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Developing countries in times of COVID: Comparing inequality impacts and policy responses

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This brief focuses on the socioeconomic inequality impacts of the Covid-19 crisis, within and across countries, and on the impacts of the policy responses designed to mitigate them. It departs from the fact that against predictions, many low and lower-middle income countries managed to navigate through the 2020 waves of the pandemic. How and why this happened, and what does it tell us about the capacity of poor countries to mitigate future shocks and address structural inequality are the overarching questions of this brief.

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Introduction

The WHO declared COVID-19 a 'pandemic' on March 11, 2020. At this time, four countries reported more than 90% of cases (China, Iran, Italy and South Korea). 57 reported 10 cases or less and 81 countries reported no cases (WHO, 2020). Warning calls promptly emerge on the devastating effects COVID-19 would have on developing countries, due to strained public health systems and low budgetary capacity to buffer shocks when compared to richer countries. A United Nations agency asserted in April that, even with social-distancing measures, the virus could kill 300,000 Africans in 2020. In May the World Health Organization (WHO) warned that 190,000 people on the continent could die if containment measures failed. At the end of September, 2020, the world passed the one million deaths mark. On the same day, the cumulative count for Africa officially totalled 35,954, with a fatality count well below other continents. (The actual excess deaths toll on the African continent is likely to be significantly higher than official numbers. The extent of the gap between reported and effective deaths remains unknown and is a key public statistics question to answer in the coming months. Nevertheless, Africa's 2020 relatively low toll is likely to hold even after factoring for differences in statistical capacity.[1]

Recalling that pre-Covid economic and sanitary conditions where unfavorable to non-OECD countries (section I), it emphasizes the role played by low-tech and prevention measures in these countries (section II), with the emergence of a "lockdown with human face" (section III). Inequality in the magnitude of recovery packages at both macro and micro levels are pointed out (section IV), as well as within country inequalities effects (section V) based on available data. However large or small today, the distributional consequences of Covid between and within countries could increase in medium-term as past pandemic and recessions have shown (section VI), calling for a new social contract in developing countries – and a sea change in the production and dissemination of data on national income and wealth distribution within countries to start with.

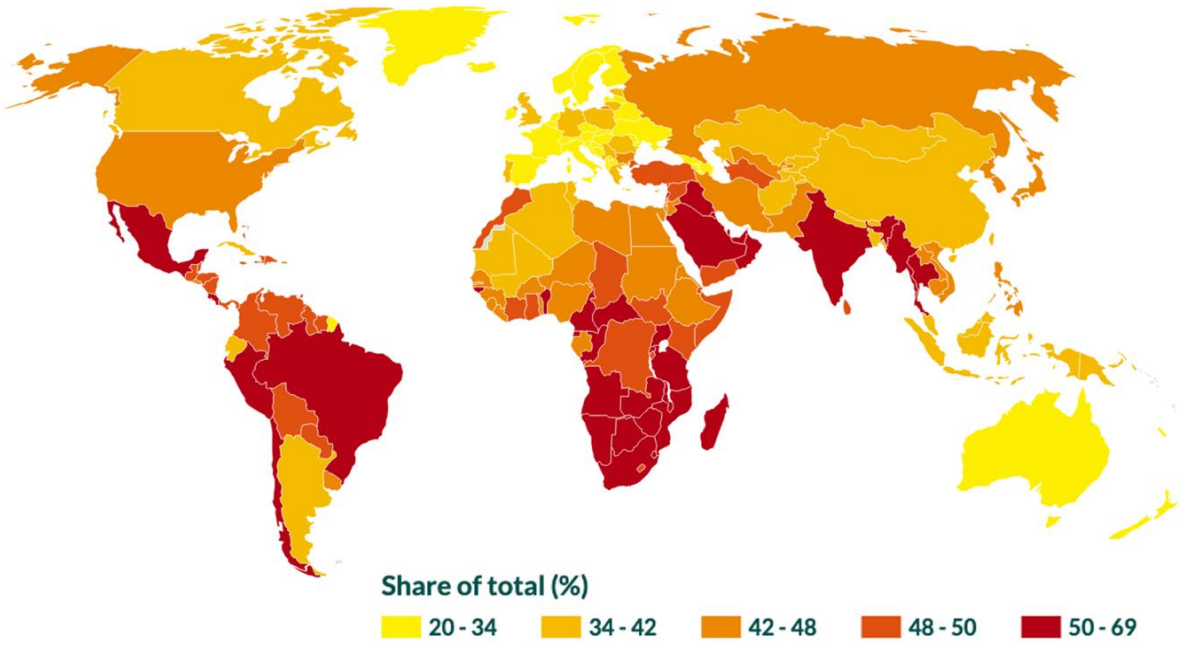
1. Pre-Covid conditions unfavourable to many developing countries

A survey by Gage and Bauhoff (2020) in seven developing countries (Afghanistan, Bangladesh, Democratic Republic of Congo [DRC], Haiti, Nepal, Senegal and Tanzania) came up with the striking estimate that less than a third of clinics and health centres in Bangladesh, the DRC, Nepal and Tanzania had any face masks at the onset of the crisis. While the US had about 33 intensive care unit (ICU) beds per 100,000 population when the pandemic broke out, the ratio was around 2 per 100,000 in India, Pakistan and Bangladesh in South Asia. In sub-Saharan Africa, the situation was even worse: Zambia for instance had 0.6 ICU beds per 100,000, Gambia 0.4, and Uganda 0.1 (Malley and Malley 2020). In 43 African countries, total ICU beds number were about 5 beds per million, against 4000 per million in Europe (Chowdhury and Jomo, 2020). Respirators barely totalled 2000 in 41 African countries together as of mid-April. Ten African countries had no respirator at all, to be compared with 170,000 respirators in the US in mid-March (Maclean and Marks 2020). Inequalities in health systems were blatant, with 0.2 physicians and 1.0 nurses per thousand people in low-income countries, compared to 3.0 and 8.8 respectively in high-income countries (Gage and Bauhoff 2020).

Inequality of access to health services among countries is compounded by domestic income inequalities, which proved way higher according to last available World Inequality Lab (WIL) data than previously estimated (figure 1).

[1] Europe's officially reported deaths per million were 15x higher in Europe than in Africa at the end of 2020. In Egypt, unofficial accounts of excess death toll cited by the BBC indicated a 7x gap between official data and actual deaths, significantly increasing the death toll there but still well below European data on reported deaths.

Figure 1. Inequality levels across the world, 2019
(Top 10% income share, in % national income)



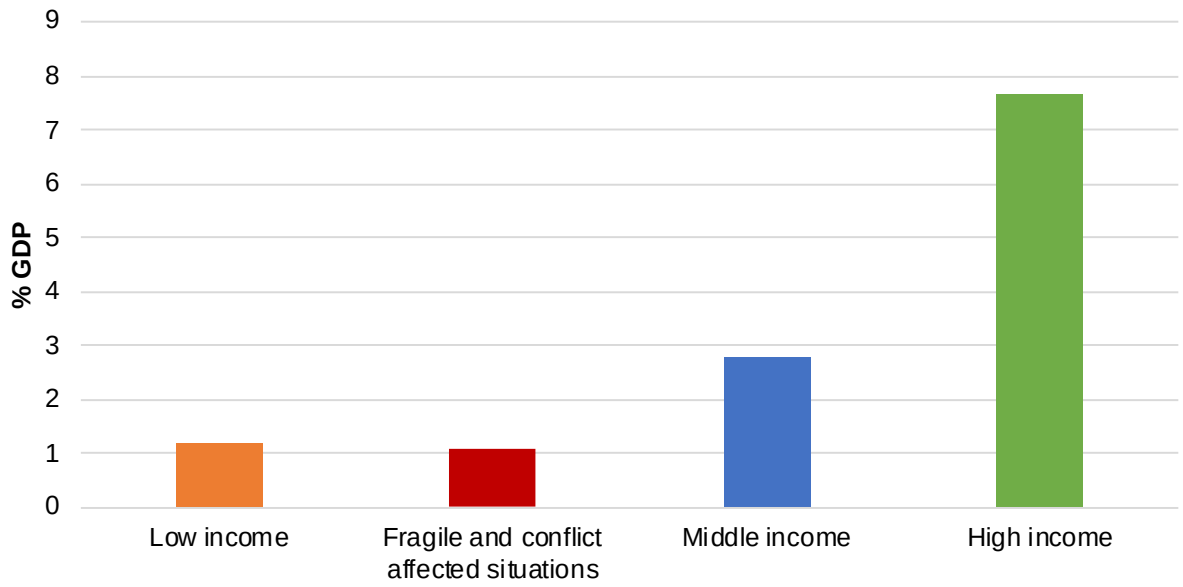
Source: World Inequality Database, WID.world. Sources and series: see www.wid.world/methodology

General government health expenditures expressed as a share of GDP actually shrunk in low income countries between the pre-financial crisis (2006-2008) situation and the pre-covid crisis ten years later (2016-2018). The move was the opposite in OECD countries and middle-income countries. The financial crisis 2008-2009 amplified the long-run divergence between public health expenditure between rich and poor countries (Figures 2A and 2B) even though divergence might occur also within the middle and high-income groups. A comparison with total health expenditures (i.e. including expenditures funded from private sources) shows that out-of-pocket spending increased in low-income countries to compensate for the decline in public expenditures in relation to GDP. The decline was even sharper among fragile and conflict affected countries.

The reasons for developing countries' weak health systems have long been debated. Nkwanga (2015) and Chowdhury and Jomo (2020) pinpoint the critical role of IMF and World Bank's structural adjustment programmes in developing countries, leading to underinvestment in health care systems, which in turn undermined their capacity to respond to the Ebola epidemic. It was the heroic behaviour of one single person, Dr Ameyo Stella Adadevoh, who risked and actually lost her life, by spotting Ebola patient 0 in Nigeria and preventing him to leave the hospital where she ordered he be tested and placed in quarantine. To be fair, IMF and World Bank programmes aside, underinvestment was also the direct consequences of regressive fiscal policies and priorities (Sanders et al. 2015; Scott et al. 2016).

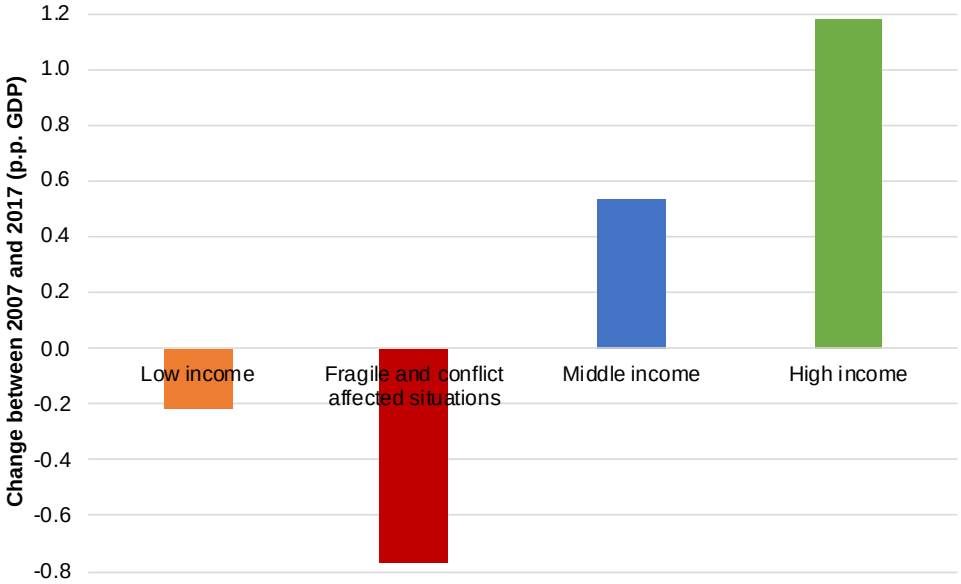
Public finance followed diverging paths. Government revenues (including taxes, non-tax revenue, grants and social contributions and expressed as a share of GDP) grew in high-income countries by 1.7% between 2006-2008 and 2016-2018. Low-income countries government revenues remain twice as low, at around 19%, even though they experienced a significant growth over the period (figure 4).

Figure 2A. Government Health Expenditures in 2018 (%GDP): low income countries are lagging behind



Source: Authors' calculation, based on World Health Organization Global Health Expenditure database (apps.who.int/nha/database).

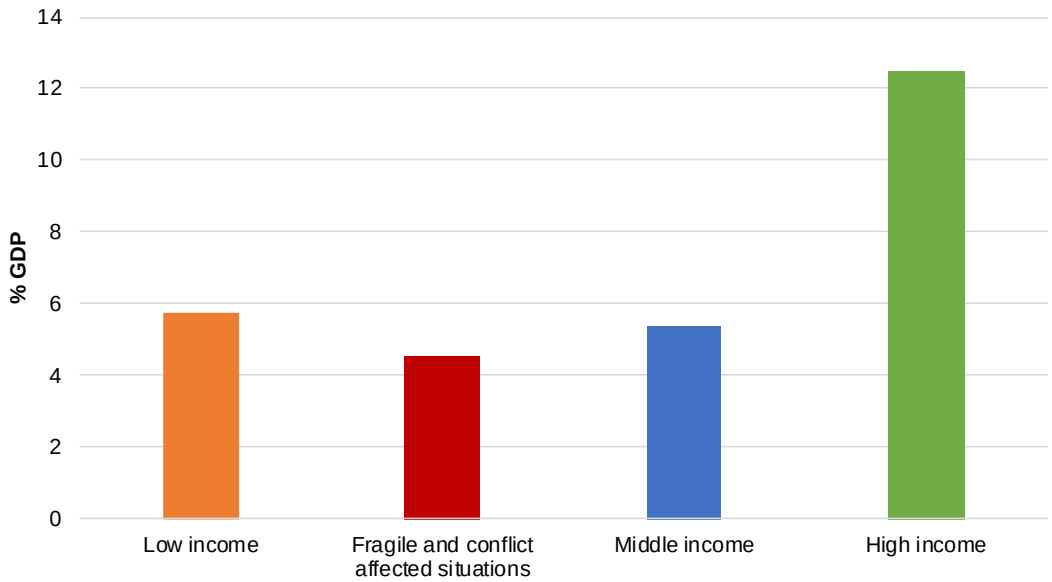
Figure 2B. Government Health Expenditures have declined in poor countries since 2007



Source: Authors' calculation, based on World Health Organization Global Health Expenditure database (apps.who.int/nha/database).

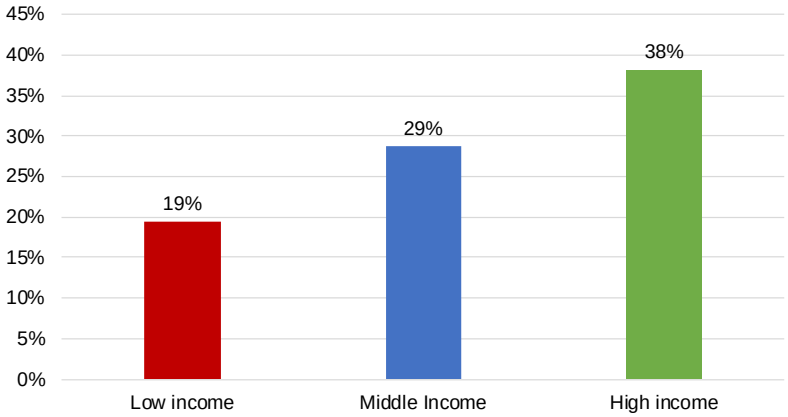
Middle-income countries governments saw their revenues decrease by more than 3%. These divergences hide regional sharp differences. Revenues receded by 14% in North Africa and Middle East and 13.5% in Sub-Saharan Africa. Before the Covid crisis hit, general government revenue was below 20% of GDP in Western, Middle and Eastern Africa, narrowing the room for manoeuvre in the face of emergency spending.

Figure 3. Total health expenditures (private + government) across countries in 2018: low- and middle-income countries are lagging behind



Source: Authors' calculation, based on World Health Organization Global Health Expenditure database (apps.who.int/nha/database).

Figure 4. Total government revenue including taxes, non-tax revenue, grants and social contributions (%GDP)



Source: Authors' calculation, based on ICTD / UNU-WIDER Government Revenue Dataset.
https://www.wider.unu.edu/project/government-revenue-dataset

In winter 2019/2020 – a few weeks before the virus spread across the world -, the fiscal situation worsened in oil-exporting countries, after the continued decline in international oil prices. The Brent fell below USD 60 per barrel in January 2020, leading countries like Nigeria and Angola to face severe fiscal strain – a "double whammy" (Zhenqian Huang and Lulu Zhao, 2020) in a broader historical context of oil rich developing countries falling short of channeling resource wealth towards public services. Oil price slump led global rating agencies to lower ratings for such countries, thereby increasing the cost of external borrowing at the outbreak of the pandemic. It I also worth mentioning that oil importing countries that receive large inflows of remittances and foreign direct investments from

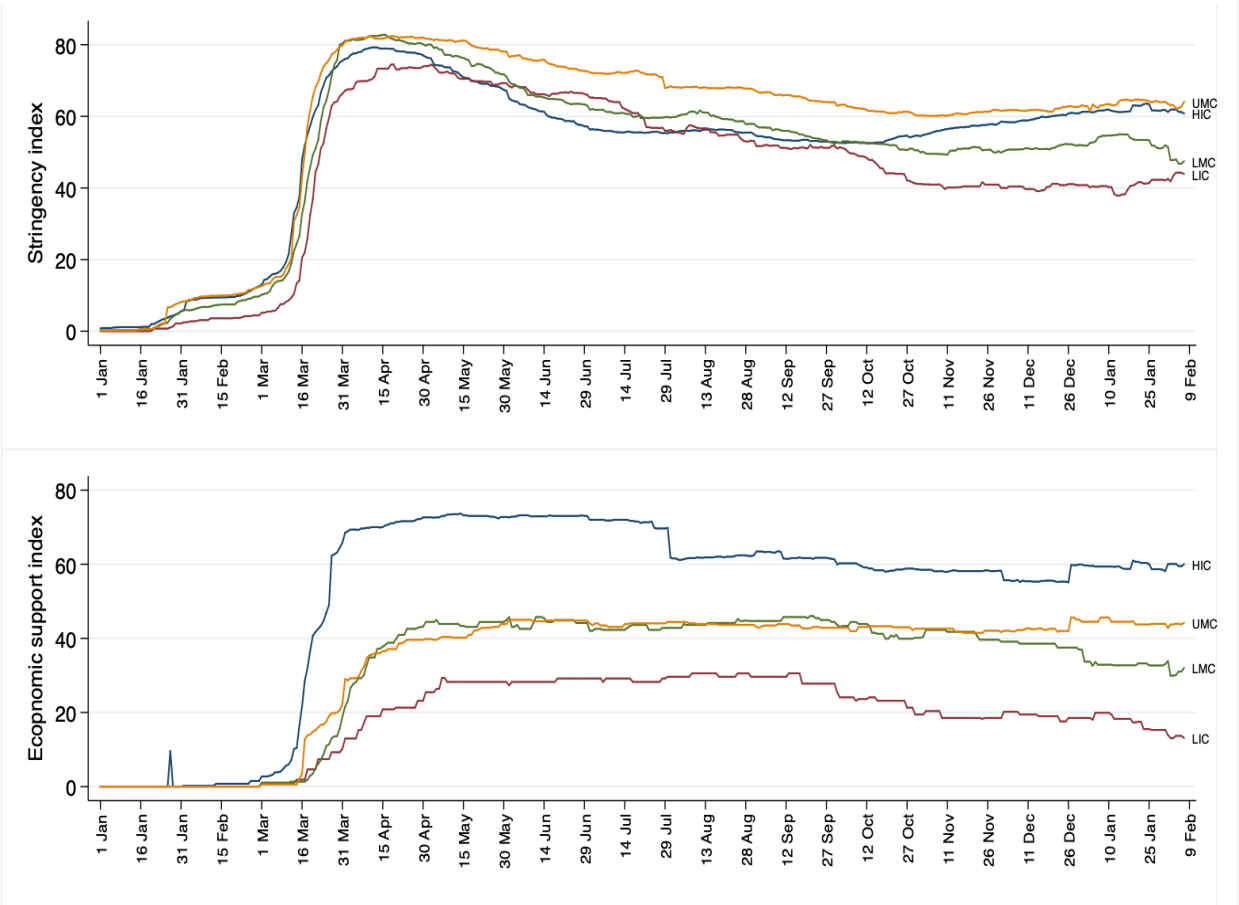
major oil economies were indirectly hit hard by the decline in oil prices.

2. Developing countries focus on prevention and low-tech measures

Against this backdrop, many authorities in poor countries considered that the best option would be to prevent the spread of the virus and implement low-tech mitigation measures such as temperature control, hand washing and social distancing, with the voluntary support from the population. Population adhered to preventive measures all the more easily that epidemic or pandemic outbreaks happened in the past in their region (SARS, Mers, Ebola, Zika). For many developing countries, COVID was not a singular problem, "it's being managed alongside Lassa fever, yellow fever, cholera, measles, and many others", making these countries "more alert and willing to deploy scarce resources to stop outbreaks before they become widespread" (Mormina and Nsofor, 2020).

A critical factor which enabled poor countries to live up to the challenges of COVID was time. Sub-Saharan Africa was hit late when compared to European and North American countries where clusters of contaminated people popped up, and first deaths were recorded, weeks before these happened across the continent. The virus entered Italy via two tourists from China, tested positive on January 31, 2020. Then the virus spread, through a first cluster of 16 cases in Lombardy, which later increased to 60, to the record of the first COVID-19 death in February 22,

Figure 5. Convergence in Covid-19 responses stringency was followed by a huge discrepancy in economic responses across countries



Source: Authors, based on Oxford Coronavirus Government Response Tracker (see footnote 2). HIC: High-income countries; UMC: Upper-Middle income countries; LMC: Lower Middle-Income countries; LIC: Low-Income countries.

2020. Weeks after the disease ravaged Italy, the disease started in Nigeria. The first reported index case of coronavirus disease in Nigeria was an Italian citizen in Lagos who tested positive on February 27, 2020. The second case was reported on March 9 - the Nigerian contact of the first index case. The first Nigerian case was also the first case of the coronavirus in sub-Saharan Africa.

This time lag, even short, enabled poor countries to draw lessons from countries already hit: some closed schools and made temperature check in public places like malls and markets, citizens voluntarily wore a mask - something which was inconceivable in rich countries – well before nation-wide lockdown. Additionally, the low-tech nature of the confinement measures created a level playing field among countries in the management of COVID-19 as far as non-economic measures are concerned[2]. The focus on prevention and the swift decision to lockdown can be explained by the limited capacity of many developing countries to cope with the sanitary consequences of COVID indeed.

By the end of March, the vast majority of countries, whatever their income level, locked their economy down, with nuances in the stringency and effectiveness of the measures adopted. The stringency index developed by the Blavatnik School of Government of Oxford University[3], which records the strictness of 'lockdown style' policies that primarily restrict people's behaviour, peaked in the end of March/mid-April, then receded until the second wave hit, displaying a quite similar pattern across country income groups (Figure 5, top panel).

During the lockdown phase, countries closed schools – a double penalty for poor countries and households as these countries have less capacity to sustain on-line learning, while the most disadvantaged have even fewer possibilities to seize whatever on-line opportunities available. Countries which could afford it closed workplaces as well, providing financial support to businesses in economic distress. The capacity to provide economic support (captured in the index by economic policies such as income support and debt/contract relief to citizen, fiscal measures and foreign aid[4]) was highly correlated to country income level, as the bottom part of figure 5 shows. Economic response was swift and reached the highest level in high-income countries, while it was more progressive and almost twice as low in the developing country group taken as a whole.

Universal lockdown ("stringent") measures and ad hoc economic support combined over the course of the year. This combination displays remarkable distinct patterns across country groups. Strikingly, schools and workplace closings, which were universally set up in April, have been a constant feature of UMICs. LICs implemented such measures during a much shorter period, and they discarded them when the second wave hit at the end of 2020, contrary to countries from the other groups, probably because of a combination of limited resilience of business and limited capacity of government to enforce strict measures.

High-income countries added economic support on the top of stringency measures all at once, then increased the magnitude of both types of measures before relaxing lockdown and keeping economic support at the highest level of all countries groups. The pattern is different for LICs and MICs, whose responses tilted toward stringency – exceeding HIC level on this indicator – at the expense of economic support, which was slower and smaller. These different combinations, and their changes over time, reflect different abilities to withstand the economic cost of containment measures. This is striking in the policy response to the second wave: after the experience of the first lockdown and of its social consequences, all of which could not be mitigated, LICs did not resume stringent measures contrary to the other groups.

3. A lockdown with "human face"?

[2] https://interactives.lowyinstitute.org/features/covid-performance/

[3] https://www.bsg.ox.ac.uk/research/research-projects/coronavirus-government-response-tracker

[4] See https://github.com/OxCGRT/covid-policy-tracker/blob/master/documentation/codebook.md#economic-policies

In their review of policy responses in developing countries in the early months of the pandemic, (Chowdhury and Jomo, 2020) identified three success stories – namely Kerala in India, Vietnam and Argentina. In Africa, the best performers according to Lowy and Oxford include Rwanda and Togo, followed by Tunisia, Mozambique, Malawi, Zambia and Uganda. Across all these countries, different sets of policies played out, leading to a remarkable control of the first wave of the pandemic at a low economic cost.

Some salient features stand out (Box 1). These include community consultations for the design and implementation process, social mobilization and solidarity across social, religious and business groups, the prevention of stigmatization, transparency and communication, and a whole of government approach. A "lockdown with human face" best summarises the approach, with the continuity of essential service provision, physical delivery of food, medicine and other essentials.

Box 1: A lockdown with human face in Kerala during the first wave

Kerala has been internationally praised as role model for poor countries facing resource constraints. By acting early and inclusively, Kerala discarded the option of a disruptive total lockdown and its associated human and economic costs. Kerala achieved a high level of popular support and voluntary compliance, making draconian measures to mitigate the consequences of the pandemic unnecessary. Five key features can best describe the policy response of Kerala:

Community consultation: The Kerala state government invited religious leaders, local bodies and civil society organisations (CSOs) to participate in policy design and implementation. The term 'social distancing', with caste and class connotations, was dismissed. The Kerala state government instead privileged 'physical distancing' as part of a more inclusive approach. It crafted political messages, such as 'Break the Chain', with larger political connotations, e.g., breaking the chains of oppression and popular emancipation.

Social mobilisation and solidarity. The Kerala state government mobilized more than 300,000 volunteers to help implement infection control measures. It mobilized CSOs to support its 'Break the Chain' awareness campaign, and got numerous micro-enterprises to produce hand sanitizers and face masks, while distributing interest-free loans worth 200 billion rupees to needy families.

Preventing stigmatization. The Kerala government organized hundreds of community kitchens with the help of CSOs and local leaders to discreetly deliver free meals to those infected with the virus, without publicly identifying them to avoid possible social stigmatization.

All of government approach. The Kerala government set up 18 inter-departmental committees involving all branches of government, with daily meeting to evaluate the situation.

Transparency and communication. In daily press conferences, the state Health Minister and Chief Minister calmly explained what was going on and what her department was doing. Communities were provided with essential epidemiological information to better understand the threat and related issues, to ensure compliance with prescribed precautionary measures and to avoid inadvertently causing panic.

Lockdown with a human face. The Kerala state government has organized the physical delivery of food, medicine and other essentials as well as necessary services to those under lockdown. It took immediate actions to reduce the risk of hunger and starvation of the poorest segments of the population by organizing free rations for all for a month, distributing food kits, consisting of 17 items for every household, irrespective of income status.

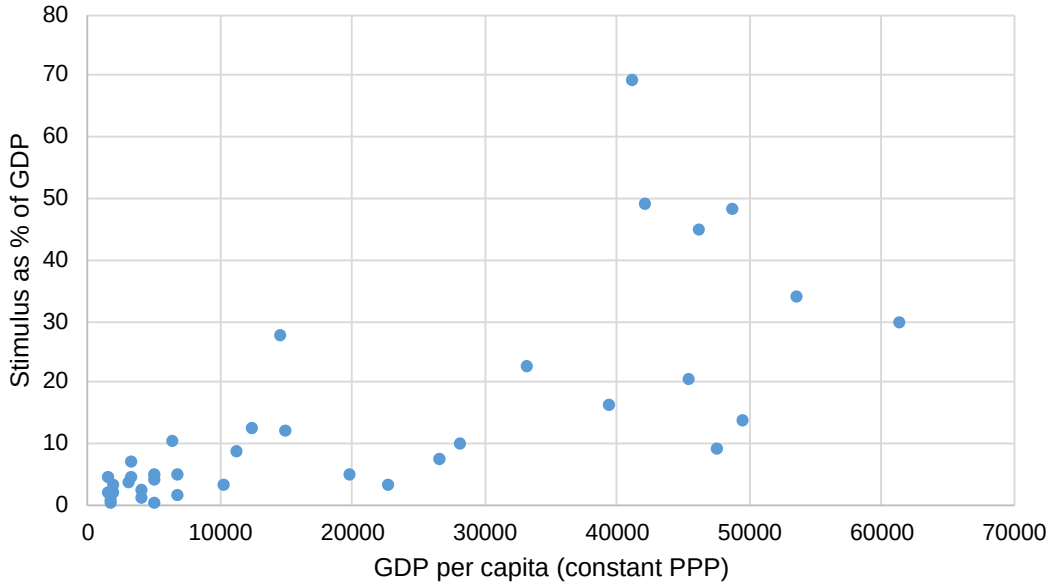
Source: Chowdhury and Jomo (2020: 170); Krishna (2020) ; Pothan (2020).

The case of Rwanda provides additional insights on how health-care system and coordinated prevention measures enabled the country to record zero deaths from the disease until May, 31, 2020[5]. During the covid-19 pandemic, Rwanda's health system has become an exemplar for its success in controlling the virus indeed. While neighbouring countries recorded between 10 000 and 90 000 cases, Rwanda, as of 9 December, had around 6000 cases and 51 deaths[6] only. Rwanda implemented a complete lockdown a week after the first case was reported. A week later, it set up a contact-tracing system and implemented testing for those working in public spaces and all staff policing borders (Condo, Uwizihiwe, Nsanzimana, 2020). Stigmatization was avoided, like during the Ebola crisis and the level of confidence in the health authority was akin to a plebiscite according to a study, making the compliance to contact-tracing and social distancing measures easy to enforce[7].

"At a basic level, people know that the system is not against them" recalls Agnes Binagwaho, an architect of Rwanda's health system[8]. "They know they can get care when they need it, and that getting care will not lead them to suffer in other ways [such as financially or in terms of employability]. And, they know that the public health guidance is not politically motivated"[9]. A key factor was that the Rwandan health sector was quite bold, with respect to equity, enabling the government to promptly identify populations in need of extra support and reach out to them (Condo, Uwizihiwe, Nsanzimana, 2020).

At the other end of the spectrum, South Africa stands out as a country where government response has been geared to a few and not the many, and quite ineffective in testing and tracing, at least in the early weeks following the first contamination cases. In a bitter painting of South Africa's poor performance in managing Covid-19, Friedman (2020) pinpointed the critical role

Figure 6: The wealthier the country, the bigger the stimulus as a share of GDP



Sources: Author, based on Economic stimulus estimates are based on ODI policy country response tracker as of 12 August 2020. GDP and population data are from World Development Indicators database. Data coverage is 36 countries.

[5] https://www.nature.com/articles/d41586-020-01563-7
[6] https://www.bmj.com/content/371/bmj.m4720
[7] Farrar J. The most important healthcare tool is trust. *Wellcome Trust* 13 Aug 2019.
[8] https://www.bmj.com/content/371/bmj.m4720
[9] *Id.*

played by top-down management and behaviours guidance which proved inapplicable in urban townships and shack settlements. On the top of that, the logistic arm of the ministry of health – the National Health Laboratory Service – was stuck in backlog, meaning that "testing and tracing could not work no matter how many tests were conducted and how many health workers were hired" (id.). In another vitriolic description of South Africa's response, C19 People's Coalition concludes that the government response had been geared to that portion of the population which is able to access medical care and could afford physical distancing measures. It did not adequate account of the situation of the majority of the population or provided relevant education or support[10]. Rwanda and South Africa illustrate the prominent role played by trust and inclusiveness in the design of policy responses, as well the path dependency in health system's capacity to provide equitable access to public health services. By April 1st 2021, cumulative cases totalled 1,546,735 in South Africa and cumulative deaths reached 52,788, against 21,645 cases and 306 deaths in Rwanda.

Similar lesson can be drawn from the particular case of Peru, as a reminder that policy design matters, in particular when the challenge is to reach out to citizens at the margin of the formal sector. At the onset of the pandemic, Peru imposed the set of measures which were shared by most countries at a given time (lockdowns, school closing, border control, relief measures). But as Chowdhury and Jomo (2020: 168) recall, "response was flawed as the government had not sufficiently considered the country's socio-economic conditions". Slums dwellers in Peru do not have bank accounts, and had to stand hours lining up for cash relief, which paradoxically became a major driver of contagion (Ghitis 2020).

4. Inequality between countries looms large in economic policy responses

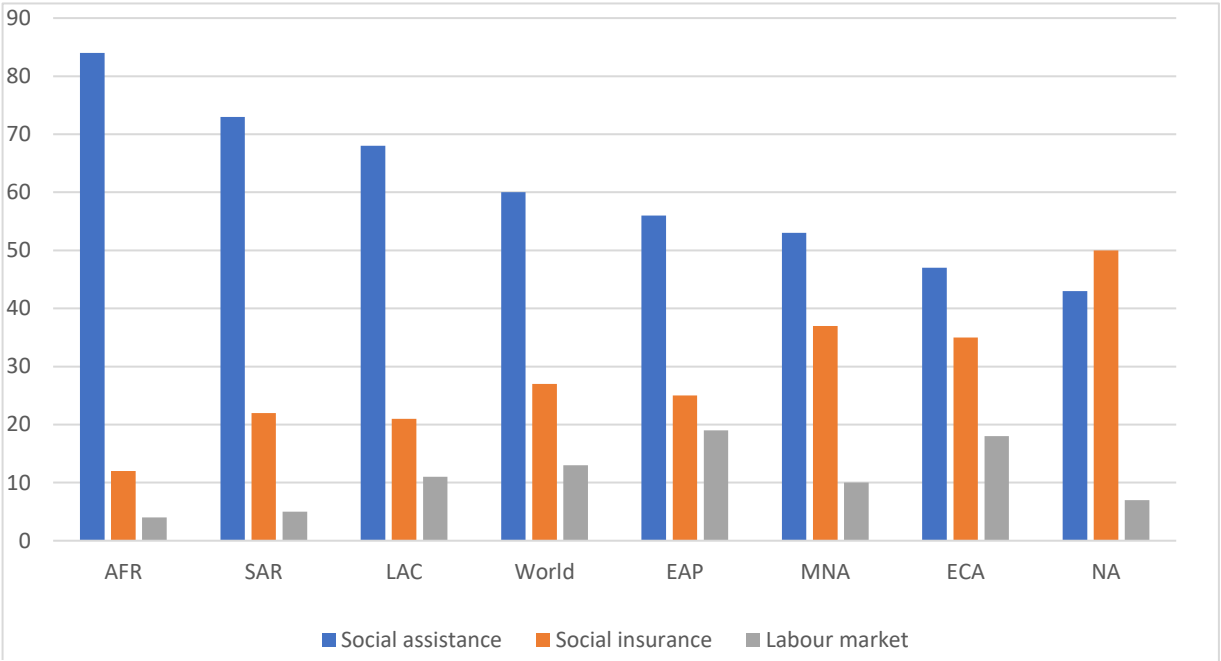
The most salient discrepancies in policy responses lie in economic rescue packages. The fiscal and monetary responses from the G20 dwarfed in magnitude the policy packages set up by poor countries. Expressed as a share of GDP, the amount of liquidity and financial support taken in broad sense was more than 8 times higher among G20 countries than in Sub-Saharan Africa (South Africa excluded) by August 2020. The wealthier the country, the higher its capacity to borrow and allocate a substantive part of its GDP to mitigate the consequences of the crisis (figure 6). The package reaches 68% of GDP in Japan (the highest ratio as of August 12) and 6.8% in Senegal (the highest ratio among SSA countries – South Africa excluded - at the same date). Gross-debt position reached a record 122% of GDP in high-income countries, against 62% and 47% in middle-income and low-income countries respectively. African sovereign bond yields bounced from 7% to 12% in March, before receding to 8% in June. They remain incommensurate with near-zero to negative rates in Europe and US in spite of record-high debt levels.

The Covid-19 response packages have compounded pre-covid inequalities across countries, in particular as regards borrowing and spending capacities. Before the crisis, public revenues as a share of GDP were 2.5 as low in low-income countries as they were in advanced economies. Total and public expenditures on health increased relatively smoothly between 2001 and 2018 in most OECD countries, reaching 12.5% and 7.7% respectively before the crisis. In 2001, African leaders pledged to invest around 15% of the government budgets in health. This vow became known as the Abuja Declaration. 18 years down the line and only a handful of countries –Rwanda, Botswana, Ethiopia, Malawi, Gambia, Swaziland, Zambia — have met the 2001 Abuja declaration target.

Monetary measures provide liquidity to the banking sector, which in turn can reallocate the extra liquidity to their clients – be they businesses

[10] https://allafrica.com/stories/202007230929.html

Figure 7. Breakdown of Covid-related social protection measures (% total number of measures)



Source: Authors based on Gentilini (2020). In Africa, 82% of Covid-related measures are social assistance measures. Note: the graph plots the number of measures taken in each region, irrespective of their size (number of people targeted). AFR: Africa; SAR: South Asia ; LAC: Latin America; EAP: East Asia Pacific; MNA: Middle East North Africa; ECA: Europe Central Asia; NA: North America

or households. They are unlikely to reach the most vulnerable (informal businesses and poor households) contrary to fiscal stimulus measures which can be set up to reach out the most left behind. The magnitude and efficacy of the later much depend on pre-existing administrative channels and social registers. In low income countries, informal employment was in the range [84% (Adult 25+) – 95% (Youth 15-24)], making it harder to expand social protection at scale, against [19% - 25%] in high-income countries. Due to different budget capacities and social register coverage, Covid-related social spending during the peak of the pandemic was way higher in high income countries than in low income countries – the ratio actually stood at 99:1 in May in per capita terms (Gentilini, 2020). As a share of population covered, North America ranks first (22% of the population), while only 2% of Sub-Saharan Africa's is covered by planned or actual cash transfers reported for Covid-19.

The breadth of social protection measures implemented to mitigate the economic consequences of Covid-19 also entail remarkable inequalities. Their different types (social assistance, social insurance, labour market) have been diversely mobilised by countries, depending on their income level. Not only financial support was limited in LICs and MICs vis-à-vis HICs, but the peculiar response might have transferred a large part of the impact to the workers. In the case of LAC where some 23 million people were temporarily removed from the workforce and have lost their jobs and their income, some labour market measures allowed for temporary suspension of contracts, reduction of working hours, reduction of wages or use of anticipated vacations to avoid massive layoffs. These measures, as expected, ended up affecting workers' income (ILO, 2020).

Social assistance through cash transfers has been the most widely used across low income countries during the crisis, their relative weight in

the overall package of social protection measures as country income rises (figure 7). In an opposite move, the share of social insurance measures increases along with country income, offering hence to rich countries the widest choice to buffer shocks.

New forms of inequalities arise during the crisis – sometimes blurring the frontier between rich and poor countries. In Europe and Central Asia a shrinking middle class, high levels of informal and vulnerable employment, gaps in social protection, emigration of skilled and young workers, and perceptions of inequality before the law made pre-COVID-19 inequality issues particularly pressing. Just as the gap in basic living standards is narrowing, new forms of inequalities were emerging, caused by uneven access to technology and education and exacerbated among poorer and more vulnerable groups by the climate crisis. For instance, nearly 90 percent of the region's energy comes from fossil fuels, coverage of the population with 4G mobile network ranges between 99 percent in Georgia and 3 percent in Ukraine.

5. The likely impact of COVID-19 on inequalities within countries

Around the globe the Covid-19 pandemic has exacerbated several forms of health, social, gender and racial inequality. The International Monetary Fund estimates for instance that in 2020 income inequality measured by the Gini coefficient on disposable income increased by 2.6 percentage points in emerging markets and low-income countries as a consequence of the crisis (IMF, 2020: 37). It would increase to a level comparable to the level in 2008, reversing any potential gains made since the global financial crisis. In other countries, where there is large available real-time income or savings data, studies have demonstrated that the pandemic and its economic consequences have disproportionately affected the low income and wealth groups (see for instance Bounie et al. 2020; Chetty et al. 2020). In the US for instance, Chetty et al. (2020) show that show that employment rates fell by 37% around the trough of the COVID recession (April 15, 2020) for workers with wages rates in the bottom quartile of the pre-COVID wage distribution, while employment rates fell by 14% for those in the top wage quartile. The fact that such results are obtained in high-income countries, i.e. countries which have developed over the past two centuries relatively generous welfare protection systems (transfers and regulations), suggests that economic shocks at the bottom of the distribution could be worse in low-income countries, where formal social assistance and insurance programs are patchy. The role of subsistence agriculture as a "buffer", in lieu of formal cash transfer and other safety net measures, could nuance this in specific rural areas, without providing much relief yet to urban poor.

The greater the pre-existing inequalities, the more unequal the impacts of a crisis are likely to be, with households that have less access to markets, capital, and basic services being more severely hit than the others. This means that, all else equal, crises have larger distributional impacts in societies with higher inequality of opportunity, in the form of unequal access to health services, job market and capital. The literature suggests that the early phases of the pandemic (lockdowns) have had a greater effect on vulnerable individuals, including those with lower income and educational attainment, minorities, and women (IMF, 2020: 77). Lower-paid workers, more than higher-paid workers, are often unable to perform their tasks from home (Dingel and Neiman 2020). Generally speaking, low-wage earners face a higher risk of losing their jobs than those in the top quintiles of the wage distribution (Shibata, 2020). In developing countries, informally employed workers tend to face a higher risk to lose their jobs more than workers with a formal contract (Jain et al., 2020). Evidence in developing countries, and in particular low-income countries, remains however incomplete due to the paucity of data on informal labour income, in spite of recent

efforts made to conduct Social-Economic Impact Assessment within the UN's Framework for the Immediate Socio-Economic Response to the COVID-19 Crisis (UNDP, 2020a; UNDP, 2020b; UNDP, 2020c). These studies support the assumption that the impact of the pandemic on household income had resulted in a loss of wage income and revenues from informal work, a decline in remittances, and price inflation triggered by a rise in food prices - with spill over effects through rising household debt levels, inability to afford out-of-pocket payments for health services and reduced access to public health and education. In other words, the crisis hit low income households disproportionately hard.

The World Bank has set up a monitoring dashboard encompassing harmonized indicators from high-frequency phone surveys conducted in over 45 countries in response to the COVID-19 pandemic[11]. They pinpoint a few interesting commonalities and differences in the distributional impact of Covid on the labour market, and in turn, on available income for households. Surveys show in particular that low and middle-income countries exhibit higher rates of income losses whereas high-income countries exhibit lower rates of income losses (box 2).

Income losses seem to be correlated with the formality/informality of the labour market, as Jain and al. (2020) suggest in the case of South Africa. Farm/non-farm family business dichotomy could be another driver of inequality changes, pointing to the role of buffer played by the agricultural sector. World Bank Covid-19 High Frequency Dashboard data suggest that income decrease is higher for non-farm family businesses than for farmers.

Turning to the other end of the income and wealth distribution, the impact of Covid and subsequent policies on inequality at the top remain speculative and not documented to date. If anything, the wealth of the Fortunes 500 (the 500 richest individuals on earth) has increased by 12% between August 2019 and August 2020, and the wealth of the top 10 increased by 24% over the same period. Plausibly, F500 companies managed to identify and tap opportunities offered by crisis (video calls, delivery services, FinTech for online payments…) and were better able to capture the benefits from liquidity packages. Overall, the recession has not yet hit the world's wealthiest. Indeed, a plausible scenario is that wealth inequality will further rise after recession as it did after 2008, unless specific policy measures are adopted to address inequality at the top of the distribution. There is no clear evidence indeed that the 2008 crisis altered the secular rise in wealth concentration or reduced pre-crisis concentration levels. What seems particularly striking is the ability of top wealth groups to rapidly recover and continue to accumulate (net of taxes) wealth at faster rates than the rest of the population (Chancel, 2019).

[11] See World Bank, Covid-19 High Frequency Monitoring Dashboard

6. Larger inequalities loom ahead

The limited evidence collated from past pandemics suggests that pandemics are associated with long-run increases in income inequality. Immediate inequality impacts do not vanish but instead, they tend to grow over time. Focus on five major events—SARS (2003), H1N1 (2009), MERS (2012), Ebola (2014) and Zika (2016)—Furceri et al. (2020) estimate the distributional impacts of such events five years after their outbreak. Their result is that on average, income inequalities in affected countries increased steadily. Post tax income inequalities were estimated to be around 1.25% above the pre-shock level. Strikingly, pre-tax inequalities grew as well but a bit lower, suggesting that redistributive public programmes had been inadequate to mitigate the distributional impacts of the pandemic, and may even have been regressive (Hill and Narayan, 2020).

The literature also warns us that economic recession – which has been the side coin of the pandemic for most countries – is a driver of long-term inequalities. The larger the output and employment losses, the higher the inequality after recessions vis-à-vis pre-crisis average (IMF, 2018: 73). Poor people are hit more than the rest of the population in case of a big drop in GDP per capita and they benefit less from fast-growth recovery. "In other words, they are more vulnerable to negative shocks and less favourably affected by positive shocks" (Bourguignon, 2012: 209). Should GDP bounce back in 2021 and 2022, poor people could still loose out and inequalities increase at the bottom.

Box 2: The distributional impact of COVID – estimates of job and income losses from high-frequency phone surveys

The job stoppage rate is low in both low and high-income countries

Job stoppages since the start of the COVID 19 outbreak vary widely across countries:

- There is an inverse U shape relationship between job stoppages and GDP per capita.
- Low and high-income countries exhibit the lowest rates, whereas middle-income countries exhibit the highest rates.
- Some regional patterns also emerge. In sub Saharan Africa, East Asia & Pacific, and Europe and Central Asia regions, the job stoppage rates tend to be lower. Whereas in the Latin America & the Caribbean region, the rates tend to be higher.

Employment appears a good predictor for income losses in middle and high-income countries but not in low-income countries

Income losses since COVID 19 outbreak vary across countries: Low and middle-income countries exhibit higher rates of income losses whereas high-income countries exhibit lower rates of income losses.

Job stoppage rates are a good predictor for income losses in middle and high-income countries but not in low-income countries.

- In high-income countries, both low job stoppage and income loss rates are low.
- In middle-income countries, both job stoppage and income loss rates are high.
- In low-income countries, the job stoppage rate is low, but the income loss rate is high.

Source: World Bank Covid-19 High Frequency Dashboard, January 15, 2021.

Last, economic research on income and wealth inequalities reveals that inequalities in developing countries, and in particular in LICs, are worse than previously thought (UNDP, 2020d). The combination of different data sources (tax data and national accounts) on top of standard household surveys reveal that in Sub Saharan Africa, inequality levels appear to be almost as high as in Latin America (Chancel et al. 2019). These novel findings suggest that the widespread view (i.e. that there would be a form of African exceptionalism in the face of economic inequality) needs to be revisited. These results also suggest that covid-19 response package should pay particular attention to the distributional consequences of the pandemic and of the various policies implemented in the coming years, let alone that inequality goes beyond income inequalities and entail other dimensions such as access to education and health, and gender effects. To accurately monitor the effect of the pandemics on socioeconomic inequality and on the distribution of macroeconomic growth, which is one part of multidimensional inequalities, it is necessary to increase inequality data production and transparency in the developing world – as well as in high-income countries (Burq and Chancel, 2020). This work would facilitate the design and increase the impact of "buffer" policies targeting particular vulnerable groups (UNECE, 2021: 14-16).

The most urgent avenues for coping with old and new inequalities consist in scaling-up data production and collection on national income and wealth distribution, something the World Inequality Lab has been particularly involved over the last year with the cooperation and support of UNDP. What can be measured can be fixed, as the motto says – an unexpected side effect of the current crisis is that the momentum is now growing on the need and possibility to collect data in countries with limited statistical capacities.

Conclusion

Agnes Binagwaho, an architect of Rwanda's health system, recounted in December 2020 that "Covid-19 has shown that the Western world and the global north are not the best at doing everything. It's time to revisit why they're doing what they're doing. The culture of individualism, the lack of solidarity—it's losing trust with the people. And it's making people sick". Our review of policy responses to Covid-19 brings much support to this claim. With a narrow fiscal space and weak health system when compared to OECD standards, many developing countries entered the crisis with a comparative disadvantage vis-à-vis their peers. They showed that no fate is destined to inevitably befall them. By focusing on prevention and low-tech mitigation measures, they invented the "lockdown with a human face" and extensively drew on informal solidarity networks to design and complete rescue packages and reach out to the most vulnerable. They took opportunity of the time lag before the crisis hit to learn from other countries and build on their own experience of past pandemics. As a direct consequence of this mixture of prevention and inclusive design of low-tech mitigation measures, several low-income countries stand out among the best performing countries in their response to Covid-19.

This does not mean that they all performed well, as the counter-example of South Africa has shown. It does not mean either that no challenges are looming ahead. History shows that economic crisis amplify economic inequalities, in a context where inequality in poor countries is greater than expected according to the latest updated data. Old inequalities could widen, and new inequality could arise, in the form of a lower capacity to engage in an inclusive and green transition. Oil and gas rich developing countries in particular, which were particularly hit by the pandemic, could be stranded in a carbon-intensive development pathway, with a shrinking fiscal space due to plummeting oil and gas revenues and unabated addiction to fossil fuel subsidies. The policies needed to address all these challenges cut across a large spectrum of policy areas – from public finance and domestic

resource mobilisation, to health, energy and the environment. They delineate a new "ecological welfare state" or "ecostate" regime whose bits and pieces have been emerging along the crisis. This new "ecostate" regime should not be the privilege of rich countries. Its definition and practicalities go well beyond the scope of this paper – and actually make up a research agenda on its own right. The bottom line remains that no policies will address old and new inequalities without a massive scale-up in the production and dissemination of data on national income and wealth distribution within countries.

References

Bounie, D., Camara, Y., Fize, E., Galbraith, J., Landais, C., Lavest, Ch., Pazem, T., Savatier, B. (2020). Consumption Dynamics in the COVID Crisis: Real Time Insights from French Data. CEPR Discussion Papers 15474.

Bourguignon, Fr. (2012). Commodity Price Volatility, Poverty, and Growth Inclusiveness in Sub-Saharan African Countries. In Areski, Pattillo, Quintyn, and Min Zhu (eds.) Commodity Price Volatility and Inclusive Growth in Low-Income Countries. IMF, Washington, DC.

Burq, F., Chancel, L. (2020). Inequality Transparency Index Update. WID.world technical note 2020/12.

Chancel, L. (2019). Ten facts about inequality in advanced economies. WID.world technical note 2020/15.

Chancel, L., Cogneau, D., Gethin, A., Myczkowski, A. (2019). How Large are African Inequalities? WID.world working paper 2019/13.

Chetty, R., Friedman, J.R., Hendren, N., Stepner, M. (2020). The Economic Impacts of COVID-19: Evidence from a New Public Database Built Using Private Sector Data, Opportunity Insights Working Paper.

Condo, J., Uwizihiwe, J.P., Nsanzimana, S. (2020). Rwanda's success in tackling Covid-19. Nature Vol. 581: 28 May 2020.

Dingel, J., Neiman, B. (2020). How Many Jobs Can Be Done at Home? NBER Working Paper 26948, National Bureau of Economic Research, Cambridge, MA.

Friedman, S. (2020). South Africa is failing on Covid-19 because its leaders want to emulate the First World. The Conversation, 16 July 2020.

Gage, A., Bauhoff, S. (2020). Health Systems in Low-Income Countries Will Struggle to Protect Health Workers from Covid-19. Center for Global Development, Washington, DC.

Ghitis, Fr. (2020). Why Even Peru's top-notch plans failed to stop the coronavirus pandemic. World Politics Review. 28 May, 2020.

Hill, R., Narayan, A. (2020) 'Covid-19 and inequality: a review of the evidence on likely impact and policy options', Working paper, Centre for Disaster Protection, London.

ILO (2020). 2020 Labour Overview. Latin America and the Caribbean. Geneva: ILO.

IMF (2018) 'World Economic Outlook', IMF, Washington DC.

IMF (2020) 'World Economic Outlook', IMF, Washington DC.

Jain, R., Budlender, J., Zizzamia, R., Bassier, I. (2020). The Labor Market and Poverty Impacts of COVID-19 in South Africa. CSAE Working Paper WPS/202014, Center for the Study of African Economies, Harvard University, Cambridge, MA .

Maclean, R., Marks, S. (2020). 10 African Countries Have No Ventilators. The New York Times, 20 April.

Malley, R., Malley, R. (2020). When the Pandemic Hits the Most Vulnerable: Developing Countries Are Hurtling Toward Coronavirus Catastrophe. Foreign Affairs, 31 March.

Mormina, M., and Nsofor, I.M. (2020). What developing countries can teach to rich countries

about how to respond to a pandemic. The Conversation, 15 October.

Pothan, P.E., Taguchi, M., Santini, G. (2020). Local food systems and COVID-19; a glimpse on India's responses. FAO, 22 April.

Sanders, D., Sengupta, A., Scott, V. (2015). Ebola Epidemic Exposes the Pathology of the Global Economic and Political System. International Journal of Health Services 45 (4): 643–656.

Scott, V., Crawford-Browne, S., Sanders, D. (2016). Critiquing the Response to the Ebola Epidemic Through a Primary Health Care Approach. BMC Public Health 16 (410): 1–9.

UNDP (2020a). COVID-19 and Central Asia: Socio-economic impacts and key policy considerations for recovery. New York: UNDP.

UNDP (2020b). COVID-19 and the countries of South Caucasus, Western CIS and Ukraine Implications for Business Support, Employment and Social Protection Policies and Programming for Sustainability. New York: UNDP.

UNDP (2020c). Analysing long-term socio-economic impacts of COVID-19 across diverse African contexts. New York: UNDP.

UNDP (2020d). The next frontier: Human development and the Anthropocene. Human Development Report 2020. New York: UNDP.

UNDP (2021). COVID-19 and Central Asia: Socio-economic impacts and key policy considerations for recovery, UNDP Eurasia.

UNECE (2021). Is the UNECE region on track for 2030? Assessment, stories and insights. New York: UN.

World Health Organization (WHO). 2020a. WHO Director-General's Opening Remarks at the Media Briefing on COVID-19, 11 March..

Zhenqien Huang, Lulu Zhao (2020). Coping with COVID-19 and enhancing long-term resilience to future shocks: An assessment of fuel-exporting countries in Asia and the Pacific. UN ESCAP.

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The World Inequality Lab

The World Inequality Lab aims to promote research on global inequality dynamics. Its core missions are the extension of the World Inequality Database, the production of inequality reports and working papers addressing substantive and methodological issues, and their dissemination in academic and public debates. The Lab regroups about twenty research fellows, research assistants and project officers based at the Paris School of Economics. It is supervised by an executive committee composed of 5 co-directors. The World Inequality Lab works in close coordination with the large international network (over one hundred researchers covering nearly seventy countries) contributing to the database

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