OVERVIEW

POVERTY AND SHARED PROSPERITY 2022

CORRECTING COURSE

WORLD BANK GROUP

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2022

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1818 H Street NW, Washington, DC 20433
Telephone: 202-473-1000; Internet: www.worldbank.org

Cover design: Bill Pragluski, Critical Stages, LLC
Interior design: Ricardo Echecopar, Beyond SAC

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Foreword

COVID-19 marked the end of a phase of global progress in poverty reduction. During the three decades that preceded its arrival, more than 1 billion people escaped extreme poverty. The incomes of the poorest nations gained ground.

By 2015, the global extreme-poverty rate had been cut by more than half. Since then, poverty reduction has slowed in tandem with subdued global economic growth. The economic upheavals brought on by COVID-19 and later the war in Ukraine produced an outright reversal in progress. It became clear that the global goal of ending extreme poverty by 2030 would not be achieved. Given current trends, 574 million people—nearly 7 percent of the world's population—will still be living on less than US$2.15 a day in 2030, with most in Africa.

In 2020 alone, the number of people living below the extreme poverty line rose by over 70 million. That is the largest one-year increase since global poverty monitoring began in 1990. Looking at poverty more broadly, nearly half the world—over 3 billion people—lives on less than US$6.85 per day, which is the average of the national poverty lines of upper-middle-income countries. Using that measure, poverty persists well beyond Africa. The prevalence and persistence of poverty darken the outlook for billions of people living around the world.

The data confirm that the income losses of the poorest 40 percent of world's population were twice as high as those of the richest 20 percent. Global median income declined by 4 percent in 2020—the first decline since our measurements of median income began in 1990. This decline represents a major setback for the goal of shared prosperity. The poorest also suffered disproportionate setbacks in education and health, with massive learning losses and shortened lifespans. These setbacks, if left unaddressed by policy action, will have lasting consequences for people's lifetime income prospects and for development more broadly.

This latest *Poverty and Shared Prosperity* report offers the first comprehensive look at the global landscape of poverty in the aftermath of COVID-19 and the war in Ukraine. It outlines the limits of current fiscal policies for poverty reduction in low- and lower-middle-income economies, and points to the importance of reviving economic growth. It also shows the potential of fiscal-policy reforms to help reduce poverty and support broad-based growth and development.

Strong fiscal policy measures made a notable difference in reducing COVID-19's impact on poverty. In fact, the average poverty rate in developing economies would have been 2.4 percentage points higher without a fiscal response. Yet government spending proved far more beneficial to poverty reduction in the wealthiest countries, which generally managed to fully offset COVID-19's impact on poverty through fiscal policy and other emergency support measures. Developing economies had fewer resources and therefore spent less and achieved

less: upper-middle-income economies offset just 50 percent of the poverty impact, and low- and lower-middle-income economies offset barely a quarter of the impact.

The rise in poverty in poorer countries reflects economies that are more informal, social protection systems that are weaker, and financial systems that are less developed. Yet several developing economies achieved notable successes during COVID-19. Helped by digital cash transfers, India managed to provide food or cash support to a remarkable 85 percent of rural households and 69 percent of urban households. South Africa initiated its biggest expansion of the social safety net in a generation, spending US$6 billion on poverty relief that benefited nearly 29 million people. And Brazil managed to reduce extreme poverty in 2020 despite an economic contraction, primarily using a family-based digital cash-transfer system.

In short, fiscal policy—prudently used and considering the initial country conditions in terms of fiscal space—*does* offer opportunities for policy makers in developing economies to step up the fight against poverty and inequality. To realize the potential of fiscal measures, the report calls for action on three fronts:

- *Choose targeted cash transfers instead of broad subsidies.* Half of all spending on energy subsidies in low- and middle-income economies went to the richest 20 percent of the population, who also happen to consume more energy. Targeted cash transfers are a far more effective mechanism for supporting poor and vulnerable groups: more than 60 percent of spending on cash transfers goes to the bottom 40 percent. Cash transfers also have a larger impact on income growth than subsidies.
- *Prioritize public spending for long-term growth.* COVID-19 has underlined how progress achieved over decades can vanish suddenly. High-return investments in education, research and development, and infrastructure projects should be made now. Governments need to improve their preparation for the next crisis. They also should improve the efficiency of their spending. Better procurement processes and incentives for public sector managers can boost both the quality and efficiency of government spending.
- *Mobilize tax revenues without hurting the poor.* This can be done by introducing property taxes, broadening the base of personal and corporate income taxes, and reducing regressive tax exemptions. If indirect taxes need to be raised, their design should minimize economic distortions and negative distributional impacts, and they should be accompanied with targeted cash transfers protecting the incomes of the most vulnerable households.

Restoring progress in poverty reduction is possible when helped by strong and broad-based economic growth—not only in the poorest economies but in middle-income economies as well. The policy reforms outlined in this report can help in achieving the necessary course corrections, recognizing that it will likely require stronger global growth and focused policy adjustments.

David Malpass
President
World Bank Group

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About the Team

Co-Leads of the Report

Jed Friedman is a lead economist in the Development Research Group (Poverty and Inequality Team) at the World Bank. His research interests include the measurement of well-being and poverty as well as the evaluation of health and social policies. His current work involves investigating the effectiveness of health financing reforms, assessing the nutritional and development gains from early life investment programs, and incorporating new approaches to survey-based well-being measurement. Jed's previous work has appeared in the *Journal of the European Economic Association*, the *Review of Economics and Statistics*, the *Journal of Development Economics*, the *Journal of Human Resources, The Lancet*, and other outlets. Jed holds a BA in philosophy from Stanford University and a PhD in economics from the University of Michigan.

Ruth Hill is a lead economist in the Global Unit of the Poverty and Equity Global Practice at the World Bank. Previously, she worked in the Sub-Saharan Africa and South Asia units on rural income diagnostics, poverty assessments, systematic country diagnostics, and an urban safety net project. From 2019 to 2021, Ruth was on external service as the chief economist at the UK government's Centre for Disaster Protection. Before joining the World Bank in 2013, she was a senior research fellow at the International Food Policy Research Institute, where she conducted impact evaluations on insurance, credit, and market interventions. Ruth has published in the *Journal of Development Economics, World Bank Economic Review, Economic Development and Cultural Change, Experimental Economics,* the *American Journal of Agricultural Economics,* and *World Development*. She has a DPhil in economics from the University of Oxford.

Core Team

Jessica Adler is a senior operations officer in the World Bank's Global Unit of the Poverty and Equity Global Practice. She supports the delivery of the Poverty and Equity work program, including strategy and program design, operational advice, quality assurance, portfolio management, and results monitoring. Jessica also serves as the program manager for the Umbrella Facility for the Poverty and Equity trust fund. She holds a BA in international economics from George Washington University and an MPP from George Mason University.

Pierre Bachas is an economist in the Development Research Group (Macroeconomics and Growth Team) at the World Bank. His research focuses on public finance in developing countries,

in particular, on optimal tax design and challenges to tax collection faced by low- and middle-income countries as a result of tax evasion, informality, and differences in economic structure. Prior to joining the World Bank, Pierre was a postdoctoral researcher at Princeton University. He holds a PhD in economics from the University of California, Berkeley.

Katy Bergstrom is an economist in the World Bank's Development Research Group (Poverty and Inequality Team). Her research interests lie at the intersection of public and development economics, specifically in optimal taxation and redistribution in developing countries, the determinants of income inequality, and investment differentials among children. Katy holds a BS in economics and mathematics from the University of Canterbury, New Zealand, and a PhD in economics from Stanford University.

Ben Brunckhorst is a consultant in the Global Unit of the Poverty and Equity Global Practice at the World Bank. His research interests include climate change and poverty, disaster risk finance, and public infrastructure investment. Before joining the World Bank, he was a research assistant at the University of Oxford and the UK government's Centre for Disaster Protection. Ben holds bachelor degrees in engineering and economics from the University of Queensland, and an MSc in economics for development from the University of Oxford.

Benoit Decerf is a research economist in the Development Research Group at the World Bank. He is an applied micro-theorist whose research interests include poverty measurement, welfare economics, and mechanism design. His current research on poverty measurement focuses on the design of poverty indicators aggregating different dimensions of deprivation, for example, combining subsistence and social participation, or combining poverty and mortality. Benoit holds an MS from the Katholieke Universiteit Leuven and a PhD from the Université Catholique de Louvain, both in Belgium.

Uche Ekhator-Mobayode is a World Bank Young Professional in the Global Unit of the Poverty and Equity Global Practice. She was previously an assistant professor of economics at the University of Pittsburgh at Bradford. Her previous World Bank experience includes one year with the pioneer cohort of the Forced Displacement Research Fellowship in 2018, and as a consultant on the Gender Dimensions of Forced Displacement project with the Global Gender Unit. Uche completed her PhD in economics at Northern Illinois University.

Yeon Soo Kim is a senior economist in the Global Unit of the Poverty and Equity Global Practice, where she co-leads the global program on the distributional impact of the COVID-19 crisis. She previously worked in the Europe and Central Asia and South Asia regions and was based in the Sri Lanka country office from 2018 to 2021. Yeon Soo has led and contributed to reports on a wide range of topics, including poverty, inequality, fiscal incidence, informality, and spatial disparities. Before joining the World Bank, she was an associate research fellow at the Korea Development Institute, where she worked on labor and health issues. She holds a PhD in economics from the University of Maryland, College Park.

Christoph Lakner is a senior economist in the Development Data Group at the World Bank. His research interests include inequality, poverty, and labor markets in developing countries. In particular, he has been working on global inequality, the relationship between inequality of opportunity and growth, the implications of regional price differences for inequality, and the

income composition of top incomes. He is also involved in the World Bank's global poverty monitoring. Christoph leads the Poverty and Inequality Data Team, which publishes the Poverty and Inequality Platform, the home of the World Bank's global poverty numbers. He holds a BA in economics, an MPhil, and a DPhil from the University of Oxford.

Daniel Gerszon Mahler is an economist in the Development Data Group, where he is part of the Sustainable Development Statistics Team and the team behind the Poverty and Inequality Platform. Prior to joining the World Bank, he was a visiting fellow at Harvard University's Department of Government and worked for the Danish Ministry of Foreign Affairs. He holds a PhD in economics from the University of Copenhagen. Daniel conducts research related to the measurement of poverty, inequality, and well-being.

Marta Schoch is a consultant in the Development Data Group at the World Bank, contributing to the group's work on global poverty and inequality measurement. Her research interests are in political economy, inequality, and poverty, with a focus on the formation of political preferences and its link with inequality. Since she joined the World Bank in 2020, she worked on the *Poverty and Shared Prosperity Report 2020* and contributed to the *Nigeria Poverty Assessment 2022*. Previously, she worked for the University of Sussex, the Migrating out of Poverty Research consortium, and the Imperial College London. Marta holds a PhD in economics from the University of Sussex.

Mahvish Shaukat is an economist in the World Bank's Development Research Group (Macroeconomics and Growth Team). Her research studies issues in governance, political economy, and public finance, with the goal of understanding how institutions and incentives shape state efficacy and citizen welfare. Mahvish holds a PhD in economics from the Massachusetts Institute of Technology.

Mariano Sosa is a consultant for the Global Unit of the Poverty and Equity Global Practice at the World Bank. His research interests include public finance and fiscal policy. His areas of expertise are fiscal incidence analysis, social policy, and the redistributive impact of fiscal policy in developing countries. Before joining the World Bank, Mariano was a research fellow for the Research Department of the Inter-American Development Bank. He holds an MPA in international development from Harvard Kennedy School.

Samuel Kofi Tetteh-Baah is a consultant in the Development Data Group at the World Bank, Washington, DC. He generally works on the empirical analysis of poverty and inequality. He has primarily been assessing the impact of purchasing power parity data on global poverty estimates. He holds a PhD in development economics from the Swiss Federal Institute of Technology, Zürich, Switzerland.

Matthew Wai-Poi is a lead economist in the World Bank's Poverty and Equity Global Practice, where he supports the regional work program in East Asia and Pacific on understanding and addressing poverty and inequality, as well as on topics such as the middle class, top incomes, female labor force participation, and the distributional impacts of climate change. He is also global lead for the Distributional Impacts of Fiscal and Social Policies. Previously, also at the World Bank, he worked on poverty and inequality issues in the Middle East and North Africa, including the role of gender and displacement, and was based in Jakarta for eight years. He was co-editor of

the recent flagship report on *Targeting in Social Assistance* and has published in the *Journal of Political Economy* and *American Economic Association Papers and Proceedings,* among others. Matthew has a PhD in economics from Columbia University and degrees in law and business. He worked in management consulting before joining the World Bank.

Nishant Yonzan is a consultant for the Development Data Group (Poverty and Inequality Data Team) at the World Bank, contributing to the group's global agenda on measuring poverty and inequality. His research interests include the measurement and the causes and consequences of economic poverty and inequality. Some of his work has highlighted the role of institutions in shaping economic distributions and civil conflict, the impact of COVID-19 on poverty and inequality, the effect of cash transfers on fertility, and the differences in top incomes captured in survey and tax data. Nishant holds a PhD in economics from the Graduate Center of the City University of New York.

Main Messages

The World Bank's latest *Poverty and Shared Prosperity* report provides the first comprehensive look at global poverty in the aftermath of an extraordinary series of shocks to the global economy.

The COVID-19 pandemic dealt the biggest setback to global poverty in decades. The pandemic increased the global extreme poverty rate to an estimated 9.3 percent in 2020—up from 8.4 percent in 2019. That indicates that more than 70 million people were pushed into extreme poverty by the end of 2020, increasing the global total to over 700 million.

2020 marked a historic turning point—an era of global income convergence gave way to global divergence. The world's poorest people bore the steepest costs of the pandemic. Incomes in the poorest countries fell much more than incomes in rich countries. As a result, the income losses of the world's poorest were twice as high as the world's richest, and global inequality rose for the first time in decades.

The poorest also suffered disproportionately in many other areas that directly affect their well-being. For example, they faced large setbacks in health and education, with devastating consequences, including premature mortality and pronounced learning losses. These setbacks, if left unaddressed by policy action, will have lasting consequences for people's lifetime income prospects.

The economic recovery from the COVID-19 pandemic has been uneven. The richest economies have recovered from the pandemic at a much faster pace than low- and middle-income economies. Rising food and energy prices—fueled by climate shocks and conflict among the world's biggest food producers—have hindered a swift recovery. By the end of 2022, as many as 685 million people could still be living in extreme poverty. This would make 2022 the second-worst year for poverty reduction in the past two decades (after 2020).

These setbacks occurred when the speed of progress toward poverty reduction was already slowing. In the five years leading up to the pandemic, poverty reduction had slowed to 0.6 percentage point per year. Before 2020, the world was already significantly off course on the global goal of ending extreme poverty by 2030. This report projects that 7 percent of the world's population—roughly 574 million people—will still struggle in extreme poverty in 2030. That is far short of the global goal of 3 percent in 2030. Further, the report shows that in 2019 nearly half of the world's population (47 percent) lives in poverty when this is measured as living on less than US$6.85 a day.

These setbacks call for a major course correction. Despite difficult global and domestic circumstances, policy makers must redouble their efforts to grow their economies in the coming years—while paying careful attention to who benefits from that growth. The need for growth that boosts the incomes of the poorest could not be greater than it is today.

Resilient recovery will depend on a wide range of policies. This report focuses on fiscal policy—a key area at the center of pandemic and postpandemic responses. Fiscal policy concerns how governments raise revenue and spend public resources. This report offers new analysis on how fiscal policy was used during the first year of the pandemic. It also sheds light on the impact of taxes, transfers, and subsidies on poverty and inequality in 94 countries before 2020, providing important new insights into the impacts of fiscal policy—not only during crises but also during normal conditions.

Fiscal policy made a noticeable difference in reducing the pandemic's impact on poverty. Without it, the average poverty rate in developing economies, assessed at national poverty lines, would have been 2.4 percentage points higher than it was. Yet fiscal policy was much less protective in poorer economies than in richer ones. Most high-income economies fully offset the pandemic's impacts on poverty through the use of fiscal policy, and upper-middle-income economies offset one-half of the impact. However, low- and lower-middle-income economies offset only one-quarter of the impact. The differences in effectiveness reflected more limited access to finance, weaker delivery systems, and higher levels of informality, which made protecting jobs much more challenging.

In general, low- and middle-income economies tend to be less successful than high-income ones in ensuring that the combination of taxes, transfers, and subsidies benefit the poor. Taxes finance spending on core services and investments, and transfers and subsidies can offset their impact on household incomes. But in two-thirds of low- and middle-income economies, the income of poor households falls by the time taxes have been paid and transfers and subsidies have been received. This divergence is due in part to the larger share of the informal sector in those economies. As a consequence, taxes are predominantly collected indirectly—through sales and excise taxes—and income transfers are often too low to compensate.

Given these structural challenges, this report identifies three key priority actions for fiscal policy in the coming years, as countries work to correct course:

1. ***Reorient spending away from subsidies toward support targeted to poor and vulnerable groups.*** Subsidies are often poorly targeted. For example, one-half of all spending on energy subsidies in low- and middle-income economies goes to the richest 20 percent of the population, who consume more energy. In contrast, programs like targeted cash transfers are far more likely to reach poor and vulnerable groups. More than 60 percent of spending on cash transfers goes to the bottom 40 percent. Cash transfers also tend to have a larger impact on income growth than subsidies.
2. ***Increase public investment that supports long-run development.*** Some of the highest-value public spending—such as investments in the human capital of young people or investments in infrastructure and research and development—can have a beneficial impact on growth, inequality, or poverty decades later. Amid crises, it is difficult to protect such

investments, but it is essential to do so. The COVID-19 pandemic has shown that hard-won progress achieved over decades can suddenly vanish. Designing forward-looking fiscal policies today can help countries to be better prepared and protected against future crises.

3. ***Mobilize revenue without hurting the poor.*** This can be accomplished through property and carbon taxes and by making personal and corporate income taxes more progressive. If indirect taxes need to be raised, cash transfers can be simultaneously used to offset their effects on the most vulnerable households.

Reforming fiscal policy will be an essential element of correcting course, but we must be realistic about how much we can expect it to do. Despite the promise of fiscal reforms, simulations suggest it will take heroic efforts toward more effective fiscal policy choices to restore the pandemic-related losses in the next four to five years. Successful fiscal reform will require the support of sufficiently powerful domestic coalitions interested in pursuing these types of policy goals, as well as stepped-up global cooperation.

Accelerating global poverty reduction, and progress toward the Sustainable Development Goals, will require more comprehensive policy action. This will involve a broader set of policies to stimulate the kind of growth that can benefit people across all income levels—but particularly those at the bottom. Correcting course is both urgent and difficult. Even if the course correction proves insufficient to end extreme poverty by 2030, it must begin now—for the sake of a lasting recovery from the overlapping crises of today.

Overview

Introduction

The COVID-19 pandemic triggered a pronounced setback in the fight against global poverty—likely the largest setback since World War II. Many low- and middle-income countries have yet to see a full recovery. High indebtedness in many countries has hindered a swift recovery, while rising food and energy prices—fueled in part by the Russian Federation's invasion of Ukraine and climate shocks among the world's biggest food producers—have made a return to progress on poverty reduction more challenging than ever. These setbacks have altered the trajectory of poverty reduction in large and lasting ways, sending the world even further off course on the goal of ending extreme poverty by 2030.

The year 2020 marked a historic turning point—an era of global income convergence gave way to global divergence as the world's poorest people were hardest hit. The richest people have recovered from the pandemic at a faster pace, further exacerbating differences. These diverging fortunes between the global rich and poor ushered in the first rise in global inequality in decades.

COVID-19, along with surging relative hikes in food and energy prices, have affected every economy around the world. Yet the impact has not been uniform across countries. In fact, it has been a function of the policy choices made during the crisis. Similarly, a range of policies and actions today will be critical to a resilient recovery tomorrow. This report focuses on fiscal policy: how governments raise revenue and spend public resources.

Fiscal policy is a main instrument used by governments to address immediate needs and promote long-term growth, with wide-ranging impacts on poverty and inequality. For many countries, fiscal policy is currently under considerable pressure. The fiscal demands of responding to a sustained crisis have left little fiscal space for additional spending, given that many countries already had little fiscal space at the onset of the pandemic (a result of years of lower growth and high debt). History shows that the fiscal choices that governments make in these moments can act as a lifeline for poor and vulnerable households—or they can further impoverish and increase inequality. This report offers new analysis of how fiscal policy was used during the first year of the pandemic. It also sheds light on the impact of taxes, transfers, and subsidies on poverty and inequality in 94 countries before 2020, providing important new insights into the impacts of fiscal policy not only during crises but also under normal conditions.

The analysis shows that the ability of fiscal policy to protect welfare during crises is limited in poorer countries. Fiscal policies fully offset the impact of COVID-19 on poverty in high-income countries (HICs), but they offset barely a quarter of the impact in low-income countries (LICs) and lower-middle-income countries (LMICs). Improving support to households as crises continue will require reorienting protective spending away from generally regressive and inefficient subsidies and

toward a direct transfer support system—a first key priority. Reorienting fiscal spending toward supporting growth should be a second key priority. Some of the highest-value public spending—such as investments in the human capital of young citizens or investments in infrastructure and research and development (R&D)—often pays out decades later. Amid crises, it is difficult to protect such investments, but it is essential to do so. Finally, it is not enough just to spend wisely—when additional revenue does need to be mobilized, it must be done in a way that minimizes reductions in poor people's incomes. Exploring underused forms of progressive taxation (such as property, health, or carbon taxes) and increasing the efficiency of tax collection can help in this regard.

What follows is a description of the two parts of this report, the first part painting in broad strokes the poverty and inequality trends since 2020, and the second part describing the possible role of fiscal policy in addressing the current crisis and putting poverty reduction back on track.

Part 1. Progress on poverty and shared prosperity

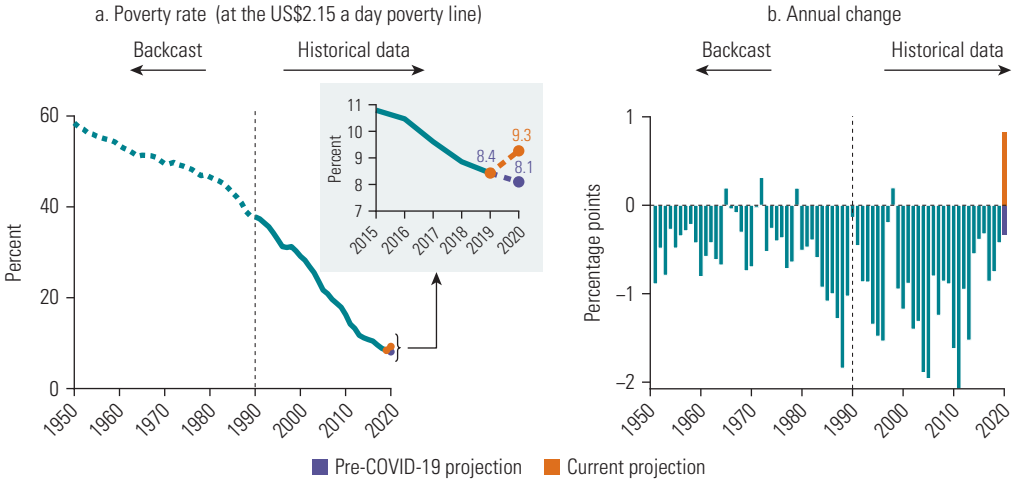
Three decades of successful global poverty and inequality reduction hit the pandemic wall in 2020

The onset of the COVID-19 pandemic in 2020 marked a turning point in the 30-year pursuit of successful poverty reduction. Global poverty had declined from more than one in three persons (38 percent of the global population) in 1990 to less than one in 10 persons (8.4 percent) by 2019.[1]

The pandemic, delivering a broad-based shock to the global economy, triggered the first increase in extreme poverty in more than two decades (figure O.1). Because of a lack of official

FIGURE O.1

The COVID-19 pandemic triggered a historic shock to global poverty



Sources: World Bank estimates based on Mahler, Yonzan, and Lakner, forthcoming; World Bank, Poverty and Inequality Platform, https://pip.worldbank.org; World Bank, Global Economic Prospects database, https://databank.worldbank.org/source/global-economic-prospects.
Note: Panel a shows the global poverty headcount rate at the US$2.15 a day poverty line for 1950–2020. "Historical data" for the period 1990–2019 are from the Poverty and Inequality Platform. "Backcast" estimates are extrapolated backward from the 1990 lineup using growth in national accounts. National accounts data before 1990 are from World Bank, World Development Indicators database, https://databank.worldbank.org/source/world-development-indicators; International Monetary Fund, World Economic Outlook, https://www.imf.org/en/Publications/SPROLLs/world-economic-outlook-databases; Bolt and van Zanden 2020. "Current projection" uses the nowcast methodology outlined in chapter 1 and a variety of data sources to project the latest 2019 lined-up estimate to 2020. "Pre-COVID-19 projection" extrapolates the 2019 lineup to 2020 using per capita gross domestic product (GDP) growth forecasts from the January 2020 Global Economic Prospects database. Panel b shows the annual percentage point change in the global poverty headcount rate.

survey data in many countries, uncertainty does exist around the poverty estimates for 2020, and they will continue to be updated as more information becomes available. The survey work on which poverty numbers rely was halted or conducted by phone (rather than via the usual in-person interviews) during the peak of the crisis in the second quarter of 2020. Nevertheless, survey-informed assessments are now possible for an increasing number of countries. Taken together, they point to an increase in poverty that is large by historic standards. The incomes of the poorest 40 percent of the world's population likely fell by 4 percent in 2020. As a result, the number of people living in extreme poverty likely increased by 11 percent in 2020—from 648 million to 719 million. This increase pushed the extreme poverty rate 1.2 percentage points higher than projections going into the year (extreme poverty had been expected to fall).

This is a historic setback in the fight against global poverty. Although data prior to 1990 are largely imputed based on national growth rates, and thus are more uncertain, the global scale of the pandemic shock likely renders the current shock the largest since 1945. Typically, past shocks (such as the 1997 Asian financial crisis, which resulted in a 0.2 percentage point increase in global poverty) tended to affect particular countries or regions. The current economic shock has led to widespread losses in employment and income as people stopped working and reduced consumption in every region of the world. Data collected by the World Bank using high-frequency phone surveys during the COVID-19 crisis found that, on average, 23 percent of respondents in the countries surveyed reported that they stopped working from April to June 2020, and 60 percent reported losing income.

This report documents these trends using new poverty lines based on the 2017 round of International Comparison Program (ICP) price data collected to generate estimates of purchasing power parity (PPP) (see box O.1). All poverty estimates in this report use the 2017 PPP-based

BOX 0.1

Introducing the new 2017 PPP-based poverty lines

The 2019 poverty numbers are the first to adopt the new estimates of global prices from the 2017 round of purchasing power parities (PPPs) that enable international comparisons of living standards across countries. With the new PPPs, the international poverty lines were revised. International poverty lines are calculated as the median of national poverty lines in low-income countries (LICs), lower-middle-income countries (LMICs), and upper-middle-income countries (UMICs), converted to US dollars using PPP exchange rates. The extreme poverty line of US$1.90 (2011 PPP) increased to US$2.15 (2017 PPP). The higher poverty line typically used to measure poverty in LMICs was updated from US$3.20 (2011 PPP) to US$3.65 (2017 PPP) and in UMICs from US$5.50 (2011 PPP) to US$6.85 (2017 PPP).

This change, however, does not mean the new extreme poverty line is now higher, and therefore more people will be counted as living in extreme poverty. The increase in the international poverty line from US$1.90 to US$2.15 primarily reflects the difference between 2017 and 2011 nominal dollar values. The change in the global poverty rate due to these updated poverty lines is thus negligible. As a result, the new extreme poverty line does not dramatically change the number of people living in extreme poverty in 2019. Extreme poverty decreases slightly, by 0.3 percentage point, to 8.4 percent, reducing the global count of the extreme poor by 20 million. This is also true of the increase from US$3.20 to US$3.65 for LMICs, and thus the poverty rate also increases slightly at the global level by 0.5 percentage point.

In UMICs, the national poverty lines have increased in real terms, on average, so the change in the international poverty line from US$5.50 to US$6.85 represents an increase in real as well as nominal terms. The global poverty rate at this line increased from 43 percent to 47 percent.

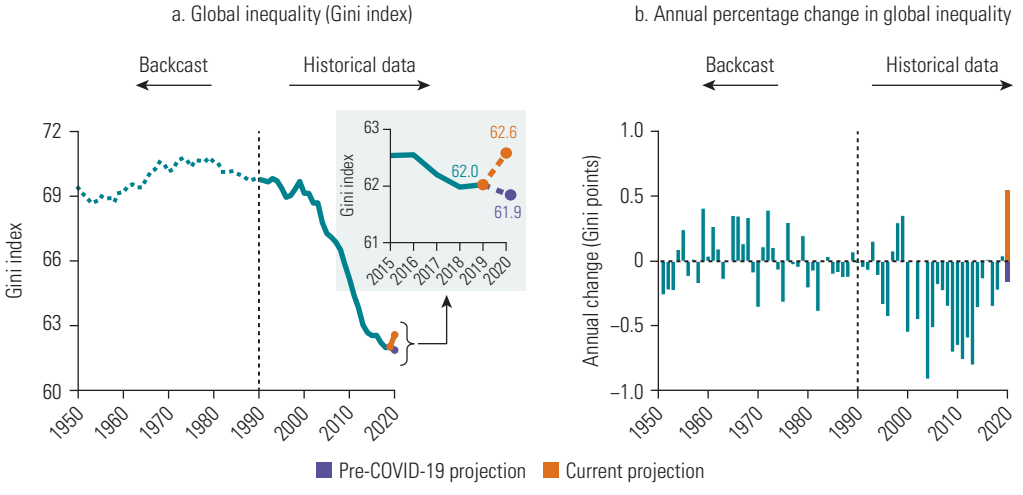
poverty lines. This updated approach changes the specification of the extreme-poverty line from US$1.90 (2011 PPP) to US$2.15 (2017 PPP), as well as the specification of other international poverty lines.

The rise in global poverty is not limited to extreme poverty measured at the international poverty line. At the US$3.65 poverty line, the line for the typical LMIC, global poverty increased by about 1.3 percentage points—from 23.5 percent in 2019 to 24.8 percent in 2020. At the US$6.85 poverty line, the line for the typical upper-middle-income country (UMIC), the poverty headcount rate also increased by 1.2 percentage points in 2020 (equivalent to 134 million more poor people).

The pandemic also increased global inequality. In terms of lost income, the world's poor paid the highest price for the pandemic: the percentage income losses of the poorest were estimated to be double those of the richest. The global Gini coefficient increased by a little over 0.5 points during the pandemic, from 62 points in 2019 to an estimated 62.6 points in 2020 (figure O.2). By contrast, earlier years had seen a shrinking gap between the global poor and others. For example, the global Gini coefficient dropped by around 0.5 points every year between 2003 and 2013. The Asian financial crisis previously brought a cumulatively large increase in global inequality in the late 1990s. It is yet to be seen what the full impact of the current crisis will be on global inequality, but diverging recoveries since 2020 suggest the impact may be large.

FIGURE O.2

Recent global inequality trends were reversed in 2020



Sources: World Bank estimates based on Mahler, Yonzan, and Lakner, forthcoming; World Bank, Poverty and Inequality Platform, https://pip.worldbank.org; World Bank, Global Economic Prospects database, https://databank.worldbank.org/source/global-economic-prospects.
Note: Panel a shows the global Gini index for 1950 to 2020. "Historical data" for the period 1990–2019 are from the Poverty and Inequality Platform. "Backcast" estimates are extrapolated backward from the 1990 lineup using growth in national accounts. National accounts data before 1990 are from World Bank, World Development Indicators database, https://databank.worldbank.org/source/world-development-indicators; International Monetary Fund, World Economic Outlook, https://www.imf.org/en/Publications/SPROLLs/world-economic-outlook-databases; Bolt and van Zanden 2020. "Current projection" uses the nowcast methodology outlined in chapter 1 and a variety of data sources to project the latest 2019 lined-up estimate to 2020. "Pre-COVID-19 projection" extrapolates the 2019 lineup to 2020 using per capita gross domestic product (GDP) growth forecasts from the January 2020 Global Economic Prospects database. Panel b shows the annual change in the global Gini Index, in Gini points.

Most countries experienced increases in poverty, but not always higher inequality

The estimated increase in global poverty of 71 million people is heavily influenced by the most populous countries because each individual in the world is weighted equally. Although large, China is home to a small share of the global extreme poor and had a moderate economic shock in 2020; as a result, China does not contribute much to the global increase in extreme poverty in 2020. The global and regional poverty estimates presented in this report include new data for India for 2015–19 (see box O.2). This represents an improvement over the previous edition of this report, in which the absence of recent data for India severely limited the measurement of poverty in South Asia. In 2020, India experienced a pronounced economic contraction. Because 2020 poverty estimates from household survey data for India are still being finalized, there is considerable uncertainty over the estimates of poverty increases in India in 2020. A national accounts–based projection implies an increase of 23 million, whereas initial estimates using the data described in box O.2 suggest an increase of 56 million—this latter number is used for the global estimate. While the final number could be higher or lower, all indications suggest the global shock to poverty reduction as a result of the pandemic was historically large. Although smaller in population, Nigeria and the Democratic Republic of Congo are still relatively large countries and home to a large share of the global extreme poor; however, they had relatively mild economic shocks in 2020 and so contribute less to the global increase in extreme poverty, about three million and half a million, respectively.

Another way to explore the global scope of this crisis period is to note the number of countries that experienced substantive changes in poverty and inequality. Poverty increases were widespread across regions and income groups (figure O.4). With the exception of 19 countries that reduced poverty through generous transfers, nearly all countries saw poverty increases, often quite large, at the poverty line relevant to their income group. The effects were much larger in some countries than in others, highlighting the fact that a country's economic structure and policy response mediated the welfare effects of the common global crisis. In aggregate, in terms

BOX O.2

Measuring poverty in India

This report publishes global and regional estimates based on new data for India available for 2015–19. The source of the data is the Consumer Pyramids Household Survey (CPHS), conducted by the Centre for Monitoring Indian Economy, a private data company. India has not published official survey data on poverty since 2011. Given the country's size and importance for global and regional poverty estimates, the CPHS data help fill an important gap.

The household consumption data used for poverty monitoring is based on an analysis by Sinha Roy and van der Weide (2022) in which the CPHS sample is re-weighted to more closely resemble a nationally representative survey and the consumption aggregate is adjusted to more closely match the consumption aggregate used in the official series. Other methods have been used to estimate the evolution of poverty in India since 2011. The methodological differences between the national accounts–based approach of Bhalla, Bhasin, and Virmani (2022) and Sinha Roy and van der Weide (2022) have been outlined elsewhere (Ravallion 2022; Sandefur 2022). Given widespread agreement that microdata from household surveys are necessary for credibly measuring poverty, this report uses the CPHS.

The CPHS was also conducted during 2020. Although the full analysis required to ensure consistency between this survey and previous surveys has not been completed, initial analysis indicates that the CPHS serves as a useful source of data on the trends in consumption in 2020.

of extreme poverty, the largest increases were observed in LICs and LMICs. In UMICs, poverty actually fell in 2020, driven in part by fiscal support in large UMICs, such as Brazil and South Africa, that mitigated the impact of the crisis on poverty (and even reduced poverty in some cases).

Although global inequality rose, this rise did not stem from widespread within-country increases in inequality. In fact, within-country inequality actually fell in many countries, thereby somewhat mitigating the increase in global inequality. The increase in global inequality would be 37 percent higher if within-country inequality changes are not taken into account. Because the change in inequality at the national level is mixed as well as small in most cases, the increase in country poverty rates is largely driven by declines in average income at the country level.

The nonmonetary dimensions of the pandemic and its impacts may ultimately prove to be more costly than the monetary dimensions

The costs of the pandemic go beyond monetary impacts. These broader costs principally include the lost learning of students unable to attend school and significantly higher global mortality rates. In fact, the world experienced the first decline in global life expectancy since the end of World War II: life expectancy fell by almost two full years (Heuveline 2022). Significant increases in pandemic-related mortality, both directly from COVID-19 infections and indirectly from factors such as declines in health care use, have afflicted every region of the world. The countries with the largest mortality burdens were middle-income countries (MICs) that confronted large economic shocks and social disruptions, but also had a relatively high share of older adults in the population who were more vulnerable to COVID-19 (WHO 2022).

As for the learning of young students today, many countries enforced social distancing measures to curtail the spread of the illness. Measures included closing schools for extended periods. From the onset of the pandemic until October 2021, the formal school system was closed for an entire school year, on average, across all countries, and even for a longer period in MICs. As a result, multidimensional poverty, which includes an educational dimension, increased in the short run. Perhaps more important, the learning loss will have significant long-term consequences for today's students and even the wider society if students are unable to make up their losses. This is because the growth potential of economies over the long term will be lower. Poverty will be prolonged for millions of people, especially the students of today who have borne the brunt of extended school closures and are now likely to earn less over their lifetime.

A comparison of the poverty shock in 2020 and 2021 with the impact of the current learning losses on long-run poverty simulations suggests that the persistence of poverty from learning losses will exceed the contemporaneous crisis-induced poverty shock for many countries.[2] The reason is that the drag on growth could persist for decades if unaddressed—even though the implications of learning loss for aggregate growth may appear modest within any one year. In LICs, the crisis increased the number of years spent in poverty by 6.1 per 100 persons for the two-year period 2020–21, whereas the loss in learning may lead to an additional total of 13.3 years in poverty per 100 persons, distributed over the longer 2022–50 period. The same metrics for LMICs and UMICs are 6.6 and 4.5 years in poverty now (2020–21) and 11.8 and 12.9 years in poverty over the future (2022–50), respectively. In 80 percent of the countries studied, the simulated future poverty increase due to learning loss exceeds the measured short-run increase in poverty.

These simulations are a point-in-time comparison that projects current conditions into the future. To the extent that the losses of 2020 can be reversed through policies addressing learning loss, the projected declines can be corrected and a comeback could even be quite rapid. But such outcomes will depend in part on the policy choices of today, including those discussed in this report and in the World Bank's forthcoming report *Collapse and Recovery: How the COVID-19 Pandemic Eroded Human Capital and What to Do About It* (World Bank, forthcoming b).

2021–22: The great divergence and a stalled recovery

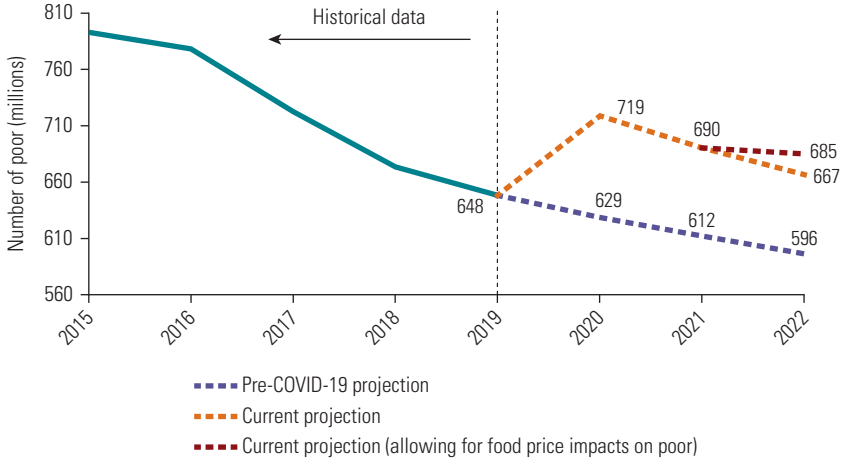
Since 2020, progress in poverty reduction has been slow. Poverty estimates for 2021 and 2022 have been "nowcasted"—that is, gross domestic product (GDP) growth rates have been used to forecast household incomes, assuming all households experience equal growth. Nowcast estimates suggest that poverty reduction resumed in 2021, but only at the slow rate of progress seen prior to the crisis (figure O.3).

Projections for 2022 are that the pace of poverty reduction will further stall as global growth prospects dim with the war in Ukraine, a growth slowdown in China, and higher food and energy prices. High food price inflation can in the short run have especially detrimental impacts on poorer households, which spend a larger share of their income on food. To highlight the additional negative impact of food prices in the short run, poverty simulations are also presented for a downside scenario that assumes maximum impact, as reflected by the price data and consumption choices of poorer households.[3] In the long run, households may adapt to higher prices by changing their consumption patterns to at least partly lessen the impacts, and wages in certain sectors can adjust. For many poor rural households engaged in agriculture, higher food prices can be a source of income growth. World Bank poverty assessments conducted after the 2008 and 2011 food price crises in Bangladesh, Cambodia, Ethiopia, India, and Uganda showed the important role that higher food prices, which led to higher agricultural income growth and higher agricultural wages, played in raising the incomes of poor households. However, increases in food prices will hurt some poor—such as poor urban households—much more than others. The impacts on the urban poor can lead to unrest in cities (as in earlier food price crises) and require a strong policy response.

At least 667 million people were expected to be in extreme poverty by 2022. That is 70 million more than the forecast would have been without the lingering effects of COVID-19 and the Russian invasion of Ukraine. In a worst-case scenario, up to 685 million people could be in extreme poverty—89 million more than would have otherwise been the case. At these levels, the number of people forecasted to move out of poverty in 2022 could be as low as 5 million.

FIGURE O.3

Poverty reduction resumed slowly in 2021 but may stall in 2022



Sources: World Bank estimates based on Mahler, Yonzan, and Lakner, forthcoming; World Bank, Poverty and Inequality Platform, https://pip.worldbank.org; World Bank, Global Economic Prospects database, https://databank.worldbank.org/source/global-economic-prospects.
Note: The figure shows the number of poor at the US$2.15 a day poverty line. For 2022, nowcasts are reported for the "Current projection" and for the "Current projection (allowing for food price impacts on poor)."

This finding places 2022 on track to be the second-worst year for poverty reduction in the last 22 years (after 2020). Global poverty rates are projected to be just as high in 2022 as they were in 2019, indicating several years of lost progress.

The pathways countries have followed since the pandemic have exacerbated global inequality, with richer countries recovering faster than poor countries. Figure O.4 shows the change in the number of extreme poor, by year, for three income groups. Recovery is estimated to have been lower in LICs, with 11 of 27 countries still estimated to have poverty increases in 2021 and full recovery expected in only six. Although recovery was more widespread in LMICs in 2021, it is estimated that most countries had not reversed the substantial increase in poverty seen in 2020. In UMICs, recovery was stronger but not by much. From 2020 to 2022, because of differences in between-country growth rates, the incomes of the world's richest 20 percent likely grew by 3.3 percent. By contrast, the rate for the bottom four quintiles was 2.1 percent to 2.5 percent.

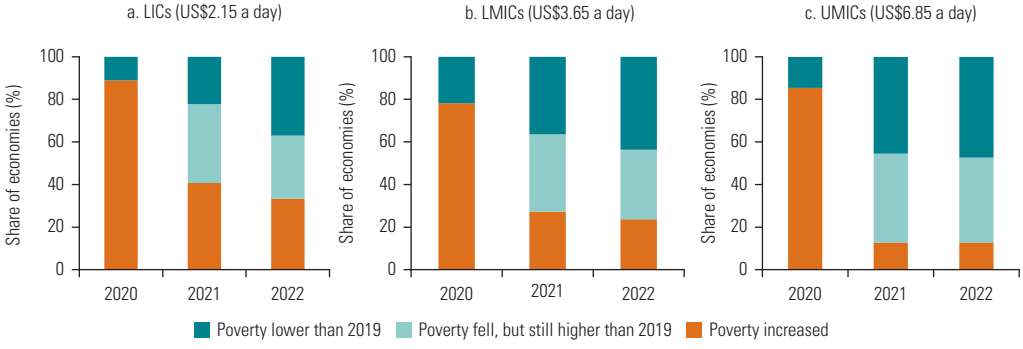
Taken together, the threats to poverty reduction noted in this report have set back progress by at least four years (figure O.5). By 2030, the global extreme poverty rate will be 7 percent. The goal of reducing global poverty to 3 percent by 2030 was difficult enough to achieve before the current crises. The recent setbacks have put this target nearly out of reach—and there is an urgent need to correct course.

These projections mask substantial differences in projections between regions. Extreme poverty is projected to become increasingly concentrated in Sub-Saharan Africa. Other regions will likely reach the 2030 target of less than 3 percent extreme poverty by 2030, but poverty is projected to remain well above target in Sub-Saharan Africa. Achieving the 3 percent goal by 2030 would require Sub-Saharan Africa to achieve growth rates about eight times higher than historical rates between 2010 and 2019.

The compounding pressure of the overlapping crises experienced over the past two years has created an elevated risk profile for the world. Government policies play a critical role in shielding societies from the worst outcomes of crises. Fiscal policy is a key instrument of such policies. Unfortunately, many countries, especially LICs, entered the pandemic with fiscal systems unable to fully confront or deal with the challenges they faced. The coming years present new opportunities and challenges. The second part of this report discusses how fiscal policy can be employed to promote a robust and inclusive recovery.

FIGURE O.4

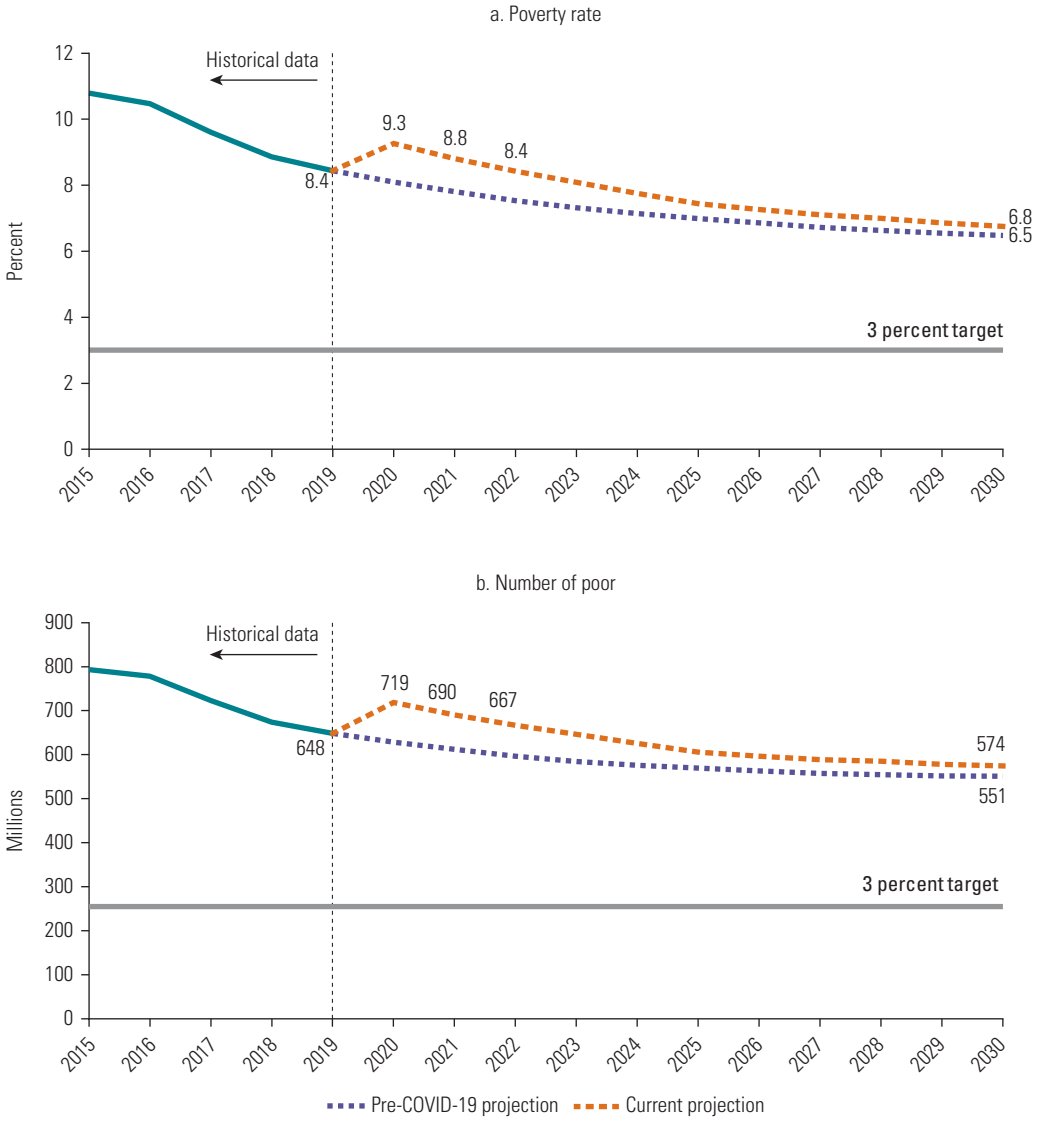
A widespread reduction in poverty across countries in 2020, followed by a nascent and uneven recovery



Sources: World Bank estimates based on Mahler, Yonzan, and Lakner, forthcoming; World Bank, Poverty and Inequality Platform, https://pip.worldbank.org; World Bank, Global Economic Prospects database, https://databank.worldbank.org/source/global-economic-prospects.
Note: The figure shows the share of economies where the poverty rate has decreased or increased relative to the prior year and relative to 2019, by income group. Economies where poverty increased include those where poverty did not change. LICs = low-income countries; LMICs = lower-middle-income countries; UMICs = upper-middle-income countries.

FIGURE O.5

Progress in poverty reduction has been altered in lasting ways



Sources: World Bank estimates based on Mahler, Yonzan, and Lakner, forthcoming; World Bank, Poverty and Inequality Platform, https://pip.worldbank.org; World Bank, Global Economic Prospects database, https://databank.worldbank.org/source/global-economic-prospects.
Note: Two growth scenarios are considered: the "Current projection" uses growth rates from the June 2022 Global Economic Prospects (GEP) database to project poverty up to 2024. The "Pre-COVID-19 projection" uses the January 2020 GEP growth rate to project poverty to 2022. Both scenarios use the country-level average annual historical (2010–19) growth rate to project poverty in the remaining years. The "3 percent target" line in panel b is based on the estimate of the number of poor in 2030—255 million.

Part 2. Fiscal policy for an inclusive recovery

During the COVID-19 crisis, various public health policies—such as stay-at-home directives as well as new and existing monetary, financial, and fiscal policies—affected the dynamics of disease transmission and altered growth, poverty, and learning outcomes. These outcomes were also shaped by the economic and social conditions of the country and the particular mix

of policies chosen. Many of these policies were adopted in an environment of economic stress, with great uncertainty about the ultimate impacts they might have.

The effects of some of those policy choices are now on view amid the current food and energy price crisis. Today, food-export bans risk further exacerbating food price volatility, as they did during the 2006–08 food price crisis (Martin and Anderson 2011). Monetary, trade, and fiscal policies (such as lower food tariffs and protective cash transfers) tailored to specific country conditions offer the potential to soften the impacts. However, the dominant policy choice has been subsidies, implemented by 93 percent of the countries that took early fiscal action in response to the food and energy price crisis, even though such subsidies are often not well targeted to need and can be detrimental in the long run.

The second part of this report starts with the recognition that the same policy can have very different effects in different countries. Higher-income economies are more resilient in the face of shocks (World Bank 2013) because their households and firms are endowed with wealth and superior health and education systems and thus are able to adapt to changing circumstances. Governments in LICs and MICs face policy options with more limited effectiveness during a crisis than richer countries because of the structure of their economies (Loayza 2020). A stay-at-home order will be largely futile if people are compelled by necessity to work outside the home. Financial sector policy is less effective when it cannot reach a large informal sector. And fiscal policy cannot achieve much if fiscal space is constrained and the structure of an economy limits the reach of standard fiscal policy instruments. Various features of an economy can amplify the impact of any shock and limit the impact of policies to address it.

This interplay of shocks, policy impact, and poverty is well illustrated in figure O.6 (Aminjonov, Bargain, and Bernard 2021). The figure depicts average workplace mobility (based on smartphone data) across 43 low- and middle-income countries. Stay-at-home directives and private decisions to avoid exposure to COVID-19 drove a dramatic reduction in mobility in March 2020. Reductions in mobility were large in both high- as well as low-poverty regions in countries. The reductions in mobility, however, were larger in the regions with lower poverty and in those that received income support. Mobility fell further in those areas that were better able to accommodate a stay-at-home order by virtue of the prevailing nature of work and the relative ability of the well-off to stay home. The difference in mobility in places with and without income support exceeds the difference in mobility in places with low and high poverty rates. As a result, income support policies also had a larger impact on mobility in higher-poverty areas than in lower-poverty areas. This finding underscores the fact that policies that promote development enable more resilience in the face of crises.

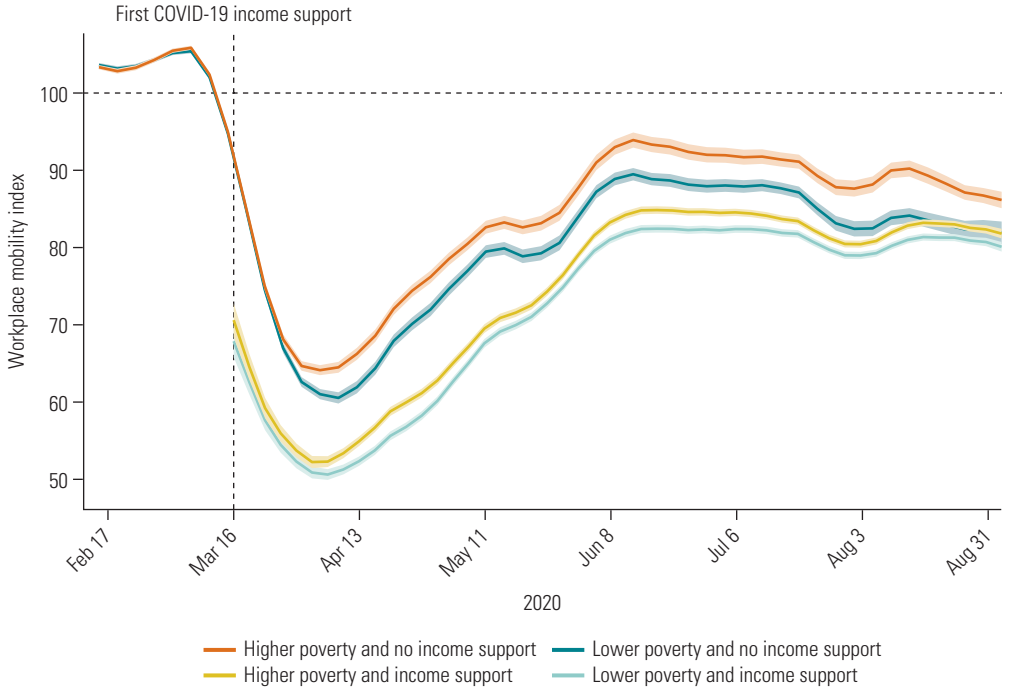
The focus on fiscal policy

Fiscal policy consists of the decisions governments make on how to raise revenue and spend public resources. Part 2 of this report focuses on how fiscal policy affects poverty and inequality. Fiscal choices affect growth, employment, and wages, as well as the services available, the prices people pay, and the income people have left after taxes are paid and transfers are received.

In many countries, fiscal policy is currently under considerable pressure. Even as governments decide which fiscal policies are the most suitable for achieving an inclusive recovery and long-run growth, they must deal with rising fiscal deficits and debt burdens and with little space for fiscal policy to support the recovery and prepare for ongoing and future crises. LICs and MICs are significantly more indebted today than two years ago. In 2020, more emerging economies experienced credit rating downgrades than over the entire 2010–19 period (Kose et al. 2022). Even as countries saw their revenues drop because of the COVID-19 crisis, they had to pursue expansionary fiscal policy if they wanted to mitigate the worst impacts of the downturn. Many countries now need to raise revenue, reduce spending, or both to escape debt distress. Historically, such fiscal policy decisions have often hurt the poor—not only in the immediate

FIGURE O.6

The interplay of shocks, policy, and poverty affects workplace mobility



Source: Based on data from Aminjonov, Bargain, and Bernard 2021.

Note: The figure depicts workplace mobility in 2020 (based on smartphone data) across subnational regions with high and low poverty rates and with and without income support in 43 low- and middle-income countries. The data points reflect the calculations by Aminjonov, Bargain, and Bernard (2021) based on Google mobility data (change in visits to workplaces relative to the daily median from January 3 to February 6, 2020); poverty data from national statistical offices and estimates by Aminjonov, Bargain, and Bernard (2021) using household surveys; and Oxford COVID-19 Government Response Tracker data on COVID-19 income support. The figure shows the local polynomial fit with a 95 percent confidence interval of daily mobility across regions, weighted by 1 divided by the number of regions in the corresponding country. Poverty is measured as the share of people living below national or international poverty lines in a subnational region. Poverty is defined as lower (higher) if a region's poverty rate is below (above) the country's median regional poverty rate. COVID-19 income support shows the daily status of whether the government provides any income support to those who cannot work or who have lost their jobs because of the COVID-19 pandemic (country-day variation in income support).

term, but also limiting the longer-term opportunities available to them. Policy makers must navigate the current challenges in ways that do not further impoverish the poor today or reduce the opportunities they might enjoy tomorrow.[4]

Fiscal policy, poverty, and inequality: Three findings

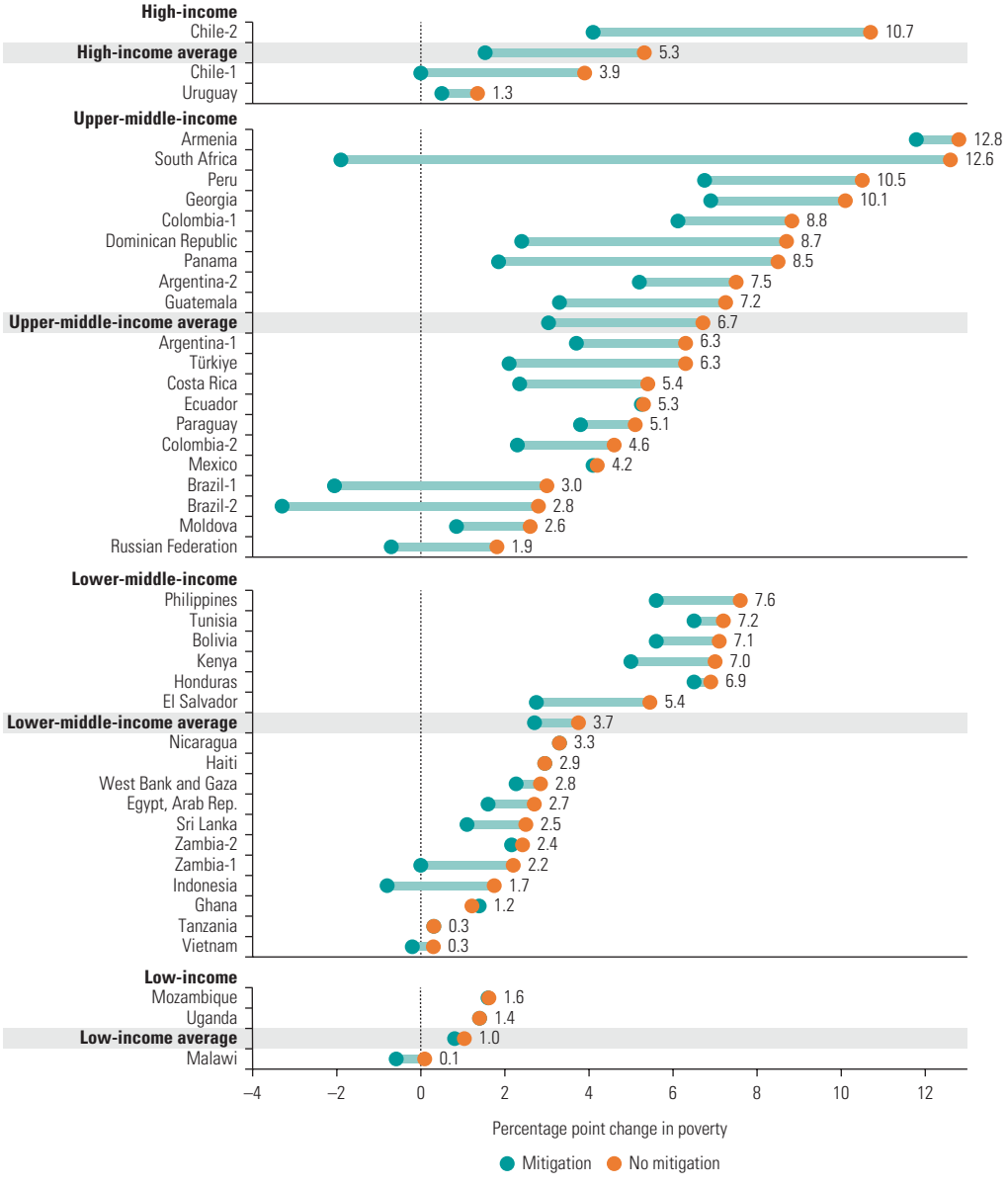
1. In low- and middle-income countries, fiscal policy can protect people's welfare in a crisis—but with limits

During the early stages of the pandemic, fiscal policy effectively prevented some vulnerable households from slipping into poverty. Microsimulations in LICs and MICs suggest poverty would have been, on average, 2.4 percentage points higher without a fiscal response (figure O.7). However, even though fiscal policy nearly fully offset the impact of the pandemic on poverty in HICs, it offset only half of the impact in UMICs and just over a quarter of the impact in LICs and LMICs.

There are some lessons to learn from this global experience—not only how to improve fiscal policy in the years to come but also how to be clear-eyed about the limits of protecting poor

FIGURE O.7

Fiscal policy reduced the impact of the COVID-19 crisis on poverty but less so in poorer economies



Sources: Estimates collected from published and World Bank microsimulation studies. See chapter 4 of the report for a full list.
Note: The figure shows the results of two simulations from each economy study: one showing the increase in poverty that would have occurred had no fiscal response been present (no mitigation), and one showing the increase in poverty taking into account the fiscal response (mitigation). The increase in poverty is measured against the national poverty line or the global poverty line appropriate to the economy income category. For some economies, more than one study is available, as indicated by the use of "1" or "2" after the economy name in the figure. Full details of the data used are in chapter 4 online annex, annex 4A, table 4A.1, available at http://hdl.handle.net/10986/37739.

and vulnerable households through fiscal policy. High borrowing costs limited the scale of the COVID-19 fiscal response in many low- and lower-middle-income countries. In survey results reported in *World Development Report 2022: Finance for an Equitable Recovery* (World Bank 2022b), 83 percent of LIC policy makers indicated they were concerned about debt sustainability or access to external borrowing for financing their fiscal response to the crisis. Many LIC and LMIC policy makers were even more concerned about access to international financial support. LICs relied almost entirely (95 percent) on international support to finance a fiscal response. Such financing was also a major source of support for LMICs (73 percent) and for UMICs (50 percent). Going into the crisis, more than half of International Development Association (IDA) countries were in debt distress, so could not borrow much. Their main source of external finance was highly-concessional flows from multilateral development banks. This highlights the importance of access to finance in a crisis response.

The structure of the economy also limited the type and impact of fiscal policy tools that could be used. Providing firms with the support needed to save jobs was almost impossible in countries with large informal sectors. The share of workers at firms receiving wage subsidy support was larger in countries with a greater share of formal workers in the economy prior to the crisis—even when controlling for the overall level of spending and GDP per capita. This finding is troubling because emerging evidence suggests that spending to protect jobs may have been more impactful in hastening economic recovery, increasing employment, and reducing poverty than income support measures (World Bank, forthcoming a).

Faced with widespread uncertainty about the impact of the crisis on household incomes and the widespread losses across poor, vulnerable, and middle-class households, most countries were under considerable political pressure to quickly provide broad income support. HICs and UMICs were more likely to provide this support through universal transfers, whereas LMICs and LICs were more likely to implement subsidies alongside targeted transfers. Although subsidies were similarly universal and often rapidly introduced, they came with several disadvantages. A greater share of subsidy support went to the better-off, and subsidies distorted the prices that households faced.

On average, almost three months passed after lockdowns began before transfers reached recipients in LICs and MICs, even though income losses and rising food insecurity took hold immediately—see Beazley, Marzi, and Steller (2021) and figure O.8. Delivery was much quicker when digital payment systems were present. Transfers did target poorer households in general. However, reaching vulnerable households with income losses who were not the usual beneficiaries of social protection systems proved more challenging, especially in LICs and LMICs. Nevertheless, there are standout examples of innovation in reaching well-targeted beneficiaries during challenging times, such as South Africa and Togo (discussed in further detail in the report). In summary, the experience of delivering support during the pandemic highlights the importance of investing in delivery systems for transfers that—when needed—can deliver timely support beyond a narrowly targeted group.

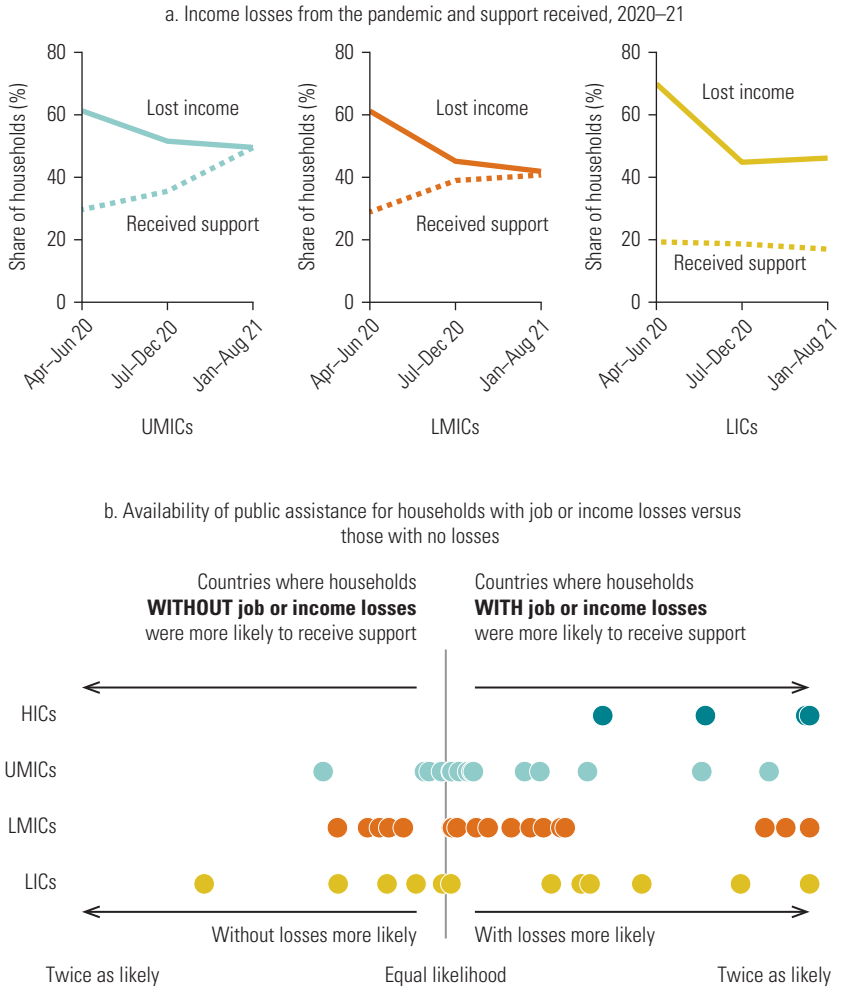
2. In poorer countries, poor households often have less income after taxes are paid and transfers are received

The lack of fiscal space in many poorer countries going into the COVID-19 crisis and the limited delivery systems available to deliver direct transfers to poor and vulnerable households reflected fiscal choices made in the run-up to the crisis. This report brings together for the first time analysis of the impact of taxes, transfers, and subsidies on household income in 94 LICs and MICs (including 55 LICs and LMICs). This analysis assesses the degree to which taxes are raised equitably and transfers and subsidies reach poor and vulnerable households.

Taken together, taxes, transfers, and subsidies reduce inequality in all countries while financing spending on security, health, education, and investments for growth and poverty reduction. HICs are effective at ensuring that taxes, transfers, and subsidies do not reduce the disposable income of

FIGURE O.8

Delivering support on time and to those in most need was challenging

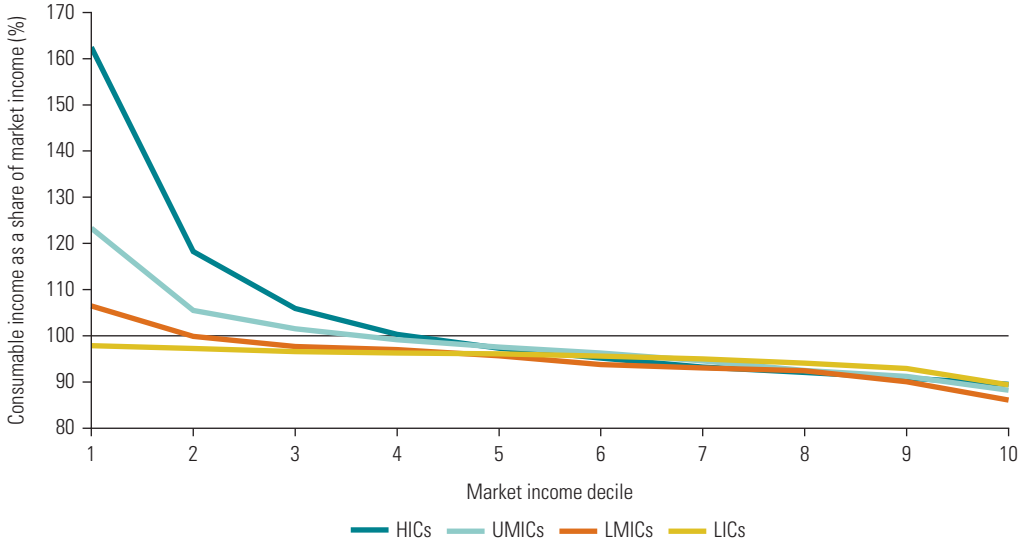


Source: World Bank estimates based on data from World Bank COVID-19 high-frequency phone surveys.
Note: Panel a shows the share of households in each income group that lost income and the share of households that received support across three periods during the pandemic (averaging across economies in each income category). Panel b shows the difference between the share of households that received support and lost income or a job and the share of households that received support but did not lose income or a job (each dot represents an economy). Economies are weighted equally. HICs = high-income countries; LICs = low-income countries; LMICs = lower-middle-income countries; UMICs = upper-middle-income countries.

poor households. However, this is not the case for LICs and MICs. In two-thirds of those countries, the income of poor households falls by the time taxes have been paid and transfers and subsidies have been received (figure O.9). In LICs the income of all households is lower after taxes, transfers and subsidies. The informal sector accounts for a large share of the economy in LICs and MICs. As a consequence, taxes are predominantly collected indirectly, and income transfers are often too low to compensate for the offsetting impact of indirect taxes on poor and vulnerable households. Encouragingly, though, across all income levels some countries are able to reduce both inequality and poverty. The highest performers in each category tend to reduce poverty by 6 to 8 percentage points at the poverty line relevant to their income category. On average, however, reducing poverty becomes much less likely for countries in lower income categories. All HICs reduce poverty by

FIGURE O.9

In poorer economies, poorer households are more likely to be left with less money after taxes have been paid and transfers received



Sources: Original estimates based on data from CEQ Institute, CEQ Data Center on Fiscal Redistribution, https://commitmentoequity.org/datacenter; Organisation for Economic Co-operation and Development data; World Bank data.
Note: The figure shows consumable income (income after direct and indirect taxes have been paid and cash transfers and subsidies have been received) as a percentage of market income (income before any taxes have been paid or transfers or subsidies received), by market income decile, aggregated by income group using the median. The sample includes 5 HICs, 19 UMICs, 16 LMICs, and 3 LICs.
HICs = high-income countries; LICs = low-income countries; LMICs = lower-middle-income countries; UMICs = upper-middle-income countries.

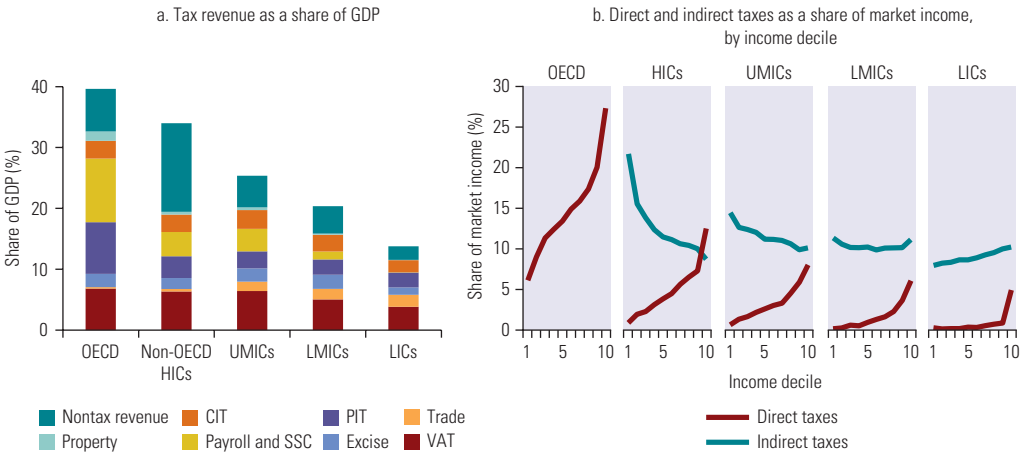
more than 1 percentage point, compared with only six of the 23 UMICs and only one of the 24 LICs and LMICs. It is thus a challenge to raise revenue without increasing poverty in a country with a large informal sector and limited safety net coverage.

Poorer countries collect less tax revenue and primarily collect taxes in the least progressive way—64 percent of taxes are from indirect taxes (value added, excise, and trade taxes). By contrast, just 28 percent of tax revenue in Organisation for Economic Co-operation and Development (OECD) member countries is derived from these sources (figure O.10). In richer countries, more taxes are collected from direct taxes: personal income tax and other taxes on income such as social security contributions. Direct taxes are typically more progressive because they can be designed to increase with income, unlike taxes on goods that everyone must purchase regardless of income level. In informal economies where income is not easily observed, recorded, and taxed, there is a greater reliance on indirect taxes. Because of this reliance, a significant share of revenue is collected from the poor.[5]

In LICs and LMICs, spending on direct transfers is low on average, and it is dwarfed by spending on subsidies. Figure O.11 compares spending on energy and agricultural subsidies with all social protection spending. In HICs, spending on social protection far exceeds spending on subsidies. In UMICs, spending on energy and agricultural subsidies is equal to spending on social protection, whereas in LMICs and LICs social protection spending is less than one-half and one-tenth of spending on energy and agricultural subsidies, respectively. Only 20 percent of spending on subsidies reaches the bottom 40 percent in each country, and this, combined with low spending on transfers, means there is little compensation for the reduction in income and consumption brought about by indirect taxes. Subsidies are widespread, in part, because they are popular, providing support to many interest groups on whom governments

FIGURE O.10

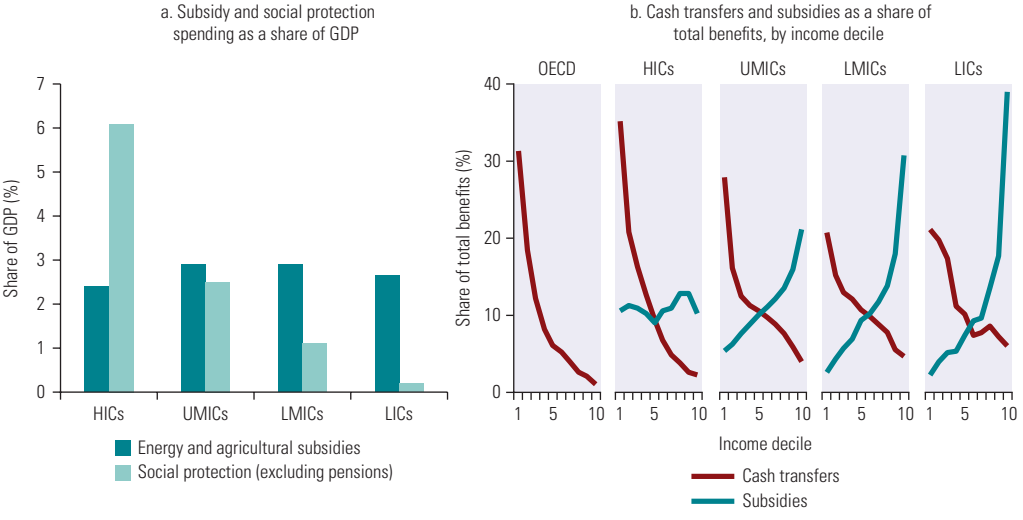
Poorer economies rely more on indirect taxes, which are less progressive



Sources: International Centre for Tax and Development, https://www.ictd.ac/; CEQ Institute, CEQ Data Center on Fiscal Redistribution, https://commitmentoequity.org/datacenter; OECD data; World Bank data.
Note: Panel a shows each type of government revenue as a percentage of gross domestic product (GDP), aggregated by income group. Panel b shows direct and indirect taxes as a percentage of total market income by market income decile, aggregated by income group. Indirect tax incidence is not available for OECD countries. CIT = corporate income tax; GDP = gross domestic product; HICs = high-income countries; LICs = low-income countries; LMICs = lower-middle-income countries; OECD = Organisation for Economic Co-operation and Development; PIT = personal income tax; SSC = social security contribution; UMICs = upper-middle-income countries; VAT = value added tax.

FIGURE O.11

Poorer economies spend less on transfers than on subsidies, which benefit the poor less



Sources: Agricultural subsidies: International Organisations Consortium for Measuring the Policy Environment for Agriculture database, http://www.ag-incentives.org/; energy subsidies: International Institute for Sustainable Development, https://www.iisd.org/; social protection: World Bank, BOOST Open Budget Portal, https://www.worldbank.org/en/programs/boost-portal, and International Monetary Fund, Government Finance Statistics database, https://data.imf.org/gfs; cash transfers and subsidies as a share of total benefits: CEQ Institute, CEQ Data Center on Fiscal Redistribution, https://commitmentoequity.org/datacenter; OECD data; World Bank data.
Note: Panel a compares spending on energy and agricultural subsidies with spending on social protection (excluding pensions) as a share of gross domestic product (GDP), aggregated by income group. Panel b shows transfers and subsidies as a share of total benefits by market income decile, aggregated by income group. Subsidy incidence is not available for OECD countries. GDP = gross domestic product; HICs = high-income countries; LICs = low-income countries; LMICs = lower-middle-income countries; OECD = Organisation for Economic Co-operation and Development; UMICs = upper-middle-income countries.

depend for support in contrast to targeted transfers. However, the high share of benefits that goes to the rich points to the need to develop systems that can deliver transfers more broadly. Increasingly, LMICs and LICs are developing stronger transfer systems that can reach more households, and important advances were made during the response to COVID-19.

3. Prioritizing effective fiscal spending, particularly in a fiscally constrained environment, is challenging

Some of the highest-impact fiscal decisions made by governments involve how to allocate spending to support long-run income growth for households. Good examples are investments in health, education, roads, electricity, and R&D—especially investments that the private sector cannot or will not make. These investments usually attempt to address market failures or provide public goods. When these policies benefit households at the bottom of the income distribution, their impact on poverty and inequality is large. Conversely, revenue can be raised in a way that negatively affects long-run growth and thus has a negative impact on poverty (see box O.3).

Recent work underscores this point and shows that the highest-value policies are often those with long-run impacts. For example, spending that invests in a child's early development can be transformative and can set the stage for a lifetime of higher earnings (Hendren and Sprung-Keyser 2020; Holla et al. 2021). Delaying the Green Revolution for 10 years would have produced a cumulative loss equivalent to one year of global GDP (Gollin, Hansen, and Wingender 2021). Recent work also highlights that context matters. The value of investing in a cash transfer, for example, depends on the return to beneficiaries' subsequent investments in, for example, children's education; on the impacts of transfers on economic activity in the local economy; and on the ability of the government to capture through taxes a share of any income growth that ultimately results from higher educational attainment.

BOX O.3

Tools that help to prioritize fiscal policies

Anyone assessing the impact of any given fiscal policy—both tax and spending—on poverty and equity must seek answers to two key questions:

1. Who is benefiting from or paying for a given fiscal policy and to what degree? Answering this question is an essential first step in assessing the distributional implications of fiscal policy. In this report, the results from the Commitment to Equity (CEQ) methodology used to conduct fiscal incidence analysis are collated and analyzed for 94 countries.
2. What is the value of this spending in terms of its long-term benefits for beneficiaries, nonbeneficiaries, and government revenue? The concept of the marginal value of public funds (MVPF), a systematic way of determining this value, has resurfaced in recent years and is being applied to a vast range of policies in the United States. It is now also being used more broadly, and in this report it is applied to selected interventions in low- and middle-income settings.

Often, a discussion of the impacts of fiscal policies on poverty and inequality focuses only on answering the first question, but answers to both questions are needed to properly assess the full set of welfare impacts. This information helps governments choose policies. A welfare judgment is needed as well: how much does a society value an additional dollar in the hands of the beneficiaries of one policy versus the beneficiaries of another? In some cases, the trade-off appears quite straightforward: it is between a policy with a high MVPF appropriately targeting the poor versus a policy with a low MVPF targeting the rich. The choice is not always this clear, but even when it is the high-MVPF policy is not always chosen, perhaps reflecting the challenge of incorporating long-run benefits into policy decisions or the specific political economy of a given country.

However, beneficial policies can be hard to prioritize precisely because their benefits accrue over the long term and are not realized immediately. For politicians, this time frame does not align with their political realities—they need to show immediate results to stay in power. So they often underinvest in areas such as health, education, and R&D. Similarly, it is hard for governments to give priority to preparing for the next crisis, even though this can be a cost-effective way of safeguarding progress. Politicians receive greater political gain from showcasing their support during a crisis instead of investing to avoid or mitigate the next one.

In a constrained fiscal space, focusing on high-value policies becomes even more important. In times of crisis and high interest rates, it is difficult to prioritize spending with long-run gains. For that reason, health and education spending are often cut during crises (Al-Samarrai et al. 2021; Mohseni-Cheraghlou 2016). Selecting and protecting high-value spending and tax policies are essential to ensuring that fiscal policy maximizes its welfare impact.

Three sets of policy priorities

This report concludes with a discussion of three policy priorities that reflect both the lessons learned from this analysis as well as the urgent need to foster a robust and inclusive recovery.

1. Spending for today: Reorienting spending away from subsidies to provide income support and stimulate growth

Avoiding overly rapid withdrawal of income support

In 2021 and early 2022, it became clear that income support had been withdrawn too quickly from some vulnerable groups for whom employment and earnings were still much lower than before the COVID-19 crisis. Higher food and energy prices were hurting many of these same households, such as the urban poor. The average duration of COVID-19 support programs was four and a half months, but the majority of programs lasted less than three months, and nearly half of new programs were one-off transfers. Gentilini et al. (2022) estimate that only 21 percent of programs were still active in early 2022. In Brazil, emergency transfers were reduced significantly in 2021. This drop, combined with a labor market that had not yet fully recovered, resulted in an increase in poverty of 6 percentage points from 2020 to 2021 (World Bank 2022a). In Indonesia, although a second round of fiscal support measures was introduced in 2021, reaching more households than the support provided in 2020, the size of the transfers was less generous and the impact on poverty more muted.

Income support is typically needed until growth recovers. However, such support need not involve much greater total spending, provided the effectiveness of social spending can be improved. Reorienting spending away from subsidies to more targeted forms of social protection will have a big impact on those who need it most. Subsidies may appear to be a solution to the current challenge of rising food and energy prices and their impacts on the poor. Subsidies can also be politically popular because the benefits tend to be widely distributed. However, this popularity makes subsidies an expensive way of targeting support to poor households. Fiscal incidence analysis across low- and middle-income countries shows that about half of spending on energy subsidies goes to the richest 20 percent, who consume more energy and receive larger per capita benefits.

Cash transfers are a more effective mechanism for supporting poor and vulnerable groups affected by high energy prices: more than 60 percent of spending on cash transfers goes to the bottom 40 percent (figure O.11, panel b). Like subsidies, cash transfers, which have a broader beneficiary base, can have greater political support—but also a higher price tag—than very targeted programs. However, unlike subsidies, the benefit values do not increase for richer households. That limits the diversion of scarce resources to those not in need. Furthermore, there is little evidence that subsidies offer long-run beneficial impacts, but increasing evidence that cash transfers can help households make crucial long-run investments—such as in educating children. Transfers may also stimulate local economic activity and increase government revenue

through higher indirect tax revenue in both the short and long run. Implementing this reorientation is possible. Indonesia, for example, successfully reoriented its social assistance away from subsidies and toward an expanded conditional cash transfer program with a greater redistributive impact. The path to reform was not always straight, but progress was accompanied by political coalition-building and increasingly successful upticks in direct support to poor and vulnerable households (Beaton, Lontoh, and Wai-Poi 2017). Analysis of subsidy reforms in the Dominican Republic, Ghana, and Jordan also highlights the importance of political maneuvering and establishing direct transfer delivery systems for use upon the removal of subsidies (Inchauste and Victor 2017).

Kick-starting income growth

Spending and investments to immediately kick-start economic growth in countries struggling to recover from the COVID-19 crisis—many of which were experiencing low growth prior to the crisis—is an urgent priority. Again, such support need not imply spending more if more effective spending is pursued. Often fiscal spending to promote income growth in the short run is in the form of subsidies to firms and farmers. However, spending that directly addresses market failures is often more cost-effective in the long run than subsidizing behavior. Two examples illustrate this.

Increasing productivity and employment in enterprises should be a priority to address employment losses, particularly in urban areas. Fiscal support of firms in LICs and MICs often takes the form of tax expenditures—indeed, 40 percent of tax expenditures go to firms in LICs and MICs (Redonda, von Haldenwang, and Aliu 2021). However, the evidence on the effectiveness of tax expenditures is mixed. Recent evaluations of support to small and medium enterprises reveal that customized business services and management training can have a high immediate and sustained impact on firms' profits when implemented well (McKenzie 2021; McKenzie et al. 2021; Quinn and Woodruff 2019).

Increasing agricultural production in the face of rising input prices can yield important benefits. Input subsidies increase agricultural production in the short run, but they distort incentives and come with long-run costs for the natural resource base. In MICs, agricultural input subsidies are large, amounting to about 5 percent of the value of agricultural production (FAO, UNDP, and UNEP 2021). However, farmers' investments are based not only on anticipated input prices, but also on output prices, knowledge of how best to invest, and access to credit, insurance, and labor markets (Duflo, Kremer, and Robinson 2008; Rosenzweig and Udry 2020). As a result, well-designed policies in extension and marketing support can increase investment and productivity among smallholder farmers in LICs and MICs (Bridle et al. 2019). Unlike spending on subsidies, these fiscal policies can result in long-run increases in agricultural income.

2. Spending for tomorrow: Prioritizing spending with long-run impacts (even in crisis times)

When fiscal space is tight, it is essential to focus on high-value policies that help countries implement their social welfare contract (box O.3). The right policy choices will differ across contexts, but long-run benefits should factor into those choices, even during a fiscal crisis, despite the fact that benefits will only be realized later.

Investing in long-run growth

COVID-19 has imposed heavy costs on the next generation's quality of life. Reducing these future costs must be an immediate priority. Although specific interventions to remediate these negative effects are discussed elsewhere (see, for example, World Bank, forthcoming b), the influence of learning losses on future income growth suggests high returns to policies that promote learning catch-up. In addition, investments in R&D and some high-value infrastructure can yield very high long-run returns.

Preparing for the next crisis

Spending today on preparing for future crises can also yield long-run benefits. The pandemic has demonstrated tragically that years of progress in reducing poverty can disappear quickly when countries cannot mount a good fiscal response to a major reversal. Crisis financial planning will equip countries with a strategic plan for unleashing the financial tools—contingency instruments, reserve funds, and budget reallocation plans—that can deliver the amount and timing of financing required in a crisis. Key elements of such a plan include the following:

- *Expand the reach of automatic stabilizers.* In countries where the informal sector is large, stabilizers may take the form of employment guarantee schemes (if the supply of work in these schemes can be scaled up) and transfers indexed to weather or prices, such as in the Kenya Livestock Insurance Program, which protects pastoralists in northern Kenya from drought.
- *Set up adaptive cash transfer programs.* Such programs can be scaled up automatically through preapproved protocols backed by social registries, open enrollment protocols, and digital payment systems in response to a crisis trigger. But scaling up will require data that capture the severity of a crisis as it unfolds and should complement data in social registries that identify not just the near-poor, but also those affected by the crisis. Examples of these data are not only traditionally defined economic measures, but also data that convey important features such as population mobility or satellite-based ground cover data that can relay information on flooding and soil moisture.

Investing in data and research to guide future investments

Better data—especially on the costs of policy implementation—are needed to prioritize well-targeted, high-value fiscal spending. Greater investments in evaluations of priority policies implemented at scale are also needed—particularly, long-run evaluations or evaluations that use good proxy indicators of long-run outcomes (Athey, Imbens, and Kang 2019). More fiscal incidence analysis is also needed, especially of productive investments such as in infrastructure, corporate subsidies and tax exemptions, and sectoral specific spending (such as on agriculture). In addition, gaps in the tax incidence analysis of the informal sector, top incomes, corporate tax, property tax, and tariffs should be closed wherever possible.

3. When needed, raise revenue without making the poor worse off

Greater mobilization of domestic resources is also important and can contribute to increased fiscal space in the short run. Poorer countries collect far less tax revenue than richer countries. LICs collect 11 percent of GDP in taxes—well below the 32 percent of GDP collected by OECD high-income countries. Differences in tax revenue reflect differences in state capacity and development (Besley and Persson 2013).[6] Likewise, public spending rates are much lower in poorer countries.

What steps can countries take to raise revenue in a way that reduces inequality while not increasing poverty? Because the level of tax a state can collect is partly determined by trust in the state and the level and quality of the services it delivers, the state cannot change tax revenue sources quickly. However, some fiscal reforms do offer increasingly feasible options for raising revenue, in part due to improvements in digital technology. If implemented well, these reforms can be high value and not put the poor out of pocket. The approach for each country will depend on its income level and economic structure, but there are three options countries can pursue:

1. *Increase property taxation and newer forms of progressive taxation—such as health and carbon taxes.*

- Property taxes are seldom collected in LICs and MICs, even though they play a big role in advanced economies. These taxes typically have little impact on poor people because they target property owners. But in countries in which poor households do own property (such as farmers who own a small plot of land), the rates can be designed to have little impact on the poor. Increasing property taxation requires cadaster investments, new valuation methods, and coordination between local and central governments. These, in turn, can require large up-front investments in implementation capacity, which reduces the initial net revenue gain. Technology can help. In Kigali, Rwanda, for example, drones have been used to update urban cadasters.
- Health taxes that take the form of indirect taxes on tobacco, alcohol, and sugary beverages may seem regressive and small, but they are actually progressive over a taxpayer's lifetime and offer large fiscal gains once health benefits are factored in. These taxes are also relatively easy to implement.
- Finally, the urgency stemming from climate change implies that fiscal policies to reduce carbon dioxide emissions and encourage clean energy use should be considered. There is strong evidence—mostly from HICs—that carbon taxes reduce emissions, and little evidence that they negatively affect GDP growth and employment (Dussaux 2020; Martin, de Preux, and Wagner 2014; Metcalf and Stock 2020; Misch and Wingender 2021; Schroder 2021). Cross-country analysis suggests that carbon taxes can raise revenue without increasing inequality in low- and middle-income countries (Dorband et al. 2019), but poor households must also pay them, so transfers are needed to compensate. Each of these tax categories will disproportionately affect some groups (such as urban property owners, alcohol beverage producers, and carbon-intensive industries), and so implementing these reforms will not always be easy.

2. *Improve the progressivity of the personal income tax (PIT) and corporate tax.* In some UMICs, increasing the progressivity of PIT could be as straightforward as revising tax rates and could be implemented in the short run. In many low- and middle-income countries, increasing the PIT's progressivity would require investing in administrative data systems and long-term monitoring to observe all the income sources of those at the top of the income distribution (including entrepreneurial activity and capital income). A corporate income tax is likely to be progressive and is an important backstop to the PIT, which is already in place in many LICs and MICs. In all countries, it may be more useful to reassess the tax incentives offered to large firms and multinationals and to formalize medium-size informal firms. Tax incentives are the product of negotiations between large firms and governments, and so they can be large, hard to change, and not always of high social value.
3. *Consider indirect taxation and accompanying direct transfers that offset negative effects.* In the short run, LICs and MICs will be unable to generate much tax income from the second option because of the high levels of informality in the economy. Although development of a more vibrant formal sector is important in these economies, increasing revenue in the short run will often require higher indirect taxation (if the rates are not too high). Even though these indirect sources of taxation are less regressive in LICs, they still constitute a large share of the income of the poor, and they do not help address inequality. Increases in indirect taxes will have to be accompanied by increases in direct transfers to offset the effects of tax increases on poverty. As direct transfers are increased, it is essential that they target households at the bottom end of the consumption distribution to offset the impact of any increases in indirect taxation.

In the long run, better debt management will be essential to increase countries' fiscal space for recovery from the pandemic and for responding to ongoing and future crises. *World*

Development Report 2022: Finance for an Equitable Recovery describes steps that can be adopted for debt management. These include taking action to proactively reduce exposure to risks that threaten to worsen public debt, such as pursuing regulatory reform in financial markets, improving debt transparency, and implementing a common framework for debt restructuring or relief (World Bank 2022b).

Finally, increasing the efficiency of spending is also essential. More-efficient public administration (such as improvements in procurement processes and incentives for public sector managers) can increase, in turn, the efficiency and quality of public spending and raise the value delivered for every expenditure.

Good fiscal policy is essential to correct course, but more will be needed

If implemented today, ambitious fiscal reforms designed to promote growth while also reducing inequality could eventually return poverty reduction efforts to the prepandemic trend. In general, increasing the progressivity of tax and spending is more effective for extreme poverty reduction in UMICs than in LMICs and LICs. In other words, a switch to more progressive fiscal policy will enable most UMICs to return to the prepandemic trajectory. For LICs, however, promoting growth through fiscal choices likely achieves more rapid poverty reduction over the medium run. Given the limits of fiscal policy, other national policy reforms will be needed to stimulate growth—particularly to boost the incomes of the poorest households. Supportive global actions will be needed as well. Even if the course correction proves insufficient to end extreme poverty by 2030, the shift must begin now for the sake of a lasting recovery from the overlapping crises of today.

Notes

1. The report presents official poverty numbers for 2019 for the first time and shows that the world entered the COVID-19 crisis in a weak position from the point of view of global poverty reduction. The global poverty headcount rate fell to 8.4 percent in 2019. Although continuing to fall, the drivers of progress that reduced the count of poor people in the world by more than 1 billion from 1990 to 2013 are no longer present, such as the fast growth in countries with a large share of the global poor during this period—in particular, China. Extreme poverty reduction progressed more slowly from 2014 to 2019. Although the pace of poverty reduction remained constant at higher poverty lines, that meant negligible progress on reducing the *number* of poor against the upper-middle-income country poverty line of US$6.85.
2. This exercise was conducted for 60 countries with diverse characteristics, using the country-specific societal poverty lines.
3. The details of these simulations are in Mahler et al. (2022) and use results from Artuc et al. (2022).
4. The report focuses on the fiscal topics of raising revenue in the short and medium term and reorienting spending toward protection and long-run growth. Technical feasibility is a key prism through which policy is recommended. However, the true feasibility of sustained and effective reform is reliant on ensuring political support. Although this report does not delve into what makes a reform politically feasible (something that has to be determined on a country-by-country basis), the analysis and tools discussed here allow a clear identification of winners and losers from any reform.
5. This occurs even though indirect taxes are far less regressive (and can even be progressive) in countries with large informal economies since, in informal economies, purchases are often not recorded so the amount that can be collected from indirect taxes is also lower.

6. For this reason, there is no clear optimal tax-to-GDP ratio across all countries, although some evidence suggests a tipping point between 12 and 13 percent of GDP above which growth and poverty reduction are faster (Gaspar, Jaramillo, and Wingender 2016).

References

Al-Samarrai, Samer, Pedro Cerdan-Infantes, Aliya Bigarinova, Juanita Bodmer, Marianne Joy Anacleto Vital, Manos Antoninis, Bilal Fouad Barakat, et al. 2021. *Education Finance Watch 2021* (English). Washington, DC: World Bank Group.

Aminjonov, U., O. Bargain, and T. Bernard. 2021. "Gimme Shelter: Social Distancing and Income Support in Times of Pandemic." IZA Discussion Paper No. 14967, Institute of Labour Economics, University of Bonn, Germany.

Artuc, Erhan, Guillermo Falcone, Guido Porto, and Bob Rijkers. 2022. "War-Induced Food Price Inflation Imperils the Poor." *VOX EU CEPR* (blog), April 1, 2022. https://voxeu.org/article/war-induced-food-price-inflation-imperils-poor.

Athey, S., R. Chetty, G. W. Imbens, and H. Kang. 2019. "The Surrogate Index: Combining Short-Term Proxies to Estimate Long-Term Treatment Effects More Rapidly and Precisely." NBER Working Paper 26463, National Bureau of Economic Research, Cambridge, MA.

Beaton, Chris, Lucky Lontoh, and Matthew Wai-Poi. 2017. "Indonesia: Pricing Reforms, Social Assistance, and the Importance of Perceptions." In *The Political Economy of Energy Subsidy Reform*, edited by Gabriela Inchauste and David Victor. Washington, DC: World Bank.

Beazley, Rodolfo, Marta Marzi, and Rachael Steller. 2021. *Drivers of Timely and Large-Scale Cash Responses to COVID-19: What Does the Data Say?* Social Protection Approaches to COVID-19: Expert Advice (SPACE). London: DAI Global UK Ltd.

Besley, T., and T. Persson. 2013. "Taxation and Development." In *Handbook of Public Economics*, vol. 5, edited by A. J. Auerbach, R. Chetty, M. Feldstein, and E. Saez. Amsterdam: North Holland.

Bhalla, Surjit, Karan Bhasin, and Arvind Virmani. 2022. "Pandemic, Poverty, and Inequality: Evidence from India." IMF Working Paper No. 2022/069, International Monetary Fund, Washington, DC.

Bolt, Jutta, and Jan Luiten van Zanden. 2020. "Maddison Style Estimates of the Evolution of the World Economy: A New 2020 Update." Maddison-Project Working Paper WP-15. https://www.rug.nl/ggdc/historicaldevelopment/maddison/publications/wp15.pdf.

Bridle, Leah, Jeremy Magruder, Craig McIntosh, and Tavneet Suri. 2019. "Experimental Insights on the Constraints to Technology Adoption." Working paper, Agricultural Technology Adoption Initiative, Abdul Latif Jameel Poverty Action Lab, Massachusetts Institute of Technology, Cambridge, MA; and Center for Effective Global Action, University of California, Berkeley.

Dorband, Ira, Michael Jakob, Matthias Kalkuhl, and Jan Christoph Steckel. 2019. "Poverty and Distributional Effects of Carbon Pricing in Low- and Middle-Income Countries: A Global Comparative Analysis." *World Development* 115: 246–57.

Duflo, Esther, Michael Kremer, and Jonathan Robinson. 2008. "How High Are Rates of Return to Fertilizer? Evidence from Field Experiments in Kenya." *American Economic Review* 98 (2): 482–88.

Dussaux, D. 2020. "The Joint Effects of Energy Prices and Carbon Taxes on Environmental and Economic Performance: Evidence from the French Manufacturing Sector." OECD Environment Working Paper 154, Organisation for Economic Co-operation and Development, Paris.

FAO (Food and Agriculture Organization), UNDP (United Nations Development Programme), and UNEP (United Nations Environment Programme). 2021. "A Multi-Billion-Dollar Opportunity—Repurposing Agricultural Support to Transform Food Systems." Rome: FAO. https://doi.org/10.4060/cb6562en.

Gaspar, Vitor, Laura Jaramillo, and Philippe Wingender. 2016. "Tax Capacity and Growth: Is There a Tipping Point?" IMF Working Paper 16/234, International Monetary Fund, Washington, DC.

Gentilini, Ugo, Mohamed Bubaker, Alsafi Almenfi, T. M. M. Iyengar, Yuko Okamura, John Austin Downes, Pamela Dale, et al. 2022. *Social Protection and Jobs Responses to COVID-19:*

A Real-Time Review of Country Measures. Washington, DC: World Bank.

Gollin, D., C. W. Hansen, and A. M. Wingender. 2021. "Two Blades of Grass: The Impact of the Green Revolution." *Journal of Political Economy* 129 (8): 2344–84.

Hendren, Nathaniel, and Ben Sprung-Keyser. 2020. "A Unified Welfare Analysis of Government Policies." *Quarterly Journal of Economics* 135 (3): 1209–1318.

Heuveline, Patrick. 2022. "Global and National Declines in Life Expectancy: An End-of-2021 Assessment." *Population and Development Review* 48 (1): 31–50.

Holla, Alaka, Magdalena Bendini, Lelys Dinarte, and Iva Trako. 2021. "Is Investment in Preprimary Education Too Low? Lessons from (Quasi) Experimental Evidence across Countries." Policy Research Working Paper 9723, World Bank, Washington, DC.

Inchauste, Gabriela, and David Victor. 2017. *The Political Economy of Energy Reform*. Washington, DC: World Bank.

Kose, M. Ayhan, Franziska Ohnsorge, Carmen M. Reinhart, and Kenneth S. Rogoff. 2022. "The Aftermath of Debt Surges." *Annual Review of Economics* 14.

Loayza, Norman V. 2020. "Costs and Trade-Offs in the Fight against the COVID-19 Pandemic: A Developing Country Perspective." Research and Policy Brief 35, World Bank, Washington, DC.

Mahler, Daniel Gerszon, Nishant Yonzan, Ruth Hill, Christoph Lakner, Haoyu Wu, and Nobuo Yoshida. 2022. "Pandemic, Prices, and Poverty." *Data Blog*, April 2022, World Bank, Washington, DC.

Mahler, Daniel Gerszon, Nishant Yonzan, and Christoph Lakner [randomized order]. Forthcoming. "The Impact of COVID-19 on Global Inequality and Poverty." World Bank, Washington DC.

Martin, Ralf, Laure B. de Preux, and Ulrich J. Wagner. 2014. "The Impact of a Carbon Tax on Manufacturing: Evidence from Microdata." *Journal of Public Economics* 117: 1–14.

Martin, Will, and Kym Anderson. 2011. "Export Restrictions and Price Insulation during Commodity Price Booms." Policy Research Working Paper 5645, World Bank, Washington, DC.

McKenzie, David. 2021. "Small Business Training to Improve Management Practices in Developing Countries: Reassessing the Evidence for 'Training Doesn't Work.'" *Oxford Review of Economic Policy* 37 (2): 276–301.

McKenzie, David, Christopher Woodruff, Kjetil Bjorvatn, Miriam Bruhn, Jing Cai, Juanita Gonzalez-Uribe, Simon Quinn, et al. 2021. "Training Entrepreneurs." *VoxDevLit* 1 (2).

Metcalf, Gilbert E., and James H. Stock. 2020. "Measuring the Macroeconomic Impact of Carbon Taxes." *American Economic Review Papers and Proceedings* 110: 101–06.

Misch, Florian, and Philippe Wingender. 2021. "Revisiting Carbon Leakage." Working Paper No. 2021/207, International Monetary Fund, Washington, DC.

Mohseni-Cheraghlou, A. 2016. "The Aftermath of Financial Crises: A Look on Human and Social Wellbeing." *World Development* 87: 88–106.

Quinn, Simon R., and Christopher Woodruff. 2019. "Experiments and Entrepreneurship in Developing Countries." *Annual Review of Economics* 11: 225–48.

Ravallion, Martin. 2022. "Filling a Gaping Hole in the World Bank's Global Poverty Measures: New Estimates of Poverty in India since 2011." Centre for Global Development Notes, Centre for Global Development, Washington, DC. https://www.cgdev.org/publication/filling-gaping-hole-world-banks-global-poverty-measures-new-estimates-poverty-india#:~:text=Ravallion%20(2016)%20proposes%20that%20the,zero%20at%20the%20poverty%20line.

Redonda, Agustin, Christian von Haldenwang, and Flurim Aliu. 2021. "Companion Paper to the Global Tax Expenditures Database." Global Tax Expenditures Database, German Development Institute.

Rosenzweig, Mark R., and Christoper Udry. 2020. "External Validity in a Stochastic World: Evidence from Low-Income Countries." *Review of Economic Studies* 87 (1): 343–81.

Sandefur, Justin. 2022. "The Great Indian Poverty Debate, 2.0." *Centre for Global Development Blog,* April 19, 2022. https://www.cgdev.org/blog/great-indian-poverty-debate-20.

Schroder, C. 2021. "Regime-Dependent Environmental Tax Multipliers: Evidence from

75 Countries." Policy Research Working Paper 9640, World Bank, Washington, DC.

Sinha Roy, Sutirtha, and Roy van der Weide. 2022. "Poverty in India Has Declined over the Last Decade but Not as Much as Previously Thought." Policy Research Working Paper 9994, World Bank, Washington, DC.

WHO (World Health Organization). 2022. "Global Excess Deaths Associated with COVID-19, January 2020–December 2021." https://www.who.int/data/stories/global-excess-deaths-associated-with-covid-19-january-2020-december-2021.

World Bank. 2013. *World Development Report 2014: Risk and Opportunity—Managing Risk for Development*. Washington, DC: World Bank. https://openknowledge.worldbank.org/handle/10986/16092.

World Bank. 2022a. *Brazil Poverty and Equity Assessment: Looking Ahead of Two Crises*. Washington, DC: World Bank.

World Bank. 2022b. *World Development Report 2022: Finance for an Equitable Recovery.* Washington, DC: World Bank.

World Bank. Forthcoming a. *Europe and Central Asia Economic Update, Fall 2022: Social Protection for Recovery*. Europe and Central Asia Economic Update 14. Washington, DC: World Bank.

World Bank. Forthcoming b. *Collapse and Recovery: How the COVID-19 Pandemic Eroded Human Capital and What to Do About It.* Washington, DC: World Bank.

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The COVID-19 pandemic triggered a pronounced setback in the fight against global poverty—likely the largest setback since World War II. Many low- and middle-income countries have yet to see a full recovery. High indebtedness in many countries has hindered a swift recovery, while rising food and energy prices—fueled in part by conflict and climate shocks—have made a return to progress on poverty reduction more challenging than ever. These setbacks have altered the trajectory of poverty reduction in large and lasting ways. The world is significantly off course on the goal of ending extreme poverty by 2030.

The year 2020 also marked a historic turning point as decades of global income convergence gave way to global divergence as the world's poorest people were hardest hit. The richest people have recovered from the pandemic at a faster pace, further exacerbating differences. These diverging fortunes between the global rich and poor ushered in the first rise in global inequality in decades.

Poverty and Shared Prosperity 2022: Correcting Course provides the first comprehensive analysis of the pandemic's toll on poverty in developing countries. It identifies how governments can optimize fiscal policy to help correct course. Fiscal policies offset the impact of COVID-19 on poverty in many high-income countries, but those policies offset barely one-quarter of the pandemic's impact in low-income countries and lower-middle-income countries. Improving support to households as crises continue will require reorienting protective spending away from generally regressive and inefficient subsidies and toward a direct transfer support system—a first key priority.

Reorienting fiscal spending toward supporting growth is a second key priority identified by the report. Some of the highest-value public spending often pays out decades later. Amid crises, it is difficult to protect such investments, but it is essential to do so. Finally, it is not enough just to spend wisely—when additional revenue does need to be mobilized, it must be done in a way that minimizes reductions in poor people's incomes. The report highlights how exploring the underused forms of progressive taxation and increasing the efficiency of tax collection can help in this regard.

Poverty and Shared Prosperity is a biennial series that reports on global trends in poverty and shared prosperity. Each report also explores a central challenge to poverty reduction and boosting shared prosperity, assessing what works well and what does not in different settings. By bringing together the latest evidence, this corporate flagship report provides a foundation for informed advocacy around ending extreme poverty and improving the lives of the poorest in every country in the world. For more information, please visit worldbank.org/poverty-and-shared-prosperity.

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