalent, with participation of the relevant public and private sector representatives. A strong fiscal and monetary response was needed to support these plans, including unconventional monetary policies, such as those used by what were labeled "developmental central banks" during the 1960s and 1970s (Díaz-Bonilla 2015). Expansion in money supply during the pandemic would finance the fiscal deficit related to public expenditures on health and non-health programs as well as programs to maintain private sector production. We noted that central banks in developed countries have followed a similar monetary approach, now called "quantitative easing," since the 2008–2009 financial crisis, an approach they ramped up during the pandemic.

Other recommendations included strong support from the international organizations through capital increases at the International Monetary Fund (IMF) and multilateral development banks (MDBs); an additional allocation of special drawing rights (SDRs[1]) (double the amount provided in the 2008–2009 crisis was suggested); establishment of a debt-resolution mechanism for developing countries focused on debt coming due in the next two years; and the use of co-lending by MDBs and private sector banks and investors.

In this chapter, we provide an update on relevant economic developments, and close with a brief discussion of the fiscal and monetary challenges ahead.

Current context

Initially, countries reacted to the emergence of COVID-19 with lockdowns, which helped to slow the virus's spread but also led to a sharp economic contraction, particularly in those service sectors that require personal contact. World GDP fell in 2020 (−3.1 percent), with advanced economies dropping 4.5 percent and the emerging and developing countries declining 2.1 percent, but with strong differences across regions. To avoid a potentially deeper economic depression while expanding health

1 The SDR is an international reserve asset, created by the IMF to supplement its member countries' official reserves. It facilitates access, at practically no cost, to the following five currencies: US dollar, euro, Chinese yuan, Japanese yen, and UK pound.

interventions, many countries resorted to strong fiscal and monetary expansions (see Table 1 for 2020 data reported by the IMF).[2]

Fiscal and monetary responses were strongest in the advanced economies and more restrained in lower-income countries. On the fiscal side, differences have been greater in the non-health components of the fiscal packages, while expenditures on health as a percentage of GDP have been similar. However, in value terms, there are also large differences in health spending; of the US$1,346 billion spent on health measures, almost 90 percent was spent in the advanced economies (and more than half in the United States alone) (IMF Covid Tracker). On the monetary side, developing countries have less margin for expanding money supply – primarily because of the likely impacts on exchange rates for their currencies – so liquidity expansion in developing countries (and particularly low-income countries) trailed the advanced economies (Table 1). The fiscal expansion increased public debt[3] (see Table 2).

While advanced economies significantly increased their debt (as percent of GDP) from levels that were already high, their central banks financed part of that increase, meaning that their *net* debt increase[4] has been smaller (14.1 percent of GDP, rather than the 15.5 percent shown in Table 2).[5] Low-income countries, which have implemented smaller fiscal packages, have also experienced relatively lower increases in debt-to-GDP ratios.

TABLE 1 Fiscal and monetary responses, 2020

COUNTRY GROUPS		RESPONSES (PERCENT OF GDP)			
		Fiscal responses (additional spending)			Monetary responses (liquidity support)
		Health	Non-health	Total	
Advanced Economies	Average	1.2	8.7	9.9	8.5
	Median	0.8	6.7	7.8	5.3
Emerging market and middle-income countries	Average	0.9	3.3	3.8	3.3
	Median	0.5	2.7	2.9	1.8
Low-income countries	Average	0.9	1.9	2.9	0.9
	Median	0.7	1.4	2.3	0.6
Global	Average	0.9	4.0	4.7	4.4
	Median	0.6	3.0	3.3	2.4

Source: Data from IMF, Policy Responses to COVID-19: Policy Tracker.

2 The IMF categorizes its members into 39 advanced economies, 96 emerging market and middle-income economies, and 59 low-income developing countries.
3 The private sector in developing countries also increased its debt; here, our focus is on public debt.
4 That is, considering the debit and credit balances within the government as a whole.
5 For instance, in the case of the United States, the Federal Reserve holds about US$5.6 trillion of the $28 trillion debt as of October 2021 (https://www.fiscal.treasury.gov/files/reports-statements/treasury-bulletin/b2021-3.pdf).

TABLE 2 Debt growth, 2019–2023

	GENERAL GOVERNMENT GROSS DEBT* (PERCENT OF GDP)					
	Actual		Projected			
	2019	2020	2021	2022	2023	Increase 2019 to 2023 (as percent of GDP)
Advanced economies	103.8	122.7	121.6	119.3	119.3	15.5
Selected emerging economies	54.7	64.0	64.3	65.8	67.1	12.4
Selected low-income developing countries	44.2	49.9	50.2	49.8	49.0	4.9
Latin America & Caribbean	68.3	78.1	73.0	73.6	74.2	5.9

Source: Data from IMF Fiscal Monitor.

Note: *Gross debt includes intragovernmental debt.

However, the emerging economies and middle-income countries, which increased spending but did not have the option of strong monetary expansion, are facing greater debt problems. Here it is important to separate China from other developing countries, given its size and particularly large debt increase (projected to jump from 57.1 percent of GDP in 2019 to 74.5 percent in 2023). Among the other developing countries, the greatest debt problems are emerging in Latin America and the Caribbean (LAC), where the IMF projects debt will reach 74.2 percent of GDP in 2023, up from 68.3 percent in 2019.[6]

Several international initiatives have aimed to alleviate the economic impact of the pandemic. Multilateral financial institutions more than doubled annual net financial lending in the first year of the pandemic, from US$64 billion to almost $129 billion (World Bank, International Debt Statistics, 2021), which financed part of the increase in spending in all developing countries. In April 2020, the G-20 countries launched the Debt Service Suspension Initiative (DSSI) to assist 73 of the world's poorest and most vulnerable countries. The DSSI instituted a suspension period, allowing countries to temporarily pause debt payments to some international financial organizations falling due from May through December 2020, and later extended to end-December 2021. However, the DSSI is only a temporary remedy and leaves out many middle-income countries, some of which have been hard hit by the pandemic.

6 Public debt can be internal or external. Looking at external debt, which can be public or private, World Bank data show that the largest increase in debt-to-GNI (gross national income) in 2020 compared to 2019 also occurred in LAC. However, sub-Saharan Africa and South Asia (excluding India) saw the largest increases in the debt-to-exports ratio (World Bank, International Debt Statistics, 2021).

In addition, the IMF approved the largest-ever emission of SDRs (US$650 billion), more than double the response to the 2008–2009 crisis ($250 billion). However, following the rules on allocation of SDRs (which is proportional to country shares in IMF capital), about 60 percent of the new SDRs were allocated to developed countries. Because of that, IMF members are considering ways to reallocate a share of the SDRs from rich countries, which will not use them, to the developing countries that will. Options include expanding the existing Poverty Reduction and Growth Trust,[7] which would provide highly concessional loans to low-income countries; a possible new Resilience and Sustainability Trust (RST), now being discussed at the IMF, that would finance poor and vulnerable countries facing structural transformation challenges, including climate-related challenges; and supporting multilateral development banks (MDBs) in their direct lending to developing countries.

These initiatives are commendable, but they may not be enough in terms of the scale of funding needs, the coverage of countries, or the activities they are considering.

Some economic developments

The pandemic has affected developing regions' economies very differently. Table 3 shows growth rates in 2020, projections for 2021, and the overall change from 2019.

TABLE 3 Regional economic growth rates, 2019 to 2021

	GDP, CONSTANT PRICES (PERCENT CHANGE)		
	2020	2021 (projected)	Change from 2019 to 2021 (projected)
World	−3.1	5.9	2.6
Advanced economies	−4.5	5.2	0.4
Emerging market and developing economies	−2.1	6.4	4.2
Emerging and developing Asia	−0.9	7.2	6.3
Emerging and developing Europe	−2.0	6.0	3.9
Latin America and the Caribbean	−7.0	6.3	−1.1
Middle East and Central Asia	−2.8	4.1	1.2
Sub-Saharan Africa	−1.7	3.7	2.0

Source: Data from IMF World Economic Outlook database, October 2021.

7 Before the current allocation of SDRs, some developed countries had already assigned about US$15 billion of those previously owned to the Poverty Reduction and Growth Trust.

Latin America and the Caribbean has been particularly affected. Among developing regions, LAC experienced the deepest economic recession in 2020 and is projected to recover more slowly – it is the only region where 2021 GDP will be lower than 2019 GDP.[8] Many countries in the region were experiencing economic problems before the pandemic (median growth in 2019 was a meager 1 percent[9]) as a result of the downswing of the commodity cycle (Díaz-Bonilla 2019). But in 2020, the region's decline in economic activity was general: all countries, except Guyana (driven by oil discoveries), experienced negative growth in 2020, with a median rate of almost −9 percent. LAC's economic recession reflects its relatively tough mobility restrictions compared to other (and more rural) developing regions, which were a response to the region's larger health shock. With only about 8 percent of the global population, LAC has suffered about a third of the world's confirmed COVID-19-related deaths as of this writing (Johns Hopkins Database). The health calamity in LAC appears to be related to several regional characteristics, namely high levels of inequality, significant urbanization, and high prevalence of obesity (a risk factor for COVID-19) (Díaz-Bonilla and Piñeiro 2021). Moreover, regional economic stagnation prior to the pandemic had affected investments in health systems, the vitality of LAC's democracies, and people's confidence in governments, making it difficult to manage the political aspects of the pandemic.

In 2021, a global economic recovery is expected: advanced economies are projected to grow at 5.2 percent while developing countries are projected to grow at 6.4 percent (Table 3). Overall, the rebound from the lockdown, advances in controlling the pandemic, and the fiscal and monetary expansion have supported the recovery.[10]

In the context of overall economic contraction, agricultural production (with forestry and fishing) generally did better in 2020 than other economic sectors. Table 4 provides World Bank agriculture sector data for 2020: no region saw declines in agricultural GDP, but LAC again underperformed other regions (projections for 2021 are not yet available). The relatively strong global supply performance of the agriculture sector has been due in part to both governments' support to the sector and to the fact that food production and distribution were considered essential activities by most countries and so faced fewer mobility restrictions. However, impacts on the demand for agrifood products were larger, due to declines in incomes and employment (see, for example, Graziano da Silva et al. 2021).

Inflation in general was subdued in 2020, despite the fiscal and monetary stimulus, but projections suggest an acceleration of inflation in 2021, which should be monitored. Figure 1 shows average and median consumer price inflation in 191 countries (IMF, WEO database).[11] Still, inflation remains below the values observed during the rebound from the last global price shock in 2011, when the average was 6.5 percent and the median was 4.7 percent; and certainly, it has not reached the levels driven by the shocks of 1970s, when inflation rates were in the double digits, and even triple digits for some countries. The process of

8 It should be noted that in Asia, India also showed a steep decline in 2020 (−7.25%) but is expected to recover strongly in 2021, ending the year about 1.6 percent above the 2019 level.

9 Some countries, including Venezuela and Nicaragua, were in recession even before the pandemic as a result of internal political problems.

10 Regarding the impact of individual economic stimulus packages on the recovery in each developing country, we found a small but positive correlation between the stimulus size (measured as the sum of the GDP percentages of the non-health fiscal expenditures and of the monetary expansion) and GDP growth in 2021 ($p=0.227$).

11 Venezuela, Zimbabwe, Sudan, South Sudan, and Lebanon were excluded as outliers.

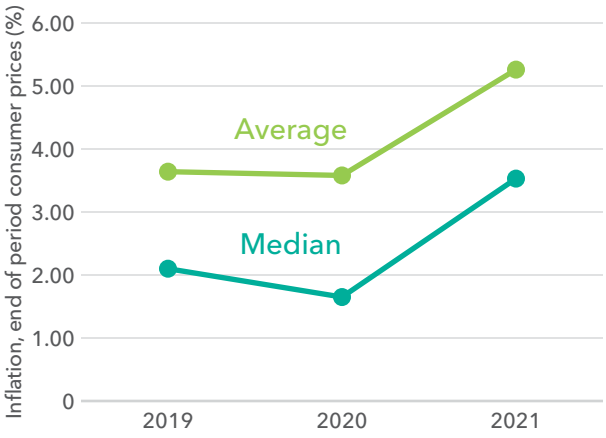
TABLE 4 Agriculture sector GDP growth, 2020, by region

AGRICULTURE, FORESTRY, AND FISHING, VALUE ADDED	ANNUAL GROWTH (%)
East Asia and Pacific (excluding high income)	2.4
Europe and Central Asia (excluding high income)	0.9
Latin America and Caribbean	0.5
Middle East and North Africa (excluding high income)	2.6
South Asia	2.9
Sub-Saharan Africa	3.0
Low- and middle-income countries	2.3
World	1.9

Source: Data from World Bank, World Development Indicators.

withdrawing the current expansionary monetary policies in developed countries will also have a negative impact on many developing countries, if it leads to sustained increases in interest rates.

FIGURE 1 Inflation rates, 2019–2021



Source: Constructed using data from IMF World Economic Outlook database, October 2021.

Looking forward

As we look forward, we are handicapped by our weak understanding of the relationship between health and economic disruptions, responses, and interactions. Initially, countries hoped to eliminate COVID-19, but it now appears that it will become an endemic disease – the world will need to learn to manage it and live with it. This continuing health problem will compound both existing and new challenges arising in low- and middle-income countries.

Key issues we need to understand are why some countries were more severely affected than others, and what policies worked or did not work to address the pandemic. Studies have shown that lockdowns slowed the spread of COVID-19, but their effectiveness differed across continents (Sulyok and Walker 2020) and their impact on employment and incomes was both heavy and unequal. For example, Peru imposed a strict lockdown but has suffered a very high death rate (as of this writing, it is the highest in the world at more than 600 deaths per 100,000 people). Mexico and Brazil, however, which did not impose strict lockdowns, reported fewer deaths per capita (Mexico: 225 deaths per 100,000; Brazil: 287 deaths

per 100,000). Moreover, Peru pursued a strong fiscal and monetary response to the economic downturn, spending about 18 percent of GDP, but still suffered a deep recession (an 11 percent drop in GDP). Yet in Brazil, where the combined fiscal and monetary stimulus was 14 percent of GDP, and Mexico, where it was less than 2 percent of GDP, the economic declines were smaller, at −4 percent and −8 percent, respectively. Looking across all developing countries, we found no correlation between the percentage of GDP spent on health-related COVID-19 measures and the per capita death rate (the simple correlation between those two variables in 2020 was very small and negative; p=-0.04).

While important questions about how best to address the pandemic's impacts remain, the recommendation we made in 2020 still holds true: Countries need to design integrated pandemic recovery programs under a centralized crisis-management office with high-level leadership (Díaz-Bonilla 2020). Those recovery programs will require strong support from the international community, which must encompass not only lower-income countries but also middle-income countries.

To address the ongoing crisis, the first step is for developing countries to accelerate vaccinations, which are progressing slowly, while strengthening their health systems to cope with future epidemics (see Financing the Global Commons 2021). As of late August 2021, almost 60 percent of the population in advanced economies was fully vaccinated, and almost 70 percent by the end of October 2021 (Our World in Data). However, in the developing countries, the vaccination rate had not reached 20 percent by the end of August, with much lower rates in low-income countries. Some African countries had not even reached 10 percent by the end of October 2021. This situation leaves the less-developed countries and their populations particularly vulnerable to more dangerous COVID-19 variants and the economic impacts that threaten already fragile economies.

BOX 1 Proposal for pandemic recovery bonds

Using the Special Drawing Rights (SDRs) emitted during the pandemic to de-risk the issuance of "pandemic recovery bonds" by developing countries could mobilize private investors with broader social goals, while offering an adequate balance of risk and reward. Such recovery bonds, or similar options, could crowd-in the large private liquidity existing in global markets to help finance credible pathways out of the pandemic for developing countries. How would these bonds work? Advanced economies (which collectively are receiving about US$375 billion in SDRs and which hold about $180 billion from previous allocations) could assign a percentage (say 10 percent, or about $55 billion) to establish a Guarantee Trust Fund (GTF) to support the issuance of special pandemic recovery bonds (PRBs). These bonds would be consoles or perpetual bonds;[1] issued in dollars; paying an adjustable rate with a cap (perhaps 5 percent[2]); and callable, with call protection (for example, until 2050). With a GFT of $55 billion guaranteeing the interest rate payments on the PRBs, the value

1 Also, 100-year bonds can be considered, with the payment period during the last 20 years or so.

2 The cap considers that the average nominal yield since 1953 for US 10-year bonds has been 5.65% (4.32% since 1990; and 1.37% on average during September 2021); average consumer inflation in the United States has been about 3% since 1913 (2.4% since 1990); and the average real interest rate for the last 200 years has been 2.6%, but it has been declining in the last 100 years (see references in Díaz-Bonilla 2021a and 2021b) The yield for the 10-year inflation-adjusted bond for the period 2003–2021 (mid-October) has been 0.88% and currently is negative, close to −1% (data from the U.S. Federal Reserve; https://fred.stlouisfed.org/series/DFII10).

of the bonds that can be issued by developing countries is multiplied several times, depending on how the guarantee is structured. For instance, assuming a maximum interest rate of 5 percent, and maintaining a rolling guarantee of three to five years in interest payments, the total amount of PRBs that can be guaranteed may be between $220 and $367 billion (as a comparison, the current allocation of SDRs to developing countries was about $275 billion). That multiplier effect may be larger, depending on the interest rates assumed; the potential defaults on interest payments (which may be similar to the lower levels of the IMF or the MDBs); and whether the losses in the GFT can be covered by additional international public money.

To ensure the funds are used effectively, middle- and low-income countries would only be eligible to issue the guaranteed bonds if they have a credible and sustainable pandemic recovery program with a multilateral development bank (MDB), encompassing health, social, economic, and environmental components. Part of the issuance of the PRBs may be used to replace the shorter-term and more expensive debt that some countries had to issue during the pandemic, thus helping with debt sustainability. The quota of PRBs by country may be determined by a combination of indicators such as poverty, health impact of the pandemic (total deaths and deaths as percentage of population), and the depth of the economic recession. This scheme could be especially relevant for LAC countries, perhaps as a component of the program to be agreed at the Summit of the Americas that will take place in mid-2022.

The GFT would also help capital markets by supporting an additional asset with an attractive combination of risk and return, which can help absorb some of the global liquidity while supporting broader humanitarian and developmental objectives. It would also benefit advanced economies by helping to put an earlier end to COVID-19 and its global consequences.

There may be other options for applying the additional SDRs strategically (such as using them to strengthen the lending capabilities of MDBs, as mentioned). And this proposal may not be the best alternative for every low- and middle-income country, some of which will need direct debt relief. Yet, using a share of the SDRs to create a guarantee fund for the type of pandemic recovery bonds outlined here is worth considering as another weapon in the arsenal to defeat the virus and thus improve global health, economic, social, and political conditions.

Source: Díaz-Bonilla 2021a, 2021b.

Getting vaccines to everyone will require additional financing. According to the Rockefeller Foundation (2021), getting shots to half the adult population of the world's lowest-income countries in 2021 will require US$9.3 billion. That estimate includes 92 nations (representing about 3.8 billion people) that are eligible for vaccine access through Gavi, the Vaccine Alliance, a public–private global health partnership. With that money, the Alliance could purchase 1.8 billion vaccine doses. A recent IMF study estimates the additional cost of vaccinating at least 60 percent of the global population by mid-2022, plus the costs of diagnostics, therapeutics, and personal protective equipment, at $50 billion ($35 billion in donor grants and $15 billion from national sources) (Agarwal and Gopinath 2021). Yet, the additional funding required is far less than the costs that further waves of the virus could impose.

Second, in addition to the vaccination and health interventions, developing countries need additional fiscal and monetary resources to recover from the economic and human costs of the pandemic. Human capital in developing countries has been affected by the gap in education for the current generation of students; the nutritional problems associated with insufficient and less-healthy diets; and the weakening of job abilities due to long unemployment periods. Yet, while needing further financial resources, these countries are already burdened by the pandemic-related increases in debt. They also continue to contend with a host of pre-existing economic and social problems, while tackling the current and future challenges of climate change. Doing all that is a very tall order.

The international community can take some important steps to help ensure fiscal sustainability for these countries, while also helping to normalize monetary policies:

Support debt relief. Several countries will need debt restructurings and write-offs (Díaz-Bonilla 2020), for which speedier and better methods must be designed. It will be important to recognize differences in solvency and liquidity problems among the different developing countries to devise appropriate debt relief programs (Kharas and Dooley 2020).

Increase capital of MDBs. While some MDBs have recently received capital increases (World Bank in 2018; African Development Bank in 2019), others will need similar treatment. At a minimum, all MDBs must optimize their balance sheets, increasing their leverage ratios and negotiating with the rating agencies for more flexible criteria that account for the current market and pandemic conditions.

Leverage global liquidity. Scarce international development funds must be used more strategically to leverage and mobilize the vast liquidity in global private capital markets, orienting those markets toward larger humanitarian and developmental objectives. This is particularly relevant in relation to the debate about more effective use of the IMF's SDRs. The Poverty Reduction and Growth Trust and the proposed Resilience and Sustainability Trust do not seem to have the needed multiplier effect. The option of allocating the SDRs to MDBs may create greater leverage (about $3–4 of additional financing per dollar of SDRs reallocated). Another option with potential for a greater multiplier effect (from 4 to close to 7) would use a share of the SDRs to create a trust fund to guarantee the emission of "pandemic recovery bonds" (Box 1; Díaz-Bonilla 2021b; also Diaz-Bonilla 2021a; von Braun and Díaz-Bonilla 2021).

Today, the world is still in the midst of the pandemic, with the possibility of new waves and strains of COVID-19. It is imperative to act now to address both the health crisis and the economic crisis.

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