



**Standing Committee
for Economic and Commercial Cooperation
of the Organization of Islamic Cooperation (COMCEC)**

COVID-19 and Its Adverse Effects on Socio-Economic Inequalities in the OIC Member States

**COMCEC Coordination Office
October 2021**

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TABLE OF CONTENTS

LIST OF FIGURES	iii
LIST OF TABLES.....	v
LIST OF BOXES	vi
LIST OF ACRONYMS.....	vii
EXECUTIVE SUMMARY	1
1 THE COVID-19 CRISIS: INTRODUCTION and BASIC FACTS.....	4
2 CONCEPTUAL FRAMEWORK	11
2.1 Data and Research in the COVID-19 Era	11
2.2 Data Sources and Methodology.....	13
3 EFFECTS of COVID-19 on INEQUALITIES in the WORLD	15
3.1 The Worldwide Pandemic Logbook	15
3.2 Growth and Income Inequality	16
3.3 Employment and Access to Decent Jobs	19
3.4 Policy Response.....	23
4 ANALYSIS of the CURRENT SITUATION in OIC MEMBER STATES	29
4.1 Evolution of the Pandemic in OIC Countries	29
4.2 Growth and Income Inequality	31
4.3 Employment and Access to Decent Jobs	34
4.4 Social Outcomes.....	37
4.5 Policy Response.....	43
4.6 Lessons Learned and Risks Ahead.....	51
5 COUNTRY CASE STUDIES	61
5.1 CASE I: Turkey.....	61
5.1.1 The Chronicle of the COVID-19 Outbreak	61
5.1.2 Impact on Socio-Economic Inequalities	65
5.1.3 Policy Response.....	75
5.1.4 Evaluation of Findings	80
5.2 CASE II: Qatar.....	84
5.2.1 The Chronicle of the COVID-19 Outbreak	84
5.2.2 Impact on Socio-Economic Inequalities	87
5.2.3 Policy Response.....	96
5.2.4 Evaluation of Findings	99
5.3 CASE III: Cameroon.....	102
5.3.1 The Chronicle of the COVID-19 Outbreak	102
5.3.2 Impact on Socio-Economic Inequalities	105
5.3.3 Policy Response.....	115
5.3.4 Evaluation of Findings	118
5.4 CASE IV: South Africa	123
5.4.1 The Chronicle of the COVID-19 Outbreak	123
5.4.2 Impact on Socio-Economic Inequalities	126
5.4.3 Policy Response.....	134
5.4.4 Evaluation of Findings	138
6 POLICY RECOMMENDATIONS.....	142
6.1 For All OIC Members	146
6.2 For OIC Members with Sufficient Institutional Capacity	150
6.3 For OIC Members with Limited Institutional Capacity	154
REFERENCES.....	158
ANNEX I	167

ANNEX II..... 168
ANNEX III 174
ANNEX IV..... 179
ANNEX V 181

LIST OF FIGURES

Figure 1.1. Global recoveries in history.....	5
Figure 3.1. Global evolution of the COVID-19 pandemic.....	15
Figure 3.2. Change in income inequality (Gini Index), 1990-2019.....	17
Figure 3.3. Regional per capita income inequalities.....	18
Figure 3.4. Annual change in the number of extreme poor, 1992-2020.....	19
Figure 3.5. Working-hour losses, deviation from pre-pandemic levels.....	20
Figure 3.6. Employment rate, deviation from pre-pandemic levels.....	21
Figure 3.7. Informal economy.....	21
Figure 3.8. Sectoral employment growth.....	22
Figure 3.9. Monetary and fiscal policy measures.....	24
Figure 3.10. Key interventions in education and health.....	25
Figure 4.1. Evolution of the COVID-19 pandemic in OIC and elsewhere.....	29
Figure 4.2. Vaccination coverage.....	30
Figure 4.3. Extreme poverty in OIC.....	34
Figure 4.4. Informality in OIC region.....	36
Figure 4.5. Education losses during the pandemic.....	40
Figure 4.6. Social safety nets and assistance.....	43
Figure 4.7. Key interventions in education and health in OIC.....	51
Figure 4.8. Vaccine hesitancy.....	59
Figure 5.1.1. Evolution of the COVID-19 pandemic in Turkey and elsewhere.....	62
Figure 5.1.2. Vaccination coverage.....	65
Figure 5.1.3. Per capita income of Turkey, various comparisons.....	67
Figure 5.1.4. Working-hour losses in Turkey.....	69
Figure 5.1.5. Informality in Turkey compared to OIC regions.....	70
Figure 5.1.6. Internet infrastructure in Turkey, various comparisons.....	72
Figure 5.1.7. Assets and liabilities of health system in Turkey.....	74
Figure 5.1.8. COVID-19 policy response summary in Turkey.....	75
Figure 5.2.1. Evolution of the COVID-19 pandemic in Qatar and elsewhere.....	85
Figure 5.2.2. Vaccination coverage.....	87
Figure 5.2.3. Per capita income inequalities of Qatar, various comparisons.....	89
Figure 5.2.4. Working-hour losses in Qatar.....	90
Figure 5.2.5. Informality in Qatar compared to OIC regions.....	91
Figure 5.2.6. Internet infrastructure in Qatar, various comparisons.....	94
Figure 5.2.7. Assets and liabilities of health system in Qatar.....	95
Figure 5.2.8. COVID-19 policy response summary in Qatar.....	97
Figure 5.3.1. Evolution of the COVID-19 pandemic in Cameroon and elsewhere.....	103
Figure 5.3.2. Vaccination coverage.....	105
Figure 5.3.3. Per capita income inequalities of Cameroon, various comparisons.....	107
Figure 5.3.4. Working-hour losses in Cameroon.....	108
Figure 5.3.5. Informality in Cameroon compared to OIC regions.....	109
Figure 5.3.6. Internet infrastructure in Cameroon, various comparisons.....	112

Figure 5.3.7. Assets and liabilities of health system in Cameroon.....	114
Figure 5.3.8. COVID-19 policy response summary in Cameroon	116
Figure 5.4.1. Evolution of the COVID-19 pandemic in South Africa and elsewhere.....	124
Figure 5.4.2. Vaccination coverage	126
Figure 5.4.3. Per capita income inequalities of South Africa, various comparisons.....	128
Figure 5.4.4. Working-hour losses in South Africa	129
Figure 5.4.5. Informality in South Africa compared to OIC regions	130
Figure 5.4.6. Internet infrastructure in South Africa, various comparisons.....	132
Figure 5.4.7. Assets and liabilities of health system in South Africa.....	133
Figure 5.4.8. COVID-19 policy response summary in South Africa	135

LIST OF TABLES

Table 1. GDP growth in OIC	32
Table 2. Unemployment in OIC	35
Table 3. Fiscal policy measures in OIC, percent of 2020 GDP	45
Table 4. General government gross debt as percent of GDP in OIC.....	47
Table 5. Monetary policy measures in OIC.....	49
Table 6. Vaccine supplies, OIC regions.....	60
Table 7. Vaccine supplies, Turkey.....	63
Table 8. Turkey's vaccine program: Population targeting	64
Table 9. Social protection programs in Turkey	77
Table 10. Vaccine Supplies, Qatar	86
Table 11. Vaccine Supplies, Cameroon	104
Table 12. Vaccine Supplies, South Africa	125

LIST OF BOXES

Box 1. Disruption in access to primary health service in Indonesia	38
Box 2. Widening rural-urban gap in education in Uganda	41
Box 3. Digital COVID-19 social assistance framework in Turkey	54
Box 4. National food security strategy in Qatar during the COVID-19 pandemic	57

LIST OF ACRONYMS

ADSLA	Ministry of Administrative Development, Labor and Social Affairs
AEs	Advanced Economies
AVAT	African Vaccine Acquisition Trust
BEAC	Bank of Central African States
CAR	Central African Republic
CBRT	Central Bank of the Republic of Turkey
CCO	COMCEC Coordination Office
CDS	Credit Default Swap
CEMAC	Central African Economic and Monetary Community
CEPI	Coalition for Epidemic Preparedness Innovations
COBAC	Banking Commission of Central African States
COMCEC	Committee for Economic and Commercial Cooperation of the Organization of Islamic Cooperation
COVAX	COVID-19 Vaccines Global Access
COVID-19	Coronavirus Disease 2019
CPI	Consumer Price Index
DGE	Dynamic General Equilibrium
EBA	Education Information Network
EMDEs	Emerging Markets and Developing Economies
FTE	Full-Time Equivalent
GAM	Global Acute Malnutrition
GAVI	Global Alliance for Vaccines and Immunization
GCC	Gulf Cooperation Countries
GDP	Gross Domestic Product
GEP	Global Economic Prospects
HDI	Human Development Index
IDPs	Internally Displaced Persons
ILO	International Labor Organization
IMF	International Monetary Fund
INS	Institute of National Statistics
ISAS	Integrated Social Assistance Information System
LFPR	Labor Force Participation Rate
LICs	Low Income Countries
LMS	Learning Management System
LNG	Liquefied Natural Gas
MDGs	Millennium Development Goals
MINEPAT	Ministry of Economy, Planning and Regional Development
MINFI	Ministry of Finance
MoNE	Ministry of National Education

MoPH	Ministry of Public Health
NEET	Not in Employment, Education, or Training
NOC	No Objection Certificate
non-OIC	Non-OIC Emerging Market and Development Economies
OECD	Organization for Economic Cooperation and Development
OIC	the Organization of Islamic Cooperation
OWID	Our World in Data
OxCGRT	Oxford COVID-19 Government Response Tracker
PPI	Producer Price Index
PwDs	Persons with Disabilities
QCB	Qatar Central Bank
QDB	Qatar Development Bank
RCF	Rapid Credit Facility
RGE-2	Second General Census of Enterprises
SAM	Severe Acute Malnutrition
SARB	South African Reserve Bank
SARB	South African Reserve Bank
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2
SASF	Social Assistance and Solidarity Foundations
SDGs	Sustainable Development Goals
TERS	Temporary Employee/Employer Relief Scheme
UHFPS	Uganda High-Frequency Phone Survey
UIF	Unemployment Insurance Fund
UN	United Nations
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
VAT	Value Added Tax
WEO	World Economic Outlook
WFP	World Food Program
WHO	World Health Organization

EXECUTIVE SUMMARY

The COVID-19 pandemic has infected more than hundreds of millions of people around the world, leading to a catastrophic death toll since December 2019 when the first COVID-19 positive case was identified in Wuhan, China. Due to rapid spread of COVID-19 along with high hospitalization and mortality rates, most countries adopted several measures including but not limited to international travel controls, school and workplace closures, restrictions on gatherings and public events, public transport restrictions, internal movement constraints, protection of sensitive groups (i.e., elderly population and those who have chronic illnesses), mask wearing rules, public information campaigns, and “stay-at-home” policies. Intensive contact tracing and massive testing procedures have also been implemented to minimize the spread of virus.

A detailed analysis of the infection and death rates suggests that the main trends (i.e., ups, downs, and swings) are different in the Organization of Islamic Cooperation (OIC) region than the rest of the world. In particular, the boom-bust cycles are not as significant in the OIC countries as they are in the non-OIC countries. Moreover, a substantial level difference is also observed—e.g., the number of new cases and deaths per million are much lower in the OIC region relative to the rest of the world. These differences suggest that (1) the pandemic may follow different transmission processes in the OIC and non-OIC countries and (2) COVID-19 data quality may be much lower in the OIC countries in comparison to non-OIC countries due to various reasons. Within the OIC countries, the number of new cases and deaths exhibited a substantial degree of heterogeneity across sub-regions. The timing of peaks and troughs also exhibits non-negligible cross-country variation. The existing statistics suggests that OIC sub-regions have experienced their own dynamics in infection rates.

The extreme measures taken to contain the spread of coronavirus outbreak had significant adverse effects on both supply and demand of goods and services, resulting in a sharp increase in unemployment claims and a large decline in global economic activity. The COVID-19 pandemic has led to one of the deepest economic crises since the 1929 Great Depression, and it has disproportionately hit the most vulnerable groups. There is a strong tradeoff between strict implementation of pandemic rules/restrictions and economic activity in the short run. Countries have aimed to achieve a balance between the two by periodic openings and closings, which can be regarded as a typical strategic or tactical move until effective treatment/vaccination is developed. As a result, fluctuations or waves have been observed in the data in terms of infection and death rates. The timing and intensity of the disease burden have exhibited a substantial degree of variation across countries and regions due to several reasons.

The nature of shocks hitting the developing countries during the pandemic has some specific features that led to accumulation of socio-economic risks along various dimensions. Those risks are also highly relevant for the most OIC countries. Projected and estimated

income/output losses are substantial for economies that extensively draw on exports of commodities, tourism revenues, remittances, and also for the ones with limited fiscal capacities. Moreover, the expected recovery after the sharp initial losses is projected to leave permanent damages on the socio-economic status of disadvantaged groups—such as low-skilled workers, women, youth and persons with disabilities (PwDs). These asymmetric effects have been harmful especially for poverty alleviation, gender equality, education, social protection, refugees/IDPs, slum dwellers, labor market outcomes, remittances, international trade, commodity prices, food insecurity, and tourism dimensions in the OIC economies.

The policy measures taken in response to the COVID-19 pandemic suggest that the OIC countries have implemented containment and monitoring policies quite strictly (may even be stricter than non-OIC countries) during 2020. Then, perhaps due to increased social pressures and accumulated socio-economic risks, the stringency of policies has been relaxed in a much faster pace than it has happened in the non-OIC countries. The lack of sufficient support and relief programs for households also contributed to a more rapid relaxation of containment policies. But the downside is that the decline in policy stringency is not backed by a sound vaccination plan in most OIC countries, which lags behind the rest of the world in terms of vaccine supply due to various reasons. This heightens the risk of further COVID-19 waves with higher infection and death rates.

This report aims to provide a practical guideline for the OIC member states to better respond to the socio-economic inequalities resulting from the COVID-19 pandemic. Chapter 1 makes a gentle introduction and provides some background information. Chapter 2 explains the conceptual framework of the study, provides the methodological details, and data description. Chapter 3 dissects the COVID-19 triggered inequalities in the world. Chapter 4 focuses on the OIC countries and provides an in-depth assessment of the socio-economic outcomes of the pandemic in the OIC states. Chapter 5 presents four case studies. Chapter 6 concludes and provides concrete policy recommendations for the OIC countries to facilitate policy-making in response to the challenges faced during the pandemic. The general policy recommendations can be briefly listed as follows:

- Diversify concentrated exposures and resolve over-reliance on a single or small number of suppliers for critical goods and services to minimize the damages in future emergencies.
- Design labor market policies (i) to establish a balance between protecting existing shocks and addressing the destructive effects of labor reallocations and (ii) to provide unemployment subsidies that also cover informal workers.
- Utilize online databases and other digital tools to identify the needs, monitor changing situations of individuals and households, build automatic decision systems to check for eligibility, and effectively distribute social assistance in emergency situations.

- Develop effective food safety strategies to address the problems of food insecurity and undernourishment that emerged during the COVID-19 crisis due to the dramatic fall in income levels especially for disadvantaged groups.
- Devote more resources and set fiscal spending priorities to reverse learning depreciations among disadvantaged children, who lost substantial amounts of instructional time during the COVID-19 pandemic.
- Invest in health infrastructure and ensure health equality to effectively provide health care for disadvantaged and vulnerable groups during emergencies.
- Increase priority actions to ensure equal access to vaccines to achieve global herd immunity, save lives, prevent the emergence of new variants, and contribute trillions to global economic recovery.
- Improve policy coordination both within the OIC group, and between OIC countries and the rest of the world for more effective policy implementation during times of crises and to continue to narrow the gap between their living standards and those of advanced countries.

More concrete policy measures tailored towards differing needs of OIC countries are also supplied at the end of the report.

1 THE COVID-19 CRISIS: INTRODUCTION and BASIC FACTS

Coronavirus disease 2019 (COVID-19) is an infection caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The first known case in the world was detected in Wuhan in December 2019. The disease soon after became global and the World Health Organization (WHO) declared the outbreak a pandemic on March 11, 2020.

The COVID-19 pandemic has so far infected more than 217 million people around the world, leading to approximately 4.5 million deaths since December 2019.¹ Due to the rapid spread of COVID-19 along with high hospitalization and mortality rates, most countries adopted several measures including but not limited to international travel controls, school and workplace closures, restrictions on gatherings and public events, public transport restrictions, internal movement constraints, protection of sensitive groups (i.e., elderly population and those who have chronic illnesses), mask wearing rules, public information campaigns, and “stay-at-home” policies. Intensive contact tracing and massive testing procedures have also been implemented to minimize the spread of virus.

These extreme measures had significant adverse effects on both supply and demand of goods and services, resulting in a sharp increase in unemployment claims and a large decline in global economic activity. The World Economic Outlook (WEO) report published by the International Monetary Fund (IMF) in April 2021 documents that the global real GDP declined by 3.3 percent in 2020 (IMF, 2021a). The contraction in 2020 was very sudden and deep compared to previous global crises, even as the policy response in many countries was swift and sizable.

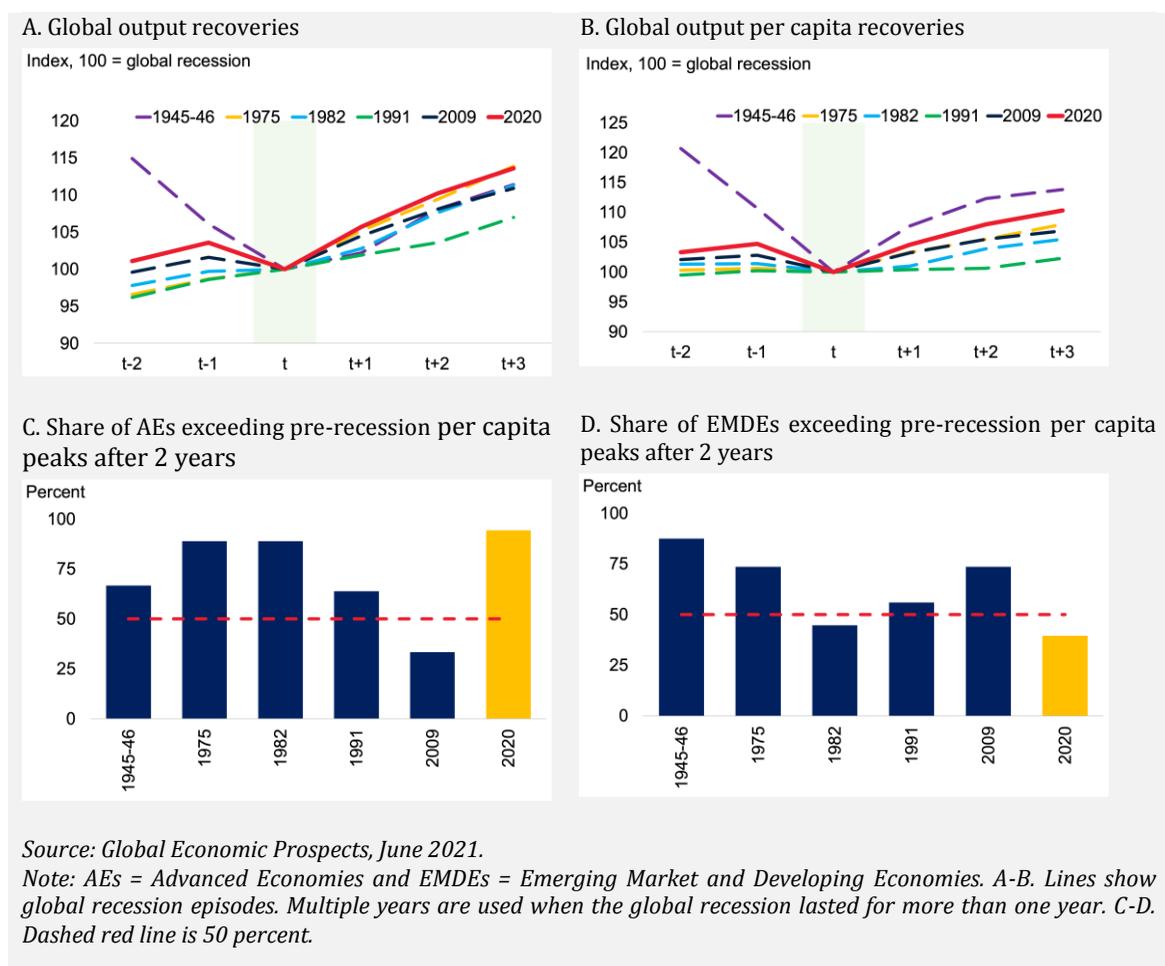
Similarly, according to the most recent Global Economic Prospects (GEP) report published by the World Bank Group, the COVID-19 pandemic has led to one of the deepest economic crises since the 1929 Great Depression (World Bank, 2021a). The baseline scenario of the report envisions the fastest recovery compared to any of the five global downturns in the past 80 years, considerably faster than the initial rebound from the global financial crisis (Figure 1.1.A-B). The limitation of the recovery is concentrated in emerging markets and developing economies (EMDEs): More than 90 percent of advanced economies (AEs) are expected to regain their pre-pandemic per capita income levels in 2022, while only about one third of EMDEs are expected to do so over that time (Figure B1.1.C-D).

The pandemic has disproportionately hit the most vulnerable groups. It is well-known that natural disasters unduly affect the poorest segments of the population, with significant intergenerational effects as individuals’ health is damaged, their livelihoods are destroyed and children are prevented from attending school. COVID-19 also exhibits similar properties with one major difference: it has affected all countries across the world rather than being a regional shock.

¹ See <https://www.worldometers.info/coronavirus/>. Date of access: August 30, 2021.

The adverse impacts of COVID-19 are not limited to macroeconomic outcomes. International organizations have been warning against the harmful effects of COVID-19 pandemic on human development. A recent United Nations Development Program (UNDP) report (UNDP, 2020) estimates that a combined measure of the world’s education, health, and living standards may have declined in 2020 for the first time since the concept was developed in 1990. Considering the inability to access the internet, education rates in primary education are expected to drop to the levels of the mid-1980s especially in low-income countries. UNDP simulations also suggest that the conditions today would correspond to a sharp narrowing in human capabilities, which would be equivalent to erasing all the human development progress achieved in the past six years.

Figure 1.1. Global recoveries in history



The COVID-19 pandemic has certainly posed additional challenges on the poverty eradication front. The April 2021 IMF-WEO report clearly states that approximately 95 million additional people have fallen below the poverty line in 2020 in comparison to the pre-COVID-19 estimates. Moreover, there are 80 million more undernourished individuals than before the

pre-pandemic period. Economic inequalities have also increased beyond expectations along various directions. These estimates and projections suggest a reversal in global poverty reduction gains, which have been accumulated through tremendous effort and global cooperation in the past two decades. Lower-middle-income people especially in developing and low-income countries have also started to have increased poverty perceptions—due to higher weight of cheaper staple foods in their diet habits and, therefore, undernourishment caused by sharp declines in their income.

A study conducted by the World Bank experts (see Lakner et al., 2021b) forecasts that COVID-19 is likely to cause the first increase in global poverty since 1998—the time when a large financial crisis hit Asia. The study also suggests that the share of the world’s population living below the poverty line (i.e., less than \$1.90 per day) is expected to substantially increase. In particular, the COVID-19 pandemic is likely to push approximately 120 million people into extreme poverty in 2020, setting back poverty reduction efforts by more than three years. Of these projected additional poor, around 60 percent are expected to be in South Asia and 30 percent in Sub-Saharan Africa. When the poverty line is increased to \$3.20 per day, the number of “added poor” is expected to increase to 230 million—again driven by South Asia. Finally, the World Food Program (WFP) predicts that around 270 million people would become acutely food insecure by the end of 2020 (WFP, 2020).

Recent research suggests that COVID-19 has non-negligible impacts also on child and maternal health mostly through its adverse effects on health services. For example, Robertson et al. (2020) find using a data set covering 118 countries that the COVID-19 pandemic likely causes an additional 250,000 child deaths and 12,000 maternal deaths. Under three different scenarios², the pandemic is likely to increase death of children of younger than age 5 by 10 to 45 percent per month, while maternal deaths increase by 8 to 39 percent per month. The 5th item in Sustainable Development Goals (SDGs) aims to reach gender equality on various development-related outcomes across the globe by 2030. Recent studies reveal that COVID-19 has hit women harder than men in the overall (Alon et al., 2020a; Deryugina et al., 2021). There are several socio-economic dimensions along which women have been hit harder than men by COVID-19.

Researchers are increasingly interested in estimating various aspects of the adverse effects of the COVID-19 pandemic on educational outcomes. In a recent paper, Azevedo et al. (2020) predict that the COVID-19 pandemic leads to a loss of between 0.3 and 0.9 years of schooling (adjusted for quality), bringing down the effective years of basic schooling that students attain during their lifetime from 7.9 years to between 7.0 and 7.6 years. Around 7 million primary and secondary school students could drop out due to the income shock of the pandemic alone. The current cohort of students could face a reduction of yearly earnings in the order of \$355-\$1,408, on average. In present value terms, this amounts to between \$6,472 and \$25,680 loss

² Reductions in the availability of health workers and supplies due to the reallocation of resources to the pandemic response are investigated under three scenarios: Small (5% reduction), moderate (10% reduction), and large (25% reduction).

of earnings, on average, during a student's lifetime. Engzell et al. (2020) use data from Netherlands to show that the average learning loss is equivalent to a fifth of a school year. Recent estimates by international organizations such as the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Children's Fund (UNICEF), the World Bank, and the IMF suggest that nearly 1.2 billion learners—approximately, 68 percent of enrolled students—are affected by school closure measures. Most importantly, education losses measured in terms of average missed days of instruction clearly indicate that around 50 school days are missed across the globe on average in 2020. The loss is around 15 days in advanced economies, slightly below 50 days in emerging economies, and around 70 days in low-income developing economies.

The employment losses due to COVID-19 have been among the most heavily debated policy topics during the pandemic. The government-imposed lockdowns have caused significant reductions in hours of work and labor force participation. Researchers and international organizations have recently documented the magnitude of job losses as well as the impact of COVID-19 on vulnerable groups such as low-skilled individuals, informal workers, and women. The International Labor Organization (ILO) estimates suggest that total working-hour losses in the second quarter of 2020 (i.e., during the first global peak of the pandemic) relative to the fourth quarter of 2019 (adjusted for seasonality) have reached to 17.3 percent—or 495 million full-time equivalent (FTE) jobs (ILO, 2020a). Lower-middle-income countries have been hit the hardest, having experienced an estimated decline in working hours of 23.3 percent (240 million FTE jobs) in the second quarter of 2020. Workers in EMDEs, especially those in informal employment, have been affected to a much greater extent than in past crises. In developing economies, opportunities for distant working are limited, and hence the impact of the crisis on informal workers is likely to be greater. Furthermore, limited fiscal buffer in developing countries puts additional constraints on the resources for the implementation of COVID-19 response measures. Formal employees have benefited from social security subsidies or other public sector measures that cushion the blow of labor income losses. In contrast, the ILO Monitor estimates suggest that 60 percent of global workers, who are informally employed and, therefore, out of social security coverage, are particularly vulnerable to income losses and poverty during the COVID-19 crisis.

Employment losses in the intensive margin have also importantly contributed to labor income losses. Specifically, ILO estimates document that losses in hours of work have been translated into substantial losses in labor income. Estimates of labor income losses suggest a 10.7 percent global decline during the first three quarters of 2020 (compared to the corresponding period in 2019), which amounts to a US\$3.5 trillion, or 5.5 percent of global gross domestic product (GDP) for the first three quarters of 2019. Labor income losses are highest in middle-income countries—decomposed as 15.1 percent decline in lower-middle-income countries and 11.4 percent decline in upper-middle-income countries.

Another important observation for unemployment effects of COVID-19 is that it asymmetrically affected different demographic groups—and this is mostly an issue for developing and less developed economies rather than advanced economies. In particular, low-

skilled workers, women, youth and PwDs have been affected much more severely. Increases in unemployment rates, declines in labor force participation, and therefore declines in employment rates have been more prominent for these groups. These asymmetric labor market effects are likely to be more persistent (Barrero et al., 2020) and long lived. It should be noted at this stage that countries with larger fiscal packages (and more fiscal room in general) are more likely to experience faster recoveries and employment reallocations across sectors.

Several studies construct various indices to understand the change in vulnerabilities in labor markets as a consequence of the COVID-19 pandemic. Studies including Demir-Şeker et al. (2020), Gentilini et al. (2020), and Hatayama et al. (2020) find that employment vulnerabilities are the highest among textile/leather and apparel, and accommodation and food sectors. In contrast, information and communication technologies, and finance are among the least vulnerable sectors. Demir-Seker et al. (2020) report that only 10 percent of the workers in Turkey can work from home and, in the overall, around 7 million workers are at risk of losing their jobs due to the adverse economic impacts of COVID-19. There is ample evidence that women are disproportionately affected by the pandemic through increased burden of childcare and through job losses or furloughs, as women are more likely to be employed in services sector or informal jobs that were hit the hardest (Alon et al., 2020a; Blundell et al., 2020; McKinsey & Company and LeanIn, 2020).

Fiscal policy has played a substantial role in absorbing the negative economic impact of the COVID-19 pandemic. The size of fiscal stimulus packages has far exceeded the amount that was spent to overcome the adverse effects of the 2008 global financial crisis. However, fiscal spaces and, therefore, the size of fiscal stimulus packages have also varied substantially across countries. For example, the COVID-19 fiscal stimulus packages have reached to around 11 percent of GDP in advanced economies (only 2.6 percent in the 2008 crisis), while it is only 5 percent of GDP in emerging markets and developing economies (4.6 percent in the 2008 crisis). The size of stimulus packages—measured in terms of GDP shares—rapidly declines with the development level of countries. Although expansionary fiscal policy has played a significant role in supporting economic activity from falling further, global fiscal stimulus has been concentrated mostly in high-income countries and fiscal space remains limited in many developing countries. ILO estimates suggest the fiscal stimulus gap in low-income and lower middle-income countries is equivalent to approximately 14 percent of aggregate GDP for these countries in 2019. UNCTAD (2020) argues that the “unprecedented COVID-19 stimulus packages are not being leveraged to accelerate SDGs investment” such as renewable energy, food sustainability, and empowerment of vulnerable groups. Most importantly, limited fiscal space in developing and low-income countries (including the OIC countries) restricts those countries’ capacity to effectively respond to the pandemic crisis in terms of aggressively trading off foregone economic activity with strict lockdown measures in the short term (to benefit from long-term returns in the form of reduced infection rates and higher income).

Meanwhile, the final solution to ending the COVID-19 pandemic, vaccine development and subsequent deployment, has been underway. Since 2020, vaccine development has been

accelerated through unparalleled collaboration between big multinational pharmaceutical firms and governments. By June 2020, tens of billions of dollars had been invested by companies, governments, international bodies, and college research groups to develop dozens of vaccine candidates and prepare global immunization programs against COVID-19 infection. The result has been the development and emergency approval of multiple vaccines from different countries as of November 2020, which is a remarkable achievement.

At the beginning of 2021, massive vaccination campaigns were launched, especially in advanced economies, but also in China and Russia. As of August 30, 2021, 39 percent of the world's population had received at least one dose of the COVID-19 vaccine, meaning that 5.25 billion doses have been administered worldwide and 39.5 million are administered every day. However, only 1.6 percent of people in low-income countries received at least one dose. Vaccine inequity among nations is one of the major problems associated with the pandemic, and the path chosen in this regard is probably the most important element in determining the global destiny of the COVID-19 pandemic.

Equitable global distribution of vaccines is first and foremost an ethical and humanitarian responsibility, as rightfully claimed by Çakmaklı et al. (2021). This study makes the economic case for equitable vaccine deployment by presenting estimates that show that increasing the production and supply of vaccines has significant economic benefits for the global economy, at minimal cost. To fully address the economic burden of the pandemic, rich countries have strong economic incentives to participate in efforts such as COVAX that aim to increase the supply of vaccines to achieve equitable global distribution, as such engagement brings high returns to these countries.

As is the case in other parts of the world, the COVID-19 pandemic has posed unprecedented challenges with severe socio-economic consequences for many OIC member countries. The situation is particularly alarming given the continuous weakening of the economic performance of many OIC countries in the last few years (SESRIC, 2020). In particular, 2019 is the third consecutive year where the average economic performance of the OIC countries, with a growth rate of 2.4 percent, remained below the world average. In 2020, the OIC economies were expected to contract and record a negative growth rate of 3.5 percent, which is a higher contraction rate than the global contraction of 3.3 percent suggested in IMF (2021a). SESRIC estimates suggest that 35 OIC countries are expected to experience negative growth rates in 2020. Amid the ongoing global economic recession due to the COVID-19 pandemic, the total number of unemployed individuals in the OIC countries would increase from its previously estimated level of 47.7 million to 53.3 million in 2020.

The aim of this report is (1) to analyze the adverse effects of COVID-19 on socio-economic outcomes in the OIC countries, (2) to evaluate the effectiveness of policy measures taken in response to the pandemic, (3) to examine the best-practices, innovative approaches, successful initiatives in the OIC member states as well as beyond the OIC countries in various areas, (4) to identify challenges ahead, and (5) to generate concrete policy recommendations to alleviate the adverse effects of the pandemic. The study also aims to provide a multidirectional practical



guideline for the member states to better respond to the socio-economic inequalities resulting from the pandemic.

The plan of the rest of the report is as follows. Chapter 2 explains the conceptual framework of the study, provides a methodological summary and data description. Chapter 3 dissects the COVID-19 triggered inequalities in the world. Chapter 4 focuses on the OIC countries and provides an in-depth assessment of the socio-economic outcomes of the pandemic in the OIC states. Chapter 5 presents four case studies. Chapter 6 concludes and provides concrete policy recommendations for the OIC countries to facilitate policy-making in response to the challenges faced during the pandemic.

2 CONCEPTUAL FRAMEWORK

2.1 Data and Research in the COVID-19 Era

The COVID-19 pandemic has substantially altered almost every socio-economic aspect of human life. These profound changes also shifted the focus of academic research and policy-making activities toward the topics surrounding the COVID-19 pandemic. Researchers, universities, governments, and other organizations have instantly been engaged in intensive data collection activities, which resulted in data sets on a wide range of variables in various fields/areas been generated. Data science tools and techniques, which have been developed mostly in the past three decades, have greatly assisted those data collection activities. Thanks to these efforts, in less than one and half year after the start of the pandemic, researchers have gained access to various data sets, which are intensively used not only in monitoring and analyzing the pandemic itself and infection rates, but also in developing policies and supporting international coordination.

Despite the rapid increase in the appetite for data generation, there are various (rather serious) issues about data availability and data quality:

First, most of the initial data collection activities have yielded “aggregate” variables (such as overall infection rates, country-level policy actions, etc.). More granular information about sub-regions in countries is not publicly available yet—apart from a few exceptions.

Second, comprehensive micro-level data sets that would allow for a more detailed analysis of the direct effects of the pandemic on key socio-economic variables are also not available yet. Standard micro-level survey data sets (such as labor force surveys, and income and living conditions surveys) generally become available with a two-year lag, which means that representative micro-level information that would allow for a full-fledged analysis of the socio-economic impacts of the pandemic would only become available by as early as mid-2022. There is still some time for generation and dissemination of other non-standard micro data sets that are specifically designed for pandemic-related issues.

Third, quality of the available data is highly questionable (Adıgüzel et al. 2020; Attar and Tekin-Koru, 2020 and 2021). Some countries, either intentionally or unintentionally underreport the COVID-19 cases and deaths. Testing regimes, capacities, scales, and standards may be different across countries and, most importantly, they change over time within countries, which also brings in additional layers of measurement issues.

Fourth, reporting practices are different across countries. Some countries treat asymptomatic and mildly symptomatic cases differently than other countries—i.e., those cases are not tested and even not admitted to health care facilities unless they develop more serious symptoms. It is also well-known that differences in the timing of PCR tests also yield different results. As a result, countries that test individuals at different stages of their illnesses may pick up different

infection rates. These differences and data generation asymmetries across countries make cross-country comparisons a fairly difficult and complex task.

Almost all countries have taken a multitude of policy measures to minimize infection rates, regulate health care systems, support vulnerable groups, and subsidize the continuation of economic activities. Although the rich set of policies and variations in policies across countries jointly provide valuable opportunities for researchers to analyze policy effectiveness and carry out impact analyses, there are also some difficulties in quantification of those policies and measures:

First, there are numerous different policies implemented in each country and those policies are quickly turned on and off, which is not always possible/easy to follow and document—especially for international analysts.

Second, enforcement and monitoring capacities substantially differ across countries. As an example, among two countries that are implementing the same policy (say, mandatory mask wearing) on paper, one country may be strictly implementing the policy while the other one may not, due to differences in enforcement and monitoring capacities.

Finally, some countries actively participate in international policy cooperation and transparently provide feedback to international community in terms of the policies implemented, while others are either relatively closed/opaque or they provide information to international community with a substantial lag.

The issues listed above about country-level differences in data availability, data quality, and policy implementation standards pose limitations on analysis capacity. However, despite these limitations, the COVID-19 pandemic has channeled academic research activity toward the topics related to coronavirus. According to a recent Nature article³, around 5 percent of the world's research output was allocated to COVID-19 pandemic in 2020. The Dimensions database suggests that, as of late August 2021, the number of COVID-19 articles has reached almost 600,000—originating from a total of 29,000 organizations in 198 countries.⁴ As of the last week of August 2021, the top-5 institutions that have carried out COVID-19 research projects can be listed as Harvard University (7,312), University of Oxford (4,314), University of Toronto (3,838), Johns Hopkins University (3,739), and University College London (3,717). The top-5 topics include (1) public health, (2) mental health, (3) modelling epidemic and controlling spread, (4) diagnostics and testing, and (5) hospital mortality.⁵ Although the rapid

³ See <https://www.nature.com/articles/d41586-020-03564-y>. The article also reports that academic research in all areas has surged since the beginning of the pandemic. For example, the number of papers submitted to Elsevier journals between February 2020 and May 2020 increased by 58 percent in comparison to the same period in 2019. The increase is even more dramatic (92 percent) in the health and medicine titles.

⁴ See <https://reports.dimensions.ai/COVID-19/>.

⁵ The surge in COVID-19 research has reduced journal review/refereeing times and increased acceptance rates for papers related to COVID-19 topics. For example, in medical journals, the average acceptance time declined from around 90 days for all papers in 2019 to around 20-25 days for COVID-19 papers in 2020.

increase in information related to COVID-19 pandemic in all fields, the relaxed publication standards also raise questions about reliability of the data and results. On the positive side, interdisciplinary research collaboration has increased. Availability of social data platforms has also been serving as an implicit refereeing process as people quickly read papers and publicly criticize low quality research and data analysis.

2.2 Data Sources and Methodology

The conceptual framework and methodology used in this report are developed with these limitations and concerns in mind. As the COVID-19 pandemic unfolds, researchers learn, understand, and apply many different methods and concepts that were previously unknown to them. Amid all these new developments and bombardment of new information, it is crucially important to be aware of existing limitations to avoid misleading conclusions.

Cross-country comparability lies at the heart of this report; therefore, it is essential to rely on measures and indicators that are consistently produced for a wide range of countries. For this purpose, this report relies on information a plethora of variables that satisfy this requirement. The set of databases used in the analysis are presented in Annex I.

All variables that are used in the analyses are explained in the first place of mention throughout the report. Using relevant variables from these sources, compact yet informative charts⁶ and tables are constructed to present the results of a descriptive analysis. These graphs are indeed efficient ways of representing the estimated means to compare different country groups:

World (consisting of all 193 countries in the data set).

Advanced Economies, AEs (consisting of 38 countries): Australia, Austria, Belgium, Canada, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong, Iceland, Ireland, Israel, Italy, Japan, South Korea, Latvia, Lithuania, Luxembourg, Macao, Malta, Netherlands, New Zealand, Norway, Portugal, San Marino, Singapore, Slovakia, Slovenia, Spain, Sweden, Switzerland, Taiwan, United Kingdom, United States.

Non-OIC Emerging Market and Developing Economies, Non-OIC EMDEs (consisting of 98 countries): Angola, Antigua and Barbuda, Argentina, Armenia, Aruba, Bahamas, The, Barbados, Belarus, Belize, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Burundi, Cabo Verde, Cambodia, Central African Republic, Chile, China, People's Republic of Colombia, Congo, Dem. Rep. of the, Congo, Republic of, Costa Rica, Croatia, Dominica, Dominican Republic, Ecuador, El Salvador, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Fiji, Georgia, Ghana, Grenada, Guatemala, Haiti, Honduras, Hungary, India, Jamaica, Kenya, Kiribati, Kosovo, Lao P.D.R., Lesotho, Liberia, Madagascar, Malawi, Marshall Islands, Mauritius, Mexico, Micronesia,

⁶ The report adapts the style of the Global Economic Prospects of the World Bank for visually pleasing results.

Fed. States of, Moldova, Mongolia, Montenegro, Myanmar, Namibia, Nauru, Nepal, Nicaragua, North Macedonia, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Romania, Russian Federation, Rwanda, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Serbia, Seychelles, Solomon Islands, South Africa, South Sudan, Republic of Sri Lanka, São Tomé and Príncipe, Tanzania, Thailand, Timor-Leste, Tonga, Trinidad and Tobago, Tuvalu, Ukraine, Uruguay, Vanuatu, Venezuela, Vietnam, Zambia, Zimbabwe.

OIC countries (consisting of 57 countries; see below).

OIC-Arab group (consisting of 22 OIC countries in the Arab group): Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen.

OIC-Asia group (consisting of 18 OIC countries in the Asian group, including Guyana and Suriname): Afghanistan, Albania, Azerbaijan, Bangladesh, Brunei Darussalam, Indonesia, Iran, Kazakhstan, Kyrgyz Republic, Malaysia, Maldives, Pakistan, Tajikistan, Turkey, Turkmenistan, Uzbekistan, Guyana, and Suriname.

OIC-Africa group (consisting of 18 OIC countries in the African group): Benin, Burkina Faso, Cameroon, Chad, Cote d'Ivoire, Gabon, Gambia, Guinea, Guinea-Bissau, Mali, Mozambique, Niger, Nigeria, Senegal, Sierra Leone, Togo, and Uganda.

Econometric analysis can also be performed to estimate the basic correlations between the policy measures and economic outcomes. In fact, many studies in the literature aim to estimate the causal effects of COVID-19 response by governments on disease containment and socio-economic outcomes in various countries and country groups.⁷ However, econometric identification is a real challenge here. In particular, whether governments' response is strict versus more relaxed is endogenous to the extent of COVID-19 related socio-economic damage. Moreover, post-COVID-19 observations are still not yet fully mature to facilitate a full econometric analysis of the consequences of the pandemic. Increased availability of micro-level data sets, which are expected to become available worldwide beginning from the mid-2022, would make convincing/credible econometric analysis of the effects of COVID-19 on various socio-economic outcomes more feasible. Given these limitations, this report focuses on a more descriptive analysis of a comprehensive set of key variables for a large number of countries without explicitly claiming causality.

⁷ See, for example, Hsiang et al. (2020), Fornano and Wolf (2020), Dave et al. (2020), Gupta et al. (2020), Maier and Brockmann (2020), Cho (2020), Karaivanov et al. (2020), Cooper et al. (2020), Askitas et al. (2021), Bendavid et al. (2021), Chernozhukov et al. (2021), Cirera et al. (2021), Goolsbee and Syverson (2021), Bloom et al. (2021), and Gourinchas et al. (2021)

3 EFFECTS of COVID-19 on INEQUALITIES in the WORLD

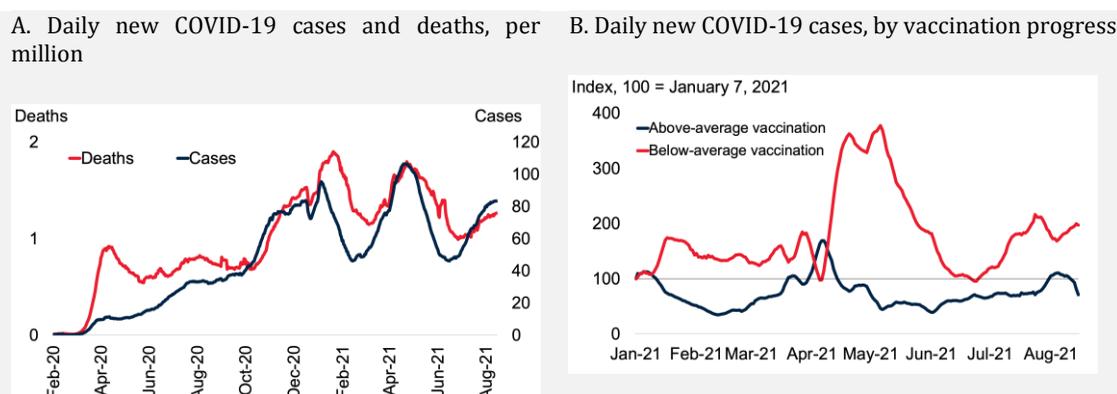
Today, more than a year after the eruption of the pandemic, the global outlook remains highly uncertain. New viral mutations and the rising death toll are cause for concern, although increasing vaccination coverage is lifting spirits. Economic recovery varies across countries and sectors, reflecting the various pandemic-related disruptions and the extent of policy support. The outlook depends not only on the outcome of the battle between the virus and the vaccines but also on how effectively economic and social policies implemented under this high uncertainty environment.

Social distancing, vaccine deployments and treatments have helped slow the spread of the virus and save lives. At the same time, the crisis has revealed wide disparities in the ability of countries to support their populations, particularly those most at risk. The measured death toll from the pandemic, additional mortality from other causes due to delayed treatment, and high unemployment have led to extreme social strains worldwide.

3.1 The Worldwide Pandemic Logbook

Since COVID-19 began spreading, it has infected at least 217 million people and caused more than 4.5 million deaths as of August 30, 2021 according to Our World in Data. Hundreds of thousands of new cases are reported every day even though what is reported is only a fraction of the actual cases. The number of unreported cases is estimated to be substantial, especially at South Asia (Bhattacharyya et al. 2020).

Figure 3.1. Global evolution of the COVID-19 pandemic



Data Source: Our World in Data

Note: AEs = Advanced Economies and EMDEs = Emerging Market and Developing Economies

A. Figure shows the seven-day moving average of daily new COVID-19 cases and deaths per million people for 38 AEs and 155 EMDEs. Last observation is August 21, 2021.

B. Figure shows the seven-day moving average of daily new COVID-19 cases per million people for 38 AEs and 155 EMDEs above and below the global average vaccination rate. Last observation is August 21, 2021.

Global outbreaks of the virus occurred in several waves, with each wave having a higher daily infection rate than the previous one (Figure 3.1.A). There are five main waves of virus spread. The first four waves peaked in April 2020, August 2020, January 2021, and April 2021, respectively, while the fifth wave (the largest of all, due primarily to the much more contagious delta variant of the SARS-CoV-2) began in late June 2021 and is still peaking.

Comparing the peaks of the first and fourth waves, the daily number of cases increased about tenfold, while the daily number of deaths increased only twofold. The relative decline in death rates over time could be due to (1) effective COVID-19 containment measures, (2) improvements in treatment protocols and public health capacity over time, (3) changes in measurement/reporting, or (4) a combination of these three factors. The further decline in relative mortality rates in the current fourth and fifth waves may also be attributed to rapidly advancing vaccination efforts.

In many advanced economies and a number of emerging economies, vaccination campaigns are gaining momentum, with about 39 percent of the world's population having received at least one dose of vaccine and 27 percent having been fully vaccinated⁸. However, these numbers mask huge regional and income disparities -notably low vaccination coverage in the poorest countries. In countries where a larger proportion of the population has been vaccinated, caseloads are growing much more slowly than in the substantial proportion of developing countries where only a small proportion has been vaccinated (Figure 3.1.B).

New variants originally identified in Brazil, India, South Africa and United Kingdom are now circulating worldwide. Evidence suggests that these new strains can spread more easily and cause more hospitalizations (Davies et al., 2021). Some of these strains also appear to be impervious to immune responses induced by previous infection or by current vaccines (Wang et al., 2021). All countries remain exposed to renewed outbreaks as long as the virus continues to circulate in some countries and vaccine deployment is uneven worldwide (Çakmaklı et al., 2021).

3.2 Growth and Income Inequality

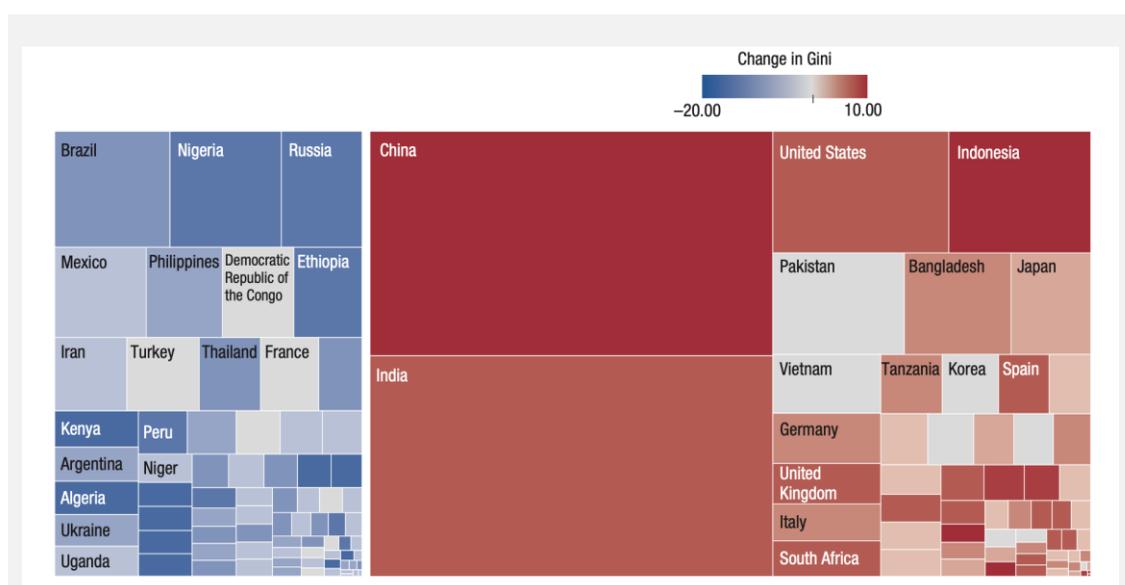
Because of the rapid spread of COVID-19 along with high rates of hospitalization and mortality, most countries have taken several measures of an extreme nature. These extreme measures had a significant negative impact on both the supply and demand of goods and services, resulting in a sharp decline in global economic activity. IMF (2021a) foresees a 3.6 percent decline in global GDP for 2020, but it also predicts a strong recovery from 2021 on: 5.8 percent in 2021 and 4.1 percent in 2022. The decline in economic activity can be decomposed as 4.7 percent and 2 percent decline between advanced and emerging/developing economies, respectively.

⁸ See <https://ourworldindata.org/covid-vaccinations> Date of access: August 30, 2021.

The strength of the estimated recovery differs across countries, depending on the gravity of the health crisis, the degree of domestic disruptions to economic activity (interrelated with countries' dependence on contact-intensive sectors), exposure to cross-border spillovers, and, most significantly, the effectiveness of policy support to limit the ongoing damage.

Output losses were particularly large in countries dependent on tourism and commodity exports and in countries with limited policy space. Many of these countries were in a perilous fiscal position at the onset of the crisis and had less capacity to implement large-scale public health measures, forcing them to adopt more stringent measures to contain the spread of the virus. Factors such as the share of tele-workable jobs, the share of employment in small and medium-sized enterprises, the depth of capital markets, the size of the informal sector, and the quality of and access to digital infrastructure also played a role-both in the downturn and in the speed of recovery. Such differences may in turn lead to lasting divergences across countries if the pandemic is not rolled back universally.

Figure 3.2. Change in income inequality (Gini Index), 1990-2019



Source: IMF Fiscal Monitor, April 2021.

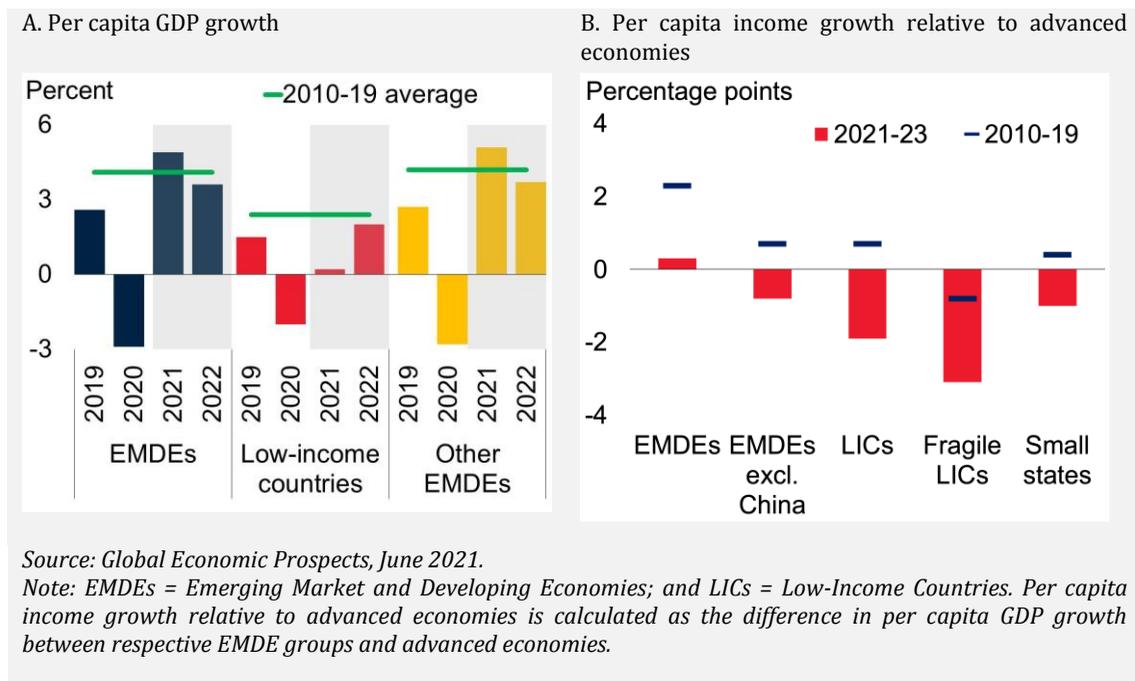
Note: Size of the rectangles correspond to the relative size of the countries' populations. Red (blue) represents deterioration (improvement) in Gini Index and grays denote little change between the value in the most recent available year and the 1990s.

Figure 3.2 shows that over the last 30 years; income inequality has risen in most advanced economies and large emerging markets. In contrast, income inequality has declined in many emerging market economies and low-income developing countries. Country-specific as well as global factors such as globalization, revolutionary technologies, and commodity price cycles have influenced the evolution of income inequality. Meanwhile, global income inequality (for all individuals independent of where they are located in the world) has been steadily declining,

showing that some of the largest emerging economies have caught up with advanced economies. In other words, global extreme poverty has accordingly been on the decline since the 1990s.

Against this backdrop, the COVID-19 pandemic has had a devastating impact on per capita income growth that will continue for some time. According to World Bank (2021a) while per capita income growth in EMDEs is expected to be 4.9 percent in 2021 (Figure 3.3.A), it will be virtually zero in LICs. As a result, the catch-up in per capita income with advanced economies may slow or even reverse in many poorer countries (Figure 3.3.B). Moreover, the losses in per capita income suffered in 2020 will not be fully recovered by 2022 in about two-thirds of EMDEs, including 75 percent of fragile low-income countries (LICs). About 100 million people in EMDEs are expected to fall back into extreme poverty by the end of 2021, reversing a two-decade-long trend of global poverty reduction. The pandemic's impact on poverty could linger for a long time because of its devastating consequences for long-term growth prospects.

Figure 3.3. Regional per capita income inequalities

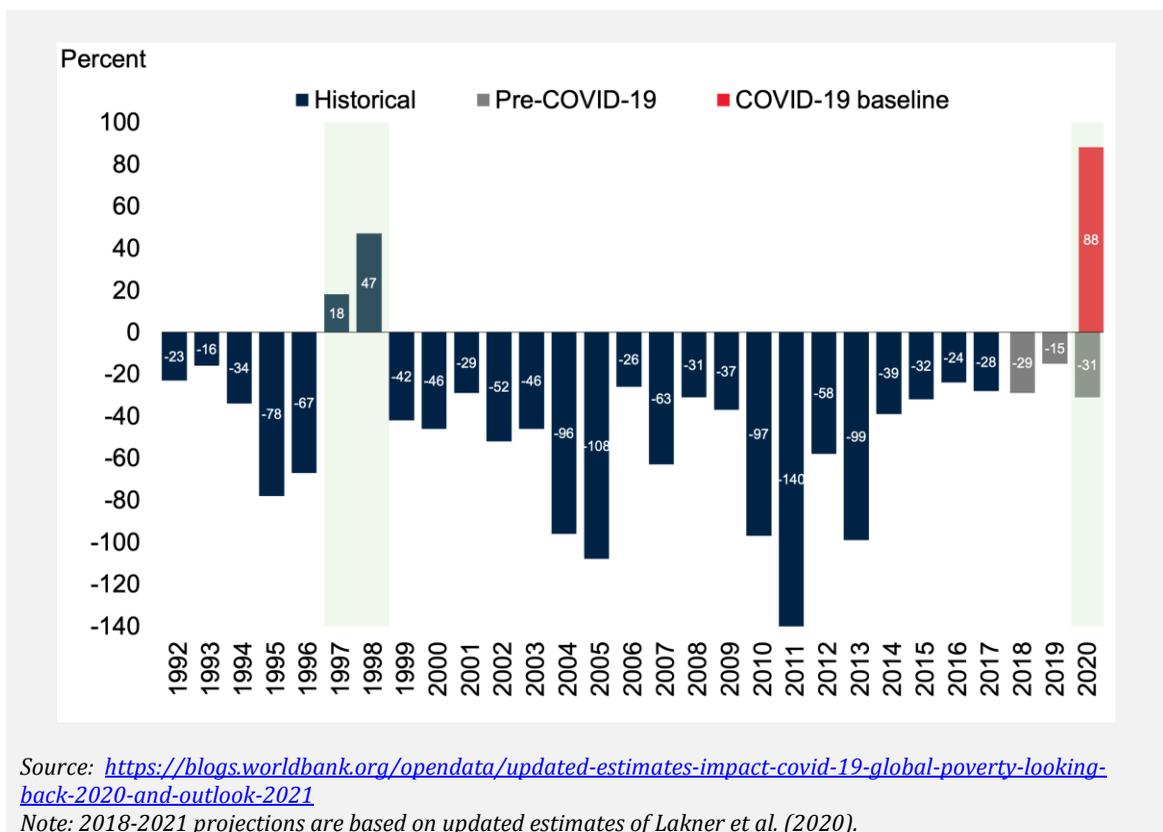


The projected increase in global poverty in 2020 is truly unparalleled. Figure 3.4 shows Lakner et al. (2021a) estimates of the annual change in the number of the world's extreme poor from 1992 to 2020, with each bar representing the net number of people who either moved out of extreme poverty (\$1.90 a day) if they were poor last year or moved into extreme poverty if they were not poor the previous year. Prior to COVID-19, the only other crisis-related rise in the global number of poor over the past 30 years was the Asian Financial Crisis, which increased extreme poverty by 18 million in 1997 and by another 47 million in 1998. In the 20

years since 1999, the number of people living in extreme poverty in the world has dropped by more than 1 billion.

According to Lakner et al. (2021a) some of this success in poverty alleviation will be reversed by the COVID-19 pandemic. For the first time in 20 years, poverty is likely to increase significantly. They estimate that the COVID-19 pandemic will lead to an increase in extreme poverty of between 88 million (baseline estimate) and 93 million (downward estimate) in 2020. Taking into account those who would otherwise have escaped extreme poverty but will not do so because of the pandemic (i.e., 31 million in 2020), the total number of COVID-19 induced new poor in 2020 is estimated to be between 119 and 124 million.

Figure 3.4. Annual change in the number of extreme poor, 1992-2020



3.3 Employment and Access to Decent Jobs

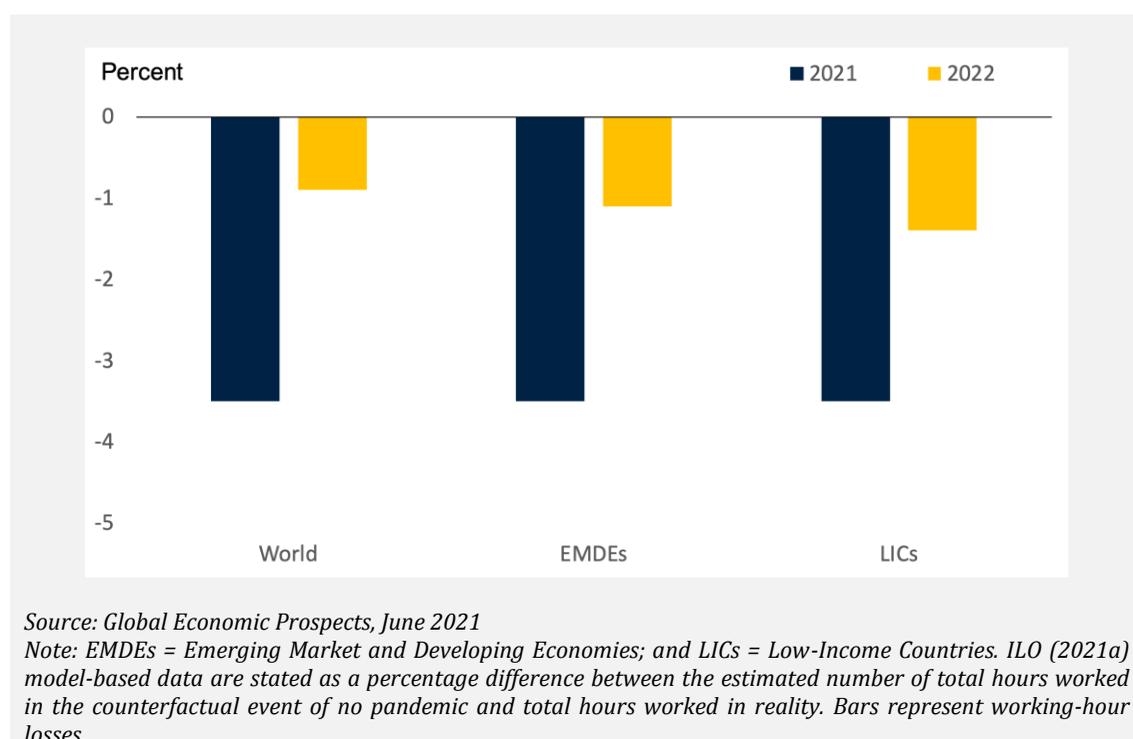
The pandemic's impact on labor markets has been astounding in its depth and breadth. In particular, developing countries, low-skilled workers, informal workers, women and youth have been seriously hit.

ILO estimates 8.8 percent decline in working hours globally in 2020 compared to the fourth quarter of 2019, quadrupling the figures experienced in 2009 Global Financial Crisis.

Employment losses in 2020 were manifested as inactivity (71 percent of global employment losses) rather than unemployment; i.e., 81 million people fell out of labor force accounting for a 2.2 percentage points drop in global labor force participation. Finally, the decline in global income (without including income support measures) amounted to \$3.7 trillion and 4.4 percent of global GDP (ILO, 2021a).

In EMDEs, the pandemic led to a decline in hours worked equivalent to the loss of about 200 million full-time jobs in 2020, and employment is not expected to return to pre-pandemic levels until 2022, especially in LICs (Figure 3.5; ILO 2021a; Khamis et al., 2021).

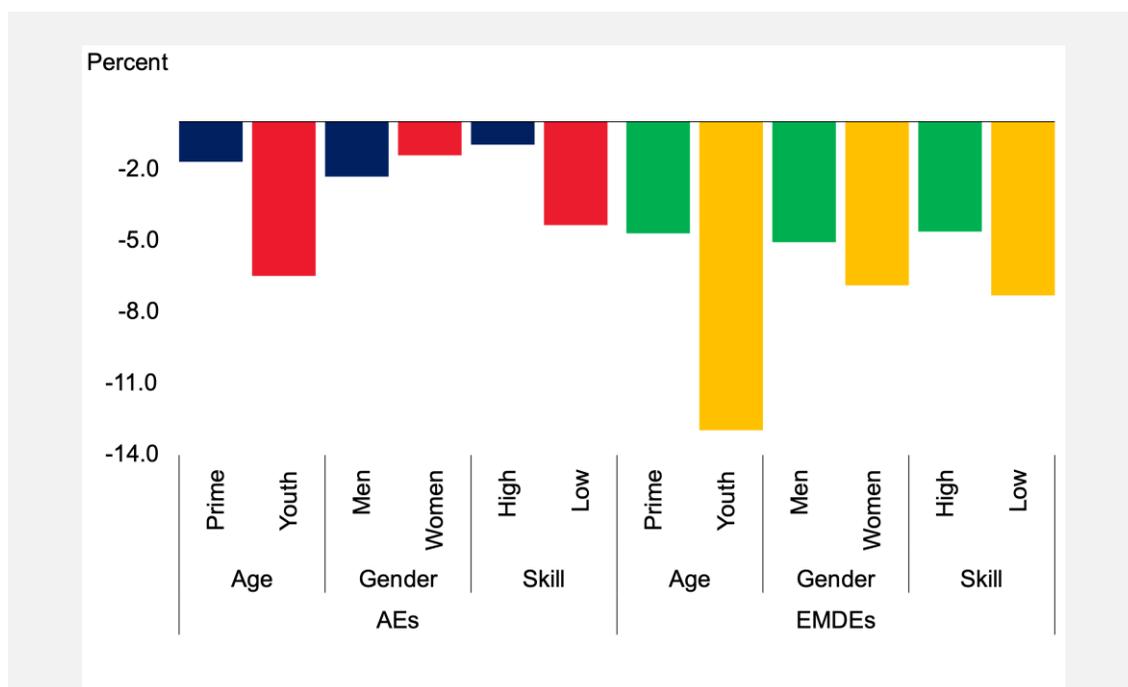
Figure 3.5. Working-hour losses, deviation from pre-pandemic levels



It should be emphasized that although the COVID-19 pandemic is typically viewed as an economic shock of an aggregate nature, its effects were felt unevenly across demographic groups (Figure 3.6). The pandemic has exacerbated inequality by disproportionately affecting vulnerable groups, including women, children, and unskilled and informal workers.

First, there is widespread agreement that the COVID-19 shock has worsened pre-existing labor market problems, particularly in those regions of the world where informality is widespread (Figure 3.7). Secondly, employment conditions for the low-skilled deteriorated faster and more severely. Thirdly, women's employment has been affected more than men's because they have more responsibilities at home and fewer opportunities to work from home -a more serious problem for developing countries.

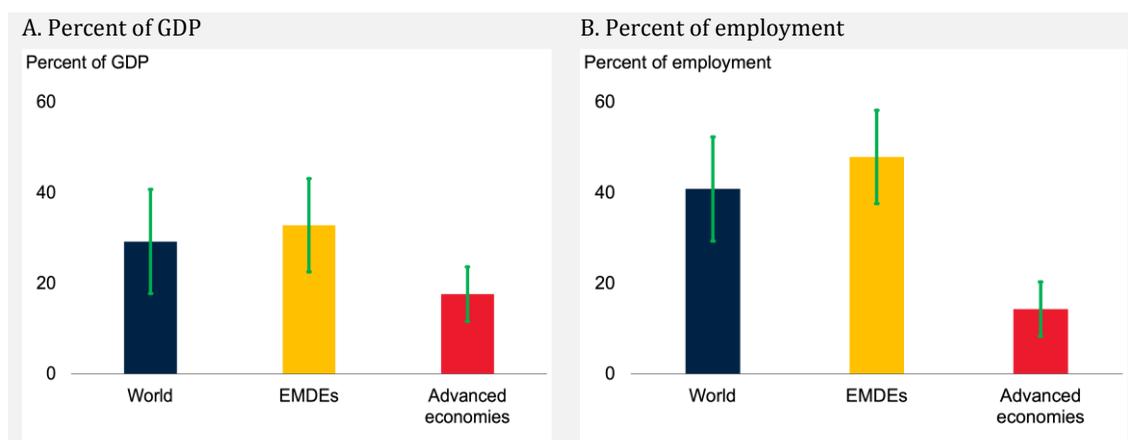
Figure 3.6. Employment rate, deviation from pre-pandemic levels



Source: World Economic Outlook, April 2021

Note: AEs = Advanced Economies; EMDEs = Emerging Market and Developing Economies. High skill = tertiary education and above; Low skill = post-secondary, non-tertiary education and below. Prime age = 25-54 years old; Youth = 15-24 years old. The bars are deviations from pre-pandemic (2019: Q4) in 2021: Q1.

Figure 3.7. Informal economy



Source: Ohnsorge and Yu (2021)

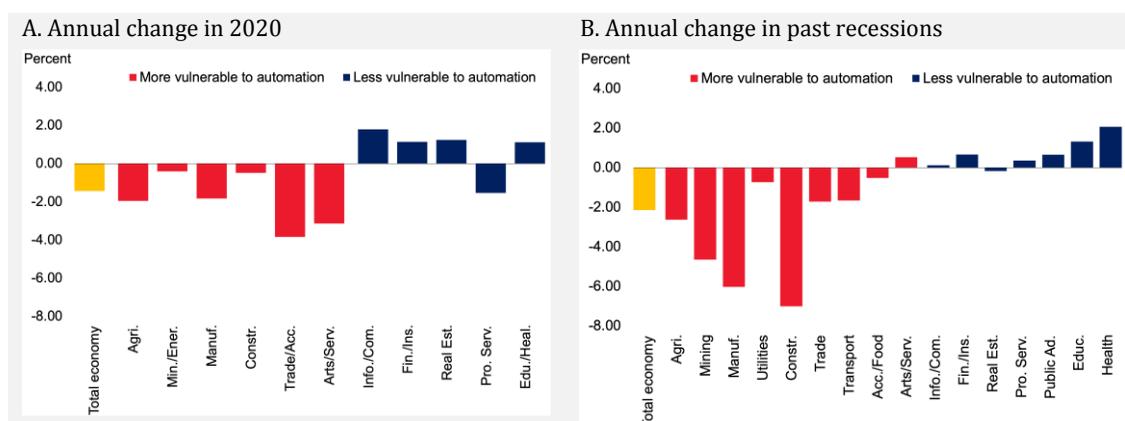
Note: EMDEs = Emerging Market and Developing Economies. Output informality is measured by dynamic general equilibrium (DGE) model-based estimates on informal output in percent of official GDP. Informal employment is proxied by self-employment in percent of total employment. Bars show simple group averages for World, EMDEs and Advanced Economies over 2010-2018. -1 and +1 standard deviations are shown in green whiskers.

An assortment of factors may explain why employment rates remain restrained. These include the persistence of the health crisis, which continues to prevent a full recovery, workers' concerns about occupational health risks, and firms' reluctance to hire new workers in the face of continued uncertainty about the recovery. In some countries, especially in advanced economies, transfer payments and unemployment insurance have been effective in cushioning income losses but may have delayed reintegration.

The heavy burden of pandemic for lower-skilled and low-wage workers should be highlighted further. The unemployment rates have increased more among low-skilled workers than high-skilled ones. Job openings for the low-skilled have remained substantially low during the pandemic. Most importantly, re-employed low-skilled workers tend to change sectors (if they are able to find a job), which is a well-documented fact in the labor economics literature (Reichert and Tauchmann, 2017). But this re-employment in a different sector is typically associated with a significant cost, i.e., wage penalty. These uneven labor market dynamics have further fed socio-economic inequalities in the society during the pandemic.

Finally, the pandemic had asymmetric effects on labor market conditions in different sectors (Figure 3.8). For example, sectors that are more vulnerable to automation were more affected. IMF (2021a) states that in advanced economies, the largest employment declines were in wholesale and retail trade, transportation, accommodation and food services, and arts and entertainment, different from previous recessions over the past 50 years, when manufacturing and construction were typically the hardest hit. However, some sectors, such as information and communication and finance and insurance, actually experienced employment growth during the pandemic, further illustrating the divergence in trends. Interestingly, the overall sectoral pattern is similar to that observed in previous recessions, which appear to have accelerated pre-existing structural trends and accelerated a shift in employment away from sectors that are more vulnerable to automation.

Figure 3.8. Sectoral employment growth



Source: World Economic Outlook, April 2021.

Note: Sectors are classified as more less vulnerable to automation if more (less) than half their share of employment is in occupations classified as highly exposed to routinization.

A. Underlying data cover 2019: Q1–2020: Q4. B. Underlying data span 1970–2019.

In response to these aggregate, demographic group-specific, and sector-specific effects, countries have adopted job retention and reallocation measures to mitigate the negative COVID-19 impacts on labor markets. The COVID-19 crisis contains both temporary and permanent elements, so countries are recommended to combine job retention and labor reallocation measures (which most of them do) to mitigate the negative labor market consequences of the pandemic.

3.4 Policy Response

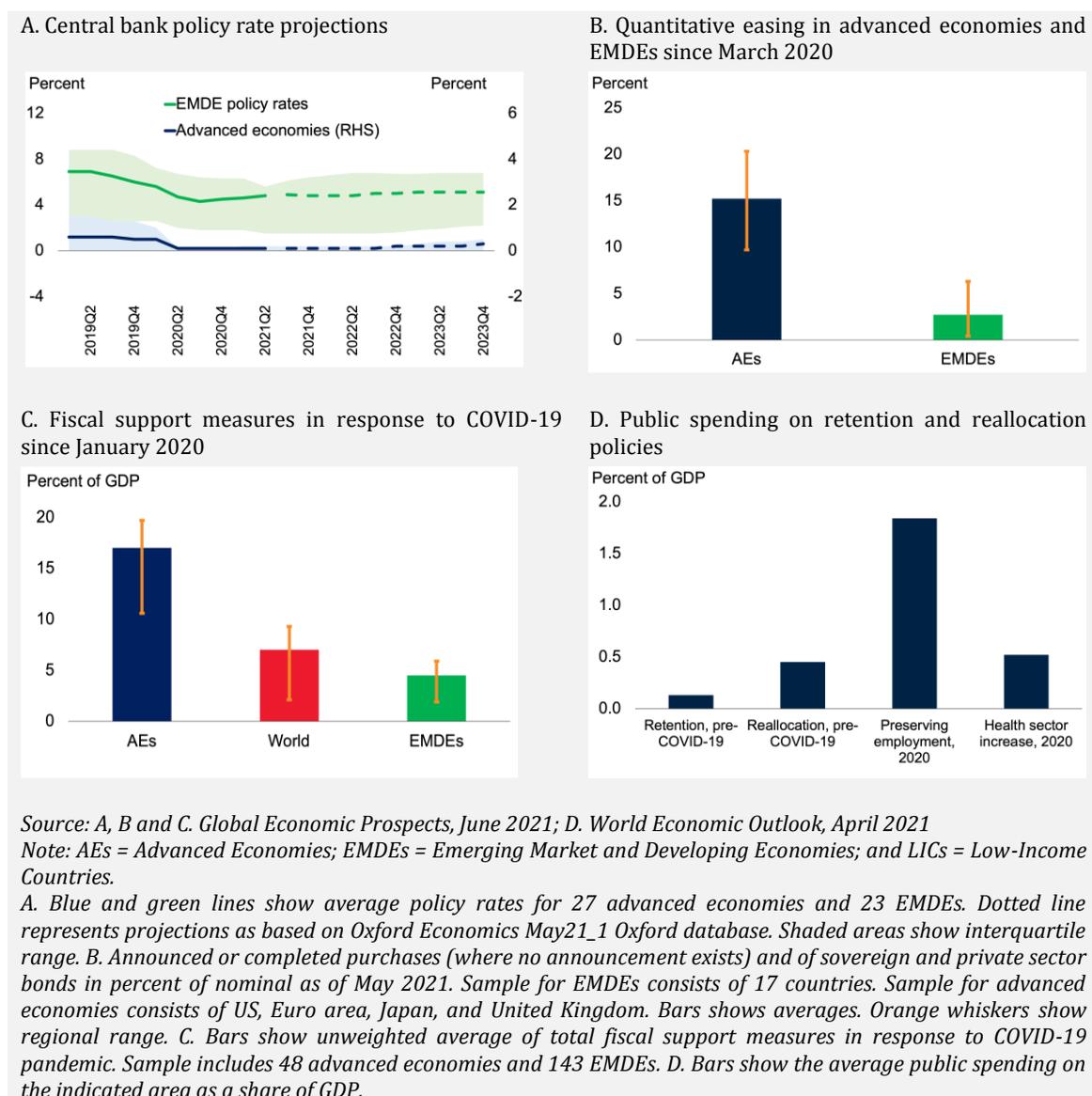
The package of measures COVID-19 includes international travel controls, school and workplace closures, restrictions on meetings and public events, restrictions on public transport, internal movement restrictions, protection of sensitive groups (i.e., the elderly population and people with chronic diseases), rules on wearing masks, public information campaigns, and "stay at home" rules. Intensive contact tracing and massive testing procedures have also been implemented to minimize the spread of the virus. There are also various forms of economic subsidies that directly target the negative impacts of the COVID-19 pandemic. These measures include fiscal extensions in the form of direct subsidies to households and firms, debt relief, tax cuts of various dimensions, and additional relief for the financial sector. Added resources are also invested in vaccine development and improved healthcare capacity.

Monetary and Fiscal Policies

In response to the COVID-19 shock, central banks loosened monetary policy sharply, lowering policy rates and, in many cases, committing to keep them low for a prolonged period, as well as introducing unconventional measures (Figure 3.9.A-B). Fiscal authorities also announced a series of large-scale support packages in all advanced economies and, to a lesser extent, in EMDEs (Figure 3.9.C).

As the pandemic progresses, the discussion focuses on the role of two broad sets of policies and when they should be used: those for job retention (preserving existing matches between workers and employers) and those for worker reallocation (creating new jobs and enabling the movement of workers away from shrinking and toward growing sectors and occupations). In particular, policy instruments that promote job retention include wage subsidies, short-term work arrangements, and partial unemployment benefits, while instruments that promote worker reallocation include hiring and start-up incentives, job search and placement assistance, and retraining programs. Average public spending directed towards job retention after the COVID-19 crisis is dramatically higher than spending directed towards to worker reallocation. The increase in healthcare spending alone is on par with average reallocation spending in the past (Figure 3.9.D).

Figure 3.9. Monetary and fiscal policy measures

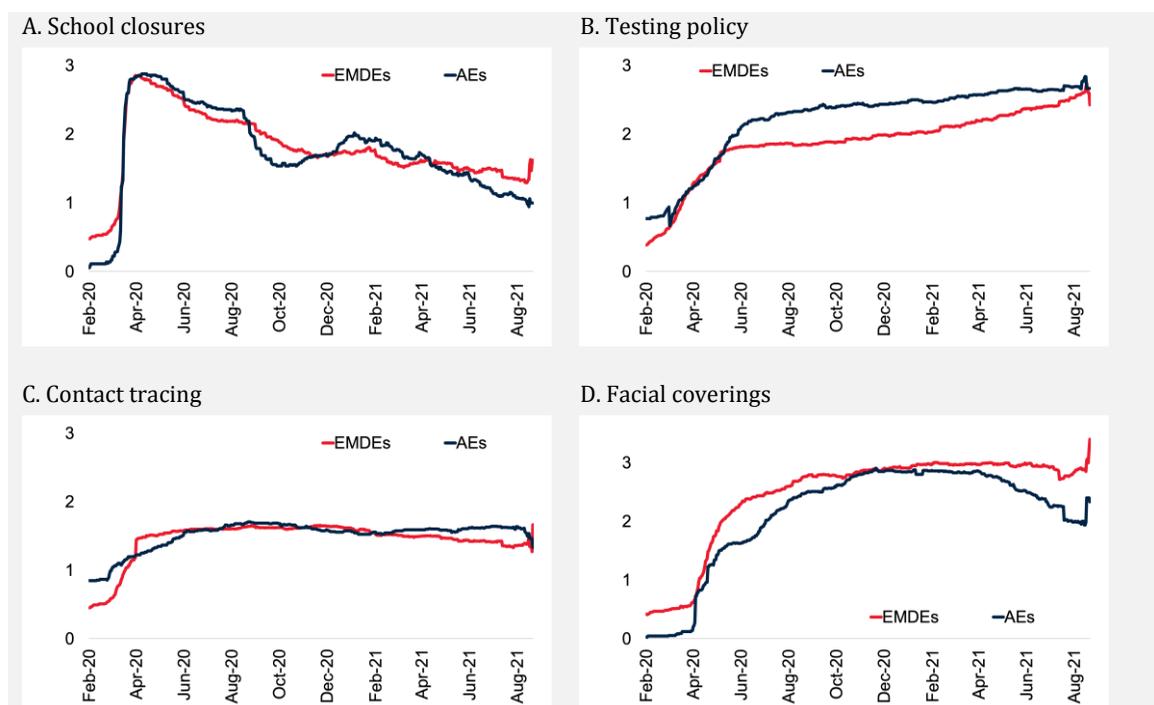


Interventions in Education and Health

Public health interventions to minimize the spread of the virus are effective tools to help recovery because they prevent or reduce deaths, rebuild confidence, and boost activity (Chetty and others 2020). Countries that reacted to the pandemic with "perceptive" containment measures, such as early, pinpointed, and stern mobility restrictions, along with extensive testing, tracing, and public information campaigns, lost fewer lives to the pandemic and are expected to better contain the negative impact on economic activity and fiscal balances (Fotiou and Lagerborg, 2020). While the cost of COVID-19 prevention and treatment depends on the

healthcare capacity and the success of containment measures, estimates suggest that efforts to increase critical care capacity by 1/5 (excluding capital costs) and testing capacity to twice per person per year would bear a cost amounting to 0.3 to 0.5 percent of GDP in selected AEs (G7, Korea, Spain) (de Bidegain et al., 2020). The ongoing as well as capital costs related to strengthening pandemic preparedness are likely to be higher in EMDEs with shakier healthcare systems (IMF, 2020a).

Figure 3.10. Key interventions in education and health



Data Source: The Oxford COVID-19 Government Response Tracker

Note: AEs = Advanced Economies and EMDEs = Emerging Market and Developing Economies.

A. 0 - no measures; 1 - recommend closing or all schools open with alterations resulting in significant differences compared to non-COVID-19 operations; 2 - require closing (only some levels or categories, e.g., just high school, or just public schools); 3 - require closing all levels. B. 0 - no testing policy; 1 - only those who both (a) have symptoms AND (b) meet specific criteria (e.g., key workers, admitted to hospital, came into contact with a known case, returned from overseas); 2 - testing of anyone showing COVID-19 symptoms; 3 - open public testing (e.g., "drive through" testing available to asymptomatic people). C. 0 - no contact tracing; 1 - limited contact tracing, not done for all cases; 2 - comprehensive contact tracing, done for all identified cases. D. 0 - no policy; 1 - recommended; 2 - required in some specified shared/public spaces outside the home with other people present, or some situations when social distancing not possible; 3 - required in all shared/public spaces outside the home with other people present or all situations when social distancing not possible; 4 - required outside the home at all times regardless of location or presence of other people.

Figure 3.10 shows a selection of public health measures taken by world governments in response to the COVID-19 pandemic. In the first wave, actions were rapid and strong. In subsequent waves, depending on the timing and severity of the pandemic, there was a "stop-and-go" trend in restrictions, which varied from country to country.

School closures started to be widely implemented in late February 2020, and the measures remained fairly severe in almost all countries through early April 2020. After the first wave, which placed a heavy burden on health systems in many countries, subsided, countries adopted different school closure measures that exhibited cyclical patterns that correlated with the course of the pandemic (Figure 3.10.A).

Testing has become more common over time, and countries have moved from policies based only on selective testing to open public testing over time. AEs have adopted more generous testing regimes compared with EMDEs, largely because of better fiscal capacity (Figure 3.10.B). While contact tracing measures have been implemented fairly stably over time in both AEs and EMDEs (Figure 3.10.C), face covering (mask wearing), one of the most important containment measures, was implemented increasingly stringently in all countries until May 2021 (Figure 3.10.D). Thereafter, there was a marked decline in mask-wearing in advanced economies as gradual re-openings occurred along with large-scale vaccine deployments. In emerging economies, stricter mask-wearing guidelines were maintained. With the spread of highly contagious variants of the virus in the summer of 2021, firmer face-covering guidelines were re-introduced around the globe.

Discussion

"Epidemics are stress tests for governments" (Eichengreen et al., 2021, p.1). Governments need to give everyone a fair chance -allowing all individuals to reach their potential- and strengthen the resilience of vulnerable households to maintain social stability and, by extension, macroeconomic stability. The pandemic has made evident the importance of equitable access to basic services -healthcare, education, and digital infrastructure- as well as inclusive labor markets and functioning social safety nets. Countries with better performance in these areas has increased resilience to the pandemic and were one step closer to economic recovery, benefiting everyone and boosting confidence in their governments.

As the pandemic prolonged, it has become economically and socially more difficult to enact policies that reduce income inequality and improve access to basic services. Public finances have deteriorated in most countries as a result of the pandemic. To finance these critical policies and promote inclusive growth, many countries will need additional revenues and improved spending efficiency. In other words, with tighter fiscal space, there will be a demand for increasingly inclusive growth policies that are demanded by the public at large.

Therefore, the recent policy debate on recovery after COVID-19 started revolving around two related forces: (i) global vaccine deployment and (ii) multi-speed recoveries.

Global Vaccine Deployment. Much like the climate crisis, eradicating a deadly contagious disease like COVID-19 requires the combined efforts of all stakeholders. The difference with the climate crisis is that the pandemic is degrading or destroying people's livelihoods right now, right here. Humanity's most powerful weapon against this catastrophe appears to be a rapid rollout of vaccines to all parts of the world, equitably. IMF (2021c) states that by the end

of June 2021, about 3 billion doses had been administered worldwide, nearly 75 percent of them in developed countries and China. In low-income countries, less than 1 percent of the population had received a dose. Most low-income countries rely primarily on the collective vaccine procurement vehicles COVAX⁹ and African Vaccine Acquisition Trust (AVAT), which had delivered fewer than 200 million doses to about 140 countries by mid-August 2021, instead of initially projected 600 million doses.

Although nearly all emerging and developing countries are expected to eventually achieve 60 percent coverage (through a combination of COVAX orders, regional agreements such as AVAT, and bilateral agreements), most deliveries are unlikely to occur before the end of 2021 or 2022. This delay leaves large segments of the world's population vulnerable to the virus and increases the risk of new mutations.

The ongoing vaccine apartheid is indeed troubling. The director general of WHO, Tedros Adhanom Ghebreyesus, called global vaccine inequity "grotesque," a recipe for sowing viral variants that can escape vaccines, and a "moral scandal." In the midst of the worst pandemic in 100 years, instead of becoming a freely available public good, vaccines continue to be corporation-owned goods and sold to the wealthy. There is a crucial need for vaccine donations from countries with surplus doses, for vaccine manufacturers to prioritize shipments to low- and middle-income countries, and for export restrictions on vaccines and raw materials to be lifted.

Furthermore, investment in added global vaccine capacity is necessary to deliver booster doses and to provide cushions against unforeseen holdups in current manufacturing sites. Upfront financing and purchase obligations by the largest economies will help accelerate the process and incentivize additional investment along the entire supply chain, which includes raw materials, equipment for filling and finishing facilities, and expanded storage and distribution (IMF, 2021c).

Finally, the only truly sustainable solution forward seems to globalize production so that underprivileged countries no longer rely solely on charity. After many years and countless deaths, this was achieved with the AIDS crisis. There is an urgent need of relaxation of intellectual property rights and technology transfers in poor countries and steadfast establishment of regional vaccine manufacturing centers.

Multi-Speed Recovery. The term is used by IMF (2021b) for the situation that developed economies are expected to recover faster than other countries. As long as the global herd immunity is delayed because of unequal access to vaccines, this stop-go rhythm due to

⁹ COVID-19 Vaccines Global Access, abbreviated as COVAX, is a worldwide enterprise designed to ensure equitable access to COVID-19 vaccines. It is directed by Gavi, the Vaccine Alliance (formerly the Global Alliance for Vaccines and Immunization, or GAVI), the Coalition for Epidemic Preparedness Innovations (CEPI), and the World Health Organization (WHO). It coordinates worldwide resources to enable low- and middle-income countries fair access to COVID-19 tests, therapies, and vaccines. As of July 15, 2020, 165 countries – representing 60 percent of the world population had joined COVAX.

unending cycles of restrictions and relaxations will provoke uneven and incomplete recoveries across countries.

Indeed, in different countries, recovery was affected by the course of the pandemic, mobility restrictions imposed to curb progress, and policies. Output losses were particularly large for countries dependent on tourism and primary goods exports and for countries with limited policy space to respond. Many of these countries entered the crisis in a risky fiscal outlook and had less capacity to adopt major public health measures, forcing them to adopt tighter lockdowns to contain the spread of the virus. Factors such as the share of tele-workable jobs, the share of employment in small and medium-sized enterprises, the depth of capital markets, the size of the informal sector, and the quality of and access to digital infrastructure also played a role -both in the downturn and in the speed of recovery. These differences may turn into lasting divergences across countries if the pandemic is not universally rebounded.

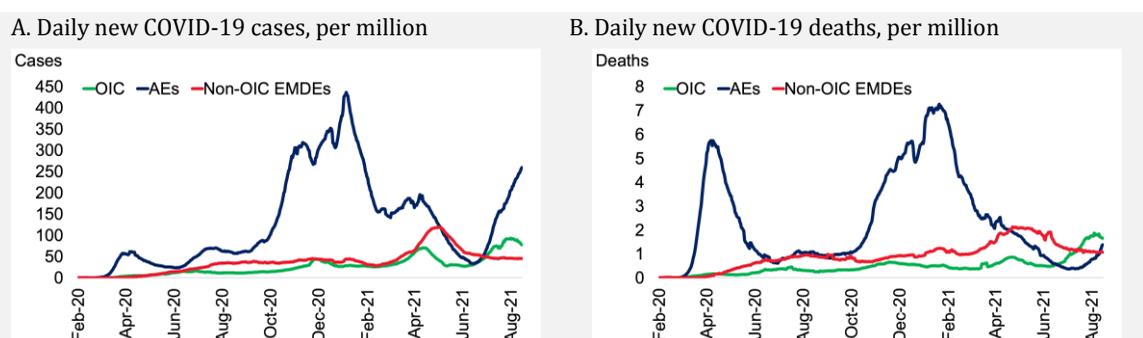
Finally, one of the biggest concerns about the consequences of a multispeed recovery is the expected inconsistency in the timing of decisions to tighten financial conditions. Monetary and fiscal conditions are currently extremely loose. A faster economic recovery for advanced economies means that their tightening cycle could start early and have a negative impact on emerging markets. In other words: If the U.S. and the E.U. central banks start raising interest rates early, this may lead to large portfolio shifts and increase the risk of sudden stops in vulnerable developing economies. Therefore, international policy coordination would remain an important policy issue in this arena as well.

4 ANALYSIS of the CURRENT SITUATION in OIC MEMBER STATES

4.1 Evolution of the Pandemic in OIC Countries

Detailed analysis of infection and mortality rates suggests that the main trends (i.e., ups, downs, and swings) in the OIC countries are different from those in the rest of the world. In particular, boom-bust cycles are not as significant in the OIC region as in AEs (Figure 4.1.A-B). In addition, there is also a significant difference in levels -for example, new cases and deaths per million are lower in the OIC countries compared to AEs and non-OIC EMDEs. These differences suggest that (i) the pandemic may follow different transmission processes in OIC and non-OIC countries and (ii) data quality may be much lower in OIC countries compared to non-OIC countries for several reasons discussed below.

Figure 4.1. Evolution of the COVID-19 pandemic in OIC and elsewhere



Data Source: Our World in Data

Note: AEs = Advanced Economies; OIC = Organization of Islamic Cooperation; non-OIC EMDEs = non-OIC Emerging Market and Developing Economies. Figure shows the seven-day moving average of daily new COVID-19 cases and deaths per million people for 56 OIC countries, 38 AEs and 95 non-OIC EMDEs. Last observation is August 21, 2021.

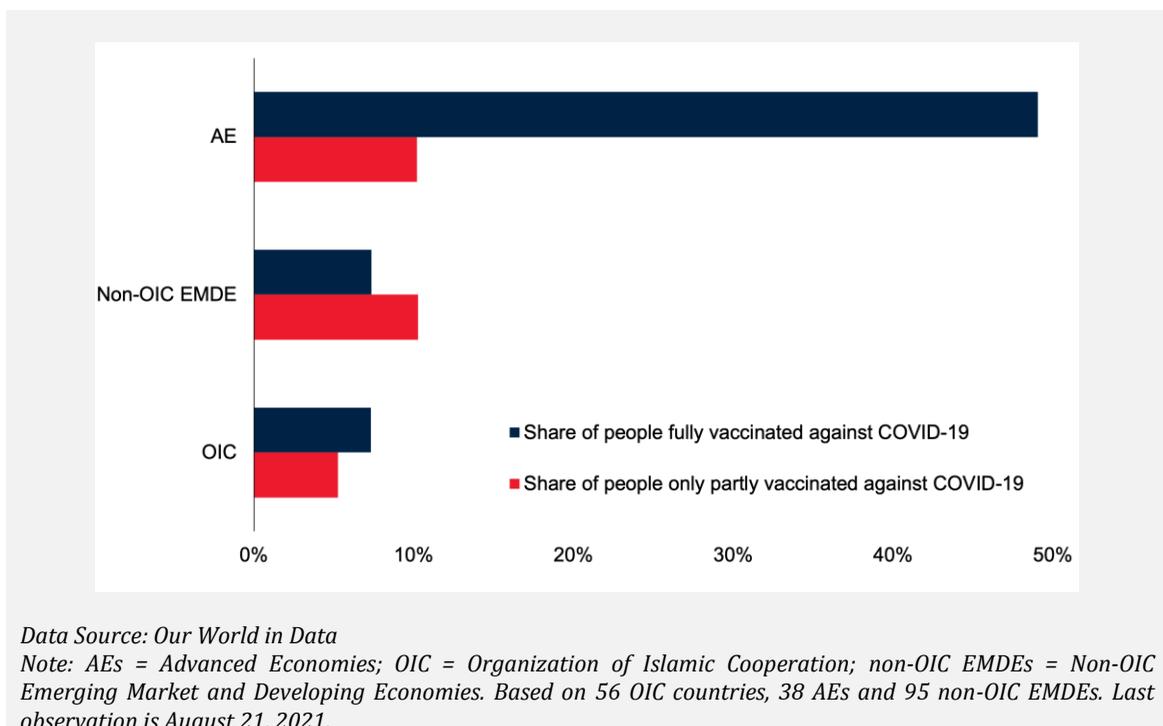
In addition, the number of new cases and deaths within OIC countries showed a substantial degree of heterogeneity among subregions (not shown here for brevity). The timing of peaks and troughs also shows a non-negligible variation among countries. Existing statistics suggest that OIC subregions have experienced their own dynamics in infection rates. The OIC-Arab and OIC-Asian regions show a relatively stronger correlation with trends in the non-OIC countries - although it appears that the figures for the Asian group follow those for the Arab region with an apparent lag. The OIC-Africa countries have significantly lower infection and death rates, suggesting that the potential underreporting problem is likely to be a more serious issue for the African region than in the other regions. The number of cases and deaths are higher in the Arab group than in the other two groups.

It should be noted that serious reporting problems have been observed for several OIC countries and data on COVID-19 infections for these countries tend to be inaccurate/incomplete. For example, there is no data for Turkmenistan and many countries

(especially in the African group) tend to report very low numbers of cases and deaths in a standardized way. Another problem is that some countries do not report COVID-19 figures on a daily basis, preferring to report weekly or bi-monthly, which can distort country-level trends. Although the reporting problem is also observed for some non-OIC countries, these are typically very small island countries and their potential impact on the overall non-OIC averages is quite small.

It is clear that the existence of an efficient surveillance system, together with a solid infrastructure of health statistics, has greatly facilitated the effectiveness of policies. To develop a sustainable strategy for building a well-structured surveillance and reporting system, it may be useful at this point to review some of the possible reasons for misreporting and underreporting COVID-19 statistics. First, the reason for misreporting may be a lack of a well-developed national statistical infrastructure (supported by modern online tools and data science technologies), especially with respect to health statistics. Second, differences in testing systems (probably due to lack of access to sufficient numbers of PCR tests) may partly explain the observed cross-national differences in COVID-19 cases. Third, low capacity in health systems may lead to underreporting of existing cases. Fourth, COVID-19 awareness among citizens in certain low-income countries may be low so that many COVID-19 cases may go undetected. Fifth, a lack of effective communication with international data collection initiatives and coordinating organizations may also exacerbate the problem of underreporting. Finally, governments may choose to underreport the true number of COVID-19 cases and deaths because of various economic and political concerns.

Figure 4.2. Vaccination coverage



Even though vaccination campaigns gained momentum in many advanced economies and a number of emerging economies in Spring 2021 and helped bring down caseloads quickly in some regions, economies kept diverging even further, influenced by differences in the pace of vaccine introduction and political support. Vaccine inequity between OIC countries and AEs is staggering. While about 59 percent of the population of AEs having received at least one dose of vaccine and 49 percent being fully vaccinated, these figures drop to 12 percent and 5 percent in OIC countries and 17 percent and 7 percent in non-OIC EMDEs, respectively (Figure 4.2).

The uneven distribution of vaccines not only leaves untold millions of people defenseless against the virus but also allows deadly variants to emerge and then ricochet around the world. As new variants continue to ravage communities, even countries with sophisticated vaccination programs would be forced to reintroduce stricter public health measures. Then, it would only be a matter of time that an everlasting pandemic would lead to increasing divergence in economic development, with damaging consequences for all.

4.2 Growth and Income Inequality

The COVID-19 pandemic has significantly disrupted manufacturing activities, trade patterns, human mobility, and global supply chains. Policies to contain the spread of the virus posed further challenges to economic activity in all sectors. Increased volatility in financial markets and mixed signals from public health authorities about the future course of the COVID-19 pandemic significantly increased economic uncertainty, further dampening investment, employment, and manufacturing activity. Asymmetries in the implementation of fiscal and monetary policies across countries led to sharp capital movements and have created cumulative risks of future economic instability. Financial, economic and social vulnerabilities in developing countries, including OIC member states, have deepened further.

Although growing rates of vaccination improves the sentiment and some countries (such as New Zealand, Australia, and Israel) have virtually brought the number of daily new cases to zero for a while, there has been a recent increase in the human toll due to various inequities in accessing healthcare and vaccinations. This naturally translates into high uncertainty surrounding the economic growth prospects across the world.

Contraction in global economic activity was 3.3 percent according to the IMF estimates (IMF, 2021a). Basic counterfactual analysis suggests that the decline could have been much worse (around three times as large) had the extraordinary policy support were non-existent. The IMF estimates also suggest that the recovery times to go back to pre-2020 national income levels will exhibit substantial heterogeneity across countries. For example, China has already reached pre-2020 GDP levels, while most advanced countries are expected to close to gap by late 2021 and early 2022. For most EMDEs and LICs, going back to pre-2020 levels is harder and would extend to 2023. The amount and coverage of COVID-19 stimulus programs are among the main determinants of recovery times. Medium- and low-income countries will likely experience

Table 1. GDP growth in OIC

Country	2015	2016	2017	2018	2019	2015/19 Mean	2020	2021	2022
Afghanistan	1.0	2.2	2.6	1.2	3.9	2.2	-5.0	4.0	4.5
Albania	2.2	3.3	3.8	4.1	2.2	3.1	-3.5	5.0	4.0
Algeria	3.7	3.2	1.3	1.2	0.8	2.0	-6.0	2.9	2.8
Azerbaijan	1.1	-3.1	0.2	1.5	2.2	0.4	-4.3	2.3	1.7
Bahrain	2.5	3.6	4.3	1.7	2.0	2.8	-5.4	3.3	3.1
Bangladesh	6.6	7.1	7.3	7.9	8.2	7.4	3.8	5.0	7.5
Benin	1.8	3.3	5.7	6.7	6.9	4.9	2.0	5.0	6.0
Brunei	-0.4	-2.5	1.3	0.1	3.9	0.5	1.2	1.6	2.5
Burkina Faso	3.9	6.0	6.2	6.8	5.7	5.7	0.8	4.3	5.2
Cameroon	5.7	4.6	3.5	4.1	3.9	4.4	-2.8	3.4	4.3
Chad	1.8	-5.6	-2.4	2.3	3.0	-0.2	-0.9	1.8	2.6
Comoros	1.3	3.5	4.2	3.6	1.9	2.9	-0.5	0.0	3.6
Cote d'Ivoire	8.8	7.2	7.4	6.9	6.2	7.3	2.3	6.0	6.5
Djibouti	7.7	6.9	5.1	8.5	7.5	7.1	-1.0	5.0	5.5
Egypt	4.4	4.3	4.1	5.3	5.6	4.7	3.6	2.5	5.7
Gabon	3.9	2.1	0.5	0.8	3.9	2.2	-1.8	1.2	2.7
Gambia	4.1	1.9	4.8	7.2	6.1	4.8	0.0	6.0	6.5
Guinea	3.8	10.8	10.3	6.2	5.6	7.4	5.2	5.6	5.2
Guinea-Bissau	6.1	5.3	4.8	3.4	4.5	4.8	-2.4	3.0	4.0
Guyana	0.7	3.8	3.7	4.4	5.4	3.6	43.4	16.4	46.5
Indonesia	4.9	5.0	5.1	5.2	5.0	5.0	-2.1	4.3	5.8
Iran	-1.3	13.4	3.8	-6.0	-6.8	0.6	1.5	2.5	2.1
Iraq	2.5	15.2	-3.4	0.8	4.5	3.9	-10.9	1.1	4.4
Jordan	2.5	2.0	2.1	1.9	2.0	2.1	-2.0	2.0	2.7
Kazakhstan	1.2	1.1	4.1	4.1	4.5	3.0	-2.6	3.2	4.0
Kuwait	0.6	2.9	-4.7	1.2	0.4	0.1	-8.1	0.7	3.2
Kyrgyzstan	3.9	4.3	4.7	3.5	4.5	4.2	-8.0	6.0	4.6
Lebanon	0.2	1.5	0.9	-1.9	-6.7	-1.2	-25	n/a	n/a
Libya	-13.0	-7.4	64.0	17.9	13.2	14.9	-59.7	131.0	5.4
Malaysia	5.0	4.5	5.8	4.8	4.3	4.9	-5.6	6.5	6.0
Maldives	2.9	6.3	7.2	8.1	7.0	6.3	-32.2	18.9	13.4
Mali	6.2	5.9	5.3	4.7	4.8	5.4	-2.0	4.0	6.0
Mauritania	5.4	1.3	3.5	2.1	5.6	3.6	-2.2	3.1	5.6
Morocco	4.5	1.1	4.2	3.1	2.5	3.1	-7.0	4.5	3.9
Mozambique	6.7	3.8	3.7	3.4	2.3	4.0	-0.5	2.1	4.7
Niger	4.4	5.7	5.0	7.2	5.9	5.6	1.2	6.9	12.8
Nigeria	2.7	-1.6	0.8	1.9	2.2	1.2	-1.8	2.5	2.3
Oman	4.7	4.9	0.3	0.9	-0.8	2.0	-6.4	1.8	7.4
Pakistan	4.1	4.6	5.2	5.5	1.9	4.3	-0.4	1.5	4.0
Qatar	4.8	3.1	-1.5	1.2	0.8	1.7	-2.6	2.4	3.6
Saudi Arabia	4.1	1.7	-0.7	2.4	0.3	1.6	-4.1	2.9	4.0
Senegal	6.4	6.4	7.4	6.2	4.4	6.1	0.8	5.2	6.0
Sierra Leone	-20.5	6.4	3.8	3.5	5.5	-0.3	-2.2	3.0	3.6
Somalia	3.5	2.9	1.4	2.8	2.9	2.7	-1.5	2.9	3.2
Sudan	1.9	3.5	0.7	-2.3	-2.5	0.3	-3.6	0.4	1.1
Suriname	-3.4	-5.6	1.8	2.6	0.3	-0.9	-13.5	0.7	1.5
Syria	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Tajikistan	6.0	6.9	7.1	7.3	7.5	7.0	4.5	5.0	4.5
Togo	5.7	5.6	4.3	5.0	5.5	5.2	0.7	3.5	4.5
Tunisia	1.2	1.2	1.9	2.7	1.0	1.6	-8.8	3.8	2.4
Turkey	6.1	3.3	7.5	3.0	0.9	4.2	1.8	6.0	3.5
Turkmenistan	6.5	6.2	6.4	6.2	6.3	6.3	0.8	4.6	3.9
Uganda	7.3	0.3	7.3	6.0	8.0	5.8	-2.1	6.3	5.0
UAE	5.1	3.1	2.4	1.2	1.7	2.7	-5.9	3.1	2.6
Uzbekistan	7.4	6.1	4.5	5.4	5.8	5.8	1.6	5.0	5.3
West Bank and Gaza	3.7	8.9	1.4	1.2	1.4	3.3	-11.0	5.7	7.0
Yemen	-28.0	-9.4	-5.1	0.8	2.1	-7.9	-5.0	0.5	2.5
OIC	2.4	3.4	4.4	3.7	3.5	3.5	-3.5	6.3	5.3
OIC-Arab	1.1	2.8	4.1	2.7	2.2	2.6	-8.2	9.0	4.0
OIC-Asia	3.2	3.7	4.6	3.8	3.6	3.8	-3.6	4.8	4.6
OIC-Africa	3.5	4.0	4.6	4.8	5.0	4.4	-0.2	4.1	5.2
World	3.5	3.3	3.8	3.6	2.8	3.4	-3.3	6.0	4.4
Advanced economies	2.4	1.8	2.5	2.3	1.6	2.1	-4.7	5.1	3.6

Data Source: World Economic Outlook, April 2021.

Notes: Simple regional averages are reported in the last seven rows of the table. The sixth column documents the five-year simple average of growth rates for each OIC country. IMF figures are complemented by the World Bank, World Development Indicators database in case of data unavailability. GDP annual growth rates in constant prices are reported.

significant medium-term losses and more policy effort is needed to prevent persistent increase in income differences both between and within countries.

Table 1 shows the economic growth rates for the OIC countries. Simple averaging of growth rates across the OIC countries suggests that the economic contraction for year 2020 would be around 3.5 percent, slightly more negative than the global contraction estimate. The pace of recovery in the OIC region for 2021 and 2022 is expected to be on par with the global recovery rates.

Region specific averages, however, show that there is significant heterogeneity within the OIC countries both in terms of 2020 realizations and expectations for 2021/22 recovery. In particular, the average contraction among the OIC-Arab group is estimated to be 8.2 percent, while for the Asian and African regions the estimates are 3.6 percent and 0.2 percent contraction, respectively. The sharp contraction in the Arab region partly comes from the deep deterioration in economic activity in conflict-afflicted member countries—such as Libya, Iraq, Lebanon, Tunisia, and Palestine. Instability and uncertainty in oil prices during the pandemic also negatively affected the oil-exporting member countries in the Arab region—including Kuwait, UAE and, Saudi Arabia.

The projected recovery paths also reflect similar heterogeneities. The size of fiscal support packages is typically small in EMDEs and LICs, which limited governments' capacity to smooth out immediate output losses. However, loose financial conditions in advanced economies are indirectly supporting financial conditions in EMDEs and LICs. The sharp economic contraction has been particularly detrimental for poorer OIC economies, because those countries not only cope with the economic difficulties posed by COVID-19 but they also try to close the existing gaps between their income and living standards and those in advanced economies.

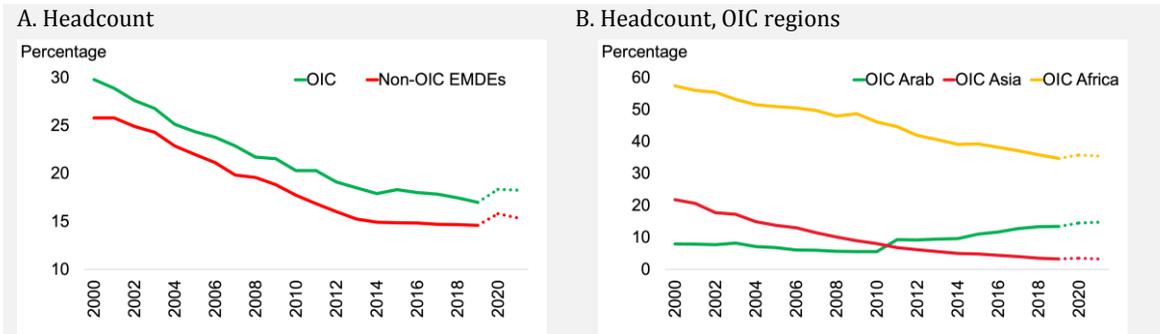
Lakner et al. (2021a) estimated that between 119 and 124 million people will be pushed into extreme poverty worldwide in 2020. They later revised these figures based on updates to global poverty data that occurred in March and June and on recently released growth projections from the June 2021 version of the GEP (Lakner et al., 2021b). Their results show that the pandemic resulted in 97 million more people living in extreme poverty (less than \$1.90 per day) in 2020. This is a decrease of about 20 million from the previous estimate. Even this lower estimate epitomizes a historically unparalleled upsurge in global poverty.

While current estimates point to a global recovery in 2021, the recovery will not be the same for everyone (Figure 4.3.A-B). This suggests that some of the poorest and most vulnerable parts of the world may not be out of woods after all COVID-19 is over.

The pandemic added 13 million poor people in OIC countries from 2019 to 2021. The expected level of extreme poverty headcount in the region is indeed a return to 2015, erasing 6 years of poverty reduction. While the number of poor in the OIC-Africa and OIC-Asia regions has been declining for years, the number of poor in the OIC-Arab region increased sharply in the 2010s due to the ongoing conflicts in the region. The expected poverty headcount in 2021 in the OIC-

Arab region is equivalent to that in 1991. In other words, the COVID-19 pandemic has been contributing to a further deterioration of an already desolate picture in the region.

Figure 4.3. Extreme poverty in OIC



Data Source: PovCal

Note: OIC = Organization of Islamic Cooperation; non-OIC EMDEs = Non-OIC Emerging Market and Developing Economies. Figure shows poverty headcount for 56 OIC countries and 95 non-OIC EMDEs. The estimates for 2020 and 2021 are obtained by using the methodology in Lakner et al (2020).

4.3 Employment and Access to Decent Jobs

Table 2 summarizes the unemployment effects of the COVID-19 crisis. The average unemployment rate between 2015 and 2019 for the entire OIC group is 8.1 percent, and it sees an increase by 0.6 percentage points to reach 8.7 percent by the end of 2020. In some OIC countries, employment conditions have deteriorated particularly sharply over the COVID-19 pandemic (for example, in Jordan from 16.9 percent to 22.7 percent, in Sudan from 20.7 percent to 26.8 percent, and in Algeria from 11.3 percent to 14.2 percent). In general, the increase in unemployment rates has been particularly large in the Arab group.

Another important observation for unemployment effects of COVID-19 is that it asymmetrically affected different demographic groups—and this is mostly an issue for EMDEs and LICs rather than advanced economies. In particular, low-skilled workers, women, and youth have been affected much more severely. Increases in unemployment rates, declines in labor force participation, and therefore declines in employment rates have been more prominent for these groups. These asymmetric labor market effects are likely to be more persistent (Barrero et al., 2020) and long lived. It should be noted at this stage that countries with larger fiscal packages (and more fiscal room in general) are more likely to experience faster recoveries and employment reallocations across sectors.

In terms of sectors, the biggest drops in employment happened in transportation, accommodation, food, entertainment, and some of the other services sectors. Manufacturing and construction sectors also experienced drops in employment, but milder than the drops in those sectors in previous recessions. Some sectors, such as information and communication technologies, insurance, finance, and food retail trade experienced employment growth. The

Table 2. Unemployment in OIC

Country	2015	2016	2017	2018	2019	2015/19 Mean	2020	2021	2022
Afghanistan	11.4	11.3	11.2	11.1	11.0	11.2	11.7	n/a	n/a
Albania	17.1	15.2	13.7	12.3	11.5	14.0	12.5	14.0	13.0
Algeria	11.2	10.5	11.7	11.7	11.4	11.3	14.2	14.5	14.9
Azerbaijan	5.0	5.0	5.0	4.9	4.8	5.0	6.5	5.8	5.7
Bahrain	3.4	3.7	3.6	3.9	4.0	3.7	5.0	3.8	3.8
Bangladesh	4.4	4.3	4.4	4.3	4.2	4.3	5.3	n/a	n/a
Benin	2.6	2.5	2.4	2.4	2.3	2.4	2.5	n/a	n/a
Brunei	7.7	8.5	9.3	8.7	6.8	8.2	6.8	6.8	6.8
Burkina Faso	6.0	5.6	5.1	4.7	4.6	5.2	5.0	n/a	n/a
Cameroon	3.5	3.5	3.4	3.4	3.3	3.4	3.6	n/a	n/a
Chad	1.9	1.9	1.9	1.9	1.9	1.9	2.3	n/a	n/a
Comoros	8.1	8.0	7.9	7.8	7.7	7.9	8.4	n/a	n/a
Côte d'Ivoire	3.1	2.6	3.3	3.2	3.2	3.1	3.5	n/a	n/a
Djibouti	11.4	11.3	11.2	11.1	11.0	11.2	11.6	n/a	n/a
Egypt	12.9	12.7	12.2	10.9	8.6	11.5	8.3	9.8	9.4
Gabon	20.2	20.1	19.9	19.8	19.6	19.9	20.5	n/a	n/a
Gambia	9.3	9.2	9.1	9.0	8.9	9.1	9.6	n/a	n/a
Guinea	4.4	4.3	4.3	4.2	4.1	4.3	4.4	n/a	n/a
Guinea-Bissau	3.0	3.0	2.9	2.8	2.8	2.9	3.2	n/a	n/a
Guyana	13.5	13.7	13.9	14.0	13.9	13.8	15.8	n/a	n/a
Indonesia	6.2	5.6	5.5	5.3	5.3	5.6	7.1	6.5	5.8
Iran	11.0	12.4	12.1	12.0	10.7	11.6	10.8	11.2	11.7
Iraq	10.7	10.8	13.0	12.9	12.8	12.0	13.7	n/a	n/a
Jordan	13.1	15.3	18.3	18.6	19.1	16.9	22.7	n/a	n/a
Kazakhstan	5.1	5.0	4.9	4.9	4.8	4.9	5.5	5.2	5.0
Kuwait	1.3	1.2	1.3	1.1	1.2	1.2	6.8	n/a	n/a
Kyrgyzstan	7.6	7.2	6.9	6.6	6.6	7.0	6.6	6.6	6.6
Lebanon	6.3	6.3	6.2	6.1	6.0	6.2	6.6	n/a	n/a
Libya	18.9	18.8	18.6	18.5	18.3	18.6	19.4	n/a	n/a
Malaysia	3.2	3.5	3.4	3.3	3.3	3.3	4.5	3.8	3.6
Maldives	5.7	6.1	6.0	5.9	5.8	5.9	7.2	n/a	n/a
Mali	7.7	7.6	7.4	7.3	7.2	7.5	7.5	n/a	n/a
Mauritania	10.2	10.3	10.3	10.2	10.1	10.2	10.7	n/a	n/a
Morocco	9.7	9.9	10.2	9.5	9.2	9.7	11.9	10.5	9.7
Mozambique	3.4	3.4	3.3	3.2	3.2	3.3	3.4	n/a	n/a
Niger	0.5	0.5	0.5	0.5	0.5	0.5	0.7	n/a	n/a
Nigeria	9.0	13.4	17.5	22.6	n/a	15.6	n/a	n/a	n/a
Oman	3.3	3.3	2.5	1.8	1.8	2.5	4.8	n/a	n/a
Pakistan	5.9	6.0	6.0	5.6	4.1	5.5	4.5	5.0	4.8
Qatar	0.2	0.2	0.1	0.1	0.1	0.1	3.5	n/a	n/a
Saudi Arabia	5.6	5.6	6.0	6.0	5.6	5.8	n/a	n/a	n/a
Senegal	6.8	6.7	6.6	6.5	6.5	6.6	7.1	n/a	n/a
Sierra Leone	4.6	4.6	4.5	4.4	4.4	4.5	4.6	n/a	n/a
Somalia	13.3	13.2	13.0	12.9	12.8	13.0	13.1	n/a	n/a
Sudan	21.6	20.6	19.6	19.5	22.1	20.7	26.8	28.4	29.7
Suriname	7.0	10.0	7.0	9.0	9.0	8.4	11.3	11.2	10.9
Syria	8.5	8.4	8.3	8.2	8.2	8.3	9.0	n/a	n/a
Tajikistan	7.5	6.9	6.8	6.7	6.7	6.9	7.5	n/a	n/a
Togo	2.2	3.0	3.7	3.7	3.6	3.2	4.1	n/a	n/a
Tunisia	15.4	15.5	15.5	15.5	14.9	15.4	n/a	n/a	n/a
Turkey	10.3	10.9	10.9	11.0	13.7	11.4	13.1	12.4	11.0
Turkmenistan	3.9	3.9	3.8	3.8	3.7	3.8	4.4	n/a	n/a
Uganda	1.9	1.8	1.8	1.8	1.7	1.8	2.4	n/a	n/a
UAE	1.7	1.6	2.5	2.2	2.3	2.1	5.0	n/a	n/a
Uzbekistan	5.2	5.2	5.8	5.7	5.7	5.5	6.0	n/a	n/a
West Bank and Gaza	25.9	26.9	25.5	26.3	25.4	26.0	25.9	25.1	25.3
Yemen	13.4	13.3	13.1	13.0	12.9	13.2	13.4	n/a	n/a
OIC	8.0	8.1	8.2	8.1	7.8	8.1	8.7	10.6	10.5
OIC-Arab	10.4	10.4	10.6	10.5	10.3	10.4	12.2	15.4	15.5
OIC-Asia	7.3	7.5	7.2	7.1	6.9	7.2	7.7	8.0	7.7
OIC-Africa	5.3	5.5	5.7	6.0	4.9	5.6	5.3	n/a	n/a

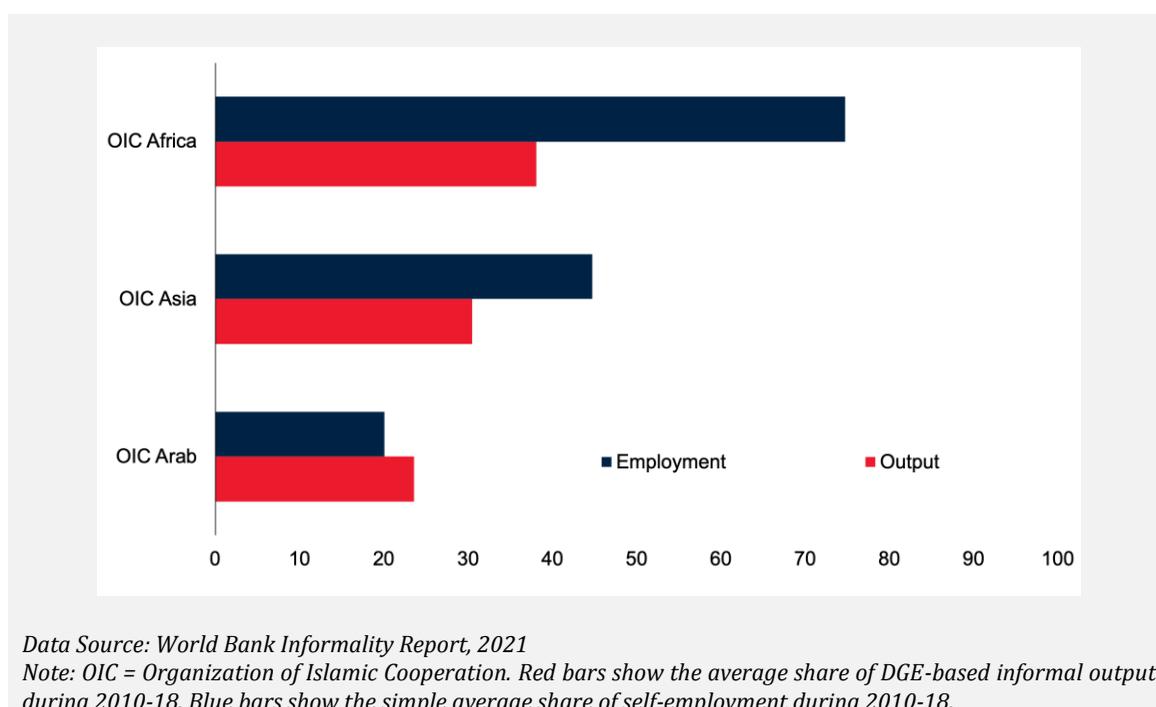
Data Source: World Economic Outlook, April 2021.

Notes: Simple regional averages are reported in the last four rows of the table. The sixth column documents the five-year simple average of unemployment rates for each OIC country.

COVID-19 shock also expedited the automation and digitization mega-trends in the vulnerable sectors. Job separation rates increased and job finding rates declined, which implies increased turnover and longer unemployment spells. These patterns are more or less broadly observed both in the non-OIC and OIC countries (IMF, 2021a).

It should be noted that the unemployment figures presented in Table 2 are subject to some measurement issues. As shown in Figure 4.4 there exist significant levels of both output and employment informality in OIC countries, particularly in the OIC-Africa subregion. Obviously, informal workers are affected the worst during the pandemic since they are, by definition, out of the coverage of government subsidies and job guarantee schemes. The official employment statistics tend to understate informality in developing and less-developed economies, which suggests that the increase in unemployment during the COVID-19 pandemic is likely underestimated. Moreover, agricultural employment (in particular, employment in subsistence agriculture) is imprecisely measured, which makes it difficult to interpret the employment effects of the pandemic especially in poorer countries that extensively rely on subsistence agriculture.

Figure 4.4. Informality in OIC region



What happened to labor earnings during the COVID-19 pandemic is also an important question, but detailed representative micro data sets are not available yet to fully analyze and answer this question. However, a preliminary analysis of the existing data suggests that workers tend to switch occupations and search for jobs in sectors less adversely affected by the pandemic (Hensvik et al., 2021). Moreover, such switches are associated with significant

wage penalties both in terms of lower levels and flatter wage growth trajectories. This is again a much more serious issue for developing and less-developed economies, including the OIC countries.

Despite the heterogeneity in infection and death incidence, almost all societies/economies have been deeply influenced by the pandemic. Governments are forced to trade-off public health safety with economic activity, and maintaining a balance has not always been easy. Advanced economies have larger fiscal capacities and they could afford keeping their economies locked-down for longer time periods, while developing and low-income countries typically had smaller fiscal packages, which forced them to implement lockdown measures for shorter durations. This trade-off has been particularly difficult for countries with workforces comprising mostly of informal and low-skilled workers living in slums. Informal workers and their families are not only out of the coverage of typical “formal” support packages, but they are also the ones who have been exposed to severe health risks during the pandemic due to adverse conditions they live/work in and limited health insurance coverage.

4.4 Social Outcomes

COVID-19 has uncovered and aggravated already existing inequalities in income and access to basic public services, such as health care and immunizations, both within and across countries. Disruptions in education impend social mobility by leaving enduring impacts on children and youth, particularly those from poorer households. These challenges are intensified by accelerated digitalization and the transformative effect of the pandemic on the economy, leaving low-skilled workers struggling to find employment. Against this backdrop, the post COVID-19 period may see increased polarization of society, loss of trust in government, or social unrest. These factors make sound economic policy more difficult and harbor risks to macroeconomic stability and the smooth functioning of society (IMF, 2021b).

The discussion in this section draws on analyses mostly on emerging markets and developing economies as well as low-income countries, given the lack of consistent and sufficient data on the social consequences of the COVID-19 pandemic for many OIC countries and prepares the ground for lessons that can be learned for OIC member states. Where possible, shorter box discussions/analyses for individual member states are presented below.

Effects of COVID-19 Pandemic on Health Outcomes

Pre-existing inequalities, both between and within countries, have influenced the health outcomes from the COVID-19 pandemic.

Regarding income inequality within a country, cross-country analysis presented in IMF (2021b) demonstrates that both infection and mortality rates are positively correlated with relative poverty (the proportion of the population living below 50 percent of a country's median income). Single country studies confirm the association between health outcomes of COVID-19 and income, inequality, and poverty. For example, the pandemic per capita death

rate in the United States was nearly twice as high in counties with poverty rates greater than 20 percent as in counties with poverty rates less than 5 percent (Chen and Krieger, 2020).

Besides its direct impact on well-being, COVID-19 has disturbed everyday healthcare services. These disturbances could cause a substantial proliferation in fatalities from other diseases such as HIV, tuberculosis and malaria in the medium term (Box 1; Hogan et al., 2020).

Box 1. Disruption in access to primary health service in Indonesia

To quickly respond to the growing demand for telephone household surveys that capture responses to and impacts of COVID-19 on well-being, the World Bank Poverty and Equity Global Practice and Development Data Group have partnered with many other Global Practices to develop survey instruments and technical guidelines to better assess the impacts of COVID-19 and to support country teams that are moving quickly to design and implement telephone survey systems in all regions. Indonesia conducted 7 rounds of panel surveys (20-30 minutes phone interviews with about 4,000 households, every 3-6 weeks for the first 3 rounds and every 3 months for the following rounds, with an 83 percent overall response rate.

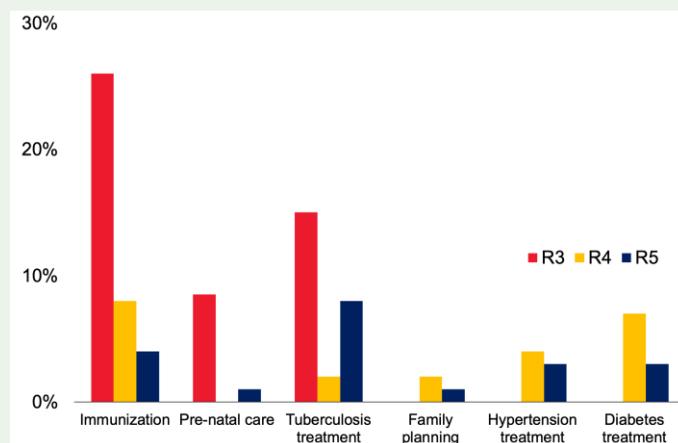


Figure 4.B1. Disruption access to healthcare

Results from Rounds 3-5 (R3, R4, and R5) show that of households in need of primary health care, nearly a quarter did not have access to routine immunization services, 10 percent did not have prenatal care, and 15 percent did not have tuberculosis treatment in July-August 2020 (Round 3). Round 4 (November 2020) and Round 5 (March 2021) added additional questions related to family planning services, questions

about hypertension, and diabetes treatment. There was a significant decrease in healthcare access disruptions related to immunizations, prenatal care, and tuberculosis treatment in Rounds 4 and 5. The newly added indicators showed lower levels as well.

Figure 4.B1 is a testament to (i) the overcrowding of the healthcare system associated with the population's fear of becoming infected at healthcare facilities; (ii) the likely collateral damage to society in terms of the lack of primary health care services, especially at the height of the pandemic.

Source: World Bank. Indonesia - High-Frequency Monitoring of COVID-19 Impacts (HIFY) 2020

Various factors explain the association between inequality and COVID-19 health outcomes. Poorer people have fewer tele-commuting jobs, less job security, and less financial savings on average and thus are less likely to engage in social distancing (Chiou and Tucker, 2020). Poorer people are also more likely to live in crowded neighborhoods and homes, have limited access

to hygiene, water and sanitation, and use public transportation intensively, making them more vulnerable to infection (Papageorge et al., 2020). Higher mortality rates in counties across the United States are associated with higher use of public transportation compared with telecommuting (Knittel and Özaltun, 2020). In addition, minority groups have even worse outcomes than predicted on the basis of income alone, echoing inequalities in access to essential services and disparities in occupation. Conducting a meta-analysis of 50 studies in the United States and United Kingdom, Sze et al. (2020) unearth a higher risk of getting infected with COVID-19 for blacks and Asians than for whites. There exists a strong positive relation between relative poverty and urban share of the population, suggesting higher prevalence of COVID-19 amongst poorer urban households.

Effects of COVID-19 Pandemic on Education Losses

COVID-19 related global education losses harbor substantial challenges to human capital accumulation. At the height of the pandemic, school closures affected 1.6 billion students in 180 countries (World Bank, 2020). Figure 4.5 shares a rich set of findings for EMDEs and LICs that are also highly relevant for many OIC countries.

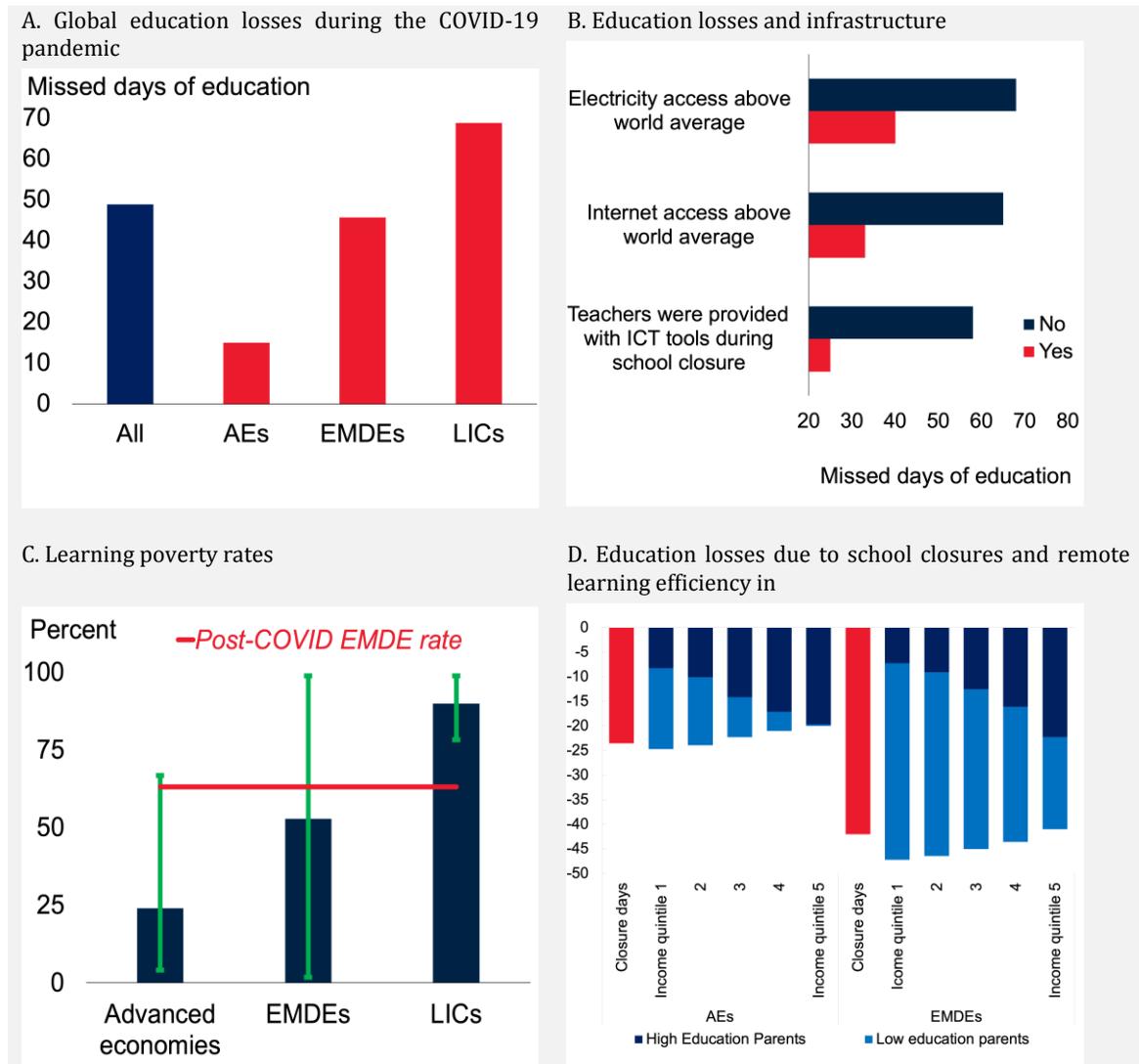
In 2020, an average of 49 missed days of instruction, equivalent to about one-quarter of an academic year, were reported across the globe. Losses in education were more severe in LICs, where students missed an average of 69 school days in 2020, compared with 46 days in EMDEs and 15 days in AEs (Figure 4.5.A) Learning losses are likely greater than missed school days suggest, given the potentially lower effectiveness of distance education compared with face-to-face education. Moreover, girls as well as students from low-income households are at unduly greater risk of learning losses.

Pandemic-related disruptions in education systems are shown to be particularly large in countries with limited infrastructure (Figure 4.5.B; Box 2). Granted, the global shift to distance learning has limited educational losses, uptake and effectiveness are uneven across countries. Educational losses are 70 percent higher in countries that are below the world average in access to electricity than in countries that are above the world average (IMF, 2021a).

In countries where less than half of the population had internet access, students missed 65 days of schooling -twice as much as in countries with higher connectivity rates. Moreover, when teachers were not provided information and communication technology tools or free connectivity, nearly twice as many missed days compared to those that did were reported (IMF, 2021a). Online platforms for distance learning are available in only three-quarters of LICs. Majority of these countries resorted to radio and television to broadcast educational content, causing less effective learning.

All these interruptions that break the continuity of learning might be expected to worsen learning outcomes (Figure 4.5.C). Coupled with the de-skilling associated with persistent unemployment this could lead to significant future income losses (Azevedo et al., 2020; Fasih, et al., 2020).

Figure 4.5. Education losses during the pandemic



Source: A and B. World Economic Outlook, April 2021; C. Global Economic Prospects, June 2021; D. Fiscal Monitor, April 2021

Note: EMDEs = Emerging Market and Developing Economies; and LICs = Low-Income Countries.

A. Bars represent the average number of missed days of education by country groups. B. Bars correspond to the average number of missed days of education by infrastructure characteristic of the countries. C. The learning-poverty rate is the proportion of 10-year-olds unable to read a short, age-appropriate text, as described in Azevedo et al. (2021). Blue bars represent the pre-COVID estimations. Red horizontal line shows the expected impact of COVID-19 on learning poverty due to disruptions in education. Green whiskers denote the min-max ranges for each country group. D. Simple averages. Red bars represent shares of a school year that schools at all levels were subject to compulsory closures between March 1 to December 31, 2020. Blue bars denote estimated contributions of children's learning losses by parents' education.

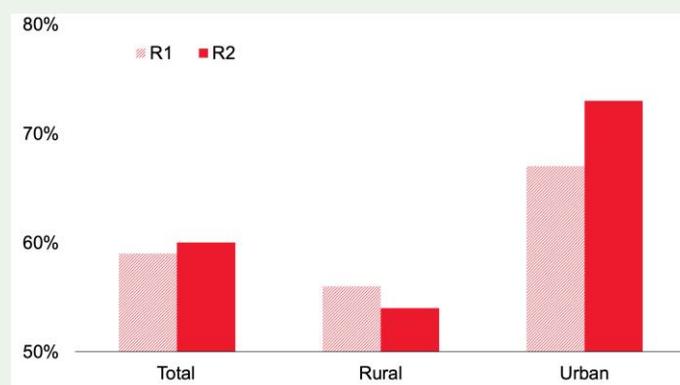
Box 2. Widening rural-urban gap in education in Uganda

Results from the second round of Uganda High-Frequency Phone Survey at COVID-19, conducted in July/August 2020, show that the country experienced a widening of the urban-rural gap in access to education during the COVID-19 pandemic. The second round was conducted between July 31 and August 21, 2020. Of the 2,421 targeted households, 2,227 households were surveyed in Round 1 (R1), and of those, 2,199 were surveyed in Round 2 (R2), for a 99 percent response rate between rounds.

Respondents were asked about each child's participation in educational or learning activities in the past 7 days in July-August. Information from the second round was in turn used to construct an indicator comparable to the first round -the participation of each child (3-18) in any learning activity at the household level.

In Figure 4.B2 the absence of change in this variable at the national level between the two survey rounds conceals disparities between households living in rural and urban areas. The percentage of households with at least one child participating in an educational or learning activity decreased slightly in rural areas (56 versus 54 percent) and increased in urban areas (67 versus 73 percent). This is indeed a widening of the existing gap between rural and urban areas, from 11 percentage points in R1 to 19 percentage points in R2. Moreover, according to R2 data, only 42 percent of children living in households in the poorest quintile had access to education. The same statistics was 69 percent for children in the richest quintile in Uganda.

Figure 4.B2. Rural-urban divide in education



The most common reasons for children not participating in learning activities were absence of education materials, low student interest, no access to radio/TV, and increased housework. When respondents were asked for each child's reason for not participating in learning activities at home, not receiving materials from school (53 percent) or government (43 percent) were the main causes, especially for children in rural

areas and those living in households in the poorest quintile. About 35 percent of children did not participate due to no interest on the part of the student and this reason was more likely to be cited among boys than girls.

Source: Monitoring COVID-19 Impacts on Households in Uganda: Findings from the Second Round of the High-Frequency Phone Survey (English). Monitoring COVID-19 Impacts on Households in Uganda Washington, D.C.: World Bank Group.

<http://documents.worldbank.org/curated/en/849351604069345438/Findings-from-the-Second-Round-of-the-High-Frequency-Phone-Survey>

The IMF (2021b) notes that learning losses will be particularly large in EMDEs and for children from poorer households and rural regions without access to digital infrastructure. Based on cross-country analysis, realized learning losses from compulsory school closures by the end of 2020, are estimated at 20 percent to 25 percent of the school year in AEs and between 40 percent and 50 percent in EMDEs, depending on income quintile and parental education (Figure 4.5.D). When both compulsory and recommended school closures are taken into account, the losses could be much greater. These estimates assume that some children will participate in distance education, which will mitigate some of the learning losses, while others who do not participate in distance education would suffer greater educational losses.

Effects of COVID-19 Pandemic on Women

In contrast to past recessions, when men were more likely to lose their jobs, women have been particularly affected during the COVID-19 crisis (Rubery and Rafferty, 2013). There are several socio-economic dimensions along which women have been hit harder than men by COVID-19.

The first is the direct impact on the health and social care workers. On average, the proportion of women among health and social care workers is about 70 percent -slightly higher outside the developed world. In general, women perform three times more unpaid care work than men. This suggests that women in health and social care face the virus more directly than men. In particular, the demand for unpaid care increased substantially during COVID-19 due to the increased proportion of children out of school and the increased needs of the elderly and PwDs.

Second, women are disproportionately affected by the negative labor market impact of COVID-19. Several studies show that preexisting patterns of women's employment -particularly their sectoral, occupational, and task distribution- have made them more vulnerable to the negative labor market effects of COVID-19 (Cajner et al., 2020). Moreover, in most OIC countries, the vast majority of women's employment is in the informal economy -about 70 percent. Even in the formal sector, women have a higher proportion of temporary contracts, which were more affected by job losses during the pandemic than jobs with permanent contracts (Kikuchi et al., 2020).

Finally, due to a combination of asymmetric job losses and the increased need for more intensive home care, childcare, and household management, women had to spend more time at home during the lockdown. This has led to various adverse effects on women's well-being. For example, the COVID-19 quarantine has caused an increase in domestic violence (Leslie and Wilson, 2020; Roesch et al., 2020). This is likely a more serious problem in EMDEs and LICs (especially OIC countries) due to strong paternalistic norms in social life. In addition, women are also disproportionately affected by the negative mental health effects of the COVID-19 pandemic (see, e.g., Altındağ et al., 2021 and Kola et al., 2021).

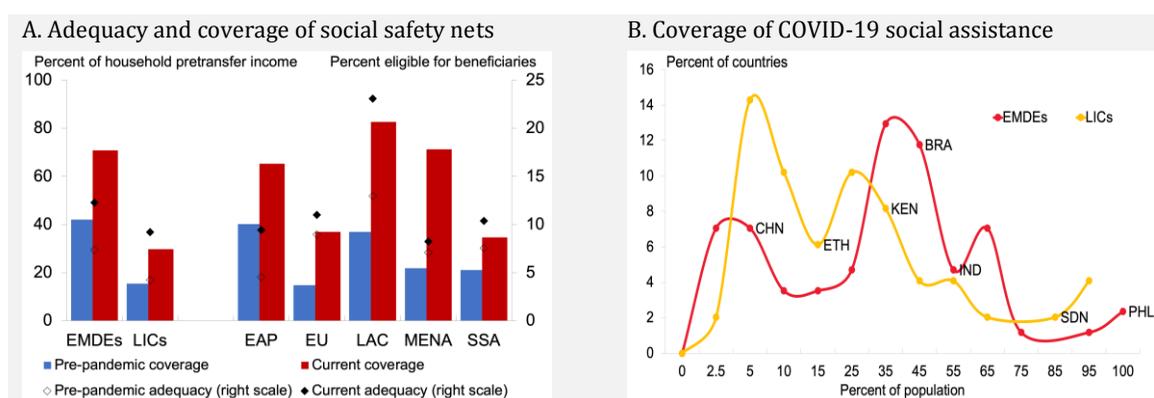
4.5 Policy Response

Social Protection

The importance of social protection measures has increased significantly due to the negative impact of the pandemic on low-income and other disadvantaged groups. About 55 percent of the world's population (about 4 billion people) is not covered by any form of social insurance or social assistance. Only one-fifth of the world's unemployed are covered by unemployment support systems, and coverage is much lower still in low-income countries—those with typically weaker labor market institutions. Extensive informal employment and a large rural population living predominantly on subsistence agriculture further exacerbate the problems posed by the lack of adequate social protection systems.

Given the unprecedented uncertainty of the economic outlook facing all countries in the OIC region, policy should aim to strengthen their social protection frameworks and expand eligibility for unemployment insurance so that at least the most vulnerable groups, namely informal workers and the self-employed, are covered. Social assistance programs are known to act like a shield against shocks by mitigating the negative impact of income losses and food price increases on malnutrition.

Figure 4.6. Social safety nets and assistance



Source: Fiscal Monitor, April 2021

Note: AP = Asia and Pacific; EMDEs = Emerging Markets and Developing Economies; EUR = Europe; LAC = Latin America and the Caribbean; LICs = low-income countries; MENA = Middle East and North Africa; SSA = Sub-Saharan Africa.

A. Adequacy is the total transfer amount received by beneficiaries as a share of pretransfer total income and coverage denotes the share of population that receives social assistance. B. Coverage denotes the share of population that receives social assistance. Some countries have a high coverage (sometimes exceeding 100 percent of the population) owing to program duplications. Those exceeding 100 percent of the population are excluded. Post-COVID-19 data are constructed by adding COVID-19 social assistance to pre-COVID-19 information.

According to IMF (2021b), added social protection expenditures in response to the COVID-19 pandemic averaged 0.6 percent of GDP in the first three quarters of 2020, to enlarge social

safety nets (Gentilini et al., 2020). Indeed, these social protection expenditures has alleviated the increase in global extreme poverty by nearly 10 million people (IMF, 2020a).

Whether social safety nets function as desired can be evaluated along coverage, adequacy, and cost-effectiveness. During the COVID-19 pandemic, the share of the population covered by social safety nets increased in EMDEs, however, this increase was not uniform across countries (Figure 4.6.A-B). Countries, such as the Philippines, have chosen to reach a large portion of their population via social assistance to low-income households, displaced workers, and small businesses. In addition to broader coverage, existing social safety net beneficiaries have also received higher transfers, leading to improved adequacy levels in 2020. There were regional disparities as well. Many OIC countries in Middle East and North Africa have experienced the highest coverage levels but the lowest levels of benefit adequacy, which is a sign of untargeted support. In Latin American and Caribbean countries, there was a doubling of adequacy levels and population coverage remained relatively high as well.

Fiscal Policy

Table 3 summarizes the key fiscal measures that OIC governments have announced or taken in response to the COVID-19 pandemic (as of June 5, 2021). The table shows the measures taken by individual OIC governments, as well as the averages of OIC and advanced economies in the lower part of the table.

The metrics included in Table 3 incorporate COVID-19 related measures since January 2020 and cover measures for implementation in 2020, 2021 and beyond. Categorizing different types of fiscal support as above-budget and below-budget measures and contingent liabilities harbor different repercussions for public finances both in the short and long run.

The costs of most "above-the-line" budgetary measures are reflected in the short run in the fiscal balance, government debt, and increased borrowing requirements. Among these measures are extra spending (e.g., on health services and unemployment benefits), capital grants and targeted transfers (e.g., wage subsidies or direct transfers), or tax measures (e.g., tax cuts or other relief) provided through standard budgetary channels. Deferrals of tax payments and social security contributions have a temporary effect on the deficit and debt and aim to provide liquidity to taxpayers. Although deferrals create current financing needs, the government is eventually be repaid in the future.

"Below-the-line" measures usually involve the creation of assets, such as loans or equity in firms. Equity expansions or loans to firms generally create little or no impact on the fiscal deficit, but they may increase debt or reduce liquidity. Government guarantees to banks, firms, or households typically have no immediate cost in terms of deficits or debt unless the expected cost is budgeted for, but they create a contingent liability, with the government exposed to future calls on guarantees.

Table 3 shows that the fiscal stimulus packages are much heftier in advanced economies compared to the OIC countries. While the total fiscal support in OIC countries amounts to 4.5

percent of GDP (3.0 percent in the form of above-the-line measures and 1.5 percent in the form of liquidity support), it reaches 19.3 percent of GDP (10.7 percent in the form of above-the-line measures and 8.6 percent in the form of liquidity support) for advanced economies. It is also observed that the share of above the line measures in the many wealthier OIC member countries are rather low compared to the region average.

Table 3. Fiscal policy measures in OIC, percent of 2020 GDP

	Above the line measures				Liquidity support			
	Additional spending or foregone revenues			Accelerated spending / deferred revenue	Subtotal	Below the line measures: equity injections, loans, asset purchase or debt assumptions	Contingent liabilities	
	Subtotal	Health sector	Non-health sector				Guarantees	Quasi-fiscal operations
Afghanistan	2.1	0.7	1.4					
Albania	2.3	1.1	1.1		1.6		1.6	
Algeria	1.3	0.7	0.6					
Azerbaijan	2.5	0.9	1.6		2.7	2.0	0.7	
Bahrain	5.8	1.4	4.4	0.0	0.8	0.0	0.8	0.0
Bangladesh	1.4	0.1	1.3		0.1		0.1	
Benin	2.6	1.4	1.2	0.2	1.6	0.7	0.9	
Brunei	1.2							
Burkina Faso	3.8	1.7	2.1					
Cameroon	0.9	0.3	0.6					
Chad	5.8	1.0	4.8		0.1		0.1	
Comoros	2.8	2.0	0.9					
Côte d'Ivoire	2.5	0.5	2.0					
Djibouti	2.4	0.8	1.6					
Egypt	1.6	0.2	1.3		0.1	0.1		
Gabon	2.0	0.8	1.2		0.1	0.0	0.1	
Gambia	2.8	0.8	2.1	1.3				
Guinea	2.2	1.4	0.8		0.1		0.1	
Guinea-Bissau	6.7	5.9	0.8		1.8	1.8		
Indonesia	4.5	1.8	2.7		0.9	0.2	0.6	
Iran	4.9	1.8	3.0	5.5				
Iraq	0.2	0.0	0.1	0.0		0.0	0.0	0.0
Jordan	0.9	0.2	0.7		1.8	0.2		1.6
Kazakhstan	4.4	0.7	3.7	0.3	2.9	1.7		1.1
Kuwait	1.5							
Kyrgyzstan	6.1	0.3	5.8					
Libya	4.2							
Malaysia	5.2	0.3	5.0	0.0	3.5	0.0	3.5	
Maldives	6.9	2.6	4.3					
Mali	3.2	0.6	2.5	0.1	0.2		0.2	
Mauritania	4.8	0.6	4.2					
Morocco	2.4	0.3	2.1		4.6		4.6	
Mozambique	4.7	0.8	3.9		0.2	0.2		
Niger	0.7	0.3	0.4		1.3	0.6	0.6	
Nigeria	2.4	0.1	2.2					
Oman	0.6	0.0	0.6				0.0	
Pakistan	2.0	0.4	1.6	1.2				
Qatar	0.4							
Saudi Arabia	2.2	1.8	0.4	2.1	0.8	0.8		
Senegal	4.3	0.7	3.6	0.6	0.2		0.2	
Sierra Leone	5.5	0.9	4.6					
Somalia	0.2	0.2	0.0					
Sudan	0.9							
Tajikistan	3.0	1.9	1.1		0.5	0.5		
Togo	6.2	2.2	4.0					
Tunisia	2.7	0.4	2.3	0.3	0.8	0.6	0.2	
Turkey	2.7	0.4	2.3	1.4	9.5	0.4	6.4	2.7
Turkmenistan	0.0	0.0	0.0		0.0	0.0		
Uganda	1.6	0.9	0.7	0.5	0.5	0.5		
UAE	2.5							
Uzbekistan	4.4	1.2	3.3		1.3	1.3		
Yemen	1.1	0.1	1.0					
OIC	3.0	0.9	2.1		1.5			
Advanced Economies	10.7	1.5	9.2		8.6			

Data Source: Fiscal Monitor Database

Notes: Estimates as of June 5, 2021. Numbers in percent of GDP are based on July 2021 World Economic Outlook. The fiscal measures include resources allocated or planned in response to the COVID-19 pandemic since January 2020, which will cover implementation in 2020, 2021, and beyond.

Fiscal support has averted more severe economic convulsions and bigger job losses but at the same time, this support, along with declining revenues, has pushed government budget deficits and debt to unparalleled levels in all countries of the world. Average aggregate deficits as a share of GDP touched 11.7 percent for AEs, 9.8 percent for EMDEs, and 5.5 percent for LICs in 2020.

The ability of countries to increase spending varies. The increase in deficits in some OIC countries resulted in roughly equal parts from an increase in spending and a decline in revenues, while in many low income OIC countries it was primarily caused by a downfall in revenues due to the economic slump. Fiscal deficits are expected to shrink in 2021 in most countries as pandemic-related assistance is phased out, revenues slightly improve, and the number of unemployment claims shrinks.

Table 4 shows the developments in gross general government debt for the OIC countries before and during the pandemic—along with some predictions for the future. Gross debt figures are preferred for data availability issues rather than net figures. It should be noted that trends in net and gross debt tend to behave similarly, so there is no significant loss of information by focusing on the gross debt figures.

Simple averaging of the gross debt ratios to the GDP suggests that between 2015 and 2019, the gross general government debt as a percentage of GDP was 49.7 percent for the entire OIC group. It sharply increased during the pandemic and reached 64.5 percent. Although it is expected to somewhat decline in 2021 and 2022, mostly due to expected economic recovery, part of the increase in government debt during the pandemic tends to be permanent.

For sub-regions, it increased from 59.9 percent to 80.0 percent for the OIC-Arab group (35 percent increase), from 39.2 percent to 55.6 percent for the OIC-Asia group (41.8 percent), and from 49.4 percent to 57.4 percent for the OIC-Africa group (16.2 percent). For individual countries in the region, the gross debt patterns exhibit substantial heterogeneity. The largest government debt to GDP ratios are observed as of 2020 in Sudan (262.5 percent), Suriname (165.8 percent), Lebanon (154.4 percent), Maldives (142.6 percent), Bahrain (132.9 percent), and Mozambique (122.2 percent). These patterns roughly exhibit limited fiscal response capacity for the less-developed countries among the OIC group.

Even though debt levels are much higher than usual, average interest payments are generally lower in many OIC countries, as market interest rates have tended to fall. As part of their mandate, most OIC central banks have lowered policy rates and acquired government bonds, facilitating fiscal responses to the pandemic stricken public. However, for many low-income OIC countries, financing these large deficits remains a challenge because of imperfect and incomplete market access and few opportunities to raise revenues in the short run. These countries require support through grants, concessional financing and debt restructuring. In the medium run, fiscal deficits are expected to shrink in all OIC income groups as the recovery accelerates and fiscal adjustments resume. Consequently, debt to GDP ratios will stabilize or

Table 4. General government gross debt as percent of GDP in OIC

Country	2015	2016	2017	2018	2019	2015/19 Mean	2020	2021	2022
Afghanistan	9.2	8.4	8.0	7.4	6.1	7.8	7.8	8.8	9.6
Albania	73.7	73.3	71.9	69.5	67.8	71.3	76.0	75.4	75.0
Algeria	8.7	20.5	26.8	37.8	45.8	27.9	53.1	63.3	73.9
Azerbaijan	18.0	20.6	22.5	18.7	17.7	19.5	21.4	30.9	31.4
Bahrain	66.2	81.3	88.1	95.0	102.1	86.5	132.9	129.4	134.2
Bangladesh	33.7	33.3	33.4	34.6	35.7	34.1	38.9	40.2	40.2
Benin	30.9	35.9	39.6	41.1	41.2	37.7	45.4	47.7	46.3
Brunei	3.0	3.0	2.8	2.6	2.6	2.8	2.9	2.3	2.4
Burkina Faso	31.4	33.3	33.5	37.7	42.7	35.7	44.3	46.8	48.1
Cameroon	32.0	33.3	37.7	39.5	41.7	36.8	43.2	42.5	42.0
Chad	43.9	51.3	50.3	49.1	44.3	47.8	43.0	41.7	41.2
Comoros	14.5	15.1	19.3	18.6	25.2	18.6	26.8	30.0	31.0
Côte d'Ivoire	34.2	35.6	36.9	40.1	41.2	37.6	45.7	46.3	46.6
Djibouti	39.9	45.7	47.9	46.5	38.7	43.7	42.2	40.2	38.2
Egypt	88.3	96.8	103.0	92.5	84.2	93.0	90.2	92.9	88.9
Gabon	44.7	64.2	62.9	60.9	59.5	58.5	72.5	71.1	70.3
Gambia	69.4	80.9	87.0	84.6	80.1	80.4	75.8	73.9	70.0
Guinea	41.9	42.5	40.5	38.3	36.8	40.0	41.4	42.3	43.3
Guinea-Bissau	54.1	57.0	50.0	59.2	66.9	57.4	78.1	78.1	76.4
Guyana	37.4	39.6	38.9	43.1	39.8	39.8	43.9	41.4	38.2
Indonesia	27.0	28.0	29.4	30.4	30.6	29.1	36.6	41.4	42.8
Iran	14.0	44.7	36.9	38.5	47.9	36.4	42.8	36.6	36.2
Iraq	56.9	67.0	59.1	50.0	47.7	56.1	81.2	69.7	73.3
Jordan	78.4	77.4	76.0	75.1	78.0	77.0	88.5	91.2	91.0
Kazakhstan	21.9	19.7	19.9	20.3	19.9	20.3	27.4	27.0	28.5
Kuwait	4.7	10.0	20.5	14.8	11.8	12.4	11.5	13.7	27.3
Kyrgyzstan	67.1	59.1	58.8	54.8	54.1	58.8	74.3	73.4	71.7
Lebanon	140.8	146.2	149.7	154.9	174.3	153.2	154.4	n/a	n/a
Libya	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Malaysia	57.0	55.8	54.4	55.7	57.2	56.0	67.5	67.0	67.4
Maldives	54.9	62.3	64.4	71.5	78.1	66.3	142.6	139.7	140.0
Mali	30.7	35.9	35.5	36.1	40.5	35.7	44.2	46.1	46.8
Mauritania	58.7	56.6	55.1	61.4	56.5	57.7	59.5	56.3	61.6
Morocco	63.7	64.9	65.1	65.2	65.2	64.8	76.1	77.1	77.4
Mozambique	87.4	119.9	100.1	105.3	103.4	103.2	122.2	125.3	126.4
Niger	29.9	32.8	36.5	36.9	39.8	35.2	44.2	44.5	42.0
Nigeria	20.3	23.4	25.3	27.7	29.2	25.2	35.1	31.9	32.5
Oman	15.5	30.3	44.8	51.4	60.0	40.4	81.1	71.3	66.8
Pakistan	63.3	67.6	67.1	72.1	85.6	71.1	87.2	87.7	83.3
Qatar	35.5	46.7	51.6	52.2	62.3	49.7	71.8	59.8	53.9
Saudi Arabia	5.8	13.1	17.2	19.0	22.8	15.6	32.4	31.0	31.7
Senegal	44.5	47.5	61.1	63.5	64.8	56.3	65.8	66.8	66.6
Sierra Leone	45.7	60.7	69.2	69.1	71.7	63.3	71.9	70.4	69.3
Somalia	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Sudan	93.2	109.9	152.9	185.6	200.3	148.4	262.5	211.7	185.9
Suriname	44.0	79.3	79.8	76.3	92.5	74.4	165.8	157.4	153.4
Syria	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Tajikistan	34.7	42.1	50.3	47.8	43.1	43.6	48.1	49.8	49.2
Togo	53.4	60.3	57.0	57.3	53.6	56.3	57.6	60.0	59.9
Tunisia	55.4	62.3	70.9	77.5	71.8	67.6	87.6	91.2	93.9
Turkey	27.4	28.0	28.0	30.2	32.6	29.2	36.8	37.1	38.8
Turkmenistan	22.1	25.1	30.5	31.4	32.9	28.4	31.0	26.0	25.5
Uganda	28.7	31.0	33.7	34.9	37.3	33.1	45.7	48.8	50.3
UAE	16.7	19.4	21.6	20.9	26.8	21.1	38.3	37.1	39.2
Uzbekistan	7.1	8.6	20.2	20.4	29.4	17.2	37.9	42.3	44.3
West Bank and Gaza	37.1	31.0	31.8	33.1	34.5	33.5	47.3	47.9	44.3
Yemen	57.0	72.3	77.4	74.5	76.5	71.6	83.2	73.0	67.9
OIC	42.1	48.3	51.0	52.5	54.7	49.7	64.5	61.4	61.1
OIC-Arab	49.3	56.1	62.0	64.5	67.6	59.9	80.0	71.5	71.1
OIC-Asia	34.0	38.8	39.9	40.1	43.2	39.2	55.6	55.5	55.3
OIC-Africa	42.5	49.7	50.4	51.8	52.6	49.4	57.4	57.9	57.5

Data Source: World Economic Outlook, April 2021

Notes: The gross debt consists of all liabilities that require payment or payments of interest and/or principal by the debtor to the creditor at a date or dates in the future. Simple regional averages are reported in the last four rows of the table. The sixth column documents the five-year simple average of general government gross debt as percent of GDP for each OIC country.

decrease in most OIC countries, although public debt will continue to rise in some countries due to factors such as aging populations and urgent development needs.

Monetary Policy

In late February 2020, news of the global contagion of COVID-19 hit financial markets with astounding force. A month later, global risk aversion had reached an amount not seen since the apex of the global financial crisis, while capital flows from emerging and developing economies began to wildly fall (IMF, 2021a).

In this environment, emerging economies responded by implementing highly countercyclical monetary policies, following the lead of central banks in advanced economies that lowered policy rates wherever possible and introduced a series of asset purchase programs to support credit markets. The policy toolkit used by central banks in emerging markets was remarkably broad. Soon after these strong measures, sovereign default risk premia in emerging markets began to decline.

The monetary policy actions of OIC member countries followed this trend, but they were not nearly as forceful as those of advanced economies. Table 5 shows an illustration of the various monetary policy instruments used by OIC countries during the pandemic, using data based on Elgin et al. (2020). The first column is the latest date on which these metrics are compared to their February 2020 levels. Interest rate cut and RR cut are policy rate cuts and reserve requirement cuts, respectively, by monetary policy authorities (as a percentage of the current rate on February 1, 2020), and Macro-Financial shows the size of the macro-financial package (as a percentage of GDP).

While policy rate and reserve requirement cuts amounted 16.3 and 12.6 percent in OIC countries on average, the same variables reached 26.8 and 40.4 percent in the advanced economies. However, this monetary action is not uniform across OIC countries. The rate cuts in OIC-Arab region countries are at least as high as advanced economies, whereas in most of the OIC-Africa counties the rate cuts are low. Macro-Financial measures taken by the central banks of OIC countries (4.4 percent of GDP) are also lower in size compared to advanced economies (20.3 percent of GDP).

With AEs recovering sooner than most, the projections for a multispeed recovery should raise concerns about the impact of an asynchronous abandonment of monetary policy support that exacerbates financial conditions for OIC countries. Fiscal stimulus packages in the United States play an important role in heightening these concerns, which could lead to a scaling back of Federal Reserve asset purchases and an earlier-than-expected rise in U.S. interest rates. IMF (2021a) suggest that a rapid upward change in expected U.S. monetary policy rates could cause rising risk premia and substantial capital outflows from EMDEs including OIC countries.

Table 5. Monetary policy measures in OIC

	Date	Rate Cut (%)	RR Cut (%)	Macro-Financial (% GDP)
Afghanistan	06.May	0.0	0.0	0.0
Albania	06.May	50.0	0.0	4.0
Algeria	03.May	14.3	80.0	0.0
Azerbaijan	06.May	11.4	0.0	0.0
Bahrain	06.May	52.3	40.0	28.0
Bangladesh	06.May	20.8	76.4	2.7
Benin	06.May	15.6	0.0	8.5
Brunei	06.May	0.0	0.0	NA
Burkina Faso	06.May	15.6	0.0	6.7
Cameroon	06.May	11.9	0.0	0.8
Chad	06.May	11.9	0.0	0.7
Côte d'Ivoire	05.May	15.6	0.0	3.4
Djibouti	05.May	0.0	0.0	0.0
Egypt	06.May	23.5	0.0	2.2
Gabon	06.May	11.9	0.0	2.2
Gambia	06.May	20.0	13.3	1.7
Guinea	06.May	8.3	6.3	0.0
Guinea Bissau	06.May	15.6	0.0	10.6
Guyana	06.May	0.0	16.7	0.0
Indonesia	05.May	30.0	50.0	3.2
Iran	06.May	0.0	0.0	4.7
Iraq	06.May	0.0	13.3	1.0
Jordan	06.May	37.5	28.6	3.0
Kazakhstan	06.May	2.8	25.0	0.0
Kuwait	04.May	45.5	19.2	0.0
Kyrgyzstan	04.May	-17.6	48.6	0.0
Lebanon	05.May	0.0	0.0	0.0
Libya	06.May	0.0	0.0	0.0
Malaysia	05.May	36.4	33.3	5.0
Maldives	05.May	0.0	50.0	0.0
Mali	06.May	15.6	0.0	6.6
Mauritania	04.May	25.4	14.3	0.0
Morocco	06.May	33.3	0.0	4.5
Mozambique	06.May	-3.9	7.9	3.5
Niger	06.May	17.2	0.0	4.0
Nigeria	06.May	14.8	0.0	4.7
Oman	06.May	60.0	40.0	26.2
Pakistan	06.May	47.2	40.0	4.3
Qatar	06.May	47.1	0.0	12.0
Saudi Arabia	06.May	63.5	0.0	7.0
Senegal	06.May	17.2	0.0	NA
Sierra Leone	01.May	15.9	0.0	1.3
Sudan	03.May	0.0	0.0	0.0
Suriname	03.May	0.0	0.0	5.0
Tajikistan	07.May	15.7	0.6	0.0
Togo	06.May	15.6	0.0	16.1
Tunisia	07.May	25.8	0.0	1.0
Turkey	06.May	-76.7	13.2	8.8
Turkmenistan	06.May	0.0	0.0	0.0
UAE	06.May	62.5	50.0	30.0
Uganda	06.May	22.2	0.0	0.0
Uzbekistan	06.May	12.5	0.0	0.8
Yemen	06.May	0.0	0.0	0.0
OIC		16.3	12.6	4.4
Advanced Economies		26.8	40.4	20.3

Source: Components of COVID-19 Economic Stimulus Index developed by Elgin et al. (2020); <http://web.boun.edu.tr/elgin/COVID.htm>

Notes: Rate cut and RR cut are the interest rate and reserve requirement cuts, respectively, as a percent of the pre-crisis level, Macro-Financial is the monetary stimulus package as a percent of GDP.

Interventions in Education and Health

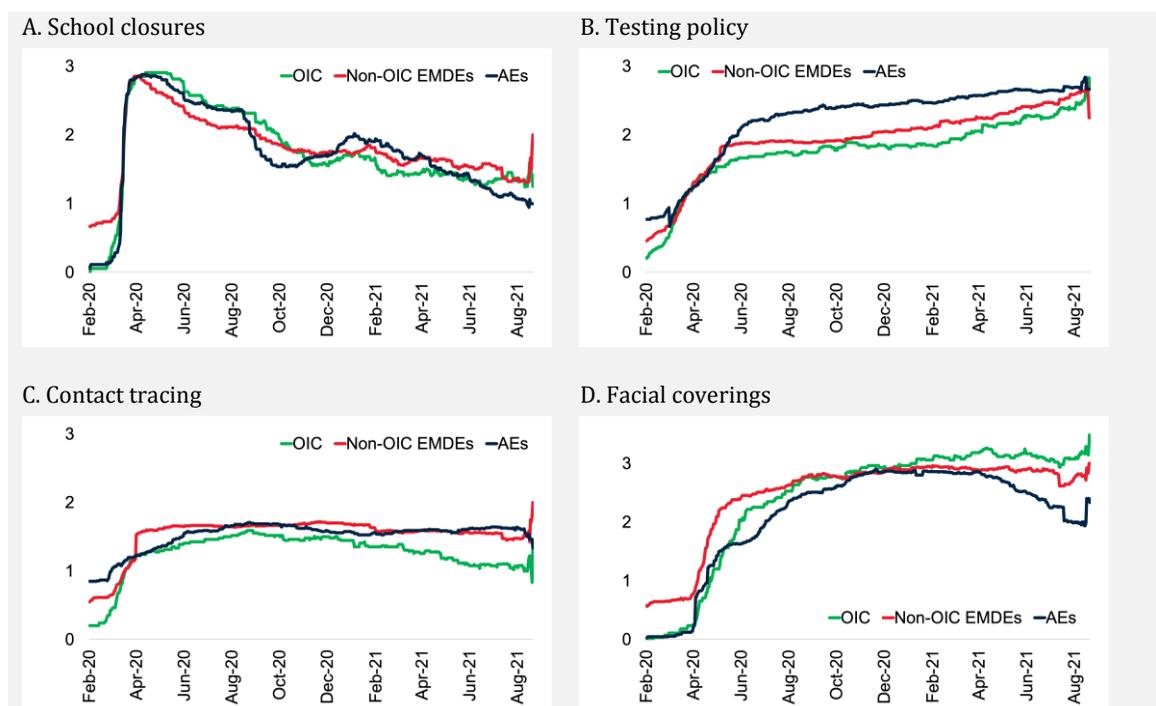
After the onset of COVID-19 pandemic, countries have implemented various policies ranging from health policies—both pharmaceutical and non-pharmaceutical—to directly tackle with the spread of the viruses, broad macroeconomic policies to mitigate the aggregate effects of the pandemic, more targeted sectoral or firm-level policies to alleviate the sector-specific impacts, and more targeted social/economics policies implemented at household and/or individuals level to minimize the effects of the pandemic on well-being and welfare of individuals (especially the vulnerable ones) in the society. Each country has its own policy mix, which makes cross-country comparisons quite a challenging task. Data collection/availability is another challenging issue—particularly so for the OIC countries. The OxCGRT database provides a comprehensive and readily usable summary of the policy measures taken in OIC countries in response to COVID-19 infections, which allows for rich international comparisons not only between OIC and non-OIC countries, but also within OIC countries (namely the Arab, Asian, and African groups).

Figure 4.7 shows a selection of public health measures taken by OIC governments vis a vis non-OIC EMDEs and AEs. Figure 4.7.A suggests that school closure policies were more stringent in OIC countries during 2020, but became less stringent in 2021 relative to non-OIC countries. Within-group decomposition (not shown here) suggests that the rapid relaxation of school closure measures mostly caused by the African group and then the Arab group, while the Asian group still implements more conservative school closure policies.

Figures 4.7.B-C convey the critical message that both testing and contact tracing policies have been less stringent in OIC countries than non-OIC EMDEs and AEs since the beginning of the pandemic. Despite these stark differences between OIC and non-OIC countries, there are no noticeable differences within the OIC country groups. In contrast, for mask wearing, OIC countries have been more stringent than AEs all through the pandemic (Figure 4.7.D). There are also significant differences within OIC countries in mask wearing. In particular, African countries have implemented the most stringent mask wearing rules followed by Asian and then Arab group.

In the overall, the policy measures taken in response to the COVID-19 pandemic suggests that OIC countries have implemented containment and monitoring policies quite strictly (even stricter than AEs) during 2020. Then, perhaps due to increased social pressures and accumulated socio-economic risks, the stringency of policies has been relaxed in a much faster pace than it has happened in the non-OIC countries. The lack of sufficient support and relief programs for households also contributed to a more rapid relaxation of containment policies.

Figure 4.7. Key interventions in education and health in OIC



Data Source: The Oxford COVID-19 Government Response Tracker

Note: AEs = Advanced Economies; OIC = Organization of Islamic Cooperation; non-OIC EMDEs = Non-OIC Emerging Market and Developing Economies.

A. 0 - no measures; 1 - recommend closing or all schools open with alterations resulting in significant differences compared to non-COVID-19 operations; 2 - require closing (only some levels or categories, e.g., just high school, or just public schools); 3 - require closing all levels. B. 0 - no testing policy; 1 - only those who both (a) have symptoms AND (b) meet specific criteria (e.g., key workers, admitted to hospital, came into contact with a known case, returned from overseas); 2 - testing of anyone showing COVID-19 symptoms; 3 - open public testing (e.g., "drive through" testing available to asymptomatic people). C. 0 - no contact tracing; 1 - limited contact tracing, not done for all cases; 2 - comprehensive contact tracing, done for all identified cases. D. 0 - no policy; 1 - recommended; 2 - required in some specified shared/public spaces outside the home with other people present, or some situations when social distancing not possible; 3 - required in all shared/public spaces outside the home with other people present or all situations when social distancing not possible; 4 - required outside the home at all times regardless of location or presence of other people.

But the downside is that the decline in policy stringency is not backed by a sound vaccination plan in many OIC countries, which lag behind the rest of the world in terms of vaccine supply due to various reasons. This heightens the risk of further COVID-19 waves with higher infection and death rates.

4.6 Lessons Learned and Risks Ahead

The nature of shocks hitting developing countries during the pandemic has some specific features that lead to accumulation of socio-economic risks along various dimensions. Those risks are also highly relevant for most OIC countries. Projected and estimated income/output

losses are substantial for economies that extensively draw on exports of commodities, tourism revenues, and also for the ones with limited fiscal capacities. Moreover, the expected recovery after the sharp initial losses is projected to leave permanent damages on disadvantaged groups'-such as low-skilled workers, women, youth, and PwDs socio-economic status. These asymmetric effects have been harmful especially for poverty, gender equality, education, social protection, refugees, slum dwellers, labor markets outcomes, remittances, tourism, international trade, commodity prices and food insecurity dimensions in vulnerable economies. Furthermore, vaccine hesitancy and inequity are significant risks in themselves. Some of these dimensions that are discussed in the preceding sections are mentioned here briefly. Some new ones are explored furthermore below. The lessons learned for the OIC countries are carefully highlighted.

Poverty

The 2030 Agenda for Sustainable Development clearly states that the world's greatest challenge is to eradicate all forms of poverty around the world, and this is a critical priority to achieve sustainable development. Thanks to effective and inspiring global cooperation, the Millennium Development Goals (MDGs) have helped lift more than one billion people out of extreme poverty. However, despite all these achievements, inequalities persist across a wide range of outcomes and new challenges - such as urban poverty, climate change, extreme disaster risks, forced displacement - have emerged due to the changing nature of the socio-economic landscape around the world.

The COVID-19 pandemic has certainly brought additional challenges in the area of poverty reduction. IMF (2021a) clearly states that about 95 million additional people have fallen below the poverty line in 2020, compared to estimates before COVID-19. Similarly, Lakner et al. (2020) and their updates predict that about 100 million people will be pushed into poverty. In addition, there are 80 million more undernourished people than before the pandemic period.

Economic inequality has also increased in various directions beyond expectations. These estimates and projections point to a reversal of global gains in poverty reduction achieved through tremendous efforts and global cooperation over the past two decades. Low-and middle-income people, particularly in EMDEs and LICs, have also begun to have heightened perceptions of poverty due to the greater weight of cheaper staple foods in their diets and thus malnutrition, caused by sharp declines in income.

Although accurate estimates are not yet available (due to delays in generating detailed micro-level datasets), some OIC countries -particularly those with high pre-pandemic vulnerability- started feeling these social pressures very acutely. Without more focused policy coordination and equitable access to vaccination (and other potential medical solutions that will be developed in the future), cross-country disparities in well-being and living standards would widen, and global gains in poverty reduction could be reversed.

Gender Equality

The fifth point of the SDGs aims to achieve gender equality in various development-related outcomes globally by 2030. Recent studies show that COVID-19 has hit women harder than men overall (Alon et al., 2020a; Deryugina et al., 2021). There are at least three reasons that contribute to this outcome: (i) Women are overrepresented in the sectors most affected by COVID-19. In member countries of the Organization for Economic Cooperation and Development (OECD), for example, women account for about 60 percent of workers in the accommodation and retail sectors. (ii) Women also make up the majority of first responders in healthcare -more than 3/4 of the world's physicians and nurses are women (Boniol et al., 2019). (iii) Working mothers have also borne the brunt of childcare closures in schools and childcare centers.

In light of these developments, it has become clear that placing women at the center of post-pandemic reconstruction efforts/policies should be an important policy goal, as there has been limited progress in recent decades toward eliminating gender inequality and strengthening women's rights - which are now clearly in jeopardy due to the adverse effects of the COVID-19 pandemic.

Education

Recent estimates from international organizations such as UNESCO, UNICEF, the World Bank, and the IMF indicate that nearly 1.2 billion students -approximately 68 percent of enrolled students- are affected by school closures. Most importantly, educational losses, as measured by average days of instruction missed, clearly indicate that an average of about 49 school days will be missed worldwide in 2020. The loss is about 15 days in advanced economies, 46 days in emerging economies, and about 69 days in low-income developing countries. Educational losses are particularly high in OIC countries. Girls and students from low-income households are even more affected. Various estimates in the literature support these findings (Azevedo et al., 2021). It should also be noted that parental job loss can also negatively affect the educational outcomes of vulnerable children (Oreopoulos et al., 2008).

OIC countries have made significant enhancements in improving educational outcomes. However, the disruption of education services during COVID-19 has severely affected the process of human capital accumulation, which is a fundamental aspect of sustainable economic growth. Recent improvements in educational outcomes in OIC countries are at severe risk, given limited scope to allocate more funds to remedial educational policies. Without such policies, cross-country disparities in human capital levels may perpetuate the risk of welfare divergences between poor and rich countries across the world.

Social Protection

A well-established and institutionalized social assistance framework will alleviate the burden of the current crisis on households and can also serve as a direct/automatic policy response during the recovery phase. Several OIC countries have effectively implemented social

protection policy frameworks during the crisis. For example, Indonesia has extended the coverage of its unemployment subsidies so that it also includes the informal sector. Togo has established a digital platform that is directly linked to national IDs of all citizens and has provided emergency cash assistance using that platform during the pandemic. Turkey has also utilized a centralized and integrated system that brings together all relevant information, automatically examines most of the eligibility criteria, and enables entitlement of some of the social assistance programs without the need for physical (or in-person) application by beneficiaries. Box 3 explains in detail the social protection framework implemented by Turkey during the COVID-19 pandemic as a best practice.

Box 3. Digital COVID-19 social assistance framework in Turkey

A strong IT infrastructure is critical to the operation of Turkey's social assistance system. Prior to the start of the project on the development of Turkey's e-government portal, information system studies developments on social assistance were initiated. In this context, the process of social assistance can be carried out entirely on an electronic platform, thanks to the Integrated Social Assistance Information System (ISAS), which Turkey developed entirely with its own financial and human resources. The ISAS examines the social assistance applications to Social Assistance and Solidarity Foundations (SASF) with the IDs of applicants. Until now, 28 different institutions are integrated into this system. The socio-economic status of people applying for social assistance is examined using the informatics infrastructure of the relevant institutions as a result of this integration. In addition to this query, social assistance examiners submit a report to the SASF Board of Trustees for the final decision to be made in the households of people who apply for social assistance.

During the pandemic, this strong informatics infrastructure was also advantageous. The needy people to be paid were quickly determined by the system's database, and bureaucratic processes were avoided shortened. Furthermore, thanks to the integration with the e-government gateway used throughout the country, online applications were received during the pandemic process, and eligibility determination processes were carried out immediately through the system.

During the COVID-19 pandemic, the system assisted (i) individuals and families who were already eligible for social assistance in the pre-pandemic period and (ii) individuals who were not eligible for the social assistance program in the pre COVID-19 period but needed assistance after the pandemic outbreak. The flexibility of the legislation allowed for immediate confirmation of the eligibility status of individuals in the second group without requiring changes to existing rules and regulations. Reduced bureaucracy, the existence of multiple application channels (web-based system, email, social media, etc.), a coordinated approach by local foundations established in 1,003 different locations, and flexible payment arrangements increased the operational efficiency of the system.

Refugees and IDPs

The number of forcibly displaced people has exceeded 80 million by mid-2020 - about 46 million internally displaced persons (IDPs), 30 million refugees, and 4 million asylum seekers. IDPs are mostly located in countries suffering from severe internal conflict. Refugees are mostly located in EMDEs and LICs adjacent to countries of origin. Recent estimates suggest

that more than half of the world's IDPs and refugees live in countries at increased risk for negative COVID-19 socio-economic impacts. The legal status of refugees (or persons with temporary protected status) in developing and emerging countries is generally not clearly defined. As a result, their eligibility for national social protection programs is also not clearly defined. In some countries, they benefit from externally funded social assistance programs. But typically, the amount of social assistance they benefit from (if any) is very small and far from providing satisfactory coverage. Another problem is that they are mostly employed in informal and temporary jobs, which poses additional risks that are exacerbated during the COVID-19 pandemic. This is a particularly important issue for several OIC countries that are hosting significant numbers of refugees.

Jobs, Income, and Labor Markets

One of the most devastating consequences, true in almost all OIC countries, is that approximately 1.6 billion informal workers have lost more than half of their income, have little savings, and no access to social protection. Informality is an inherent feature of the "economic structure" in OIC countries and has largely hampered the effectiveness of mitigation measures, thus exacerbating the crisis. Normally, informality serves as a smoothing factor (or insurance) against shocks (see, e.g., Ahn et al., 2019). However, due to the nature of the COVID-19 shock, it became a factor that amplified the magnitude of the shock (Alfaro et al., 2020; Balde et al., 2020; Kesar et al., 2020; and Levya and Urrutia, 2020).

During the COVID-19 pandemic, unemployment rates increased, labor force participation rates decreased, and employment rates declined in OIC countries. The asymmetric nature of the COVID-19 shock made the impact of the pandemic on employment and earnings very unequal across demographic groups. Women, youth, and low-skilled individuals were the worst affected. Low-skilled jobs tended to be held by slum dwellers, suggesting that disadvantaged individuals were also more directly exposed to coronavirus and that infection rates were much higher among them. In other words, low-skilled individuals were mostly employed in "contact-intensive" jobs, which were mostly in the informal sector. Reduced access to social protections and health services exacerbated the negative impact of COVID-19.

Roughly speaking, factors such as the share of tele-workable jobs, the share of jobs in small and medium-sized enterprises, the share of the informal sector, the size of the informal labor market, the level of development of financial and capital markets, cheaper access to telecommunication services, and the quality of the broadband network (and more generally of the technological infrastructure) determine the extent of the destructive effects of the COVID-19 shock. Moreover, early observations suggest that employment losses are concentrated in sectors that are more vulnerable to automation. This suggests that many of the jobs lost by disadvantaged individuals are unlikely to return; thus, the speed of recovery also depends on the composition of jobs.

Remittances and Tourism

Remittances (i.e., the amount of money immigrants send back to their home countries) to middle- and low-income countries have declined by 15-20 percent by the end of 2020. This has two main implications. First, remittances are an important source of external financing for many developing and low-income countries; therefore, a decline in remittance flows negatively affects financial conditions in recipient countries. Second, they are an important non-labor income component for many vulnerable households. In other words, the loss of jobs that immigrants face in receiving countries not only directly affects the living standards of the immigrants themselves, but there are also negative spillover effects that affect their families who rely on remittances. World Bank estimates suggest that in regions relevant to OIC countries, the decline in remittances is 8 percent in Central Asia, 11 percent in East Asia, 8 percent in Middle East, 9 percent in Sub-Saharan Africa, and 8 percent in North Africa, suggesting that the decline in remittances may pose non-negligible challenges to financial conditions in OIC countries.

Tourism is considered the sector most affected by the COVID-19 outbreak. The loss of international tourists in 2020 is estimated at more than 1 billion, representing a potential loss of approximately \$910 billion to \$1.2 trillion in export services revenues. The loss of jobs in the tourism sector, estimated at more than 100 million, further drives up the bill. The degree of dependence on tourism revenues will also determine the speed of recovery, which is a major concern for several OIC countries given the expectation of a slow normalization of cross-border travel.

International Trade and Commodity Prices

The COVID-19 pandemic has negatively affected global trade values and volumes in 2020 and 2021. However, initial estimates suggest that the level of trade in goods has returned to pre-pandemic levels (due to a significant upward shift in demand for durables), while trade in services is still underperforming. Restrictions on international mobility and concerns about travel safety are expected to dampen revenues from exports of services. Losses in tourism revenues are a major concern for many OIC countries (see below). There are also significant protectionist risks associated with trends to restrict the cross-border supply of medical technologies, medical/health equipment, COVID-19 vaccines, and other medical supplies, which may negatively impact the pace of COVID-19 contagion in low-income countries -an issue that is quite relevant to public health policy in the OIC region.

Commodity prices have fluctuated wildly since the beginning of the crisis, a major source of economic uncertainty in developing countries. Output losses have been particularly large for OIC countries, which are highly dependent on commodity exports. However, in line with global recovery scenarios, projected increases in commodity prices would support economic recovery in commodity-exporting countries. However, various side effects of this increase - such as high inflation and, in particular, high food inflation- are also expected to occur in

commodity-importing countries. Inflationary pressures are expected to ease gradually over time as the base effects of commodity prices disappear.

Food Insecurity

Initial estimates COVID-19 indicate that the number of people experiencing acute food insecurity has doubled worldwide. Food insecurity is also strongly linked to economic development. For example, childhood undernutrition and malnutrition can negatively impact children's development (particularly cognitive skills), which can later negatively impact lifetime income, perpetuate inequality, and limit economic growth potential. Therefore, assessing the impact of the COVID-19 pandemic on malnutrition and food insecurity is important for sustainable development policies, especially in the group of low-income OIC countries.

Box 4. National food security strategy in Qatar during the COVID-19 pandemic

Qatar has implemented a comprehensive food safety strategy to mitigate risks associated with the COVID-19 pandemic. This strategy was introduced in 2008, continuously updated over time, and actively used in its current form during the pandemic. The strategy consists of 4 main policy pillars:

International trade and logistics: (i) Ensure trade routes are diversified so that risk exposure is limited, and (ii) Provide a contingency plan for alternative routes to meet emergency needs.

Domestic self-sufficiency: (i) the efficient cultivation of crops, meat, and fish within Qatar's resource base to ensure a stable source of perishable goods in times of crisis; and (ii) the establishment of a regulatory framework that creates incentives to focus on commodities that make sense from a cost-competitiveness perspective. The main objective under this pillar is to increase local production of perishables to ensure self-sufficiency of 30% to 70% for strategic commodities.

Strategic reserves: to create adequate but meaningful reserve capacity to serve as a buffer in times of crisis, both for inputs (water, seeds, fertilizer) and outputs (food). The goal is to maintain strategic reserves such that the reserves should cover the entire population with a balanced diet for 2 months or 75% of the current population with a basic diet for 6 months. Thus, it should serve as a short-term buffer against shocks or insurance against prolonged disruptions.

Domestic markets: move food from port, field, or reserves to the table as efficiently as possible (i.e., limit food loss/waste), with regulations that promote competition and support food safety. This item consists of several subprograms, including "the farmer assistance program," "integrated food waste program," and "governance mechanism to set and implement standards."

This 4-pillar strategy was implemented through the involvement of multiple public and private partners. Inflation realizations for 2020 indicate that food price and/or food supply shocks were not a threat to Qatar during COVID-19 thanks to the effective implementation of the food security strategy.

It is well known that food security concerns increase during economic downturns. The economic crisis triggered by the COVID-19 pandemic and the associated decline in income levels have brought the issue of food insecurity to the forefront in certain regions and for certain population subgroups. Another main channel through which food insecurity concerns continued to grow during the pandemic is the abrupt disruption of food supply chains, which also led to sharp increases and wild fluctuations in food prices. The third main channel is the reduction in caloric intake due to a movement toward cheaper staple foods, especially among low-income households. Consequently, the COVID-19 shock can be seen as a significant threat to decades of progress in minimizing malnutrition problems. Box 4 discusses the successful example of Qatar in this respect.

The rise in food prices has adverse effects on the welfare levels of low-income households. In addition to disruptions in domestic food markets (such as production declines and supply chain anomalies), sharp increases in commodity prices in international markets have contributed to the rise in food inflation. In other words, overreliance on imported food can make food prices vulnerable to external shocks. Ensuring the smooth functioning of food markets through measures related to the effective functioning of domestic markets and limiting overreliance on external markets can mitigate risks related to food security and food price increases. Box 4 presents as a best practice -Qatar's strategic plan to reduce/balance dependence on external food markets, establish a sound food security policy framework, and manage strategic food reserves to absorb supply shocks. The box also provides a policy example for addressing food insecurity issues in an OIC country that is jointly facing climate change risks and COVID-19.

Vaccine Hesitancy and Inequity

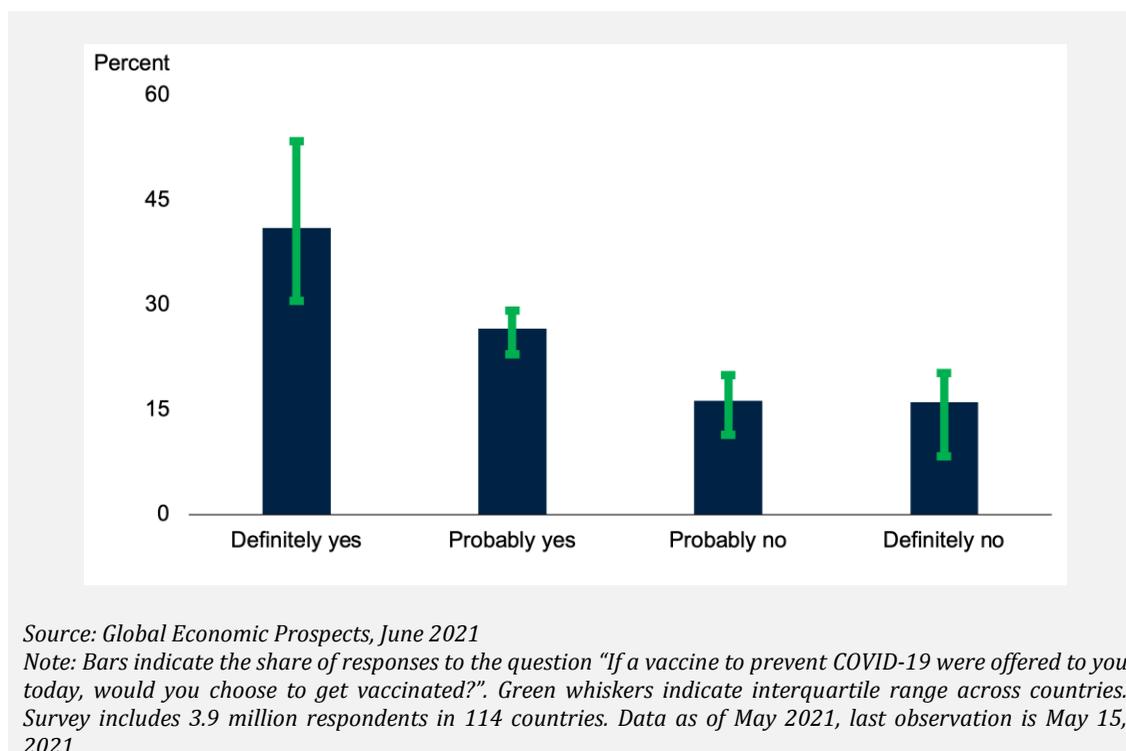
COVID-19 caseloads are likely to remain high in many parts of the world, including in EMDEs where vaccination progress has been slow or in some parts of OIC where vaccination has barely begun. Production bottlenecks, vaccine hoarding in some countries, and logistical barriers could further slow the pace of vaccine introduction, especially in EMDEs. In many countries, a significant proportion of the population is hesitant to vaccinate (Figure 4.8). Continued circulation of the virus in these locations means that countries risk repeatedly oscillating between progress in reducing COVID-19 case numbers and easing restrictions, followed by a resurgence of the virus that triggers new suspensions and a renewed decline in activity.

IMF (2021c) states that by the end of June 2021, about 3 billion doses had been administered worldwide, nearly 75 percent of them in developed countries and China. In low-income countries, less than 1 percent of the population had received a dose.

There exists vaccine inequity across OIC countries as well. According to data from Our World in Data accessed on August 23, 2021, the share of people that received at least 1 dose of one of the COVID-19 vaccines is 85 percent in UAE, 79 percent in Qatar, 62 percent in Saudi Arabia,

57 percent in Malaysia, 55 percent in Turkey while it is just 4.8 percent in Côte d'Ivoire, 2 percent in Uganda, and Somalia 1.2 percent in Niger and 0.2 percent in Chad.

Figure 4.8. Vaccine hesitancy



A comprehensive database established jointly by the IMF and WHO, The IMF-WHO COVID-19 Vaccine Supply Tracker, tracks the number of doses of vaccine secured by countries and territories through various channels, including bilateral agreements with manufacturers, donations from other countries, multilateral agreements through the COVAX facility, the World Bank Group, Asian Development Bank, or other institutions/sources. The tracker is updated every week to reflect the latest developments. Data are presented both in millions of courses and as a percentage of the population. Vaccine coverage for one person is called "one course". Specifically, for vaccines that require two doses, 2 doses = 1 course. For vaccines requiring only one dose, 1 dose = 1 course.

Table 5 uses data from this new database and shows vaccine supplies for the OIC as a whole, OIC regions, and advanced economies. On average, by August 2021, while AEs secured vaccines that cover 2½ of their populations (242 percent), this proportion is only 50 percent in the OIC-Africa region. The highest proportion in the OIC region belongs to countries in Asia, but even

that has not reached the 100 percent mark. The vaccines needed to reach 60 percent¹⁰ of the population are 13, 12, and 10 percent of the populations of the OIC-Africa, OIC-Arab, and OIC-Asia regions, respectively. In other words, taking into account income heterogeneities in the OIC region, there is still a long way to go to ensure that at least 60 percent of the populations of many OIC member states have access to vaccines.

Table 6. Vaccine supplies, OIC regions

	Secured Vaccines and/or Expected Vaccine Supply (% of population)	Vaccine Needed to Reach 60% of Population (% of population)
OIC-Africa	50	13
OIC-Arab	57	12
OIC-Asia	74	10
OIC	60	12
Advanced Economies	242	0

Data Source: The IMF-WHO COVID-19 Vaccine Supply Tracker, update on 13 August 2021

¹⁰ The IMF's latest proposal to end the pandemic, which is supported by the World Health Organization, the World Bank, and the World Trade Organization, calls for at least 40 percent of the population in each country to be vaccinated by the end of 2021 and at least 60 percent by mid-2022, while ensuring adequate diagnostics and treatment.

5 COUNTRY CASE STUDIES

5.1 CASE I: Turkey

Turkey has some key characteristics that make it a country particularly vulnerable to risks associated with rapid expansion COVID-19. First, it is located in a transitional geographic region with high human mobility. Vibrant economic and cultural links with nearby regions such as Europe, Middle East, North Africa, Russia, and the Turkish countries greatly increase geographic mobility. Second, it serves as a major air transportation hub connecting the region to the rest of the world. The construction of the new Istanbul Airport has increased air traffic capacity many times over. Third, it is an attractive tourist destination. Fourth, it is an important host country for refugees and forcibly displaced persons in the region. Finally, it has a large and young population with a high rate of internal mobility.

Against this backdrop, this case study aims to (i) document the main trends of the COVID-19 pandemic along with a chronology of key interventions, (ii) assess the impact of COVID-19 on key economic indicators such as economic growth, output and employment, (iii) analyze the impact on poverty and inequality, (iv) discuss key issues in the education and health sectors, and (v) outline current bottlenecks and an optimal policy mix.

5.1.1 The Chronicle of the COVID-19 Outbreak

The first known case of COVID-19 in Turkey was officially announced on March 11, 2020. The government took several containment measures to combat the pandemic: age-specific curfews (for under 20 and 65+), social distancing measures, travel bans except for returning nationals conditional on strict quarantine requirements, and closure of schools/universities, businesses, and entertainment venues (Source: IMF COVID-19 Policy Tracker). Detailed information on the chronology of containment and health measures are presented in Annex II.

On May 4, 2020, the government disclosed its plans about a step-by-step lifting of lockdown measures, which included reopening retail stores, lifting travel restrictions between major cities, reopening retail stores and shopping malls, and resuming domestic flights. International flights resumed on June 10 and almost all land borders reopened. Schools resumed in early September, mostly on a distance education basis.

Following the eruption of the second wave of infections, containment measures were reinstated in September and tightened furthermore in the last few months of 2020. These measures were compulsory wearing of masks in public areas, stay-at-home orders, curfews, closures or restricted opening hours of retail stores, closure of preschools, and restriction of gatherings.

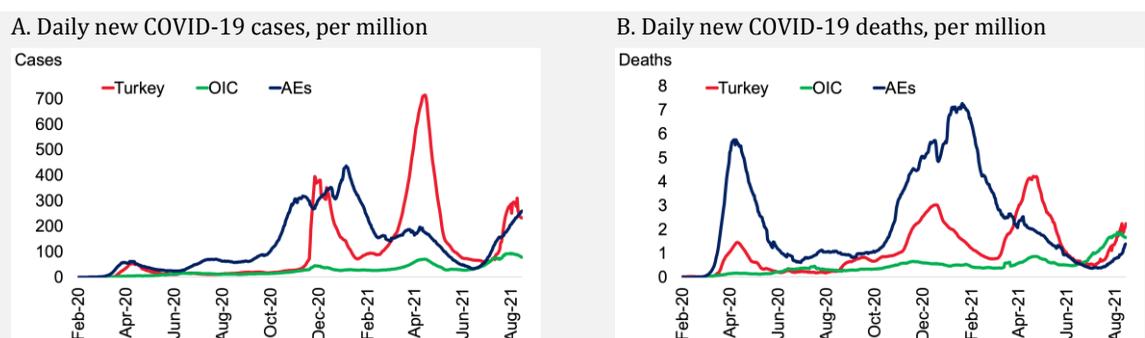
Another step-by-step-reopening process began in early March 2021, with regions classified into four risk groups. This risk assessment was used as the basis of when and where to lift

weekend curfews; to reopen cafes and restaurants (subject to capacity and hours of operation restrictions); and to resume education in schools.

After a third wave of infections, containment measures were strengthened again in late March, and another full "lockdown" was declared for late April 2021 stretching into May. In the aftermath, the government disclosed its plan for a gradual normalization process that began in mid-May and continued through June 2021.

The human cost of COVID-19 has been severe for Turkey as it has been across much of the globe. As of August 30, 2021, the total number of COVID-19 cases in Turkey is 6,366,438 and the total number of deaths is 56,458, indicating that the infection rate in the population is about 7.5 percent and the mortality rate among those infected is about 0.9 percent. Among the countries in the world, Turkey has the 7th highest number of cases, but it is 18th in terms of total number of deaths. In terms of total number of cases and deaths per 1 million people, Turkey ranks 59th and 84th, respectively (OWID Database, accessed on August 30, 2021). These figures indicate that the number of cases in Turkey appears high due to the large population and high inter- and intra-regional mobility in Turkey; however, relative to the population size (and compared to other countries), Turkey has done well in terms keeping the pandemic under control in the first and second waves.

Figure 5.1.1. Evolution of the COVID-19 pandemic in Turkey and elsewhere



Data Source: Our World in Data (database)

Note: AE = Advanced Economies; OIC = Organization of Islamic Cooperation. Figure shows the seven-day moving average of daily new COVID-19 cases and deaths per million people for Turkey, 56 OIC countries and 38 AEs. Last observation is August 21, 2021.

In terms of trends, Figure 5.1.1.A-B shows the daily number of cases and deaths compared to the averages of advanced economies and OIC. There are three completed waves of infections: the first wave from March 2020 to May 2020, the second wave from November 2020 and January 2021, and the third wave from March 2021 to June 2021. Comparing the peaks of the second and third waves, it is seen that the daily number of cases increased by about seven and 13 times, respectively, while the daily number of deaths increased by only two and three times. Turkey experienced a fourth wave in the summer of 2021, which probably has not seen its peak yet. The daily number of infections approached that of advanced economies in each of the

first and third waves, but became one of the highest in the world in the deadly second wave. While the daily number of deaths remained above the OIC average, it was lower than the AE average during most of the pandemic.

Vaccination Program

Turkey's timely purchase and phased delivery of Sinovac's CoronaVac and Pfizer-BioNTech's COVID-19 vaccines facilitated the launch of a nationwide vaccination campaign in early January 2021. Turkey has also approved Gamaleya's Sputnik V for use, while 16 vaccine development studies¹¹, five of them at the clinical trial stage¹², are currently underway. In the vaccine race, Turkey is one of the leading emerging market economies in procuring COVID-19 vaccines. By mid-August 2021, the country has secured vaccine courses that amount to 142 percent of its population (Table 7). Although this rate is much lower than that of advanced economies, it is more than twice the OIC average and three times the average for the OIC-Africa region.

In May 2021, in light of the increased supply agreements made by the government, a massive vaccine rollout was in place in the country with clearly defined priority groups. In June 2021, the government announced that healthcare personnel and individuals over age 50 who have received two doses of coronavirus vaccine would be eligible to receive the third dose beginning July 1.

Table 7. Vaccine supplies, Turkey

	Secured Vaccines and/or Expected Vaccine Supply (% of population)	Vaccine Needed to Reach 60% of Population (% of population)
Turkey	142	0
Advanced Economies	242	0
OIC	60	12
OIC-Africa	50	13
OIC-Arab	57	12
OIC-Asia	74	10

Data Source: The IMF-WHO COVID-19 Vaccine Supply Tracker, update on 13 August 2021

The Ministry of Health in Turkey has made vaccination programs an integral part of its efforts against the COVID-19 pandemic and has determined the order of groups to receive the COVID-19 vaccine by assessing the risk of exposure to the disease, the risk of getting the disease with a severe course, the risk of transmission of the disease, and the negative impact of the disease on the functioning of social life (Table 8).

¹¹ <https://covid19asi.saglik.gov.tr/EN-80240/covid-19-vaccine-production-technologies.html>

¹² <https://covid19.trackvaccines.org/country/turkey/>

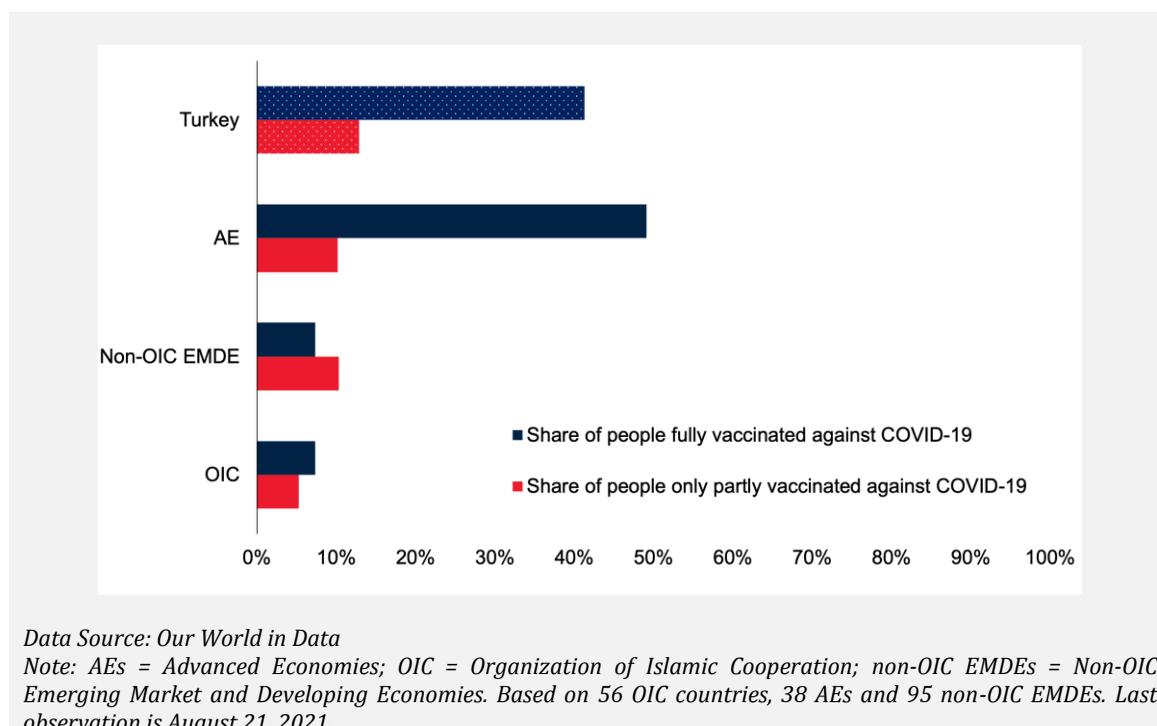
By August 30, 2021 a total of 93 million doses have been administered, equivalent to about 113 doses per 100 people, with 31 million people receiving their second dose and 9 million third dose. The pace of Turkey's immunization program is very fast compared to OIC countries and other emerging and developing economies. As of mid-August 2021, 54 percent of the Turkish population has been vaccinated against COVID-19, of which 41 percent are fully vaccinated as opposed to 12 percent for the former and 7 percent for the latter in the case of OIC countries (Figure 5.1.2). This ranks Turkey 39th in the world in terms of vaccination coverage and third among EMDEs with populations greater than 10 million. However, regional disparities in terms of vaccination rates have been stark: strong vaccine hesitancy exists in the southeast provinces.

Table 8. Turkey's vaccine program: Population targeting

Stage	Group	Rank	Subgroup	
1	A - Healthcare Workforce	A		
	B - Elderly people in nursing homes and people working in nursing homes	B		
	C - People 65 years of age and older	C1	People 90 years of age and older	
		C2	People of the age group between 85-89	
		C3	People of the age group between 80-84	
		C4	People of the age group between 75-79	
		C5	People of the age group between 70-74	
		C6	People of the age group between 65-69	
	2	A - Priority Sectors for Service Delivery	A1	Ministry of Defense
			A2	Ministry of Interior
A3			People with Critical Jobs	
A4			Police and Private Security Staff	
A5			Ministry of Justice	
A6			People in prison	
A7			Education Sector (teachers and instructors)	
A8			People working in the food sector	
A9			People working in the transportation sector	
B - People of the age group 50-64		B1	People of the age group between 60-64	
B2	People of the age group between 55-59			
B3	People of the age group between 50-54			
3	A - People with Chronic Conditions	A1	People of the age group between 45-49	
		A2	People of the age group between 40-44	
		A3	People of the age group between 18-39	
	B - Other Groups	B1	People of the age group between 45-49	
		B2	People of the age group between 40-44	
		B3	People of the age group between 35-39	
		B4	People of the age group between 30-34	
		B5	People of the age group between 25-29	
		B6	People of the age group between 17-24	

Source: Ministry of Health

Figure 5.1.2. Vaccination coverage



5.1.2 Impact on Socio-Economic Inequalities¹³

Macroeconomic Landscape during the Pandemic

Economic growth targets/projections of the government based on the 11th Development Plan suggest an average annual growth rate of 4.3 percent between 2019 and 2023. Although the projection framework of the 11th Development Plan is regarded as rather conservative, it should be noted that COVID-19 was not among the risk factors listed when the projections were produced.

After COVID-19 made its entrance in Turkey in March 2020, the country had swiftly introduced pandemic related restrictions effectively limited COVID transmission yet not nearly as disruptive as a full-scale lockdown. Following the first wave, mobility and business operation restrictions were loosened in June and July.

Meanwhile, GDP has shrunk by 11 percent in the second quarter of 2020, the sharpest decline in the decade. However, a rapid rebound of GDP followed, owing to a massive credit expansion and reopening. Indeed, GDP grew by about 16 percent in the third quarter. The yearly growth

¹³ The numerical information supplied in this section is mostly based on World Bank (2021c).

rate of GDP was 1.8 percent in 2020, which was recorded as the fastest growth among the G20 countries in 2020, along with China.

Credit incentives, expansionary monetary policy that brought real interest rates into negative territory, and a plethora of other regulatory measures to encourage credit expansion led to a very fast recovery in late 2020. Along with recapitalization of a partial credit guarantee fund and state-owned banks, policy interest rates were kept below the rate of inflation and a number of financial regulatory measures were introduced to give banks incentives to increase lending. The combined effect of these measures helped generate one of the biggest credit expansions of 2020 in the world.

Above-the-line fiscal measures as a response to the COVID-19 shock was smaller and more targeted, but stipulated vital support to businesses and households. Among the main items supported with fiscal spending were payments to furloughed workers and those placed on unpaid leave, supplementary lump-sum social assistance to households, and enlarged unemployment benefits. On the revenue side, various deferrals on tax and fee payments were adopted to diminish burden on businesses during the pandemic.

Later in 2020, emergence of economic risks started threatening recovery. In essence, what was devised to be the solution to climb up from the steep trough in the immediate aftermath of the first wave of infections became the cause of growing imbalances and risks (inflationary pressures, currency depreciation, and a loss of foreign reserves).

In the shadow of growing vulnerabilities, a series of significant policy changes were implemented to soothe the economy and reduce the built-up imbalances. The Central Bank of the Republic of Turkey (CBRT) raised its policy interest rate in several steps from September 2020 to March 2021 and ensures a positive real interest rate.

Currently, the growth outlook for 2021 onwards is optimistic. IMF projections (2021a) point to GDP growth of 6 percent in 2021, followed by milder growth in the order of 3.5 percent in 2022. There is still fiscal space (about 1 percent of GDP) to implement targeted stimulus programs in 2021, and there is also some scope for rebalancing fiscal conditions (World Bank, 2021c).

Poverty and Inequality

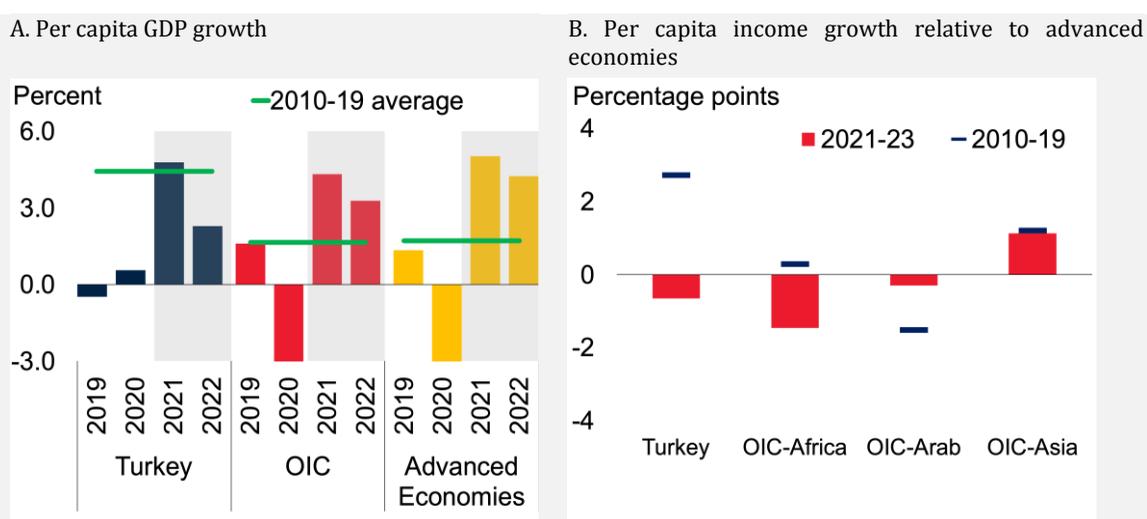
Poverty and inequality consequences of COVID-19 have been among the most frequently debated policy issues across the world recently. These issues are much more relevant and important for OIC countries. For Turkey, there are five main topics that would be relevant in this context: income inequality, labor markets, high food inflation, education and healthcare.

1. Income inequality

Currently, the Gini coefficient, the leading measure of income inequality, in Turkey is 42, according to the latest estimates of the World Bank. This makes Turkey the 48th in the income inequality rank in the world.

The COVID-19 pandemic has had a devastating impact on per capita income growth that will continue for some time. While per capita income growth in Turkey is estimated at 4.8 percent in 2021 (Figure 5.1.3.A), it will be slightly lower in OIC countries (4.3 percent) and slightly higher in advanced economies (5 percent). However, in 2022, per capita income growth is estimated to decline significantly in Turkey (2.3 percent) relative to these country groups (3.3 for OIC and 4.2 percent for AEs). As a result, per capita income catch-up with advanced economies may slow in Turkey along with OIC countries in Africa and the Arab region (Figure 5.1.3.B).

Figure 5.1.3. Per capita income of Turkey, various comparisons



Data Source: Global Economic Prospects, June 2021

Note: AEs = Advanced Economies; OIC = Organization of Islamic Cooperation. Per capita income growth relative to advanced economies is calculated as the difference in per capita GDP growth between OIC / OIC regions and advanced economies.

Turkey has achieved great success in poverty reduction in recent years. The poverty rate dropped from 37 percent in 2003 to 8.5 percent in 2018. However, this remarkable poverty alleviation was hindered by the 2018 downturn, which triggered a loss of more than one million jobs, produced substantial upward pressure on prices, and pushed poverty up to 10.2 percent in 2019. This meant nearly 1.5 million new poor, for a total of 8.4 million nationwide, and wiped out nearly all the gains made in the three years before the economic turbulence. While consumption for the average Turkish family contracted by 0.7 percent between 2018

and 2019, households in the bottom 20 percent felt a much steeper decline, ranging from 5.5 to 14.6 percent.

Against this backdrop, COVID-19 is expected to further increase poverty in Turkey. A simulation analysis of the impact of COVID-19 on household incomes by the World Bank (2021c) shows the magnitude of the potential poverty effects of COVID-19 pandemic: By the end of 2020, the poverty rate may increase by up to 2.1 percentage points, which translates into 1.6 million new poor. The poverty bill of the two successive shocks in Turkey is estimated to be more than 3 million new poor by 2021, amounting to 10 million nationwide, a 40 percent increase over the number of poor in 2018.

In spite of overall positive growth, the high level of COVID-19 impact on poverty is due to inequalities in the burden of employment contraction. In Turkey, 60 percent of the job losses was in the bottom 40 of income distribution, while most individuals in the top half retained their jobs, while those in the top decile even experienced net job gains (World Bank, 2021c)

Unless the government acted quickly, simulations (World Bank, 2021c) illustrate that poverty impact of the pandemic could have been three times as severe. In this regard, emergency social assistance measures (discussed in section 5.1.3) introduced shortly after the first wave of infections was vital in avoiding even more severe effects of the pandemic.

2. Labor Markets

By May 2020, the economy shed 2.6 million jobs (9.2 percent of total employment) compared to the same a time in 2019. Indeed, according to ILO (2021a), the pandemic in Turkey led to a 15 percent decline in hours worked (Figure 5.1.4).

While the labor market partially recovered over the course of 2020, employment declined 3.9 percent per annum in November 2020. The labor force shrank sharply to 30.6 million people in June 2020, but then recovered slightly and rose to 31.1 million in November. However, the labor force remains below pre-pandemic levels (about 1 million below end-2019 levels). This has led to a decline in overall labor force participation close to 2013 levels of 50 percent.

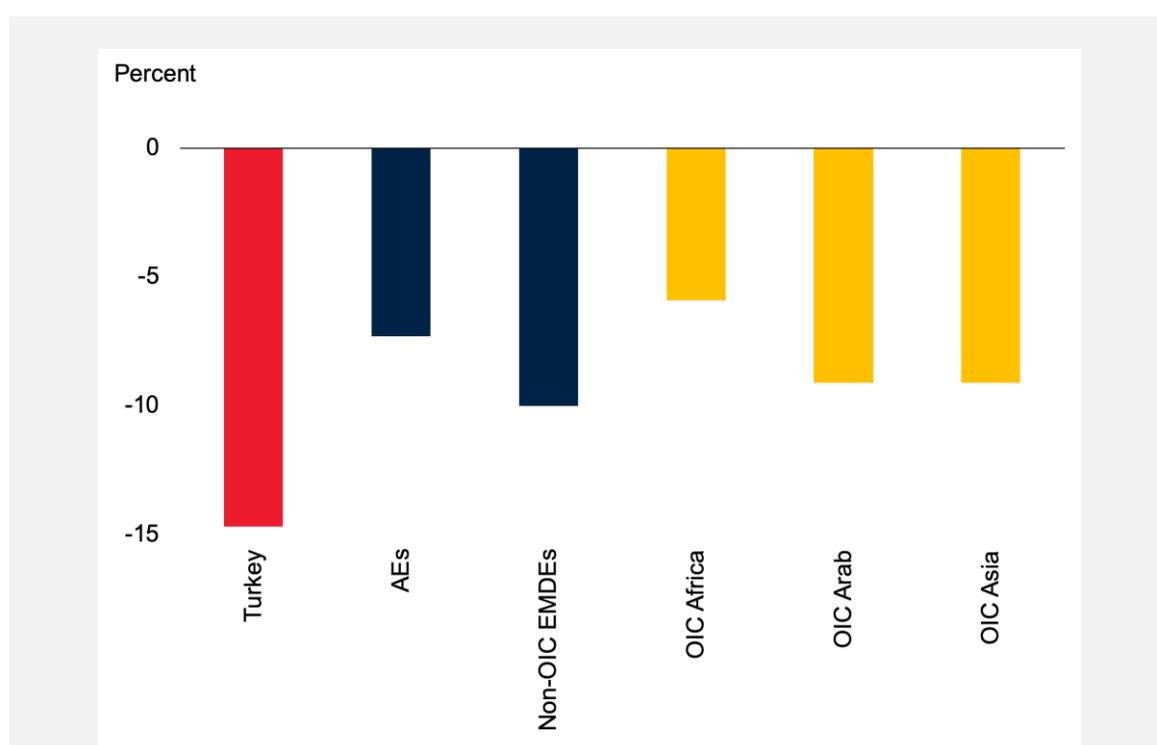
In the context of layoffs in Turkey, formal employment did not change much, however, workers were placed on paid leave more frequently. This is due to a measure put in place by the Turkish government that temporarily prohibited layoffs. The average firm in Turkey granted paid leave to 20 percent of its employees, sustained by the use of the government's short-term allowance. About 11 percent of employees received pay cuts. On average, firms shortened the working hours of 31 percent of their employees.

Meanwhile, preexisting vulnerabilities in the labor market were aggravated, with female, low-income, informal, and unskilled workers most affected. The initial labor market losses were unequally spread across the population. Employment among unskilled workers was still 9.5 percent below year-ago levels in November 2020, while it had returned to pre-pandemic levels

among medium- and high-skilled workers. A similarly uneven pattern in employment recovery is witnessed for female, youth, and informal workers.

Informal jobs continue to prevail amongst approximately 30 percent of the Turkish population, particularly in the agricultural sector. Output informality is around 27 percent. Even though these figures are much lower than OIC averages, they are still much higher than advanced economy averages as shown in Figure 5.1.5. Therefore, informal workers are affected the worst during the pandemic since they are, by definition, out of the coverage of government subsidies and job guarantee schemes.

Figure 5.1.4. Working-hour losses in Turkey



Data Source: ILO COVID-19 and Labor Statistics

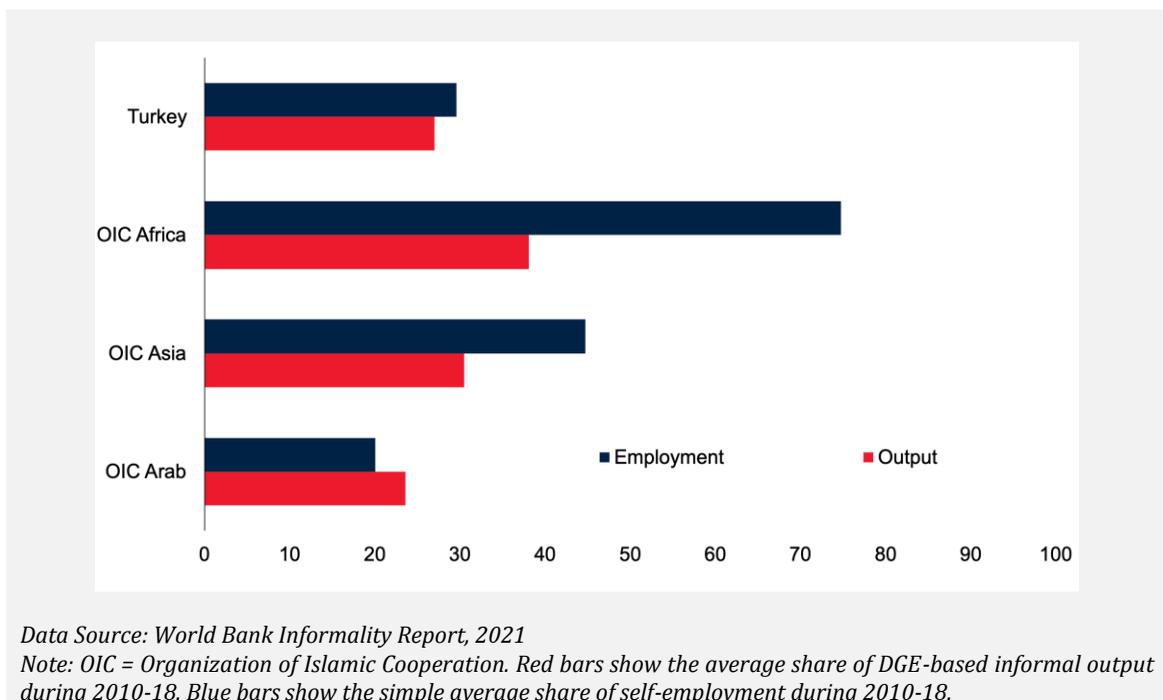
Note: AEs = Advanced Economies; OIC = Organization of Islamic Cooperation; non-OIC EMDEs = Non-OIC Emerging Market and Developing Economies. ILO (2021a) model-based data are stated as a percentage difference between the estimated number of total hours worked in the counterfactual event of no pandemic and total hours worked in reality. Bars represent working-hour losses. The figure shows percentage differences between the projected number of total hours worked assuming that there had been no pandemic.

Youth (ages 15-24) have suffered the largest losses in labor force participation. The rate of youth not in employment, education, or training (NEET) has continued to rise since the outbreak of COVID-19. In the one year to November 2020, a total of 363 thousand young people fell out of the labor force, contributing to the significant losses in youth employment since 2018.

The labor force participation rate (LFPR) fell to 49.3 percent from 52.5 percent from 2019 to 2020, and women lag significantly behind, especially among youth. The LFPR continues to be highest among the high-skilled and lowest among the low- to medium-skilled.

Women who dropped out of the labor force primarily because of their family roles. Household responsibilities dominated 31 percent of exit from the labor force and were driven by women; 46 percent of women who exited the labor force cited this as a reason, compared with zero percent of men. An overwhelming majority of women reported taking on more household responsibilities during the pandemic, while fewer than half of men experienced the same.

Figure 5.1.5. Informality in Turkey compared to OIC regions



3. High Food Inflation

Inflation increased in the second half of 2020, owing to the depreciation of Turkish Lira which caused a rise in international commodity prices and worsened inflation expectations. Consumer price index (CPI) inflation hit 15 percent and domestic producer price index (PPI) inflation touched 25 percent by the end of 2020.

Food and core goods were behind nearly 65 percent of the increase in inflation by the end of 2020, with food inflation at 21 percent. A depreciating TL, seasonal elements, drought, and rising international food prices were the main culprits of high food inflation. Rising food prices signal increased difficulties for low-income individuals due to its large share in their budgets. Moreover, rising food prices create cascading effects on prices for services in hotels and

restaurants, further hurting low-income individuals who happen to work intensively in these sectors, which experienced both demand and supply side shocks during the pandemic.

4. Education

Shortly after the first case was detected in Turkey, education was disrupted as in many other countries. Students in Turkey switched between different forms of instruction, face-to-face, distance, and hybrid, as the pandemic progressed. In fact, schools in Turkey were fully closed¹⁴ for 129 days -among the highest in the world- and partially closed¹⁵ for 41 days between March 11, 2020 and February 2, 2021 according to UNESCO's School Closures database.

Close to 800,000 foreign, elementary, middle and high school students studying at schools affiliated with the Ministry of National Education (MoNE) received instruction through TRT-EBA TV and Education Information Network (EBA). The EBA was established before the pandemic by MoNE. It is an internet-based platform whose initial objectives are (i) to improve access to educational resources for disadvantaged children, (ii) to provide additional online materials to support educational activities, and (iii) to facilitate the integration of refugee children into the Turkish education system.

After a two-week break in the early days of COVID-19 outbreak, educational activities continued online at all levels in Turkey. The EBA system was quickly adapted to the conditions of the pandemic and became the primary platform through which online education was offered to the public and private schools. Private schools and universities also used other online communication platforms to deliver live/recorded classes. Preschools and childcare centers mostly remained open, although participation was voluntary. Central exams were postponed and did not take place until after the end of the first wave. Overall, educational activities continued online without major interruption during the COVID-19 restrictions.

In spring 2021, students in low- to medium-risk provinces began selectively returning to face-to-face classes, in line with the normalization roadmap announced by the government, until strict lockdown measures took effect again in the second half of Ramadan (which includes Eid) to limit increases in infection rates after the gradual reopening. After May 17, 2021, only courses for twelfth graders taking the centralized exam for transition to higher education have continued face-to-face instruction at the secondary level. Online classes continued at all levels. Currently, all schools/universities are projected to start face-to-face education in Fall 2021 provided that all stakeholders are either fully vaccinated or PCR tested every 72 hours.

Although Turkey acted quickly to address the educational needs of children and youth during the pandemic, the country could not escape all the challenges of online education: (i) Teacher

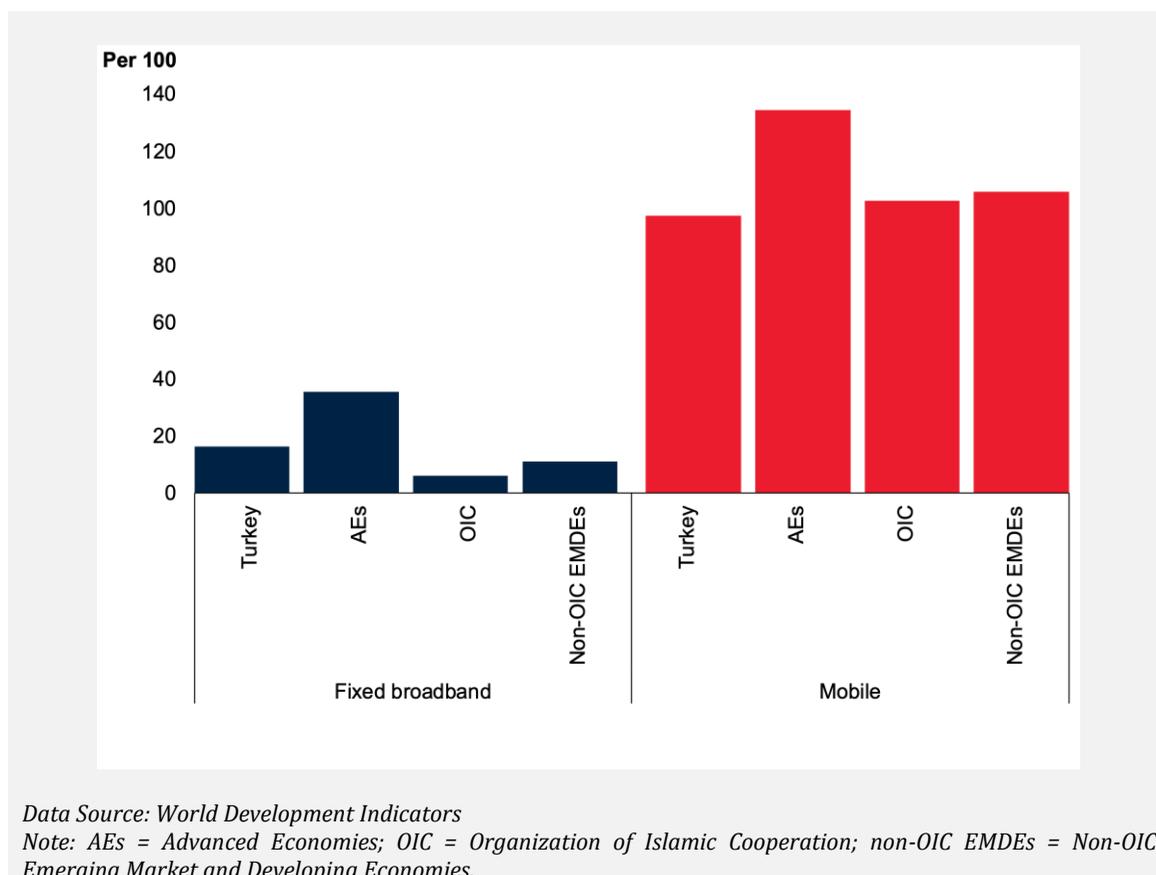
¹⁴ Schools are considered fully closed if the closures affect most or all preschool, primary, lower secondary, and upper secondary students.

¹⁵ Partial closures refer to situations in which schools are closed or operating at limited capacity either in some administrative units of a country or for some grade levels.

preparation for online education was a major concern. Teachers were mainly trained to interact with students on a face-to-face basis. The transition to online education was a major challenge for teachers. (ii) Access to online education was an issue for disadvantaged children. The availability of the internet and electronic devices in the home environment limited the number of students benefiting from online education, potentially reducing the effectiveness of online education. (iii) A quiet place to study and a dedicated device to follow lessons per child are also among the challenges for families with multiple school-age children. (iv) Student adjustment to self-directed learning was not smooth.

According to OECD (2020), Turkey is close to the OECD average on the first and fourth items, but access to online education has been a major problem for some Turkish students. Figure 5.1.6 documents the Internet infrastructure in the country. In Turkey, the number of fixed broadband connections per 100 inhabitants is 16 (35 in AEs, 6 in OIC, and 11 in non-OIC EMDEs) and the number of mobile connections per 100 inhabitants is 97 (134 in AEs, 102 in OIC, 106 in non-OIC EMDEs). Turkey is far from the average of advanced economies when it comes to fixed broadband connections and behind the averages of all country groups when it comes to mobile connections. The third item on the above list continues to be a major problem, not only for children in Turkey, but also in many countries around the world.

Figure 5.1.6. Internet infrastructure in Turkey, various comparisons



Finally, the enrollment rate of Syrian students at the elementary school level, which was nearly 98 percent before COVID-19, dropped to about 70 percent after the pandemic. The decline was even greater at the higher grade levels. This suggests that access to school for disadvantaged students could have been a major problem during the pandemic. In other words, the integration of Syrian students into the Turkish education system may have been significantly disrupted.

5. Healthcare

Since the beginning of the COVID-19 crisis, it has become clear that the effectiveness of the health care system is among the most important determinants of how COVID-19 shakes socio-economic conditions in a country. Following the onset of the pandemic, health care systems in major industrialized countries (including the United States, United Kingdom, France, Spain, and Italy) were unable to respond effectively to the rapidly increasing number of COVID-19 cases. The number of hospital beds in many countries was insufficient to accommodate all COVID-19 patients who required intensive care. Other serious shortages included the number of ventilators, basic supplies, and the number of health care workers. During peak periods, many critically ill patients were not admitted to hospitals and were unfortunately left to die.

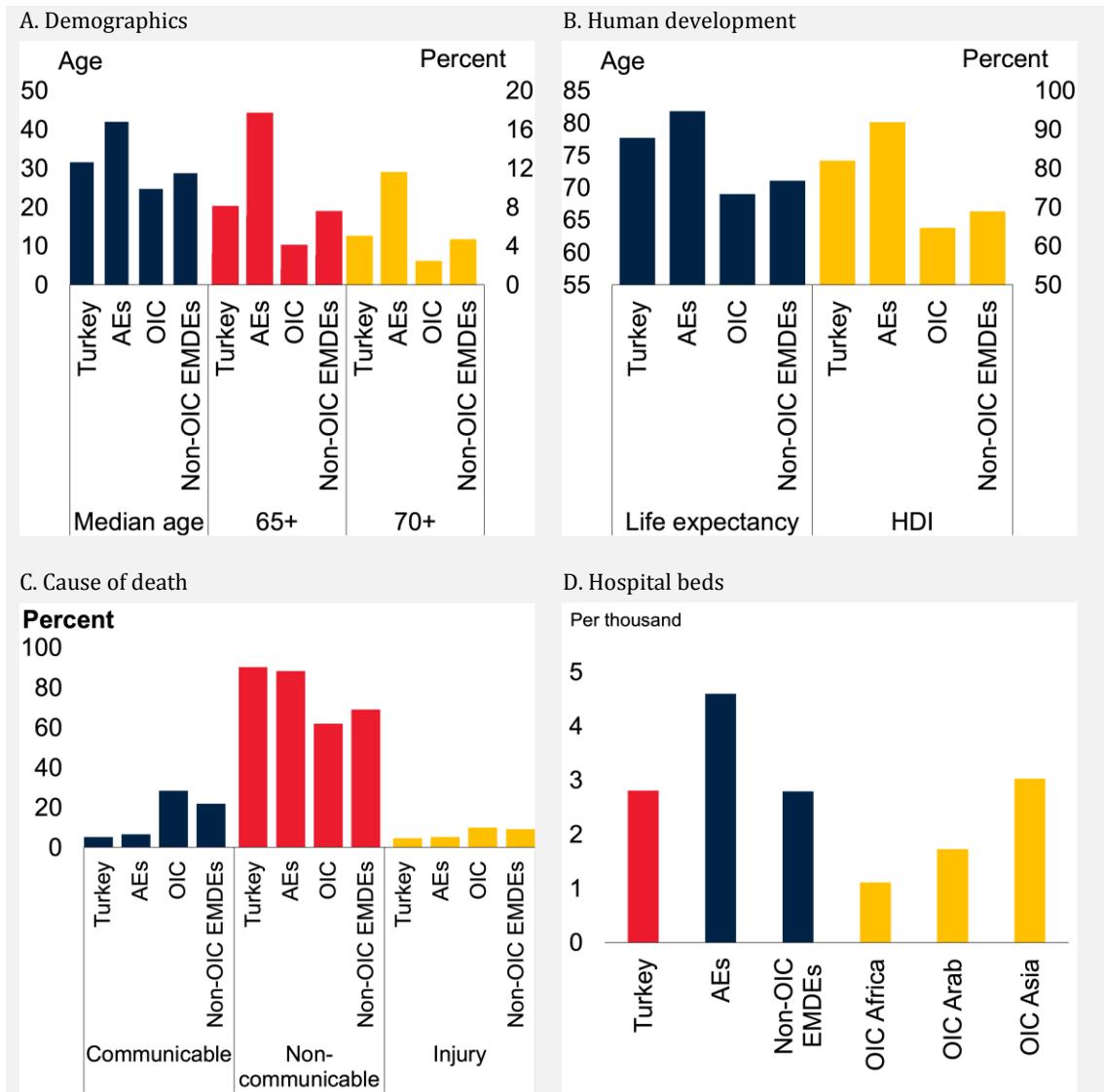
Figure 5.1.7 shows a selection of metrics used to evaluate the assets and liabilities of the healthcare system in Turkey. The country's age structure is a clear asset in the fight against COVID-19. The median age in Turkey is 32 years, and the percentage of the population older than 65 and 75 years is 8 and 5 percent, respectively. These figures are close to the averages of OIC countries and non-OIC EMDEs, but quite below the average of AEs (Figure 5.1.7.A).

Another plus point for Turkey is its high human development scores. Life expectancy in Turkey is 78 years and the HDI score is 82 out of 100. Compared to the OIC averages of 69 years of life expectancy and an HDI score of 65, Turkey shows strength in terms of health system quality (Figure 5.1.7.B).

The cause of death is one of the indicators to measure health risks in a country. Figure 5.1.7.C categorizes the cause of death into three groups: (i) by communicable diseases and maternal, prenatal, and nutritional diseases (% of total); (ii) by noncommunicable diseases (% of total); (iii) by injuries (% of total). In all countries, the proportion of (ii) is high in contrast to (i) and (iii). However, within each cause-of-death across country groups, Turkey looks different from OIC countries and non-OIC EMDEs. On the one hand, a low mortality rate related to communicable diseases (5 percent in Turkey compared to 28 percent in OIC countries and 23 percent in non-OIC EMDEs) is an advantage in terms of COVID-19 management because it is an indicator of the strength of the health system in dealing with other infectious diseases. On the other hand, a high mortality rate related to noncommunicable diseases such as cancer, diabetes, or heart illness (90 percent in Turkey compared to 62 percent in OIC countries and 69 percent in non-OIC EMDEs) is a liability because it shows vulnerabilities in terms of comorbidities in the fight against COVID-19.

Finally, one of the important, widely available indicators of health system capacity is the number of hospital beds per thousand population in a country. The latest available figures for Turkey, AEs, non-OIC EMDEs, OIC-Africa, OIC-Arabia, and OIC-Asia are 2.8, 2.8, 4.6, 1.1, 1.7, and 3.0, respectively (Figure 5.1.7.D). In this metric, Turkey is on par with the non-OIC EMDEs, but still below the OIC-Asia group and advanced economies.

Figure 5.1.7. Assets and liabilities of health system in Turkey



Data Source: Our World in Data, World Development Indicators

Note: AEs = Advanced Economies; OIC = Organization of Islamic Cooperation; non-OIC EMDEs = Non-OIC Emerging Market and Developing Economies; HDI = Human Development Index

Against this background, Turkey experienced some bottlenecks during the pandemic. However, Turkey had several advantages. First, Turkey observed the first case at a much later stage than most other European countries. With the help of a Scientific Advisory Committee, early action could be taken to mitigate the negative effects of the first wave. Second, Turkey already had a large care capacity thanks to its developed and well-organized health care system. Third, the COVID-19 treatment and monitoring protocols were designed early, strictly implemented, and improved over time. For example, “Hayat Eve Siğar” application widely used on mobile phones has been used to monitor the infection status of individuals in the entrances of schools, business, public buildings, airports, etc. Fourth, production capacity for basic materials (e.g., medical masks) and equipment (e.g., ventilators) is rapidly developed and expanded, which later made Turkey a major supplier of these materials and equipment.

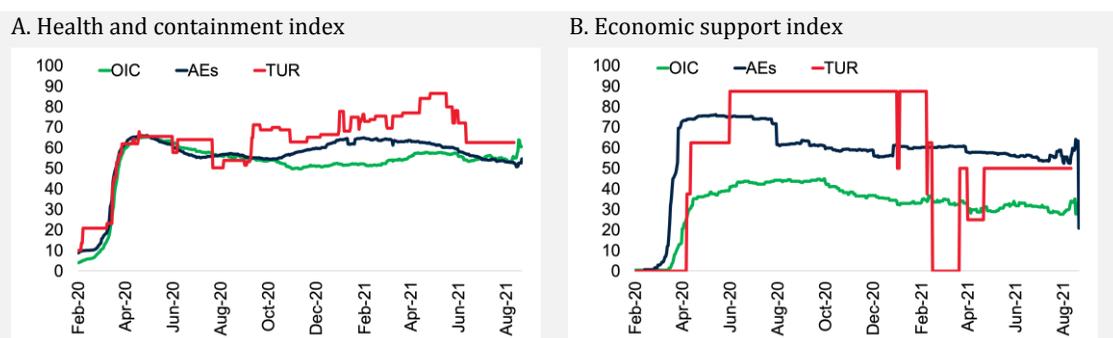
5.1.3 Policy Response

Overview

Turkey's policy response to the COVID-19 pandemic was initially rapid and strong, similar to many countries around the world. Turkey's policy response to the COVID-19 pandemic was initially rapid and strong. To discuss the pandemic-long policy performance, two measures will be discussed here:

Containment and health index combines "lockdown" restrictions and closures with measures such as testing policies and contact tracing, short-term investments in health care, and investments in vaccines. Like many other countries in the world that were first hit in the first wave of infection, Turkey has applied very stringent health and containment measures (Annex II). Except for periods of relaxation between waves, the index remained above the averages of both AEs and OICs from the beginning of the pandemic. The index peaked during the third wave, the highest and deadliest among all to date (Figure 5.1.8.A).

Figure 5.1.8. COVID-19 policy response summary in Turkey



Data Source: The Oxford COVID-19 Government Response Tracker

Note: AE = Advanced Economies, OIC = Organization of Islamic Cooperation

Economic support index captures measures such as income support and debt relief. Throughout the pandemic, advanced economies provided larger support packages compared to OIC countries. The timing and magnitude of economic support in Turkey followed a very different pattern than in advanced economies and OIC countries (Figure 5.1.8.B). The onset of economic support activities is expected to correlate strongly with the timing and magnitude of the infection waves. Accordingly, the economic support magnitude in Turkey reached its highest levels in June 2020, exceeding the averages of AEs and OIC countries, and remained there until February 2021. After a brief decline, the index stabilized in a region above OIC countries and below advanced economies after May 2021.

Fiscal Measures

According to IMF COVID-19 Policy Tracker, Turkey's overall fiscal stimulus package was predominantly concentrated on credit channel support. The package, at about 12 percent of GDP, was the second largest among EMDEs after Brazil and the 12th largest among all G-20 countries. However, unlike many other economies, Turkey employed mostly below-the-line fiscal measures, with 75 percent of the stimulus package consisting of contingent liabilities. These measures were central to enabling a sharp increase in lending, mainly through state-owned banks. Above-the-line fiscal measures, albeit on a smaller scale, were largely well-targeted and effective. These included support for workers on leave and disbursements to workers taking unpaid leave, additional social transfers to households, rent and income support for small businesses, and deferral of taxes and social security contributions for businesses.

This policy package was effective in engineering the strong credit expansion in 2020. Corporate and mortgage lending accounted for the bulk of new lending, and most of the credit growth was denominated in Turkish Liras. According to World Bank (2021c), Turkey's real credit growth in 2020 was one of the most extensive among AEs and EMDEs.

After the implementation of the fiscal policy measures described above, the budget deficit was only 3.4 percent, lower than many other countries in the world. However, the relative strength of Turkey's current fiscal position could be at risk due to the possibility that the large credit stimulus employed during the pandemic could deteriorate the budget in the future if and when contingent liabilities are realized.

Monetary Measures

According to IMF COVID-19 Policy Tracker, in response to the COVID-19 economic downturn, the policy rate was cut by 300 basis points. After the first wave, many EMDEs experienced capital outflows, with Turkey particularly hard hit, along with Brazil and South Africa. Turkey's loose monetary policy adorned with high inflation was a recipe for capital outflows in Turkey during this period. When Turkey encountered the gravity of capital flight, the CBRT began to tap international reserves at an unparalleled rate.

Beginning in August 2020, as a response to capital flight, rising inflation and currency depreciation, the CBRT began taking contractionary monetary policy measures using its interest rate corridor to increase policy rate by 200 basis point on September 24 providing room for further tightening. After the appointment of the new governor early November, the CBRT increased the policy rate by 875 basis points to 19 percent.

Portfolio flows to Turkey then recovered, induced by both domestic politics and global liquidity conditions. Portfolio inflows, which had averaged negative until the end of October, have since entered into positive domain. Part of this reversal is due to monetary tightening in Turkey but it also suggests a return of capital to EMDEs.

Social Assistance Measures

-WORKERS-

Turkey has taken a plethora of measures to support workers on unpaid leave, provide a short-term work allowance for workers on leave, and prohibit the dismissal of formal workers. The short-time allowance support and the ban on laying off workers were further extended until mid-May 2021. The number of workers receiving short-term benefits had reached 3.8 million by July 2021 (Table 9). For about 3.1 million workers who were not eligible for short-term benefits but were placed on unpaid leave, the government provided a reduced benefit. Unemployment benefit payments continued for people who had lost their jobs before the pandemic COVID-19. The government also introduced a new assistance program in August 2020, under which the government pays companies' social security contributions for workers who benefited from the short-term work allowance or were placed on unpaid leave. To date, 3.2 million workers have benefited from normalization support.

Table 9. Social protection programs in Turkey

		Number of individuals/ households reached (in millions)	Amount of assistance provided (billion TL)
Social Support Program ^a	Phases 1, 2 & 3		
+			
"Biz Bize Yeteriz" Public Campaign ^a	Household	7.2	10.8
Short Term Work Allowance ^b	Worker	3.8	36.0
Unpaid Leave Subsidy ^b	Worker	3.1	13.9
Unemployment Insurance ^b	Individual	1.1	6.4
Normalization Support ^c	Worker	3.2	4.0
Total			71.1

Source: ^a Ministry of Family and Social Services June 2021 update. ^b Turkish Employment Agency July 2021 update. ^c <https://covid19.ailevecalisma.gov.tr/index.html#sosyalyardimlar> (March 01, 2021 figures, accessed on August 27, 2021).

While these measures were in effect until early 2021, the social support program (one-time assistance for vulnerable households) ended in early 2021. However, households may continue to receive application-based social assistance under the third phase of the Pandemic Social Assistance Program, as discussed below.

-HOUSEHOLDS-

Pandemic Social Support Program

The program was implemented in three phases. In Phase 1, households benefiting from regular and centralized social assistance programs currently operated by the Ministry of Family Affairs and Social Services were provided with 1,000 TL (a little over 1/3 of minimum wage net of taxes) cash assistance. This was to protect disabled, elderly, orphaned, and widowed women, who are among the most disadvantaged groups in society, from the negative effects of the pandemic.

In Phase 2 of the assistance program, those who did not fall within the scope of the first phase but benefited from the temporary social assistance programs of the Ministry of Family and Social Services within the last year, or belonged to the households whose income test results were determined as G0 (insurance premiums paid by the state) under the General Health Insurance, whose neediness was determined by SASF locally, received a cash assistance of 1,000 TL.

In Phase 3, the applications received electronically were first filtered through a systematic pre-assessment according to established objective criteria, in order to provide assistance to those in need who could not benefit in the previous phases. Taking into account the measures taken due to the pandemic, 1,000 TL cash assistance was transferred to the beneficiaries' accounts on PTT or to the beneficiaries' bank accounts, with the condition of using their IBAN's if they preferred.

"Biz Bize Yeteriz Türkiyem" Campaign

The campaign was launched by the President of Turkey to strengthen the sense of social solidarity in the country during the pandemic and to provide assistance to the needy households. As part of the campaign, donations were collected from the general public to be distributed to the needy households.

Full Lockdown Social Assistance Program

The program was established for households in need of social assistance and was valid from April 29, 2021 to May 17, 2021. Through this assistance program, the SAS Foundations made a one-time payment of TL 1,100 per household that was in need due to the pandemic and whose eligibility remained based on applications received through the e-government gate during the Pandemic Social Support Program.

-STUDENTS-

The MoNE directed social assistance programs for students and their families regarding educational needs during the times of the pandemic.

Mobile support vehicles were set up throughout the country, including in schools in disadvantaged areas, where students from low-income families can receive interactive and personalized computer-based learning. There are currently 15,306 support points and 189 Mobile Support points.

The general population of students benefited from 3 special television channels (EBA TV), 10,703 sign language videos were created and broadcast through these TV channels. Distance education was also supported by the EBA online education platform and live courses. The ministry agreed with GSM operators to provide mobile customers with free access to online education platforms. With nearly 22.8 billion hits, EBA became the most visited education website in the world during the pandemic. To increase schools' distance learning capacity, the MoNE also distributed 105,000 classroom webcams.

Tablet computer sets with 25GB contingent internet package with 4.5G GSM sim cards were also distributed. Currently, 664,157 sets have been distributed to disadvantaged children.

MoNE took several measures to improve access to school. One of these measures is the conditional cash transfers for foreigners. Families receive cash support from Kızılaykart every two months on the condition that the child has attended school regularly (at least 80%) during the previous school months. During the period of distance learning, Syrian students continue to receive cash transfer.

Furthermore, various other measures were introduced by MoNE to improve access to education for immigrant students: The MoNE distributed "Learn at Home Kits" in 62 provinces to reduce the impact of the COVID-19 pandemic and support distance learning. In this context, the distribution benefited a total of 60,403 Syrian children and 15,145 vulnerable Turkish children. With the support of UNICEF, MoNE printed 51,614 copies of SALIH storybooks and 60,403 PIKTES books in Turkish¹⁶, which were distributed to Syrian children under temporary protection.

During the COVID-19 pandemic and with the gradual reopening of schools, cash aid was provided to schools in Ankara, Adana, İstanbul, Konya, Denizli, Afyonkarahisar, Tekirdağ, Elazığ and Manisa. 382 schools were provided with the "Safe School Support" to help them meet their basic cleaning and hygiene needs, including the purchase of hygiene materials and equipment. For this purpose, a total of 496,743 students (81,731 foreign and 415,012 Turkish) were provided with "Safe School Support".

¹⁶ These story books were developed by different initiatives coordinated by MoNE to help refugee children learn the Turkish language.

5.1.4 Evaluation of Findings

ESCAPING THE CRISIS

What Worked

Strict implementation of curfews and age-specific lockdowns based on a data-driven approach, as well as rapid and effective responses to changing conditions, helped disrupt the spread of the virus and maintain supply chains and economic activity. Continuous feedback from a "Scientific Committee" and weekly interactions between the committee and the Council of Ministers supported the implementation of preventive measures.

Effective use of information systems in monitoring COVID-19 developments, mobility, and contact improved efficiency in the delivery of health services. In addition, disciplined implementation of border protocols in the treatment of COVID-19 cases lowered mortality rates below the world average. Timely capacity enhancements and agile human resource/capacity management practices in the health sector improved the overall health system's ability to respond to emergencies.

A strong, well-developed, and well-organized health care system helped controlling the pandemic. Investments in healthcare capacity in recent years paid off during the pandemic. The COVID-19 treatment and surveillance protocols were designed early, strictly implemented, and improved over time. The rapid procurement and introduction of vaccines, as well as Turkey's numerous efforts to develop vaccines domestically, were among the most important measures taken to suppress the pandemic.

A combination of credit stimulus, targeted direct fiscal measures, loose monetary policy, and other regulatory policies to achieve recovery led to a large increase in economic activity in late 2020. Because of these measures, Turkey's GDP grew by 1.8 percent in 2020 while most other countries around the globe faced large downturns.

The digital social assistance systems implemented in Turkey offered important advantages in addressing social protection needs during the COVID-19 crisis. Turkey was able to handle the entire social welfare process electronically. The system was used to assess social assistance applications. The socio-economic status of individuals applying for social assistance was examined using the IT infrastructure of the relevant institutions as a result of this integration.

What Could be Done Differently

The balance between health and educational outcomes should be more carefully considered. In Turkey, as in almost every country in the world, schools were among the first institutions to close during the pandemic. What distinguishes Turkey from other countries is the very high number of school closure days (Section 5.1.2) and the excessively frequent opening and closing of schools (Appendix I). The reason for this was the public's rightful fear that schools would become incubators for the virus, causing children to become ill first and then other family

members. There is no doubt that children are the most important part of a society in terms of its future and their health must be protected. However, learning losses have become large in the last 18 months and have the potential to undermine the lifetime earnings of today's children and exacerbate existing inequalities. In addition, prolonged absence from school has several negative impacts on children's psycho-social development and risks more dropouts becoming child brides or child labor.

Although the current distance education infrastructure helped K-12 students during the pandemic, it proved to be an inefficient method for delivering distance education. Hundreds of thousands of students in MoNE-affiliated schools received instruction through EBA, which was quickly adapted to the conditions of the pandemic and became the primary platform through which online instruction was offered to public and private schools. However, access to the platform was uneven, especially for public-school students, reflecting differences in socio-economic backgrounds. Risk factors that affected access and efficiency included ownership of only one TV set, multiple school-age children in a family, crowded and noisy living spaces, and one-sided instruction. Private-school students had the advantage of having access to other media of online instruction and were not as impaired as public-school students.

During a pandemic, avoiding sudden changes in the disclosure of health data improve health outcomes by increasing the likelihood that the general public will comply with restrictions. Since the first days of the pandemic, the statistics of COVID-19 were announced every evening. On July 29, 2020, reporting of daily and total case counts was stopped and reporting of daily and total "patient" counts was started. "Patients" were defined as individuals who tested positive and had moderate to severe symptoms. This phenomenon in the definition of "patients" was explained as follows, "At the beginning of the pandemic, only people with symptoms were tested due to the limited availability of test kits. As the number of test kits and people tested without symptoms increased, only the test results of symptomatic cases were reported so as not to disrupt the initial data consistency."¹⁷ This move, which was taken for statistical consistency reasons, has resulted in adopting a more relaxed attitude toward compliance with social distancing rules and the use of masks due to lower "patient" numbers.

Daily disclosure of data stratified by provincial level and age groups helps control the environment of uncertainty. Daily numbers at the regional level and by age group have never been regularly and openly shared with the public in Turkey. Had this been the case, it could have (i) strengthened public opinion in favor of a more decentralized pandemic policy; (ii) improved compliance with pandemic-related rules and regulations; (iii) alleviated family concerns about the spread of the disease among children so that schools did not have to be closed for so long.

¹⁷ Translated from the notes to the Turquoise Table published daily at <https://covid19.saglik.gov.tr/>.

CURRENT BOTTLENECKS

The reappearance of COVID-19 and risks to progress on vaccine uptake could put the brakes on growth. While the vaccination program launched in Turkey in January has made good progress, there is a wide range of uncertainty about when the majority of the population could be fully vaccinated due to risks to vaccine hesitancy and efficiency of existing vaccines against new variants of the disease.

Increased internal imbalances and external volatility could disrupt growth. The relative strength of Turkey's current fiscal position may not be sustainable, given the possibility that the large credit stimulus used during the pandemic could worsen the budget in the future if and when contingent liabilities are realized. Increasing inflationary pressures in advanced economies, especially in the U.S., and intensifying expectations about an end to expansionary monetary policy in advanced economies could withdraw global liquidity away from Turkey.

Rising poverty can affect the well-being of millions of people. Coupled with job losses that affect the underprivileged groups more, the share of people in poverty has increased from 10.2 percent in 2019 to 12.2 percent in 2020 and represents a mounting challenge.

Turkey hosts about 4 million refugees of various nationalities - 3.65 million of whom are Syrian refugees. Currently, owing to the political crisis in Afghanistan, there exists the mass migration risk from that region as well. Prior to the pandemic, Turkey achieved great success in integrating Syrian refugees. In particular, refugee children were largely integrated into the Turkish education system, and the enrollment rate of refugee children was as high as 99 percent at the primary level. However, the COVID-19 pandemic has significantly disrupted integration efforts.

The frequency and severity of natural disasters due to extreme weather events related to climate change have increased in Turkey in recent years, resulting in a high humanitarian toll and economic costs. Natural disasters could derail the COVID-19 recovery, create new and unforeseen hardships for society, and exacerbate existing inequalities.

OPTIMAL POLICY MIX

Safeguarding Recovery

No one is safe until everyone is safe. Global vaccine deployment is at the forefront of ensuring recovery. The highest urgency is to guarantee swift global access to vaccines and a significant acceleration of the timeline (Çakmaklı et al., 2021). The global actors must significantly increase their efforts to vaccinate sufficient numbers of people to achieve global herd immunity. This would save lives, prevent the emergence of new variants, and contribute trillions to global economic recovery.

Timely, targeted and temporary fiscal support will continue to be vital to support recovery. With no room for monetary easing, Turkey should continue to sustain open and adaptable fiscal

policies to manage the uncertain recovery ahead to prevent substantial social and economic costs. Protecting vulnerable households and alleviating employment losses are of paramount importance.

Fiscal consolidation should be measured to contain the adversities caused by the pandemic. Despite some loss in 2020, Turkey is still endowed with fiscal space to provide economic support. Rash sharp fiscal consolidation in 2021 could harm the vulnerable and interrupt an systematic recovery.

The primary objective of the current monetary policy agenda is to reduce inflationary pressures and must be maintained. Avoiding early and impulsive monetary easing remains crucial to prevent unnecessary volatility in capital markets, tackle dollarization, anchor inflation expectations and reduce pressures on the Lira.

Even the expanded policies to protect disadvantaged workers and vulnerable remain low given the challenges COVID-19 especially for women and youth and should be broadened. Instruments and mechanisms of these measures should keep an eye on the balance between meeting urgent needs and developing long-term strength. While countries respond in different ways, in-kind and cash public assistance is likely to be needed in the medium term, either directly to workers and households or through businesses.

Investing in Future

The recovery efforts towards COVID-19 shock offers Turkey the opportunity to restructure its economy on a more resilient, inclusive, and sustainable growth path. While the global trade landscape is transformed by rapid technological developments and changing consumer preferences, Turkey must adapt to maintain its competitive advantage in world markets. This can be achieved by well-directed support measures and fundamental policy reforms.

In the face of frequent natural disasters due to climate change, actions to promote a green recovery and/or kickstart a green revolution can provide Turkey with a competitive advantage in decarbonization process of global markets. Turkey can use the opportunity to adjust its existing policy structures, particularly those associated with COVID-19, to help households and firms plan for progressive adaptation to low-carbon markets.

5.2 CASE II: Qatar

Qatar has several key characteristics that make it a country particularly vulnerable to risks associated with rapid expansion COVID-19. First, Qatar has the world's third largest gas reserves behind Russia and Iran, accounting for 13.3 percent of the world's proven reserves, and is the world's leading exporter of liquefied natural gas. Global changes in energy demand affects the country disproportionately. Second, it has a distinctive population, with over 90 percent of its residents being economic migrants from the poorer countries of the world. There exist deep fault lines between the incomes of the citizens and the majority of migrants. Third, it serves as a major air transportation hub connecting the region to the rest of the world. The high degree of mobility makes the country vulnerable in terms of containment and ending of the pandemic.

Against this backdrop, this case study aims to (i) document the main trends of the COVID-19 pandemic along with a chronology of key interventions, (ii) assess the impact of COVID-19 on key economic indicators such as economic growth, output and employment, (iii) analyze the impact on poverty and inequality, (iv) discuss key issues in the education and health sectors, and (v) outline current bottlenecks and optimal policy mix.

5.2.1 The Chronicle of the COVID-19 Outbreak

The first known case of COVID-19 in Qatar was officially announced on February 29, 2020. The Qatari government took several containment measures to combat the pandemic: travel restrictions (suspension of all international passenger flights, a 14-day quarantine for all returning Qatari citizens, and suspension of public transportation); suspension of public and private schools (replaced by distance learning) and domestic services; closure of nonessential businesses (except grocery stores and pharmacies); prohibition of all public gatherings and eating in cafes and restaurants; and cancelation of routine medical and dental appointments (Source: IMF COVID-19 Policy Tracker). Detailed information on the chronology of containment and health measures are presented in Annex III.

In early March, Qatar reported a sudden increase in the number of confirmed cases of COVID-19 among migrant workers quarantined in a labor camp near Doha. The Qatari authorities responded by imposing a full lockdown of the camps between Roads 1 and 32 in the industrial area.

There was extensive COVID-19 testing in the industrial area and affected migrant workers who live in the adjacent Labor City were offered free health care. The industrial area was fully opened on May 6, 2020, under strict and specific entry and exit regulations, for employers and employees only, and for goods and materials to enter or leave only with an application to the relevant authorities.

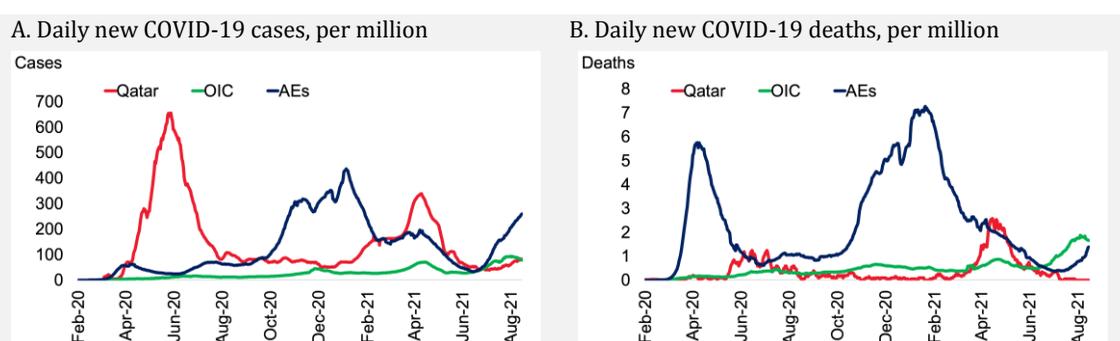
On June 8, 2020, the government announced a 4-phase plan to reopen the economy. On September 1, 2020, the economy moved to Phase 4 with full reopening of the economy, with social distancing and medical arrangements in place.

Following the eruption of the second wave of infections, containment measures were reinstated on October 13, 2020. The government announced the extension of quarantine requirements for all entrants to Qatar until December 31, 2020. A rotating, in-person school attendance system was introduced on November 1, 2020.

Qatar began its vaccination campaign in late December 2020, earlier than most countries of the world. On May 9, 2021, the government announced a 4-phase plan to fully lift COVID-related restrictions. The first phase began on May 28, 2021 and allows for the accumulation of a maximum of five vaccinated individuals. The fourth phase began July 30, 2021, with a minimum of 3 weeks for each phase.

The human cost of COVID-19 has been less severe for Qatar compared to much of the globe. As of August 30, 2021, the total number of COVID-19 cases in Qatar is 232,571 and the total number of deaths is 602, indicating that the infection rate in the population is about 8.2 percent and the mortality rate among those infected is about 0.3 percent. Among the countries in the world, Qatar has the 84th highest number of cases, but it is 128th in terms of total number of deaths. In terms of total number of cases and deaths per 1 million people, Qatar ranks 49th and 123rd, respectively (OWID Database, accessed on August 30, 2021). These figures indicate that the number of deaths in Qatar is extremely low compared to many other parts of the world.

Figure 5.2.1. Evolution of the COVID-19 pandemic in Qatar and elsewhere



Data Source: Our World in Data

Note: AEs = Advanced Economies; OIC = Organization of Islamic Cooperation. Figure shows the seven-day moving average of daily new COVID-19 cases and deaths per million people for 56 OIC countries, 38 AEs and Qatar. Last observation is August 21, 2021.

In terms of trends, Figure 5.2.1.A-B shows the daily number of cases and deaths compared to the averages of advanced economies and OIC. There are two completed waves of infections:

the first wave from March 2020 to August 2020 and the second wave from January 2020 and June 2021.

Comparing the peaks of these two waves, the country has seen that the daily number of cases halved while the daily number of deaths increased by almost three times. On the one hand, daily number of deaths (close to OIC averages in the first wave) was much smaller than advanced economies during both waves. On the other hand, Qatar had one of the highest daily infection rates in the world during the first wave and stayed above AE and OIC averages during the second wave. This may be the result of higher levels of vaccine hesitancy in the first stages of the vaccination program. According to Alabdulla et al. (2021) who conduct a national vaccine hesitancy study in Qatar with 7,859 participants, 20 percent of respondents were hesitant to be vaccinated with COVID-19 vaccines and another 20 were unsure whether they would accept vaccination or not. To put this in perspective, a global survey of 19 countries found a hesitancy rate of 28 percent, with the degree of hesitancy varying from country to country. Alabdulla et al. (2021) also find that the native Qatari population had a significantly higher hesitancy rate, comparable to high-income countries, while economic migrants had a significantly lower hesitancy rate, resulting in an overall hesitancy rate that is slightly lower than global totals. This may be the result of such views of the economic migrant group that vaccination is a means to return to full economic activity.

Vaccination Program

Qatar was one of the first countries to launch a national vaccination program in December 2020, after the Ministry of Public Health (MoPH) approved the vaccines Pfizer-Biontech and Moderna for emergency use.

Table 10. Vaccine Supplies, Qatar

	Secured Vaccines and/or Expected Vaccine Supply (% of population)	Vaccine Needed to Reach 60% of Population (% of population)
Qatar	76	0
Advanced Economies	242	0
OIC	60	12
OIC-Africa	50	13
OIC-Arab	57	12
OIC-Asia	74	10

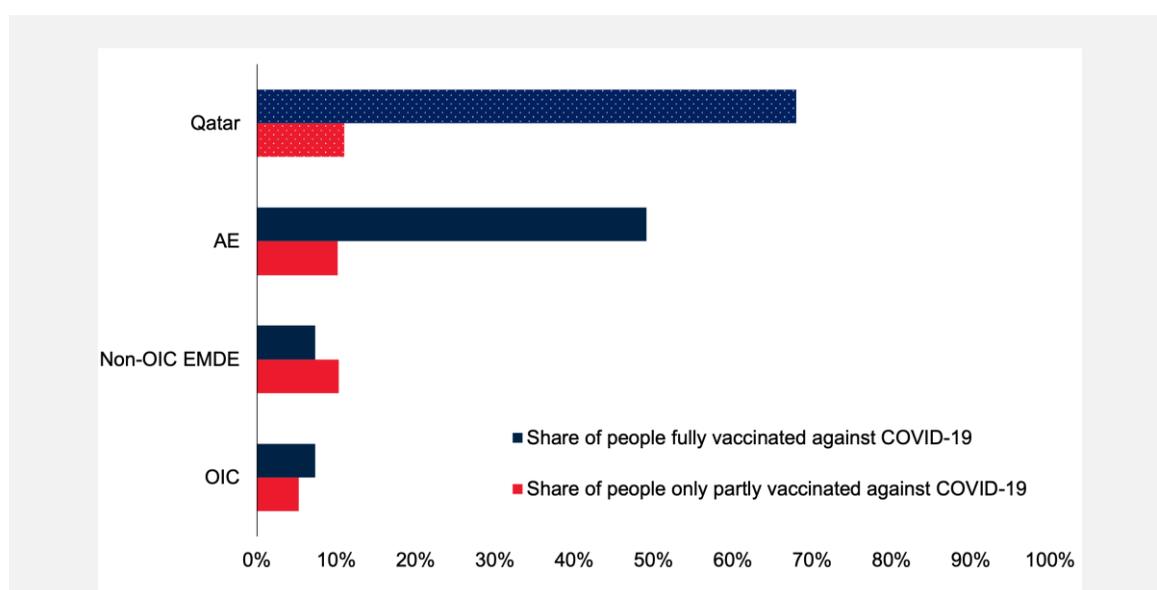
Data Source: The IMF-WHO COVID-19 Vaccine Supply Tracker, update on 13 August 2021

The government has prioritized the vaccination of teachers to ensure the continuation of the educational process and ensure that students continue their usual lessons. MoPH was able to provide COVID-19 vaccination to a large percentage of teachers and administrators in schools. The ministry also prioritized health workers for vaccination as they play an important role in treating patients and ensuring the progress of health care. The vaccine was also given to

frontline staff in many ministries and government institutions. Starting May 17, 2021, the vaccine eligibility was reduced to age 12+. In the race for vaccines, Qatar compares favorably with many OIC countries but lags behind advanced economies, with vaccines secured for 76 percent of its population by mid-August 2021 (Table 10).

By August 30, 2021 a total of 4.3 million doses have been administered, equivalent to about 150 doses per 100 people, with 2 million people receiving their second dose. The pace of Qatar’s immunization program is very fast compared to OIC countries and other emerging and developing economies. As of mid-August 2021, 80 percent of the Qatari population has been vaccinated against COVID-19, of which 68 percent are fully vaccinated as opposed to 12 percent for the former and 7 percent for the latter in the case of OIC countries (Figure 5.2.2). This ranks Qatar 9th in the world in terms of vaccination coverage.

Figure 5.2.2. Vaccination coverage



Data Source: Our World in Data

Note: AEs = Advanced Economies; OIC = Organization of Islamic Cooperation; non-OIC EMDEs = Non-OIC Emerging Market and Developing Economies. Based on 56 OIC countries, 38 AEs and 95 non-OIC EMDEs. Last observation is August 21, 2021.

5.2.2 Impact on Socio-Economic Inequalities

Macroeconomic Landscape during the Pandemic

Qatar differs from other Gulf Cooperation Countries (GCC) in its leading rank of natural gas exports, which was the result of large investments to bring gas aground and export it mainly via liquefaction. Qatar is indeed the third largest gas exporter in the world and the largest exporter of liquefied natural gas (LNG). As a result, with the collapse of crude oil prices at the

start of the pandemic, Qatar found itself squeezed, especially for oil-linked LNG contracts. This in turn played an important role in the weakening of overall GDP growth.

GDP of Qatar shrank 2.6 percent in 2020, largely driven by the non-oil sector, which accounts for more than half of the economy. However, the hydrocarbon sector contracted as well and accounted for more than one-third of the negative outcome. The fiscal deficit in 2020 was estimated at 3.6 percent of GDP, as a result of weak hydrocarbon prices, from which most government revenues are derived, and strong offsetting spending to mitigate the economic impact of COVID-19 among the most affected sectors (travel, tourism, and real estate).

Meanwhile, the lingering diplomatic dispute with four strategic neighbors (Bahrain, Egypt, Saudi Arabia, and UAE) was resolved in early 2021, removing some basic barriers to the movement of people, goods, and services between the countries.

Currently, the growth outlook for 2021 onward is optimistic. IMF projections (2021a) point to GDP growth of 2.6 percent in 2021, driven by domestic and external demand in the wake of the introduction of vaccinations and the end of the diplomatic dispute. Rising energy prices and final preparations for the 2022 World Cup, as well as expected strong tourism revenues, which could be the first sporting event for a mass audience after the end of the diplomatic dispute, are also important factors. The fiscal deficit is anticipated to be tapered to 2.3 percent in 2021 ensuing a recovery in hydrocarbon prices, the potential value added tax (VAT) introduction, and a general reduction in government expenditures as the pandemic winds down.

Inequalities

Inequality consequences of COVID-19 have been among the most frequently debated policy issues across the world recently. These issues are much more relevant and important for OIC countries. For Qatar, there are five main topics that would be relevant in this context: income inequality, labor markets, food insecurity, education and healthcare.

1. Income inequality

Qatar is one of the richest countries in the world with an estimated GDP per capita of \$97,262 in 2021 according to IMF (2021a). Poverty is not an issue for Qatari nationals. While the incidence of poverty is almost nonexistent by international criteria, inequality exists and is perceived. However, there is no publicly available data on inequality, except for 2007, which showed a Gini coefficient of 41.1. Income inequality is on the rise. Recent estimates show a rising share of the top 1 percent best earners from 23 percent of national income before taxes in 2007 to 29 percent in 2015 (up from 18.2percent in 1990)¹⁸.

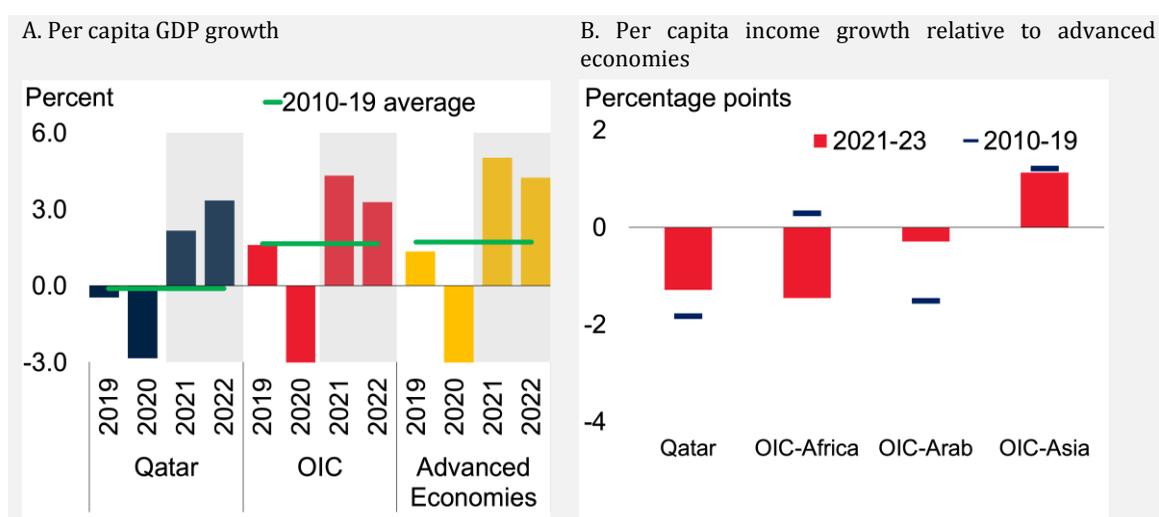
Meanwhile, low-skilled migrant workers receive lower wages compared to local standard. Typically, these migrants pay a subsidized fee for water and electricity, but prices were

¹⁸ See <https://www.bti-project.org/en/reports/country-report-QAT-2020.html#pos14>

elevated in late 2015. Some two million temporary workers live on the margins of society. In the summer of 2016, the Ministry of Development Planning and Statistics (MDPS) stated that about 60 percent of the country's population, or 1.4 million people, reside in what the Qatari government officially refers to as "labor camps." Many of these camps are located outside the city and bereft of basic amenities.

While per capita income growth in Qatar is estimated at 2.2 percent in 2021 (Figure 5.2.3.A), it will be slightly much in OIC countries (4.3 percent) and advanced economies (5 percent). This is due to the very high level of Qatari GDP per capita in the world. However, in 2022, per capita income growth is estimated to increase in Qatar (3.3 percent) relative to these country groups (3.3 for OIC and 4.2 percent for AEs). As a result, per capita income divergence with advanced economies may slow or even reverse in Qatar (Figure 5.2.3.B).

Figure 5.2.3. Per capita income inequalities of Qatar, various comparisons



Data Source: Global Economic Prospects, June 2021

Note: AEs = Advanced Economies; OIC = Organization of Islamic Cooperation. Per capita income growth relative to advanced economies is calculated as the difference in per capita GDP growth between OIC / OIC regions and advanced economies.

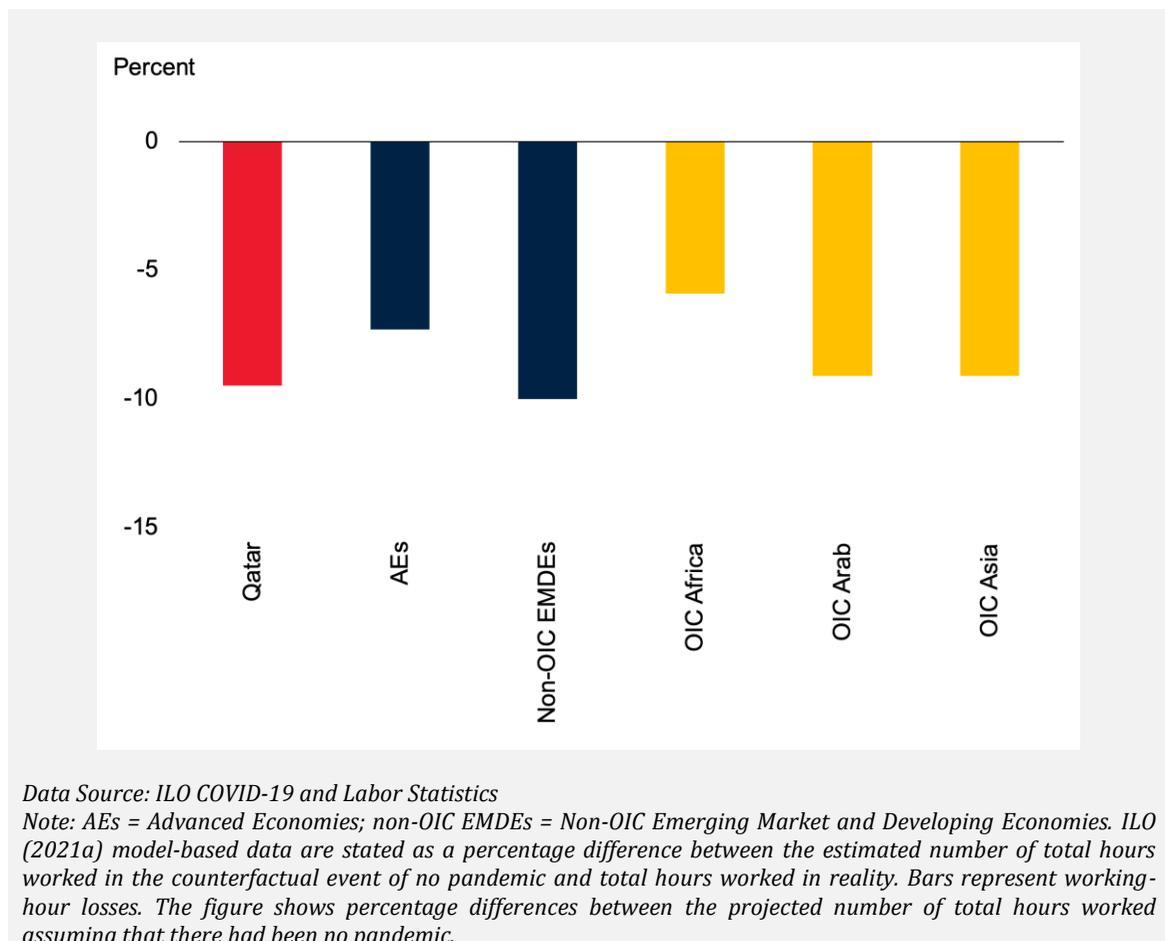
2. Labor Markets

The COVID-19 pandemic is indiscriminate in whom it infects. However, it is abundantly clear that migrant workers in high-risk industries such as construction are particularly defenseless against the health and economic consequences of COVID-19 pandemic. In early March, Qatar reported a sudden increase in the number of confirmed cases of COVID-19 among migrant workers quarantined in a labor camp near Doha. The Qatari authorities responded by imposing a full lockdown of the camps between Roads 1 and 32 in the industrial area.

The outbreak of a contagious disease in these labor camps around the world should not have come as a surprise. Migrant workers in some of the Gulf States, most of whom come from India, Bangladesh, Nepal and Kenya, usually live in crowded dwellings with conditions inferior to ordinary citizens of these states. These conditions prepare a breeding ground for the virus and speed up the spread of COVID-19. Stay-at-home orders and other restrictions on movement and travel, such as the lockdown of Qatar, can unintentionally increase the risk to workers, as well as cause workers to suffer stark economic consequences because they cannot work (ILO, 2020b).

In terms of labor market figures, in 2020, the unemployment rate in Qatar rose to 3.5 percent, which is 35 times higher than its value in 2019, 0.1 percent. In fact, according to ILO (2021a), the pandemic in Qatar led to a 9.5 percent decline in hours worked (Figure 5.2.4).

Figure 5.2.4. Working-hour losses in Qatar

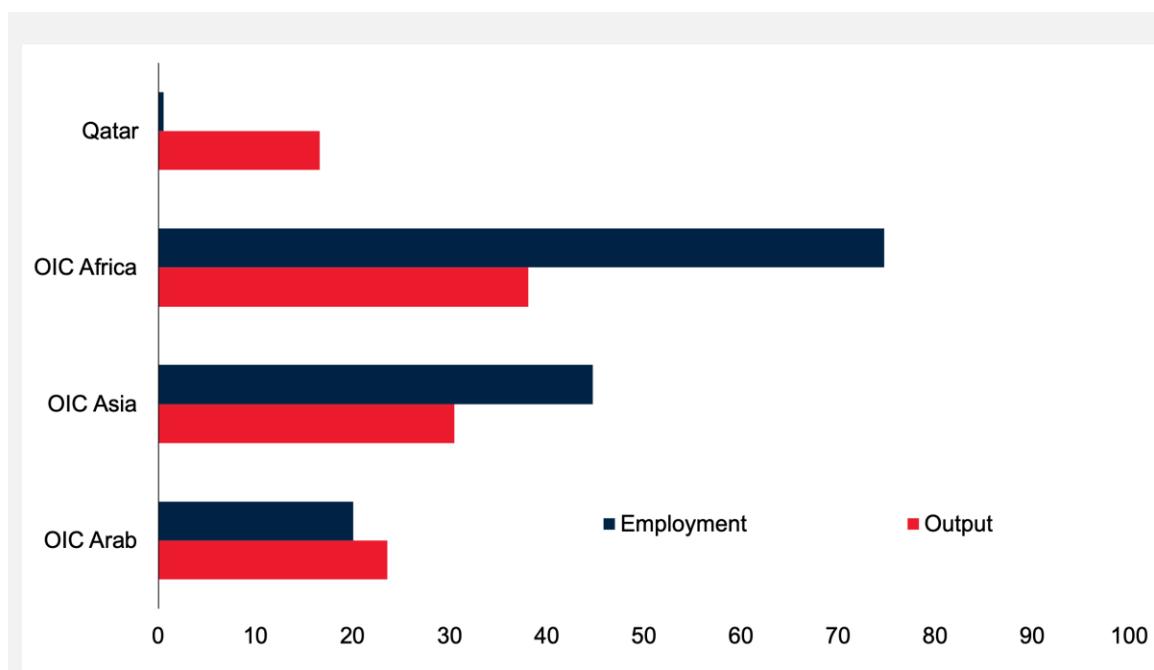


During the pandemic, the Qatari government has taken significant strides to protect its citizens by prohibiting all social gatherings and issuing work-from-home directives affecting all but

"essential" industries. Qatar has later issued an order limiting construction workers' hours of work to a maximum of 6 hours per day and has instructed construction firms to take a number of measures to protect and educate workers about COVID-19. Even though, these firms stressed the steps they took to uphold social distancing, the overcrowded labor camps and construction sites prevented workers to do so effectively. Even sleeping, most are usually housed in dormitories of 8-10 people. This exposed them to a bigger risk of infection, especially in Qatar when the industrial area was cordoned off and contributed to less working hours, reduced incomes and increase in existing inequalities.

Unlike the OIC region as a whole, employment informality is not a problem in Qatar's labor markets, as it stands at 0.5 percent, compared to 20 percent in the Arab OIC region, 45 percent in the Asian OIC region, and 75 percent in the African OIC region (Figure 5.2.5). Differentiating aspect of the Qatari labor market is its overwhelmingly large migrant labor force (90 percent).

Figure 5.2.5. Informality in Qatar compared to OIC regions



Source: World Bank Informality Report, 2021

Note: OIC = Organization of Islamic Cooperation. Red bars show the average share of DGE-based informal output during 2010-18. Blue bars show the simple average share of self-employment during 2010-18.

Another important vulnerability of labor markets in Qatar, as in all Gulf States, is the sponsorship system that bonds a migrant worker's employment and residency status to an employer. This gives the employer significant control over the migrant worker, if there is a contingency for the employee to submit a "No Objection Certificate" (NOC) to change jobs or obtain an exit permit to leave the country. This leaves migrant workers with very little leverage in negotiations with employers and make them exposed to abuse. During the

pandemic, this, like many other labor market vulnerabilities, led to increased health related or economic hardships for workers.

In 2019 and 2020, Qatar has taken groundbreaking steps to dismantle the most constricting elements of the sponsorship system. In the new regime, workers no longer need permission to change jobs or leave the country.

3. Food Insecurity

While the direct impact of the pandemic on primary agricultural goods is expected to be limited because the virus does not affect the natural resources that are used in the production process, it is obvious that COVID-19 has exposed the weakness of global food systems to shocks and crises. COVID-19 has disturbed agro-food business, producers, processors and consumers alike at various levels, causing a looming global food emergency (Ben Hassen et al., 2020).

Despite Qatar's high dependence on imported food products (90 percent of food is imported), COVID-19 had no impact on food supply or prices. Prices stayed stable and no scarcity of commodities, food and consumer goods was experienced. In addition, hypermarkets reported that there were no major obstacles in the food supply chain. In fact, they reported that they had at least three months of precautionary stock, so any significant spike in demand due to stockpiling could be comfortably handled.

Qatar's degree of preparedness in this context, in the past, has originated from its robust fiscal position and thus high purchasing power. Qatar, like the other GCC countries, was less vulnerable to food inflation than other food importers.

Prior to the COVID-19 pandemic, the degree of preparedness for food insecurity was even higher due to the recent blockade. On June 5, 2017, Saudi Arabia, UAE, Bahrain, and Egypt severed diplomatic and trade ties and imposed a naval, land, and air blockade on Qatar. During the blockade, the government has taken numerous measures to counter the impact of the blockade on food security: Diversifying global supply chains, improving port and rail infrastructure, and increasing local production.

Granted, the blockade and the COVID-19 crisis are two unrelated events, but it appears that the policies and strategies Qatar adopted in response to the blockade equipped the country with the necessary reflexes and experience in terms of food insecurity challenges that might have arisen during the COVID-19 pandemic.

In addition, on March 26, 2020, Qatar signed contracts with 14 major companies specializing in the food sector to increase its stocks of strategic commodities, particularly wheat, rice, edible oils, sugar, frozen red meat, long-life milk, and milk powder. Qatar has also set up an electronic system to manage and screen important stocks to activate the collaboration between the public and the private sector.

4. Education

Shortly after the first case was detected in Qatar, education was disrupted as in many other countries. Students in Qatar switched between different forms of instruction, face-to-face, distance, and hybrid, as the pandemic progressed. In fact, schools in Qatar were fully closed¹⁹ for 68 days and partially closed²⁰ for 101 days between March 11, 2020 and February 2, 2021 according to UNESCO's School Closures database.

With some differences in approach, Qatar has made significant efforts to safeguard continuity of education through alternate methods. Initially, Qatar's own Learning Management System (LMS) had difficulties in handling the volume of enrolling users, but collaboration with Microsoft Teams made it possible to manage a maximum capacity of 300,000 concurrent users. Qatar also introduced dedicated TV channels to air classes. Ooredoo and the Qatar Ministry of Education and Higher Education worked together to enable e-learning. The Private Schools Department within the Ministry launched a program to assist disadvantaged private school students by distributing a computer for each household.

Although Qatar acted quickly to address the educational needs of children and youth during the pandemic, the country could not escape all the challenges of online education: (i) Teacher preparation for online education was a major concern. Teachers were mainly trained to interact with students on a face-to-face basis. The transition to online education was a major challenge for teachers. (ii) Access to online education was an issue for disadvantaged children. The availability of the internet and electronic devices in the home environment limited the number of students benefiting from online education, potentially reducing the effectiveness of online education. (iii) A quiet place to study and a dedicated device to follow lessons per child are also among the challenges for families with multiple school-age children. (iv) Student adjustment to self-directed learning was not smooth.

Figure 5.2.6 documents the internet infrastructure in the country. In Qatar, the number of fixed broadband connections per 100 inhabitants is 10 (35 in AEs, 6 in OIC, and 11 in non-OIC EMDEs) and the number of mobile connections per 100 inhabitants is 142 (134 in AEs, 102 in OIC, 106 in non-OIC EMDEs). Qatar is far from the average of advanced economies when it comes to fixed broadband connections but in front of all country groups when it comes to mobile connections.

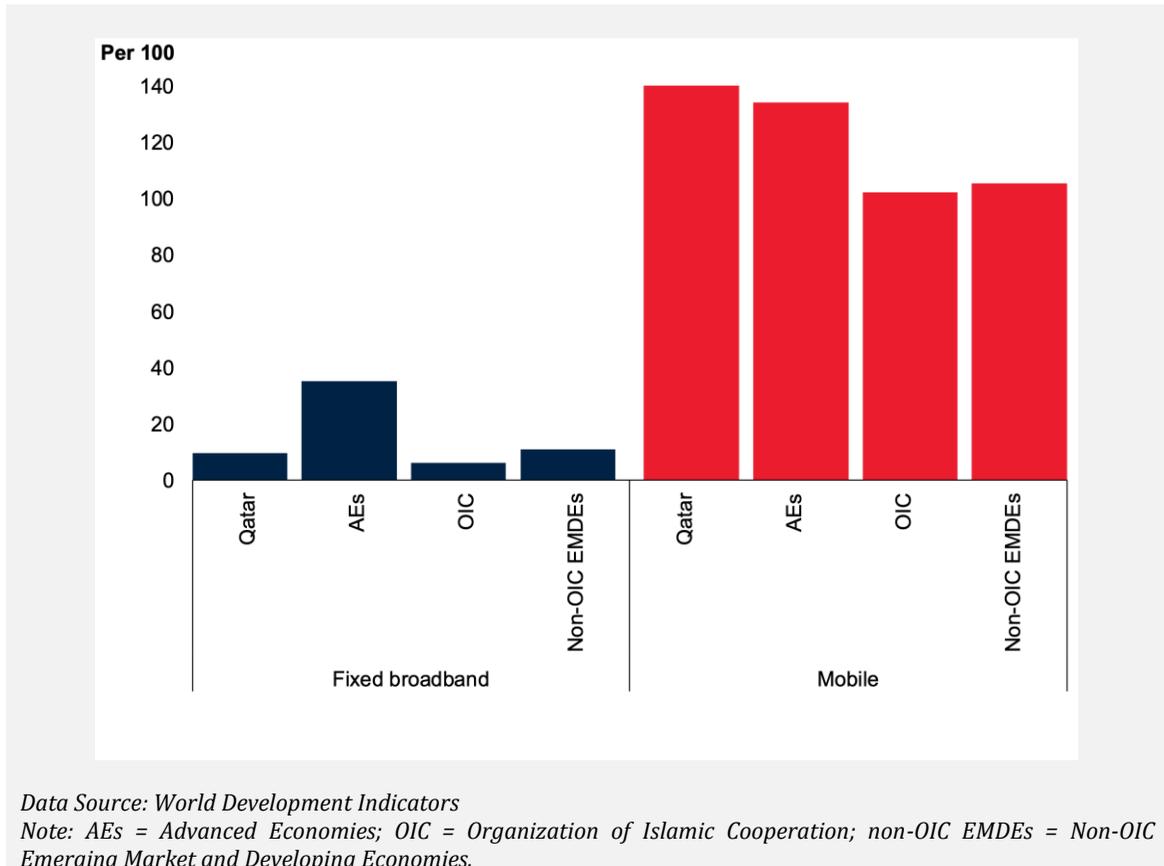
Nonetheless, there are also challenges unique to Qatar: Parallel education systems coexist due to the high share of migrant and expatriate households in the country. Many non-governmental "community schools" are significantly less well-equipped than their public-school counterparts, charge tuition, and lack the similar level of government funding. These

¹⁹ Schools are considered fully closed if the closures affect most or all preschool, primary, lower secondary, and upper secondary students.

²⁰ Partial closures refer to situations in which schools are closed or operating at limited capacity either in some administrative units of a country or for some grade levels.

community schools target migrant children of families from low-income countries. Generally, these students have been largely left to stand for themselves during lockdowns, as most of the vulnerable households are not eligible for government education assistance.

Figure 5.2.6. Internet infrastructure in Qatar, various comparisons



5. Healthcare

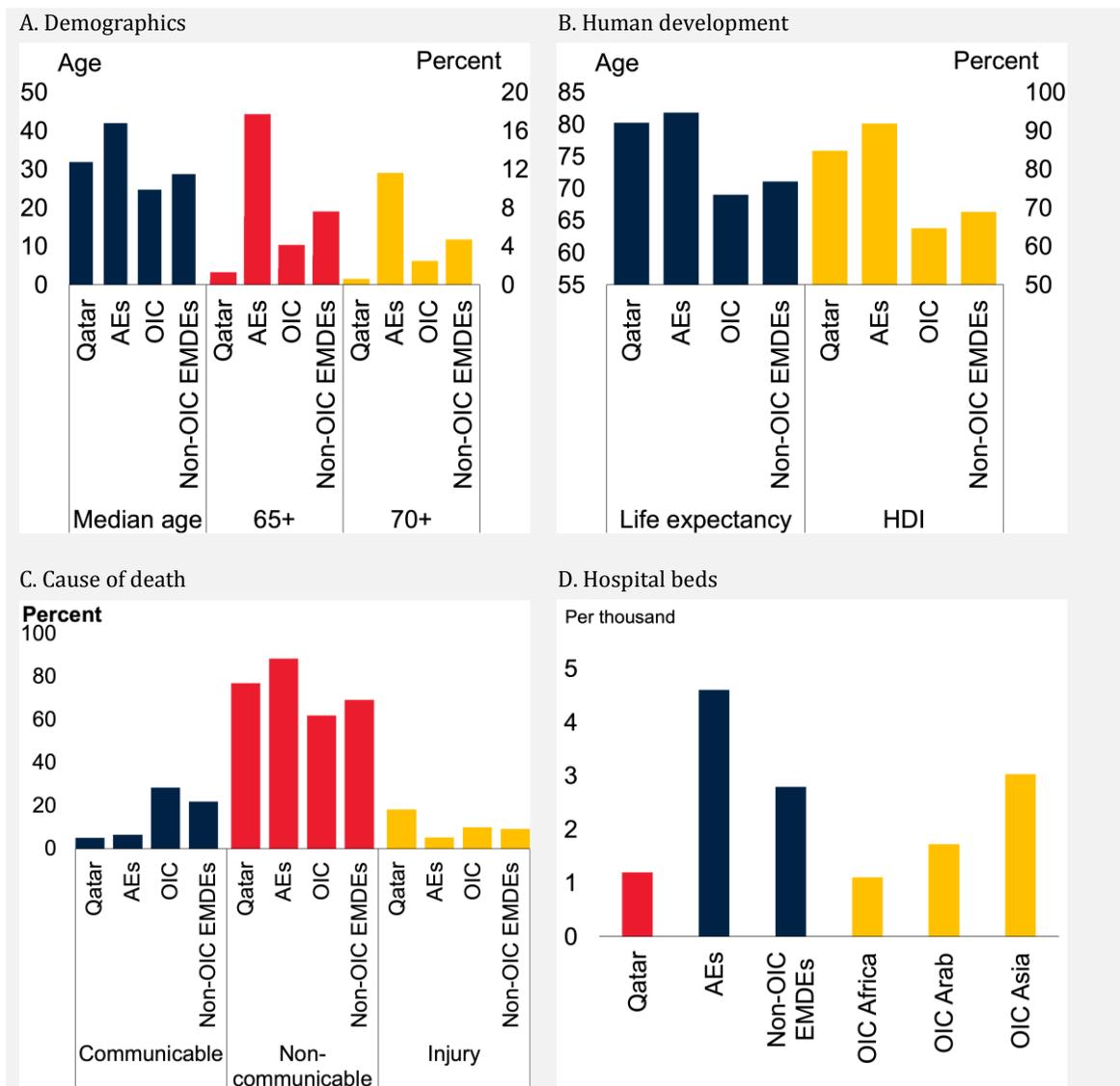
Since the beginning of the COVID-19 crisis, it has become clear that the effectiveness of the health care system is among the most important determinants of how COVID-19 shakes socio-economic conditions in a country. Following the onset of the pandemic, health care systems in major industrialized countries (including the United States, United Kingdom, France, Spain, and Italy) were unable to respond effectively to the rapidly increasing number of COVID-19 cases. The number of hospital beds in many countries was insufficient to accommodate all COVID-19 patients who required intensive care. Other serious shortages included the number of ventilators, basic supplies, and the number of health care workers. During peak periods, many critically ill patients were not admitted to hospitals and were unfortunately left to die.

Figure 5.2.7 shows a selection of metrics used to evaluate the assets and liabilities of the healthcare system in Qatar. The country's age structure is a clear asset in the fight against

COVID-19. The median age in Qatar is 32 years, and the percentage of the population older than 65 and 75 years is 1.3 and 0.6 percent, respectively. These flatter figures are lower than the averages of OIC countries and non-OIC EMDEs (Figure 5.2.7.A).

Another plus point for Qatar is its high human development scores. Life expectancy in Qatar is 80 years and the HDI score is 85 out of 100. Compared to the OIC averages of 69 years of life expectancy and an HDI score of 65, Qatar shows strength in terms of health system quality (Figure 5.2.7.B).

Figure 5.2.7. Assets and liabilities of health system in Qatar



Data Source: Our World in Data, World Development Indicators
 Note: AEs = Advanced Economies; OIC = Organization of Islamic Cooperation; non-OIC EMDEs = Non-OIC Emerging Market and Developing Economies; HDI = Human Development Index

The cause of death is one of the indicators to measure health risks in a country. Figure 5.2.7.C categorizes the cause of death into three groups: (i) by communicable diseases and maternal, prenatal, and nutritional diseases (% of total); (ii) by noncommunicable diseases (% of total); (iii) by injuries (% of total). In all countries, the proportion of (ii) is high in contrast to (i) and (iii). However, within each cause-of-death across country groups, Qatar looks different from OIC countries and non-OIC EMDEs. On the one hand, a low mortality rate related to communicable diseases (5 percent in Qatar compared to 28 percent in OIC countries and 23 percent in non-OIC EMDEs) is an advantage in terms of COVID-19 management because it is an indicator of the strength of the health system in dealing with other infectious diseases. On the other hand, a high mortality rate related to noncommunicable diseases such as cancer, diabetes, or heart disease (70 percent in Qatar compared to 62 percent in OIC countries and 69 percent in non-OIC EMDEs) is a liability because it shows vulnerabilities in terms of comorbidities in the fight against COVID-19. One noteworthy observation from the graph is the size of injury related deaths (18 percent) in Qatar, an indicator of adverse working conditions of migrant workers.

Finally, one of the important, widely available indicators of health system capacity is the number of hospital beds per thousand population in a country. The latest available figures for Qatar, AEs, non-OIC EMDEs, OIC-Africa, OIC-Arabia, and OIC-Asia are 1.2, 2.8, 4.6, 1.1, 1.7, and 3.0, respectively (Figure 5.2.7.D). In this metric, Qatar is on par with the OIC-Africa group and much below still below the OIC-Asia group and advanced economies.

5.2.3 Policy Response

Overview

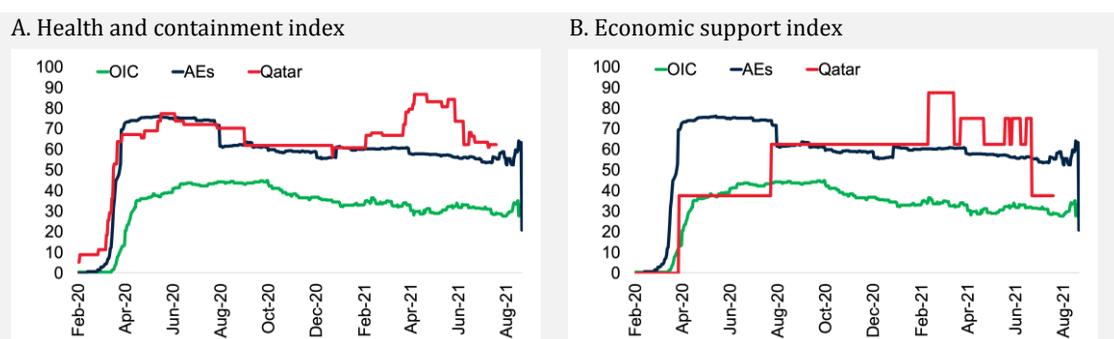
Qatar's policy response to the COVID-19 pandemic was initially rapid and strong, similar to many countries around the world. policy response to the COVID-19 pandemic was initially rapid and strong. To discuss the pandemic-long policy performance, two measures will be discussed here:

Containment and health index combines "lockdown" restrictions and closures with measures such as testing policies and contact tracing, short-term investments in health care, and investments in vaccines. Like many other countries in the world that were first hit in the first wave of infection, Qatar has applied very stringent health and containment measures (Annex III). Except for periods of relaxation between waves, the index remained above the averages of both AEs and OICs from the beginning of the pandemic. The index saw its peak values during the second wave (Figure 5.2.8.A).

Economic support index captures measures such as income support and debt relief. Throughout the pandemic, advanced economies provided larger support packages compared to OIC countries. The timing and magnitude of economic support in Qatar followed a similar pattern than in advanced economies (Figure 5.2.8.B). The onset of economic support activities is expected to correlate strongly with the timing and magnitude of the infection waves.

Accordingly, the economic support magnitude in Qatar reached its highest levels in March 2020, exceeding the averages of AEs and OIC countries, and fell to the level of OIC average in July 2021.

Figure 5.2.8. COVID-19 policy response summary in Qatar



Data Source: Oxford COVID-19 Government Response Tracker

Note: AE = Advanced Economies, OIC = Organization of Islamic Cooperation

Fiscal Measures

According to IMF COVID-19 Policy Tracker, a major stimulus package of 75 billion QAR (\$20.6 billion) for the private sector was announced on March 16, 2020. The direct component of the fiscal support package (above-the-line measures) is estimated at 2.1 billion QAR (0.4 percent of GDP) in 2020. In addition, 10 billion QAR of liquidity was announced to support Qatar Stock Exchange.

On April 5, 2020, the Qatar Development Bank (QDB) launched the 3 billion QAR (\$825 million) National Guarantee Program to offer guarantees to local banks to extend interest-free loans to business affected by COVID-19 for 12 months. The program aimed to provide assistance in the payment of salaries and rents by private sector firms.

Monetary and Macro-Financial Measures

According to IMF COVID-19 Policy Tracker, Qatar Central Bank (QCB) reduced its policy rates twice in line with the U.S. Federal Reserve (in line with the currency peg). The deposit rate was cut by 100 basis points to 1 percent, the lending rate was cut by 175 basis points to 2.5 percent, and the repo rate was cut by 100 basis points to 1 percent.

The QCB introduced an interest-free repo window of 50 billion QAR (9.3 percent of GDP) to provide liquidity to banks for deferring loan installments or granting new bank loans. Qatar Islamic Bank provided interest-free loans to private enterprises. On April 14, 2021, the interest exemption period for the National Guarantee Program was extended for another year - making it two years without interest in addition to two years with interest not exceeding the QCB lending rate +2 percent. Qatar Financial Center reduced the rate for late tax payments from 5

percent to zero by September 1, 2020, and also extended the deadlines for filing taxes and audited financial statements to August 30, 2020. The government directed funding to increase investment in the stock market by 10 billion QAR (1.8 percent of GDP).

Social Assistance Measures²¹

-SUPPORTING ENTERPRISES, JOBS AND INCOME-

The Qatar Chamber of Commerce and Industry introduced an online platform to expediate the re-employment of workers in the local market, including those furloughed due to the economic effect of COVID-19. The platform was developed in close consultation with the Ministry of Administrative Development, Labor and Social Affairs (ADLSA). The platform was aimed at companies looking for new workers to meet their needs, thereby addressing shortages and ensuring stability of businesses.

The Qatari government has taken the following measures to combat the effects of the pandemic: (i) exempting food and medical supplies from customs duties; (ii) setting prices and profits for disinfectants and antiseptics; (iii) providing free treatment for anyone (no Qatar IDs required) who needs to be tested or treated; (iv) providing paid leave for workers in isolation, quarantine, or undergoing treatment (whether or not they are eligible for sick pay).

-PROTECTING WORKERS IN THE WORK PLACE-

At the onset of the pandemic, ADLSA took a number of measures to protect workers. They included: (i) All workers should have access to free testing and medical care, regardless of their status; (ii) All workers in isolation, quarantine, or receiving treatment would continue to receive their wages and allowances, regardless of their eligibility for sick pay; (iii) Termination of employment contracts must be in accordance with the Labor Law and the terms of the contract. In the event of termination, employees have 90 days to find alternative employment; (iv) Employers and employees were encouraged to reach agreements that take into account the survival of the business and the employee's employment over the longer term. Employers and employees may mutually agree that employees will take unpaid leave or use their annual leave. (v) Any residence permits that expired while workers were out of the country were automatically renewed.

Temporary employment regulations were established based on a Cabinet Decision first adopted on March 18, 2020, and then extended: (i) In the private sector, physical presence at the workplace was reduced to 20 percent, while the rest of employers were expected to work from home. Working hours in the public and private sectors were limited to six hours per day. (ii) Excluded from this decision were grocery stores, pharmacies and restaurants (for delivery); the military and security sectors; employees of the Ministry Foreign Affairs and diplomatic missions; the healthcare facilities; the oil and gas firms; employees of public

²¹ Source: <https://www.ilo.org/global/topics/coronavirus/regional-country/country-responses/lang--en/index.htm#QA>

agencies whose type of work requires their attendance; and workers in large public projects. (iii) Temporary home services provided by cleaning and hospitality companies were discontinued. (iv) Busses that transport workers saw their capacity cut in half.

5.2.4 Evaluation of Findings

ESCAPING THE CRISIS

What Worked

Granting equal access to citizens and migrants in the provision of vaccines played an important role in reducing the severity of the pandemic after the first wave of infections, bolstered hopes for equal treatment in other areas, and halted the downward spiral of income that results from the absence of work.

Effective use of information systems in monitoring COVID-19 developments, mobility, and contact improved efficiency in the delivery of health services. In addition, disciplined implementation of border protocols in the treatment of COVID-19 cases lowered mortality rates below the world average.

A strong, well-developed, and well-organized health care system helped controlling the pandemic. The COVID-19 treatment and surveillance protocols were designed early, strictly implemented, and improved over time. The rapid procurement and introduction of vaccines was among the most important measures taken to suppress the pandemic.

Current food security policies and strategies helped avoid vulnerabilities in Qatar, a country dependent on imported food. Qatar has taken advantage of a robust fiscal position, a diversified position in global food supply chains, improved port and rail infrastructure, and increasing local production.

A combination of credit guarantees, targeted direct fiscal measures, loose monetary policy, and other regulatory policies arrested the size of the downturn along with favorable oil prices in the world markets.

What Could be Done Differently

Even though strict implementation of curfews and lockdowns is important to control the pandemic, it needs to be tailored towards the realities of the country. In early March, Qatar reported a sudden increase in the number of confirmed cases of COVID-19 among migrant workers quarantined in a labor camp near Doha. The Qatari authorities quickly responded by imposing a full lockdown of the camps between Roads 1 and 32 in the industrial area. However, the conditions in the labor camps prepared a breeding ground for the virus and speeded up the spread of COVID-19. Stay-at-home orders and other restrictions on movement and travel can unintentionally increase the risk to workers, as well as cause workers to suffer stark economic consequences because they cannot work.

CURRENT BOTTLENECKS

The reappearance of COVID-19 and risks to progress on vaccine uptake could put the brakes on growth. While the vaccination program launched in Qatar in December 2020 has made good progress, there is a wide range of estimates for when the remaining parts of the population could be fully vaccinated due to risks to vaccine hesitancy and efficiency of existing vaccines against new variants of the disease.

Uncertainty about oil and natural gas prices, stemming from the downside risk of resurgent waves of infection triggering other demand shocks in the world, may derail the Qatari recovery.

OPTIMAL POLICY MIX

Safeguarding Recovery

No one is safe until everyone is safe. Global vaccine deployment is at the forefront of ensuring recovery. The highest urgency is to guarantee swift global access to vaccines and a significant acceleration of the timeline. The global actors must significantly increase their efforts to vaccinate sufficient numbers of people to achieve global herd immunity. This would save lives, prevent the emergence of new variants, and contribute trillions to global economic recovery.

Timely, targeted and temporary fiscal support will continue to be vital to support recovery. Qatar should continue to sustain open and adaptable fiscal policies to manage the uncertain recovery ahead to prevent substantial social and economic costs. Protecting vulnerable households and alleviating employment losses are of paramount importance.

Qatar would benefit from improving the transparency and accountability of public entities to reduce fiscal weaknesses. This includes strengthening mechanisms to enhance control over contingent liabilities, rule-based formal reporting requirements for state owned enterprises, collection of relevant data for fiscal hazard analysis, and establishing clear standards (based on credit risk appraisals) for issuing guarantees.

Significant reforms to the sponsorship program over the past year should continue without letup. Workers can now change jobs or leave the country without employer permission. The authorities also set a higher minimum wage for all workers, regardless of nationality.

Improving diplomatic relations should be maintained to reduce geopolitical risks that can worsen the risks of a pandemic. The protracted diplomatic dispute with four key neighbors (Bahrain, Egypt, Saudi Arabia, and UAE) was resolved in early 2021, removing some basic barriers to the movement of people, goods, and services between the countries (including airspace restrictions), but it will take time to restore normal economic relations between the countries.

Investing in Future

The recovery efforts towards COVID-19 shock offers Qatar the opportunity to restructure its economy on a more resilient, inclusive, and sustainable growth path. While the global trade landscape is transformed by rapid technological developments and changing consumer preferences, Qatar must adapt to maintain its competitive advantage in world markets. This can be achieved by well-directed support measures and fundamental policy reforms.

Qatar is forecast to grow strongly among the GCC states, with strong demand for LNG in the South and East Asia underpinning its medium-term prospects. For Qatar, growth will be fueled by construction of the colossal North Field Project, the first phase of which will increase the country's liquid natural gas production capacity to 110 million tons from 77 million tons per year by 2025, at a cost of \$28.8 billion. The second phase will increase capacity by another 16 million tons per year by 2027, at a cost of \$11.2 billion.

For Qatar as a country rich in hydrocarbon resources, economic diversification is a vital structural reform for development and long-run prosperity. Diversification provides hedging against the time when demand for the resource or supply of the resource begins to deteriorate. Diversification lets resource-rich countries better deal with volatility in commodity prices. Third, considering then decidedly specialized and capital-intensive nature of resource extracting, diversification creates new employment opportunities.

5.3 CASE III: Cameroon

Cameroon has some key characteristics that make it a country particularly vulnerable to risks associated with rapid expansion of COVID-19. First, Cameroon, often referred to as "Africa in miniature" with its diverse cultures, is the prominent oil exporting economy in the Central African Economic and Monetary Community (CEMAC) and the driving force in growth in this subregion. As a result, economic setbacks due to the COVID-19 disruptions in Cameroon have the potential to easily spread to neighboring countries. Second, Cameroon is one of the top countries in terms of humanitarian risk in the world. With 2 million people in extreme need and another 2.4 million in stress or severe risk, COVID-19 places a disproportionate burden on the population of country. Third, Cameroon continues to be distressed by three simultaneous, multifaceted humanitarian situations: (i) Displacement due to ongoing violence in the Lake Chad Basin, (ii) in the North-West and South-West regions, along with (iii) about 280,000 refugees from the Central African Republic (CAR) in the Eastern regions. Finally, recurrent flooding is one of the greatest natural disaster risks in Cameroon, especially in coastal areas and in the Far North and Northern regions, exacerbating the effects of the COVID-19 pandemic.

Against this backdrop, this case study aims to (i) document the main trends of the COVID-19 pandemic along with a chronology of key interventions, (ii) assess the impact of COVID-19 on key economic indicators such as economic growth, output and employment, (iii) analyze the impact on poverty and inequality, (iv) discuss key issues in the education and health sectors, and (v) outline current bottlenecks and an optimal policy mix.

5.3.1 The Chronicle of the COVID-19 Outbreak

Cameroon reported the first COVID-19 case on March 6, 2020. After a decline in infection rates from late July to late September 2020, there was a resurgence from late 2020 to late May 2021.

On March 17, 2020 the Cameroonian government announced a package of 13 containment measures, including closing land, air, and sea borders; quarantining travelers returning from a country with a high infection rate; closing schools and universities; banning gatherings of more than 50 people; closing bars, restaurants, and entertainment venues after 6 p.m.; suspending overseas deployments of civil servants and parastatals; canceling school and college games; and banning overloading of cabs and public transportation. Social distancing and sanitation measures include the use of electronic communication and digital tools in meetings of more than 10 people, and adherence to sanitation measures endorsed by WHO (Source: IMF COVID-19 Policy Tracker). Detailed information on the chronology of containment and health measures are presented in Annex IV.

On April 10, the authorities took further measures to halt the increase of COVID-19. These measures took effect on April 13 and included mask-wearing in all public access areas, local manufacture of medications and screening tests, launch of specialized COVID-19 treatment facilities in all regions, strengthening of screenings, and an awareness campaign. In October 2020, the Ministry of Public Health requested COVID-19 screenings for all travelers landing in

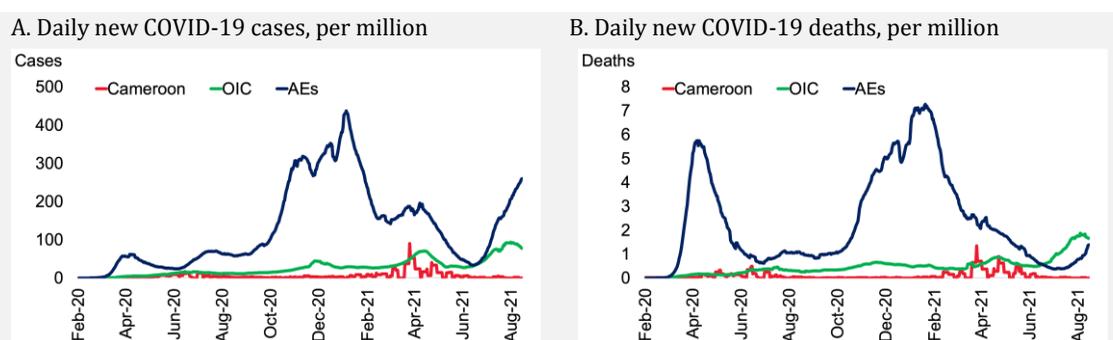
Cameroon, after a systematic scheme that provided fake negative COVID-19 tests to travelers was dismantled.

On April 30, a set of reopening measures were announced by the government. The restriction prohibiting bars, restaurants, etc. from working after 6 p.m. was relaxed, on the conditions of social distancing and mask wearing being practiced in the premises. The limit on the number of passengers in public transportation vehicles (buses and taxi) was also lifted but masks remained compulsory and overloading was banned. On June 1, face-to-face instruction began in primary and secondary schools.

Since July 2020, authorities have adopted a regionalized approach based on Cameroon's health districts and regions, aimed at fortification of case surveillance and reinforcement of the continuity of healthcare systems. Cameroon has also developed a national plan for vaccine preparedness and deployment. The government has avoided imposing new restrictions in response to latest increases in infection rates. Currently, the economy is comparatively open, with public offices, businesses, and schools functioning normally.

The human cost of COVID-19 has been relatively less in Cameroon compared to many other countries of the world. As of August 30, 2021, the total number of COVID-19 cases in Cameroon is 83,425 and the total number of deaths is 1,350, indicating that the infection rate in the population is about 0.3 percent and the mortality rate among those infected is about 1.6 percent. Among the countries in the world, Cameroon has the 111th highest number of cases, but it is 108th in terms of total number of deaths. In terms of total number of cases and deaths per 1 million people, Cameroon ranks 173rd and 164th, respectively (OWID Database, accessed on August 30, 2021). Among other reasons, underreporting of cases, young median age, prior exposure to other coronaviruses, robust immune systems due to recurrent exposure to pathogens, and geographic factors have contributed to alleviating the health impact of COVID-19 in Cameroon.

Figure 5.3.1. Evolution of the COVID-19 pandemic in Cameroon and elsewhere



Data Source: Our World in Data

Note: AEs = Advanced Economies; OIC = Organization of Islamic Cooperation. Figure shows the seven-day moving average of daily new COVID-19 cases and deaths per million people for 56 OIC countries, 38 AEs and Cameroon. Last observation is August 21, 2021.

In terms of trends, Figure 5.3.1.A-B shows the daily number of cases and deaths compared to the averages of advanced economies and OIC. There are two completed waves of infections: the first wave from March 2020 to late July 2020 and the second wave from December 2020 and May 2021. Comparing the peaks of the first and second waves, it is seen that the daily number of cases increased by six times, while the daily number of deaths increased by only two times. In Cameroon, daily numbers of cases and deaths have been much below the advanced economies' average and moved closely with the OIC country averages.

Vaccination Program

Cameroon's deployment of COVID-19 vaccines started on April 13, 2021. "The government encourages the population, especially priority targets (...) to be vaccinated when the time comes," Health Minister wrote in a statement dated April 9²². The campaign was launched after a donation of 200,000 doses of the vaccine from Sinopharm by China.

Table 11. Vaccine Supplies, Cameroon

	Secured Vaccines and/or Expected Vaccine Supply (% of population)	Vaccine Needed to Reach 60% of Population (% of population)
Cameroon	52	8
Advanced Economies	242	0
OIC	60	12
OIC-Africa	50	13
OIC-Arab	57	12
OIC-Asia	74	10

Data Source: The IMF-WHO COVID-19 Vaccine Supply Tracker, update on 13 August 2021

Gamaleya's Sputnik V and Sinopharm's BBIBP-CovV were approved for use in Cameroon²³. In the vaccine race, Cameroon is one of the laggard countries in procuring COVID-19 vaccines. By mid-August 2021, the country has secured vaccine courses that amount to 52 percent of its population (Table 11).

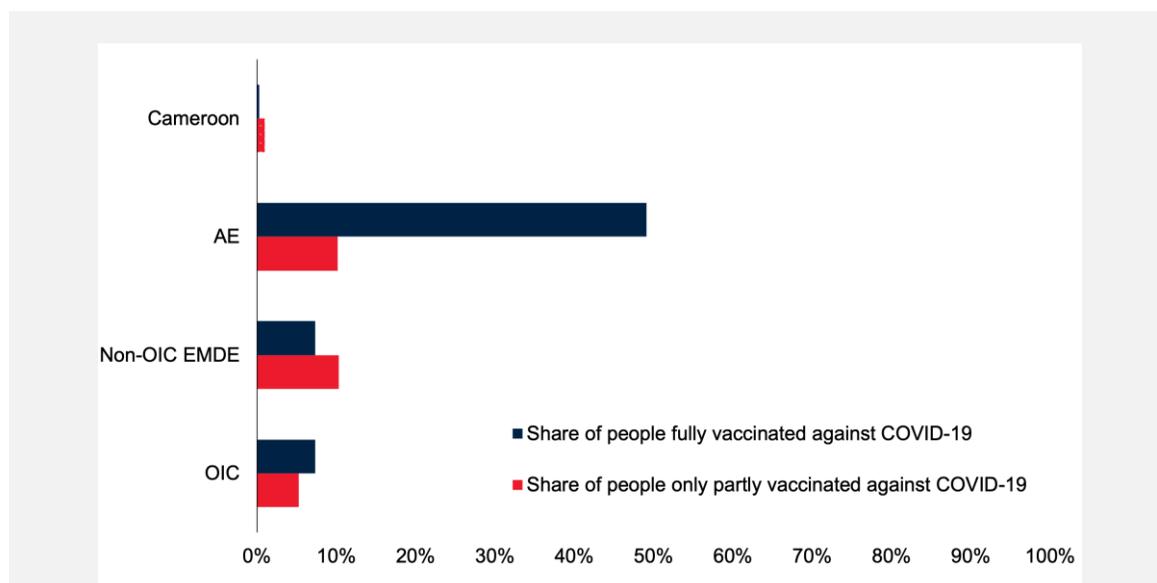
By August 23¹, 2021 a total of 400,000 doses have been administered, equivalent to about 1.5 doses per 100 people, with 300,000 people receiving their second dose. The pace of Cameroon's immunization program is very slow compared to OIC countries and other emerging and developing economies. As of mid-August 2021, only 1 percent of the Cameroonian population has been vaccinated against COVID-19, of which 0.3 percent are fully vaccinated as opposed to 12 percent for the former and 7 percent for the latter in the case of OIC countries (Figure 5.3.2). This ranks Cameroon 149th in the world in terms of vaccination

²² <https://www.africanews.com/2021/04/13/cameroon-starts-covid-vaccination-using-jabs-given-by-china/>

²³ <https://covid19.trackvaccines.org/country/cameroon/>

coverage. This very low coverage makes Cameroon extremely exposed to COVID-19 related risks and endangers its recovery prospects.

Figure 5.3.2. Vaccination coverage



Source: Our World in Data (database)

Note: AEs = Advanced Economies; OIC = Organization of Islamic Cooperation; non-OIC EMDEs = Non-OIC Emerging Market and Developing Economies. Based on 56 OIC countries, 38 AEs and 95 non-OIC EMDEs. Last observation is August 21, 2021.

5.3.2 Impact on Socio-Economic Inequalities

Macroeconomic Landscape during the Pandemic

Although Cameroon has proven resilient to shocks such as the 2014 oil crisis and other acute crises in the regions of Lake Chad Basin, North-West and South-West, its economic growth was hampered during the COVID-19 pandemic by structural factors such as overdependence on oil, high debt, and limited investment in job-creating sectors, particularly agriculture (UNOCHA, 2021).

Real GDP had declined by 2.8 percent in 2020 and growth in 2021 has been modified downwards to 3.4 percent (from 4.5 percent), which reflects the effects of a slower economic recovery in partner countries, obstinate shocks affecting the recovery pathway, and a continuation of need to use COVID-19 related containment measures to curb the spread of the virus (IMF, 2021b).

The spread of COVID-19 affected the Cameroonian economy through a variety of factors: (i) a major slow-down of global trade and value chains, which affected exports of the country's commodities such as crude oil, cocoa, coffee and cotton and imports of mostly intermediate

and final consumption goods; (ii) the reduction in foreign financing flows due to the decline in foreign direct investment, foreign aid, migrant remittances, and tourism revenues; and (iii) socio-economic disruptions caused by the government's actions in response to the virus, particularly the preventive containment measures taken at the beginning of the epidemic (IMF, 2020b).

The Cameroonian government has taken several steps to stop the spread of the disease, increased health and social assistance expenditures, and supported affected businesses and households. A series of tax breaks for businesses were approved in March 2020, which included accelerated VAT refunds and deferral of tax payment dates. The lost revenue from these measures is expected to be 0.5 percent of GDP (IMF, 2020b).

To help Cameroon address its urgent balance of payments and fiscal needs, on October 21, 2020, the IMF's Executive Board approved a disbursement of 110.4 million SDR (about \$156 million and 40 percent of the country's quota) under the Rapid Credit Facility (RCF). This was the second emergency disbursement to Cameroon since the beginning of the pandemic, which resulted in a total IMF emergency support of 276 million SDR (about \$382 million and 100 percent of the country's quota).

Concurrently, using the help of partners in development such as WHO, the government adopted a three-year preparedness and response plan. The \$825 million plan is expected to cost 2 percent of GDP and included five pillars, namely: (i) a health strategy to prevent the spread of the pandemic and provide care to infected individuals; (ii) alleviation of the economic and financial impacts of the pandemic; (iii) procurement of essential supplies; (iv) local capacity development to achieve innovative solutions; and (v) social strength to mitigate the impact of the COVID-19 pandemic on vulnerable individuals and households.

Poverty and Inequality

Poverty and inequality consequences of COVID-19 have been among the most frequently debated policy issues across the world recently. These issues are much more relevant and important for OIC countries. For Cameroon, there are five main topics that would be relevant in this context: conflict, income inequality, labor markets, food insecurity, education and healthcare.

1. Income inequality

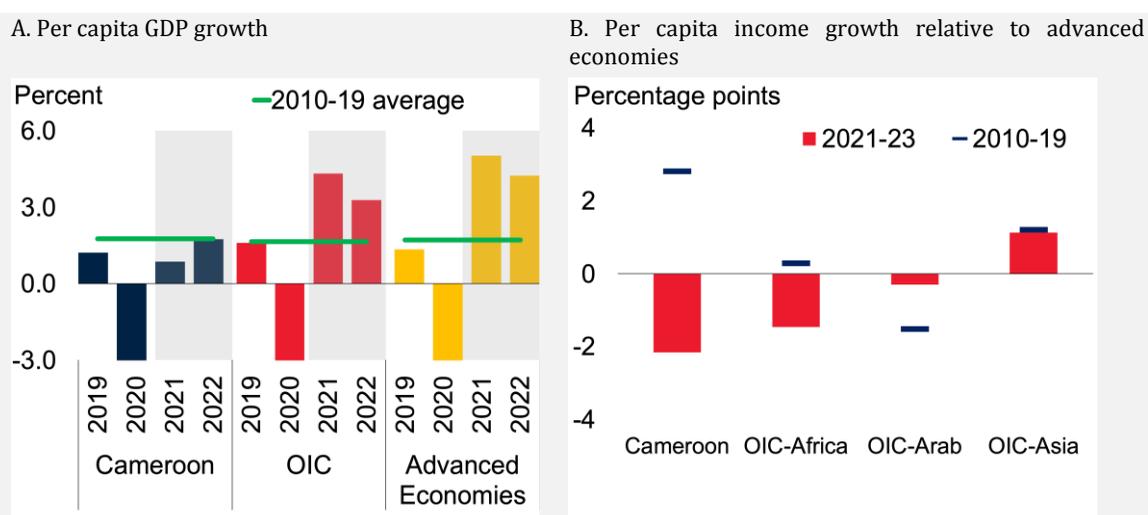
Currently, the Gini coefficient, the leading measure of income inequality, in Cameroon is 47, according to the latest estimates of the World Bank. This makes Cameroon the 26th in the income inequality rank in the world. The country ranks 150th out of 189 on the Human Development Index (UNDP, 2019), with 39 percent of the Cameroon's population living below the poverty line. The country ranks 141st out of 189 countries in terms of the level of gender inequality (UNOCHA, 2021). Altogether, this points to substantial disparities in the three main dimensions of human development: (1) reproductive health, (2) right to education, and (3) access to employment.

Gender relations and the perceptions women and men have of their roles and those of the opposite sex sustain unequal practices within households and society. The effects of structural gender discrimination against women and girls are exacerbated in some of the conflict-stricken regions.

In Far North, especially in the region of Lake Chad Basin, the economic situation is characterized by poverty, absence of natural resources as well as lack of labor and market opportunities, and a drastic decline in agriculture, livestock and tourism activities due to the prevailing insecurity.

In the regions of North-West and South-West, ongoing violence and regular closures have had a major impact on local economies. Violence and insecurity have led to large-scale displacement, affecting agricultural yields in the North-West and the abandonment of large tracts of fruit, palm, and rubber plantations in the South-West. Ethnic and political tensions between farmers and pastoralists continue. In addition, the border with Nigeria, Africa's largest economy, is officially closed, making trade increasingly difficult. Unlike North-West, however, South-West has maintained some level of economic activity.

Figure 5.3.3. Per capita income inequalities of Cameroon, various comparisons



Data Source: Global Economic Prospects, June 2021

Note: AEs = Advanced Economies; OIC = Organization of Islamic Cooperation. Per capita income growth relative to advanced economies is calculated as the difference in per capita GDP growth between OIC / OIC regions and advanced economies.

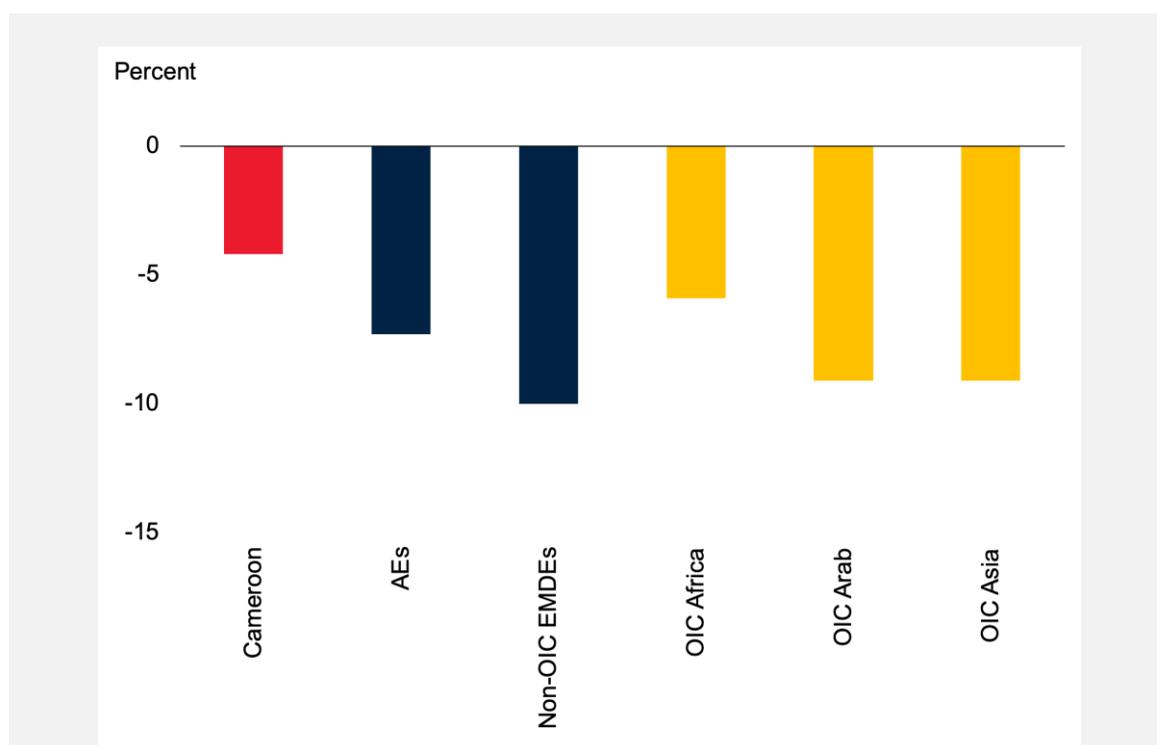
Against this background, the COVID-19 pandemic has had a devastating impact on per capita income growth of Cameroon that will continue for some time. Per capita income growth in Cameroon is estimated at 0.9 percent in 2021 (Figure 5.3.3.A), much lower than OIC countries (4.3 percent) and advanced economies (5 percent). There is a slight improvement in per capita income growth in 2022 (1.7 percent) but still not nearly enough compared to OIC (3.3 percent)

and AEs (4.2 percent). As a result, per capita income catch-up with advanced economies may greatly deteriorate in Cameroon along with OIC countries in Africa and the Arab region (Figure 5.3.3.B).

2. Labor Markets

According to ILO (2020c), the pandemic in Cameroon resulted in a 4.2 percent decline in hours worked (Figure 5.3.4). However, these estimates need to be supplemented by the results of the national survey because of the high rates of informality in the country (discussed below). The results of the national survey on the socio-economic impact of COVID-19, conducted by the Institute of National Statistics (INS) between April and May 2020, show that 65 percent of firms reported that they have reduced the working hours of their staff, 50 percent have laid off certain workers, 45 percent have reduced the wages of employees, 39 percent have delayed the payment of employees' wages, and 34 percent have rotated staff.

Figure 5.3.4. Working-hour losses in Cameroon



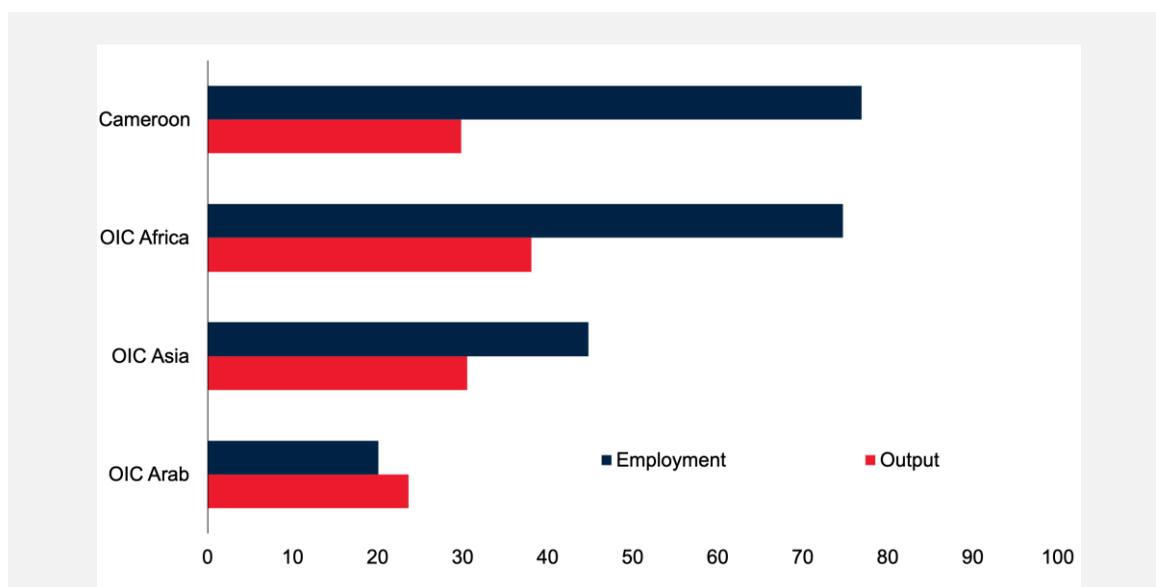
Data Source: ILO COVID-19 and Labor Statistics

Note: AEs = Advanced Economies; non-OIC EMDEs = Non-OIC Emerging Market and Developing Economies. ILO (2021a) model-based data are stated as a percentage difference between the estimated number of total hours worked in the counterfactual event of no pandemic and total hours worked in reality. Bars represent working-hour losses. The figure shows percentage differences between the projected number of total hours worked assuming that there had been no pandemic.

According to INS, the reduction of jobs was observed more in banking and insurance (100 percent), agriculture, livestock and fishing (77 percent), transportation (69 percent), education (68 percent) and business services (68 percent). This situation can be linked to the government's social distancing measures in urban and rural transportation, the closure of schools and colleges, the gathering of people in closed spaces, etc. The dismissal of certain employees has affected all the surveyed banking and insurance companies.

In addition, nearly seven out of ten companies in the healthcare and extractive industries have cut their employees' wages. INS results show that this reduction was also found in agriculture, livestock and fishing (58 percent), hotels and restaurants (55 percent), food and tobacco industry (55 percent) and education (53 percent). Although it affects only 34 percent of the companies surveyed by INS, staff rotation was heavily used in banking and insurance (100 percent), extractive industries (67 percent), and education (53 percent).

Figure 5.3.5. Informality in Cameroon compared to OIC regions



Data Source: World Bank Informality Report, 2021

Note: OIC = Organization of Islamic Cooperation. Red bars show the average share of DGE-based informal output during 2010-18. Blue bars show the simple average share of self-employment during 2010-18.

Informal jobs continue to prevail amongst approximately 77 percent of the Cameroonian workers, particularly in the agricultural sector. Output informality is around 29 percent. These figures are among the highest in the OIC region (Figure 5.3.5). This very high level of informality creates additional vulnerabilities because informal workers are affected the worst during the pandemic since they are, by definition, out of the coverage of government subsidies and job guarantee schemes.

The INS survey also shows that the COVID-19 pandemic led to a significant decline in business activity. About 80 percent of entrepreneurs in the formal sector have experienced a moderate or severe slowdown in their activities. This slowdown also existed in the informal sector and was about 82 percent. In general, eight out of ten business leaders (83 percent) said they have experienced a slowdown in their production. However, this situation was more pronounced in companies in the formal sector than in the informal.

Moreover, the above-mentioned survey on the socio-economic impact of the crisis COVID-19 (household section) shows that the majority (63 percent) of households surveyed experienced a significant deterioration in their standard of living due to COVID-19. Even though the vast majority of these individuals had not lost their jobs at the time of the survey, the analysis indicates that seven out of ten households (74 percent) experienced a significant slowdown in their activity. This slowdown in activity could lead to a loss of jobs in the formal sector in the medium term, causing affected individuals to look for ways to earn subsistence wages to alleviate unemployment, further increasing the extent of the informal sector and underemployment in the economy.

3. Food Insecurity and Malnutrition

Conflict remains a major cause of food insecurity in Cameroon. Disruption of markets as well as food and nutrition services due to violence and the COVID-19 pandemic negatively impacted the quality of diets and nutrition practices. According to the October 2020 Cadre Harmonisé analysis, nearly 2.3 million people are projected to be in Phase 3 and 4 food insecurity from June to August 2021 and will rely on crisis or emergency response strategies to ensure food security at the household level. Displacement represents a loss of food self-sufficiency resources. It mainly affects access to cultivable land, loss of livestock and productive assets of families (UNOCHA, 2021).

According to UNOCHA (2021), food security reports in the North-West and South-West regions throughout 2020 indicated worsening food insecurity, disruption of household livelihoods, and increases in staple food prices (28 to 78 percent for maize, 22 to 33 percent for imported rice, 50 to 140 percent for beans). In the North-West region, insecurity, temporary closure of import points, and limited food supply from imports were the main causes of the price increase. In addition to security concerns in the North-West and South-West regions, COVID 19 restrictions have further reduced trade flows between urban and rural areas, affecting staple food prices. The pandemic was identified nationwide as the main cause of higher prices in the second quarter of 2020.

Pandemic is also expected to adversely affect malnutrition prospects in Cameroon. On average, 34 percent of households nationwide have poor or borderline food consumption scores (UNOCHA, 2021). Malnutrition and crises usually coexist; malnutrition affects and is affected by crises. Regions affected by humanitarian crises in Cameroon are also characterized by relatively high prevalence of acute malnutrition (more than 5 percent in the Far North, North, and East), stunting (more than 37 percent in the Far North and East), and micronutrient

deficiencies (57 percent of children and 40 percent of women of childbearing age with anemia), which in turn lead to increased risk of mortality (UNOCHA, 2021). The nutrition situation in the Far North region remains perilous. Results from the SMART nutrition survey conducted in November 2019 showed a Global Acute Malnutrition (GAM) rate of 5.2 percent with 1.4 percent Severe Acute Malnutrition (SAM). For chronic malnutrition, the Far North had the highest prevalence at 39 percent (UNOCHA, 2021).

4. Education

Shortly after the first case was detected in Cameroon, education was disrupted as in many other countries. In fact, schools in Cameroon were fully closed 24 for 40 days and partially closed²⁵ for 53 days between March 11, 2020 and February 2, 2021 according to UNESCO's School Closures database.

In Cameroon, the electricity grid covers only a few localities and remains poor, with an overall household electrification rate of less than 15 percent. Figure 5.3.6 documents the Internet infrastructure in the country. In Cameroon, the number of fixed broadband connections per 100 inhabitants is only 2 (35 in AEs, 6 in OICs, and 11 in non-OIC EMDEs) and the number of mobile connections per 100 inhabitants is 74 (134 in AEs, 102 in OICs, 106 in non-OIC EMDEs). Cameroon is very far from the average of advanced economies when it comes to fixed broadband connections and behind the averages of all country groups when it comes to mobile connections.

On top of this; violence, coercions against education, displacement, and the inadequate capacity of the school system have left nearly 1.9 million school-age children in Cameroon in need of some form of educational support. The COVID-19 pandemic further deteriorated the already perilous education situation and created serious child protection risks, including for youth (UNOCHA, 2021).

School attendance remains risky for both children and teachers, as evidenced by the string of violent attacks on education since schools reopened in October 2020. Certain areas have also become more vulnerable to kidnapping for ransom, with schoolchildren particularly at risk of abduction. Only 39 percent of primary school teachers and 21 percent of secondary school teachers report to work.

Safety conditions and distances to school are also important barriers to education in the North-West and South-West regions. In addition, since parents' livelihoods were reduced due to the multiple crises, they prioritize boys' education at the expense of girls, who are more likely to be assigned to petty trade to help parents provide for the family. The lack/loss of birth

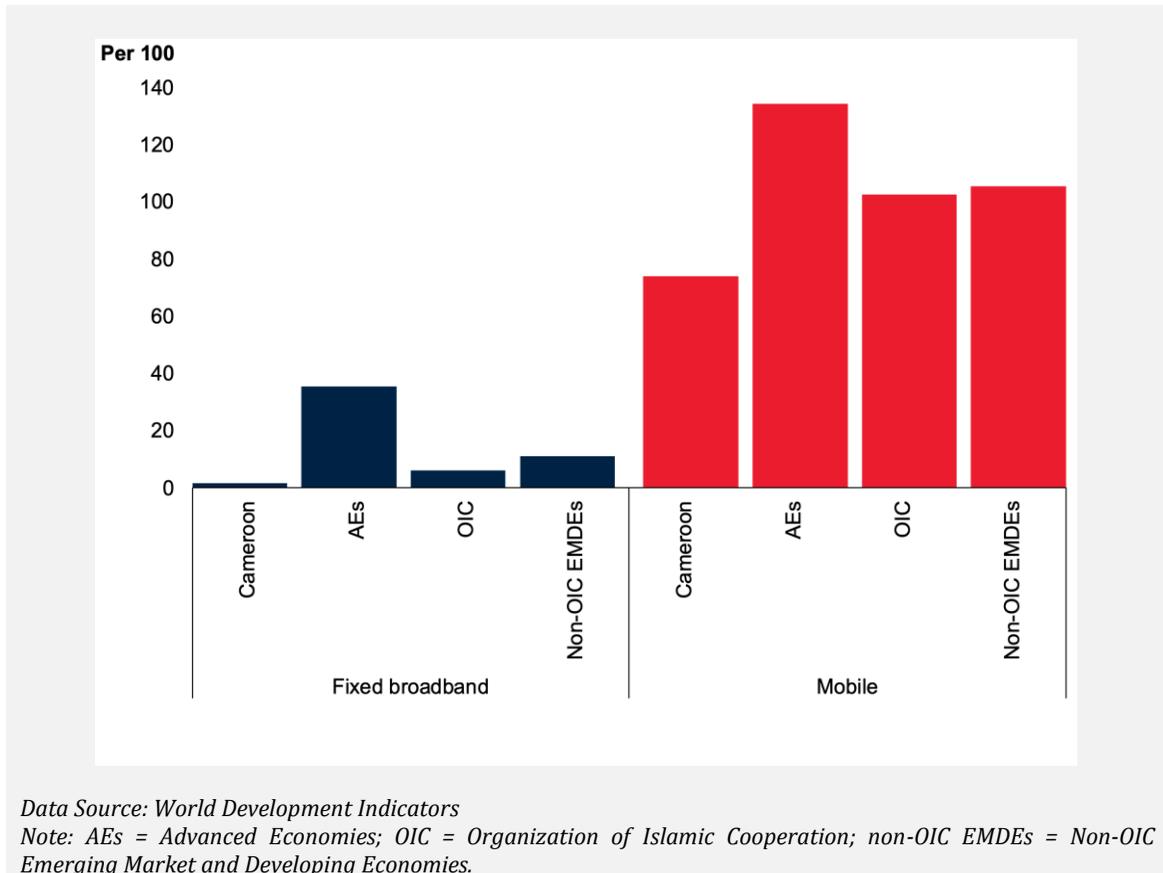
²⁴ Schools are considered fully closed if the closures affect most or all preschool, primary, lower secondary, and upper secondary students.

²⁵ Partial closures refer to situations in which schools are closed or operating at limited capacity either in some administrative units of a country or for some grade levels.

certificates due to displacement and destruction of homes is another critical factor preventing children from attending educational institutions when the security situation allows.

Additionally, the Far North region faces repeated flash flooding that devastates communities, school infrastructure, and materials. Floods in September and October 2020, for example, left more than 18,000 students out of school in Cameroon.

Figure 5.3.6. Internet infrastructure in Cameroon, various comparisons



Against this backdrop, the lockdown measures imposed to prevent the spread of COVID-19 on school campuses placed additional strain on an already fragile educational system. These measures forced school administrators to limit classes to 50 students at a time, introduce attendance in shifts, and designate additional classrooms (including those in the market or community) to accommodate all students. Some schools have no latrines, others have only one for thousands of students and no water source, all of which increasing the likelihood of spread COVID-19.

5. Healthcare

In curbing the spread of COVID-19 in Cameroonian communities, one of the most challenging issues facing the country was the low rate of adherence to these measures by the general population. According to the results of a large-scale survey by Fodjo et al. (2021), adherence to COVID-19 preventive interventions in Cameroon was initially moderate to high. However, adherence began to decline in the final phase of the pandemic, starting at week 40, after new cases of COVID-19 began to steadily decline throughout the national territory. They observed that adherence varied significantly across geographic regions of Cameroon, and older individuals and individuals who had been previously tested for COVID-19 (mostly contacts/exposed individuals) were more likely to adhere to prevention measures.

Although important by themselves, the findings of Fodjo et al. (2021) are only the tip of the iceberg in terms of existing vulnerabilities in the health sector in Cameroon. Since the beginning of the COVID-19 crisis, it has become clear that the effectiveness of the health care system is among the most important determinants of how COVID-19 shakes socio-economic conditions in a country.

Following the onset of the pandemic, health care systems in major industrialized countries (including the United States, United Kingdom, France, Spain, and Italy) were unable to respond effectively to the rapidly increasing number of COVID-19 cases.

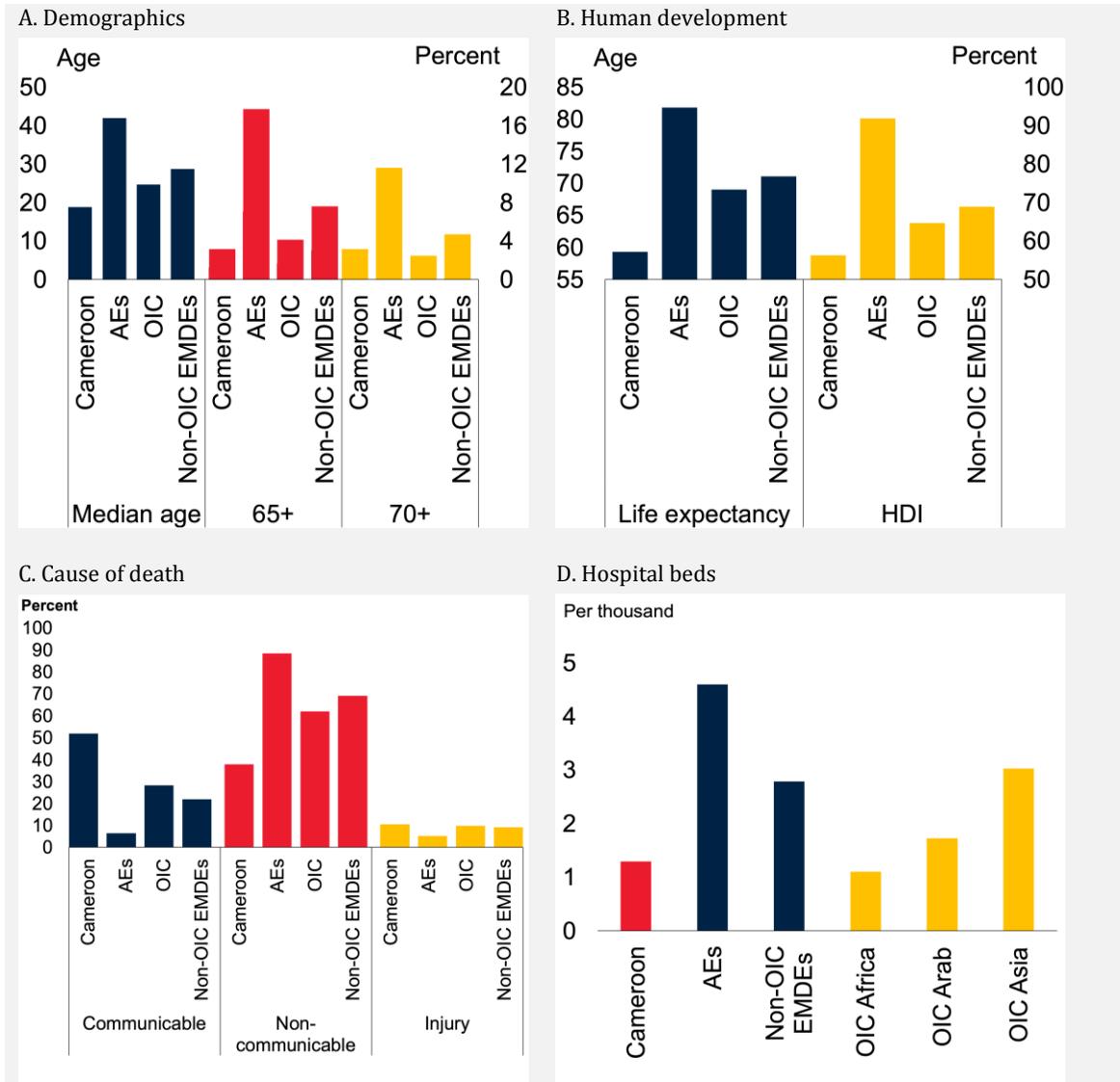
The problems and challenges in Cameroon are much different than advanced economies and most of the OIC countries. The need for safe drinking water remains critical in the whole country, even though the severity of needs varies by region. Waste is not being collected in rural areas and is mostly thrown into streams (reducing water quality), bushes or burnt. Access to safe drinking water sources and hygiene and sanitation services also continues to depend on the level of income and vary starkly between urban and rural areas. 99 per cent of the people belonging to the wealthiest 20 per cent of the population have access to an improved water source compared to 43 per cent of the bottom income quintile (UNOCHA, 2021). Regardless of the region, fetching water remains a specific activity for women, boys and girls, negatively affecting their productivity, and exposing them to protection risks. With regards to basic sanitation, latrines are often insufficient in number and insecure, leaving people to favor open defecation, resulting in poor personal and community hygiene practices.

Figure 5.3.7 shows a selection of metrics used to evaluate the assets and liabilities of the healthcare system in Cameroon. The country's age structure is a clear asset in the fight against COVID-19. The median age in Cameroon is only 19 years, and the percentage of the population older than 65 and 75 years is 3 percent both. These figures are close to the averages of OIC countries and non-OIC EMDEs, but so much below the average of AEs (Figure 5.3.7.A).

As opposed to the demographic advantage, Cameroon performs really poorly in terms of human development scores. Life expectancy in Cameroon is 60 years and the HDI score is 56

out of 100. Compared to the OIC averages of 69 years of life expectancy and an HDI score of 65, Cameroon shows vulnerabilities in terms of health system quality (Figure 5.3.7.B).

Figure 5.3.7. Assets and liabilities of health system in Cameroon



Data Source: Our World in Data, World Development Indicators

Note: AEs = Advanced Economies; OIC = Organization of Islamic Cooperation; non-OIC EMDEs = Non-OIC Emerging Market and Developing Economies; HDI = Human Development Index

In addition, infant mortality in Cameroon is high nationwide (782 deaths per 100,000 live births), as is the pregnancy rate among adolescent girls (UNOCHA, 2021). According to Cameroon's 2018 Demographics and Health Survey, 19 percent of adolescent girls between the ages of 15 and 19 already have at least one child. The percentage of women who have started

reproducing increases rapidly with age, from 4 percent at age 15 to 23 percent at age 17 to 49 percent at age 19.

The cause of death is one of the indicators to measure health risks in a country. Various regions of Cameroon continue to be haunted by vaccine-preventable diseases such as cholera and measles. There were major cholera epidemics in 1991, 1996, 1998, 2004, 2010, and 2011. The lack of health facilities is among contributing factors to the otherwise preventable outbreaks of cholera, polio, and measles.

Figure 5.3.7.C categorizes the cause of death into three groups: (i) by communicable diseases and maternal, prenatal, and nutritional diseases (% of total); (ii) by noncommunicable diseases (% of total); (iii) by injuries (% of total). In all countries, the proportion of (ii) is high in contrast to (i) and (iii). However, within each cause-of-death across country groups, Cameroon looks very different from OIC countries and non-OIC EMDEs. On the one hand, a high mortality rate related to communicable diseases (52 percent in Cameroon compared to 28 percent in OIC countries and 23 percent in non-OIC EMDEs) is a great disadvantage in terms of COVID-19 management because it is an indicator of the strength of the health system in dealing with other infectious diseases. On the other hand, a low mortality rate related to noncommunicable diseases such as cancer, diabetes, or heart illness (38 percent in Cameroon compared to 62 percent in OIC countries and 69 percent in non-OIC EMDEs) is an asset because it shows a lack of comorbidities in the fight against COVID-19.

Finally, one of the important, widely available indicators of health system capacity is the number of hospital beds per thousand population in a country. The number of hospital beds in many countries was insufficient to accommodate all COVID-19 patients who required intensive care. Other serious shortages included the number of ventilators, basic supplies, and the number of health care workers. During peak periods, many critically ill patients were not admitted to hospitals and were unfortunately left to die. The latest available figures for Cameroon, AEs, non-OIC EMDEs, OIC-Africa, OIC-Arabia, and OIC-Asia are 1.3, 2.8, 4.6, 1.1, 1.7, and 3.0, respectively (Figure 5.3.7.D). In this metric, Cameroon is on par with the OIC Arab and Africa groups.

5.3.3 Policy Response

Overview

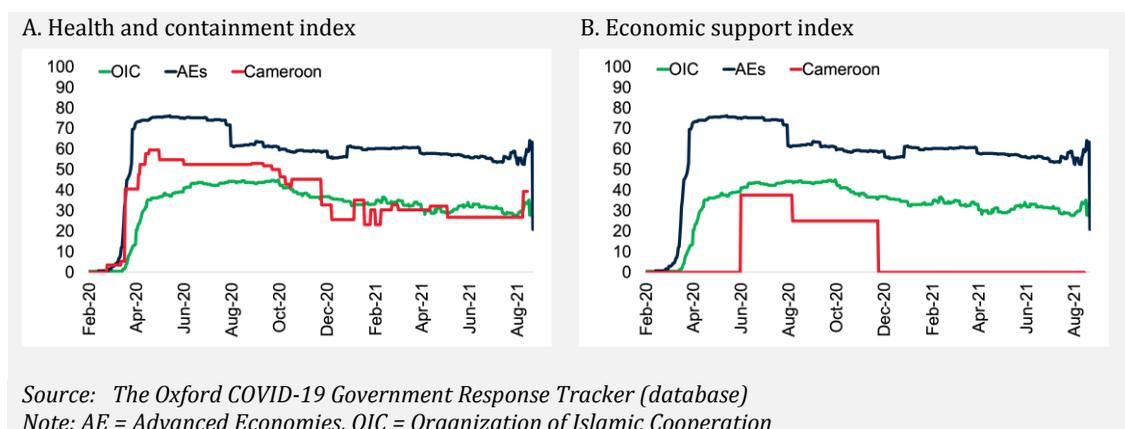
Cameroon's policy response to the COVID-19 pandemic was initially rapid and strong, similar to many countries around the world, but weakened over time. To discuss the pandemic-long policy performance, two measures will be discussed here:

Containment and health index combines "lockdown" restrictions and closures with measures such as testing and contact tracing, short-term investments in health care, and investments in vaccines. Like many other countries in the world that were the first to be affected by the first wave of infection, Cameroon applied some stringent health and containment measures

(Appendix III). However, the index for Cameroon remained well below the average for AEs throughout the pandemic, while it was above the OIC average in the first wave and on par in the second wave. (Figure 5.3.8.A).

The economic support index captures measures such as income support and debt relief. Throughout the pandemic, advanced economies provided larger support packages compared to OIC countries. The timing and magnitude of economic support in Cameroon followed a very different pattern than in advanced economies and OIC countries (Figure 5.3.8.B). The onset of economic support activities is expected to correlate strongly with the timing and magnitude of waves of infection. Accordingly, the level of economic support in Cameroon reached its highest level in June 2020, but was still well below the averages for OIC and AEs throughout the pandemic. There was almost no economic support during the second wave of infections in Cameroon.

Figure 5.3.8. COVID-19 policy response summary in Cameroon



Fiscal Measures

According to IMF COVID-19 Policy Tracker, on April 30, 2020, Cameroon announced fiscal measures to mitigate the negative socio-economic effects of the crisis. A series of measures provide temporary tax relief to businesses directly affected by the crisis through tax moratoriums and payment deferrals, specifically (i) exemptions from the tourism tax in the hotel and restaurant sector for the remainder of fiscal year 2020; (ii) exemption from the withholding tax for taxis and motorcycles and small traders for the second quarter; (iii) the allocation of a special envelope of 25 billion CFAF for the accelerated release of VAT balances awaiting refund; and (iv) the postponement of the deadline for the payment of the property tax for fiscal year 2020 to September 30, 2020.

Other measures aim to mitigate the impact on households, notably (i) an increase in the family allowance from 2, 800 to 4, 500 CFAF; (ii) a 20 percent increase for pensions that did not benefit from the 2016 reform; (iii) the continuation of family allowance payments from May to July to employees of companies that are unable to pay social security contributions or that sent

their employees on technical leave due to the crisis; (iv) the distribution of the payment of social security contributions for the second quarter into three installments and the cancelation of late fees.

Specific measures supported the fight against the pandemic, notably (i) full income tax deductibility of donations and gifts from companies for the fight against COVID-19, (ii) the three-month suspension of payment of parking and berthing fees in the ports of Douala and Kribi for essential goods; and (iii) the establishment of a consultation framework between the Ministry of Finance (MINFI) and the Ministry of Economy, Planning and Regional Development (MINEPAT) aimed at defusing the crisis and promoting a rapid resumption of activities.

A special COVID-19 account dedicated to funding the National Pandemic Response Plan has been established and is governed by a circular issued by the Minister of Finance. The circular specifies the modalities of the account's organization, operation, and monitoring and evaluation mechanisms. For 2020, the Revised Finance Law issued in June 2020 allocated approximately US\$310 million to the COVID-19 special account, 76 percent of which would be financed by funds released through debt service suspension and external budget support. The 2021 Finance Law enacted in December 2020 allocated just under \$185 million to the COVID-19 special account.

Cameroon has adopted a national plan for vaccine preparedness and use, which was prepared under the guidance of the United Nations (UN) country team. The total cost of implementing the plan is estimated at \$138 million in 2021 to cover about 5 million people (20 percent of Cameroon's population).

Monetary Measures

According to IMF COVID-19 Policy Tracker, on March 27, 2020, the Bank of Central African States (BEAC) announced a series of monetary easing measures, including a 25-basis point cut in the policy rate to 3.25 percent, a 100-basis point cut in the Marginal Lending Facility rate to 5 percent, a suspension of absorption operations, an increase in liquidity provision from 240 billion CFA to 500 billion CFA, and an expansion of the range of private instruments accepted as collateral in monetary operations. The BEAC also reduced haircuts on private instruments accepted as collateral in monetary operations until the end of 2020, which it extended by 6 months from January 1, 2021 at its MPC meeting on December 21, 2020. Furthermore, BEAC announced at its extraordinary meeting on July 22, 2020 Monetary Policy Committee (MPC) a new program to purchase government bonds for the next 6 months, which it extended at its MPC meeting on December 21, 2020 for another 6 months starting March 1, 2021. The purchase program is intended as a safety net to ensure full coverage of government securities issuance, while being consistent with the BEAC Charter, which prohibits direct monetary financing. The program was based on revised plans for issuing securities for each country, consistent with the latest revised budget laws and the budget financing frameworks agreed under IMF programs. The BEAC also decided to resume liquidity injections with longer maturities of up to one year.

On March 25, 2020, the Banking Commission of Central African States (COBAC) notified banks that they could use their 2.5 percent capital conservation buffers to absorb pandemic-related losses, but asked banks to adopt restrictive policies on dividend payments. In July 2020, COBAC prohibited all banks from paying dividends for 2020 and 2021. COBAC also established ad hoc reporting to closely monitor financial stability developments after the crisis COVID-19.

5.3.4 Evaluation of Findings

ESCAPING THE CRISIS

What Worked

The government have adopted a regionalized approach based on Cameroon's health districts and regions, aimed at fortification of case surveillance and reinforcement of the continuity of healthcare systems. Cameroon has also developed a national plan for vaccine preparedness and deployment. The government has avoided imposing new restrictions in response to latest increases in infection rates.

A combination of targeted direct fiscal measures, loose monetary policy, and other social and structural policies need to be implemented with speed and efficiency to achieve socio-economic recovery. The Cameroonian government has adopted a number of these measures in the beginning of the pandemic but due to limited state capacity in terms of fiscal and monetary policies it had to resort to foreign aid.

What Could be Done Differently

Strict implementation of curfews and lockdowns based on a data-driven approach, as well as rapid and effective responses to changing conditions, are necessary to disrupt the spread of the virus and maintain supply chains and economic activity. In early March 2020, the first cases were reported only in Center Region of Cameroon, and 10 days later, a few cases were detected in Littoral and West Regions. According to Mbopi-Keou et al. (2020) this was the time to seal off these three regions, which were the most economically active and populous parts of our country, but no movement restrictions were put in place. It is noteworthy that the general state of hospital infrastructure in Cameroon is similar to that of many other African countries, i.e., it is far from the internationally required standards. And although Cameroon has many highly qualified experts in the fields of medicine and social sciences, these experts were not always consulted to meet the challenges of the spreading pandemic (Mbopi-Keou et al., 2020).

To achieve optimal compliance, context-specific public health interventions need to be developed to address different circumstances. Fodjo et al. (2021) show that compliance with COVID-19 preventive measures in Cameroon was initially moderate to high. However, in the final phase of the outbreak, beginning in week 40, after the number of new cases of COVID-19 steadily decreased throughout the country, adherence to the measures began to decline. Raising awareness of the importance of face masks in COVID-19 prevention, combined with the provision of free/low-cost fabric masks designed to optimize user comfort, could significantly

increase mask use among Cameroonians. In addition, educating the public about the importance of cordoning off to prevent transmission of COVID-19 could help increase their compliance with government instructions. Finally, decentralization of national COVID-19 measures would be more useful to allow different regions/municipalities to implement the measures they deem appropriate for their respective populations (Fodjo, et al., 2021).

A strong, well-developed, and well-organized health care system is critical to controlling the pandemic. Investments in healthcare capacity is essential even with limited resources since it is the human lives that are at stake. Within this system, in terms of contagious disease management, the disease treatment and surveillance protocols should be designed early, strictly implemented, and improved over time.

CURRENT BOTTLENECKS

The short-term outlook remains very uncertain. The pandemic may prove more difficult to eradicate than anticipated in Cameroon mostly due to very unequal access to vaccines among all other reasons. This increased risk of a prolonged and more severe COVID-19 outbreak can proliferate human suffering, socio-political tensions, economic and social disruptions. Such a scenario would have a greater impact on tax revenues than currently assumed, leading to higher fiscal and external financing needs and increasing the vulnerability of public debt.

Unequal access to vaccines around the globe acts as a risk multiplier in terms of stopping the pandemic and causes widespread and prolonged disruptions to global economic activity, supply, and demand, as well as lower oil and other commodity prices. Such a scenario would have a greater impact on the economy and tax revenues than currently assumed, leading to higher fiscal and external financing needs and increasing the vulnerability of public debt.

Even though the human toll of the COVID-19 in Cameroon was less severe than many EMDEs and AEs, socio-economic costs of the pandemic have been heavy due to existing inequalities. Unequal access to education, employment and health facilities particularly by women, youth and unskilled workers poses large scale risks.

The ongoing conflict in different regions of the country disrupts education in ways that are not related to the pandemic itself. Since schools reopened in Fall 2020, armed attacks on teachers, students, and educational institutions have increased in the North-West and South-West regions. The attacks on education, particularly the more violent incidents, may be evidence that some non-state armed groups do not respect basic principles of international law and are indicative of the grim environment for civilians and humanitarian workers.

The risk of disastrous floods remains high in Cameroon. In 2021, floods are expected to contribute to the decline in agricultural production. The severe impact of flooding in the Far North region in 2020 has undermined remaining household resilience. The negative impact on agricultural land is expected to increase the risk of food insecurity in 2021 (UNOCHA, 2021). Floods could derail the COVID-19 recovery, create new and unforeseen hardships for society, and exacerbate already large inequalities.

The challenge of reaching the most vulnerable populations in need of government assistance persists because of informality. The increase in family allowances during the COVID-19 pandemic, which only applied to public and formal private workers, mainly benefited the rich given the structure of the current social protection system in Cameroon and will lead to an increase in inequality (ILO, 2020c).

OPTIMAL POLICY MIX

Safeguarding Recovery

No one is safe until everyone is safe. Global vaccine deployment is at the forefront of ensuring recovery. The highest urgency is to guarantee swift global access to vaccines and a significant acceleration of the timeline. The global actors must significantly increase their efforts to vaccinate sufficient numbers of people to achieve global herd immunity. This would save lives, prevent the emergence of new variants, and contribute trillions to global economic recovery.

Given the precarious economic situation of most households in Cameroon, including vulnerable groups such as people living with HIV infection, providing special financial grants to households could promote adherence to confinement measures. Similarly, financial support should be provided to medical personnel who are on the front lines of this struggle and to business owners who are restricted in their activities during confinement. Contact tracing, wearing masks in public places, and self-isolation of individuals who exhibit symptoms are critical. Finally, leveraging scientific developments and allocating more resources to the fight against COVID-19 could lead to greater capacity to diagnose, rapidly isolate, treat, and care for infected individuals.

Even the expanded policies to protect disadvantaged workers and vulnerable remain low given the challenges COVID-19 especially for women and youth. Instruments and mechanisms of these measures should keep an eye on the balance between meeting urgent needs and developing long-term strength. While countries respond in different ways, in-kind and cash public assistance is likely to be needed in the medium term, either directly to workers and households or through businesses.

Timely, targeted and temporary fiscal support will continue to be vital to support recovery. Cameroon should continue to sustain open and adaptable fiscal policies to manage the uncertain recovery ahead to prevent substantial social and economic costs. Protecting vulnerable households and alleviating employment losses are of paramount importance.

The Cameroonian government has been proactive in responding to the pandemic COVID-19. However, it is vital that authorities should closely monitor potential fiscal risks to limit further revenue losses. The government should develop additional contingency plans in the event that downside risks materialize, including consideration of additional spending shifts in areas least impactful to mitigating the pandemic outbreak, such as further deferring non-priority goods and services or capital spending, while protecting spending that benefits those most at risk. The government's strategy to return to the path of fiscal consolidation once the crisis has

subsidized is necessary to ensure debt sustainability and a strong and inclusive recovery in line with Cameroon's medium-term reform agenda.

Further and additional measures should be envisioned by the Cameroonian government to achieve and safeguard recovery including: (i) establishing a platform for regular dialog among the different actors in the labor market to monitor and manage the impact of the pandemic on employment and the labor market; (ii) involving and regularly evaluating the informal sector in the measures implemented. It has been shown that the informal sector is harmed by government decisions; (iii) local businesses could increase their production instead of importing goods, or speed up the process of local processing of goods that are often exported in their raw state; (iv) strengthen the capacity of businesses and households by informing them of the various support measures available and the conditions and procedures for accessing them; and (v) establish an information system on the economic and social trends of the countries with which Cameroon trades.

The commitment to strengthen transparency and good governance increase the chances for a healthy recovery period. It is encouraging that the government has reaffirmed its firm commitment to effective and transparent use of public funds and to ensuring that funds received through foreign assistance are used efficiently to address the pandemic crisis (IMF, 2021c).

Investing in Future

Cameroon and its development partners should seize the opportunity of this pandemic to spotlight investments in social protection for today and tomorrow if they want to rebuild the country better and stronger after COVID-19 and achieve the SDGs. Cameroon's current social protection systems face challenges including inadequate coverage and financing, weak coordination of initiatives, administrative inefficiencies, and insufficient gender mainstreaming. These challenges must be addressed before the next shock comes. The following policy recommendations are intended to help Africa achieve the above goals:

Enough resources should be assigned to social protection measures that tackle crisis-related needs, especially social transfer programs, as they help support the immediate and often basic needs of existing and novel groups of poor and vulnerable people so that they do not remain in poverty. Regulations and programs should incorporate a gender perspective and be tailored to the needs of women and other disadvantaged workers in the informal economy.

Building on the temporary measures taken during the COVID-19 pandemic, investment in social protection systems should be increased to include not only cash and in-kind transfer programs, but also a much broader range of systems, including social insurance and universal benefit programs, such as child support or social pensions. It is important to use a mix of funding sources, primarily through domestic resources such as taxes and social security contributions, to ensure fiscal and financial sustainability and reduce pressure on government budgets.

Universal social protection through nationally outlined policies and programs that protect all people throughout their lives from poverty should be supported to ensure that no one is left



behind. Such programs could include noncontributory systems that guarantee at least a basic level of income security and access to health care for all.

Institutional and international coordination and integration should be promoted in the design of social protection policies and programs. The power of digital technology (such as mobile money platforms) should be harnessed to quickly deliver services in a secure and responsible way that respects individual privacy.

5.4 CASE IV: South Africa

South Africa is a non-OIC developing country and it has several important characteristics that make it particularly vulnerable to risks associated with rapid expansion COVID-19. First, South Africa is Africa's third largest economy after Nigeria and Egypt, and is among the continent's most integrated into global value chains. Disruption of these value chains around the world at the onset of the pandemic increased the exposure of South Africa. Second, although it has a relatively high GDP per capita compared to the rest of the continent, crime, poverty, and inequality remain widespread. Indeed, one in five people in South Africa is in extreme poverty. Third, South Africa has the highest Gini coefficient in the world, implying a very high degree of income inequality in the country. Since high levels of income inequality entail unequal access to education and health, as well as gender inequality in the labor market and other areas of society, the country becomes particularly vulnerable to the effects of COVID-19. Although South Africa has resilient institutions, an effervescent democratic system, and a generally proficient civil service, the apparent rise in corruption related with the recent "state capture" contributed to political uncertainty and deteriorating business confidence.

Against this backdrop, this case study aims to (i) document the main trends of the COVID-19 pandemic along with a chronology of key interventions, (ii) assess the impact of COVID-19 on key economic indicators such as economic growth, output and employment, (iii) analyze the impact on poverty and inequality, (iv) discuss key issues in the education and health sectors, and (v) outline current bottlenecks and an optimal policy mix.

5.4.1 The Chronicle of the COVID-19 Outbreak

The first known case of COVID-19 in South Africa was officially announced on March 5, 2020. The government declared a national state of disaster, which is still in effect, and took a battery of containment measures: social distancing, travel bans on visitors from high-risk countries and quarantine of nationals returning from those countries, screening at ports of entry, school closures, screening visits to homes, and the introduction of mobile technology to track and trace contacts of those infected (Source: IMF COVID-19 Policy Tracker). These restrictions have been tightened or loosened several times from the beginning of the pandemic to the present, depending on the status of the pandemic. For detailed information on the chronology of containment and public health measures, see Appendix IV.

Notable about South Africa in this context is the inability of government and business to collaborate on pandemic management strategies. Naude and Cameron (2020) present a detailed account of events during this period. Accordingly, the government mismanaged the execution of the early lockdowns in the country, and the large businesses responded to the government's mismanagement of the lockdowns by demanding their lifting -not just relaxation but their termination²⁶. On the one hand, the government mishandled the lockdown, as

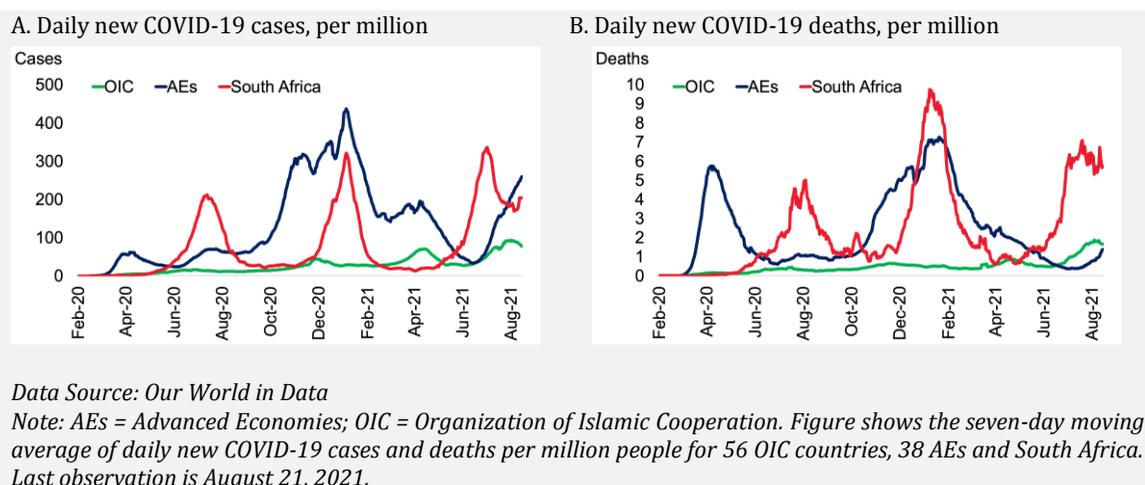
²⁶ See <https://www.endlockdown.co.za>

evidenced by its failure to prevent the pillaging of emergency funds, the unfair distribution of those funds, and some erratic measures that characterized the lockdown. On the other hand, defiance against the government and wanting to abolish all forms of lockdowns, thereby putting millions of disadvantaged workers at the forefront of a global pandemic for the sake of ambiguous profits may have been the wrong reaction on the business front at the wrong time.

The human cost of COVID-19 has been severe for South Africa as it has been across much of the globe. As of August 30, 2021, the total number of COVID-19 cases in South Africa is 2,770,575 and the total number of deaths is 81,830, indicating that the infection rate in the population is about 4.6 percent and the mortality rate among those infected is about 3 percent. Among the countries in the world, South Africa has the 17th highest number of cases, but it is 16th in terms of total number of deaths. In terms of total number of cases and deaths per 1 million people, South Africa ranks 93rd and 42nd, respectively (OWID Database, accessed on August 30, 2021).

In terms of trends, Figure 5.4.1.A-B shows the daily number of cases and deaths compared to the averages of advanced economies and OIC. There are two completed waves of infections: the first wave from May 2020 to September 2020 and the second wave from December 2020 and March 2021. Comparing the peaks of the first and second waves, it is seen that the daily number of cases increased by about 1.5 times, while the daily number of deaths increased two times. South Africa has been experiencing a third wave in the summer of 2021, which has seen its peak around July with daily case numbers slightly higher than the second wave and 30 percent lower daily death numbers.

Figure 5.4.1. Evolution of the COVID-19 pandemic in South Africa and elsewhere



Vaccination Program

According to IMF COVID-19 Policy Tracker, to develop vaccine strategies, a ministerial advisory committee was launched in September 2020 on COVID-19 vaccines. On November 3,

2020, the participation of South Africa in the WHO's COVID-19 Global Vaccine Access Facility was announced. Published on January 3, 2021, South Africa's vaccination strategy aspired to attain herd immunity for at least 67 percent of the population in three phases by the end of 2021, beginning with those most at risk. The country has secured vaccine courses that cover 85 percent of the population by mid-August 2021 (Table 12).

Table 12. Vaccine Supplies, South Africa

	Secured Vaccines and/or Expected Vaccine Supply (% of population)	Vaccine Needed to Reach 60% of Population (% of population)
South Africa	85	0
Advanced Economies	242	0
OIC	60	12
OIC-Africa	50	13
OIC-Arab	57	12
OIC-Asia	74	10

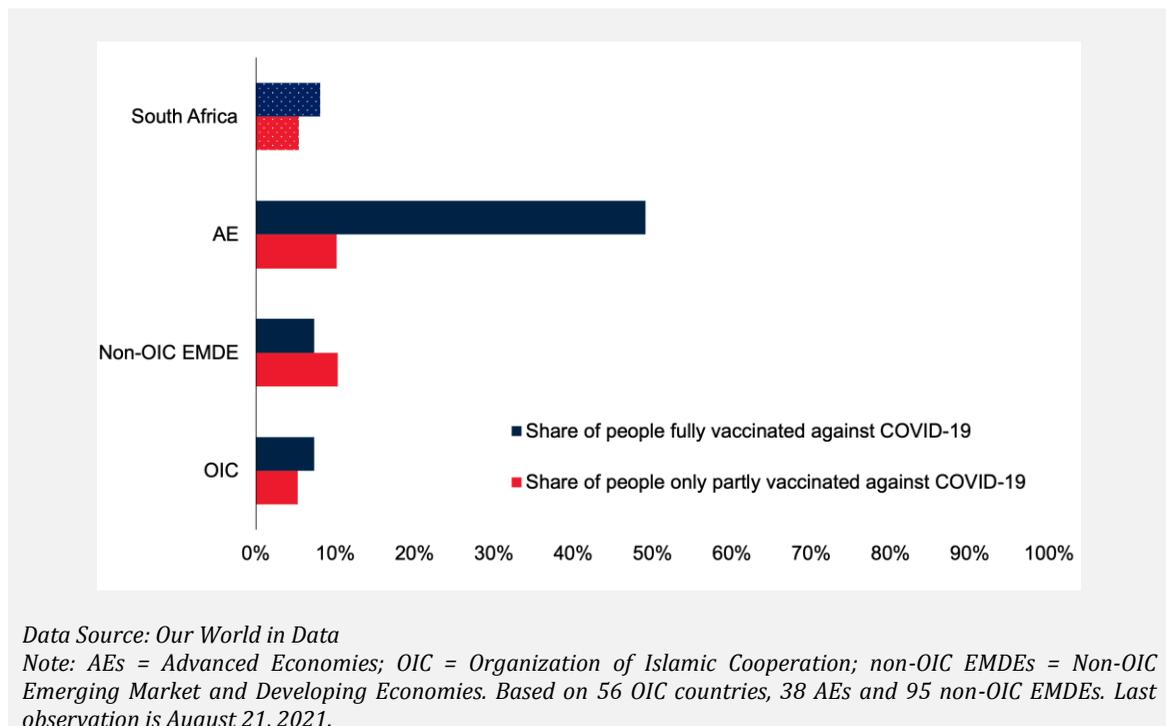
Data Source: The IMF-WHO COVID-19 Vaccine Supply Tracker, update on 13 August 2021

The South African government has made vaccination program an integral part of its efforts against the COVID-19 pandemic and has determined the order of groups to receive the COVID-19 vaccine by assessing the risk of exposure to the disease, the risk of getting the disease with a severe course, the risk of transmission of the disease, and the negative impact of the disease on the functioning of social life. Accordingly,

- Phase 1 of the country's vaccine rollout program began February 17, 2021. In this phase, Johnson & Johnson Sisonke Trial donated 500,000 of its single-dose vaccines to South Africa to accelerate vaccination of frontline health workers. Nearly 500,000 healthcare workers (479,768) have been vaccinated under Sisonke, which ended in mid-May.
 - The country's goal was to vaccinate a total of 1.25 million health workers.
- Phase 2, which began May 17, includes:
 - The vaccination of healthcare workers who were not vaccinated in Phase 1A (they were to be vaccinated under Phase 1B, part of Phase 2) and;
 - Vaccinating 6 million adults over age 60, followed by 4.8 million adults ages 50 to 59 (vaccination for this group began on July 15), and 6.9 million adults ages 40 to 50.
 - This includes people in community settings (such as prisons) and key workers such as teachers (whose vaccinations begin June 23).
- Phase 3 includes vaccination of the remaining adult population of approximately 23.5 million people ages 18 to 40.
 - Enrollment for people ages 35 to 49 began on July 15 and rollout for those enrolled in this age group, on August 1.

By August 30, 2021 a total of 12 million doses have been administered, equivalent to about 20 doses per 100 people, with 5.5 million people receiving their second dose. The pace of South Africa’s immunization program is comparable to OIC countries and other emerging and developing economies. As of mid-August 2021, 13 percent of the South African population has been vaccinated against COVID-19, of which 8 percent are fully vaccinated as opposed to 12 percent for the former and 7 percent for the latter in the case of OIC countries (Figure 5.4.2). This ranks South Africa 108th in the world in terms of vaccination coverage and 45th among EMDEs with populations greater than 10 million.

Figure 5.4.2. Vaccination coverage



5.4.2 Impact on Socio-Economic Inequalities

Macroeconomic Landscape during the Pandemic

South Africa's economic growth has slowed since the 2008 global financial crisis. After growing at an average annual rate of 4 percent between 1999 and 2008, annual GDP growth slowed to 1.7 percent in 2010-19, and with population growth of about 1.5 percent per year, GDP per capita has contracted in real terms since 2015. Real per capita income is now almost back to 2005 levels (World Bank, 2021d).

This muted growth performance is mainly structural. There are many factors that have contributed to the absence of economic dynamism over the past decade. Some are external,

like the end of the commodity super cycle that went on during the first decade of the new millennium. But domestic constraints, such as the low skill configuration of the labor force, the uneven distribution of land and productive assets, along with political uncertainty and worsening state capacity, have also played an important role as well (World Bank, 2018)

Against this backdrop, the economy shrank by 7 percent in 2020, the sharpest decline in 25 years. The reduction in global demand began to affect economic activity as early as the first quarter of 2020. Joint with domestic constraints, such as recurrent power outages, this downfall caused economic activity to contract by 0.4 percent in the January-March period. The ensuing strict lockdown brought domestic production to a standstill, and GDP dropped by 16.6 percent in April-June period.

Meanwhile, the weight of the fiscal measures taken to support the economy during the pandemic, together with the weak recovery of the South Africa, has put pressure on public finances in 2020 and 2021. For the first time ever, public debt approached to 80 percent of GDP, and under the current trajectory, is not expected to stabilize before 2026 (World Bank, 2021d). However, the current global upswing is expected to help South Africa, particularly the strong recovery in China and the United States -two of the country's most important trading partners.

Finally, the crisis exposed the principal challenge of South Africa: the labor market. Even in the best of times, the labor market was characterized by high unemployment and inactivity. Among the 40 million individuals at working-age, only 15 million are employed. The COVID-19 crisis has exacerbated an already difficult situation, with the quadrupling of job losses of low-wage workers (World Bank, 2021d).

Poverty and Inequality

South Africa is one of the most unequal countries in the world and has been for decades. South Africa is characterized not only by ever-increasing levels of inequality, but also by extremely high levels of poverty and unemployment, which together are commonly referred to as the “triple challenge” (Futshane, 2021). In South Africa, the persistence of this challenge has its roots in colonialism and apartheid, the legacies of which persist to this day.

When the democratic transition took place in 1994, the new government inherited a state in which most citizens were deeply entrenched in poverty, there was unequal income distribution (with the black majority excluded from participation in the labor market), and inequality was increasing.

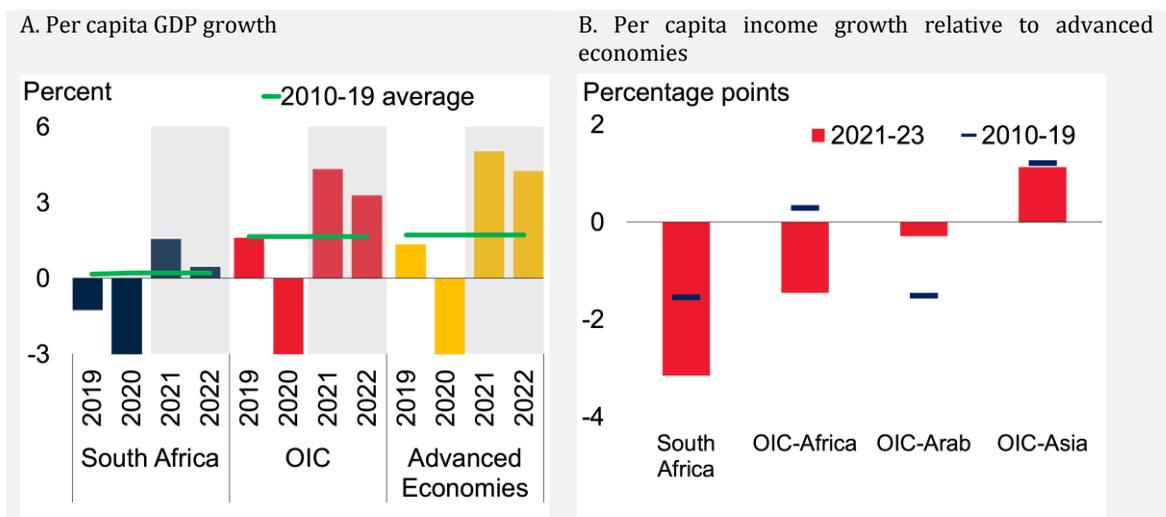
South Africa's development and growth have come a long way since the exclusionary rule of colonialism and apartheid, making considerable progress in addressing the socio-economic injustices of the past and providing improved living conditions, public services, and socio-economic opportunities for previously disadvantaged blacks and non-white South Africans. But despite 27 years of democracy, South Africa still struggles with extreme poverty, inequality, and unemployment.

Poverty and inequality consequences of COVID-19 have been among the most frequently debated policy issues across the world recently. These issues are much more relevant and important for OIC countries. For South Africa, there are four main topics that would be relevant in this context: income inequality, labor markets, education and healthcare.

1. Income inequality

The COVID-19 pandemic has had a devastating impact on per capita income growth that will continue for some time. While per capita income growth in South Africa is estimated at 1.6 percent in 2021 (Figure 5.4.3.A), it is much higher in OIC countries (4.3 percent) and advanced economies (5 percent). Furthermore, in 2022, per capita income growth is estimated to decline more in South Africa (0.4 percent) relative to these country groups (3.3 for OIC and 4.2 percent for AEs). As a result, per capita income catch-up with advanced economies may significantly slow or even reverse in South Africa (Figure 5.4.3.B).

Figure 5.4.3. Per capita income inequalities of South Africa, various comparisons



Data Source: Global Economic Prospects, June 2021

Note: AEs = Advanced Economies; OIC = Organization of Islamic Cooperation. Per capita income growth relative to advanced economies is calculated as the difference in per capita GDP growth between OIC / OIC regions and advanced economies.

Currently, the Gini coefficient, the leading measure of income inequality, in South Africa is 63, according to the latest estimates of the World Bank. This makes South Africa the country with the least equal income distribution in the world.

Pandemic-related job losses widened earnings inequalities, which were already high. Among low-wage workers (i.e., those in the bottom 20 percent of the distribution), employment collapsed by 35 percent between the first and second quarters of 2020 (World Bank, 2021d).

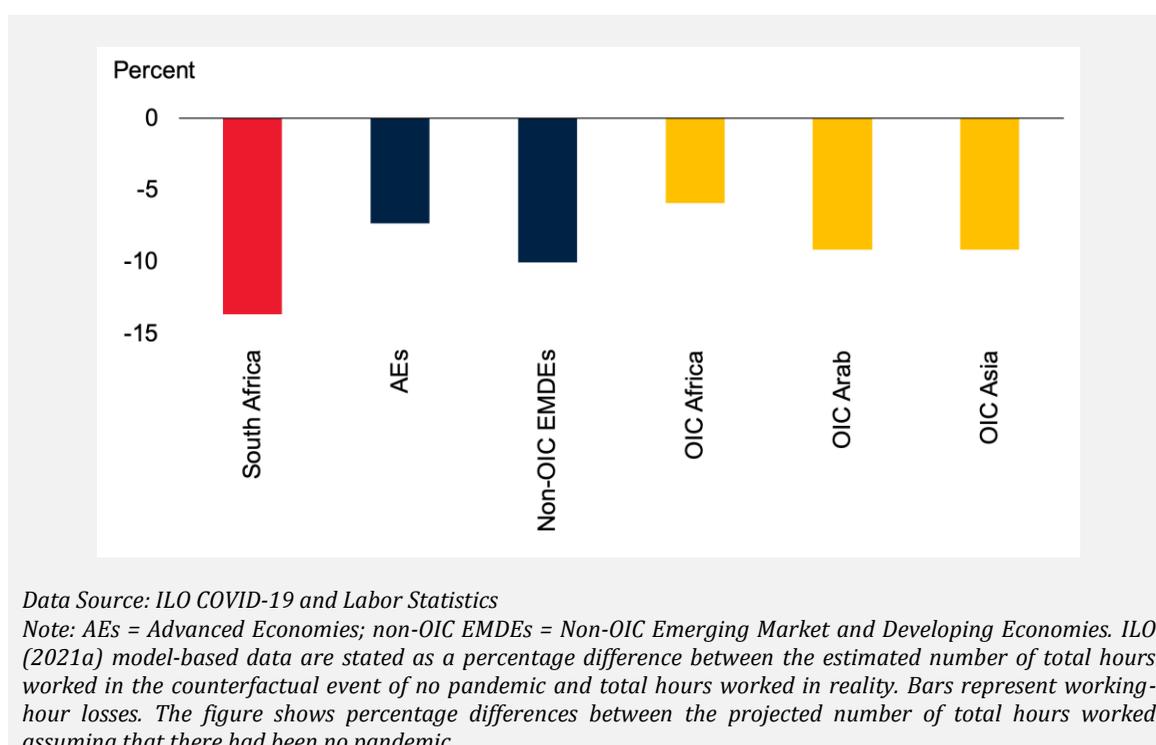
In sharp contrast, it fell by less than 10 percent for those in the top 20 percent of the wage distribution.

Employment losses also varied by demographic subgroups. Young people, people with little education, and black workers and workers of color suffered greater losses. Gender inequality was worrisome as well: “it would take the pay of 461 black women from the bottom 10 percent of earners to make as much as the average (white, male) CEO takes home in a year. It just takes 23 hours for the average CEO to earn what the average worker earns in year. Moreover, according to the World Bank, the richest 20 percent of people in South Africa control almost 70 percent of the resources.” (Oxfam, 2021, p. 12.)

2. Labor Markets

A reduction in hours-worked played an important part in absorbing the shock of the pandemic and preventing further job losses in South Africa. According to ILO (2021a), the pandemic in South Africa resulted in a 13.6 percent decline in hours worked (Figure 5.4.4).

Figure 5.4.4. Working-hour losses in South Africa

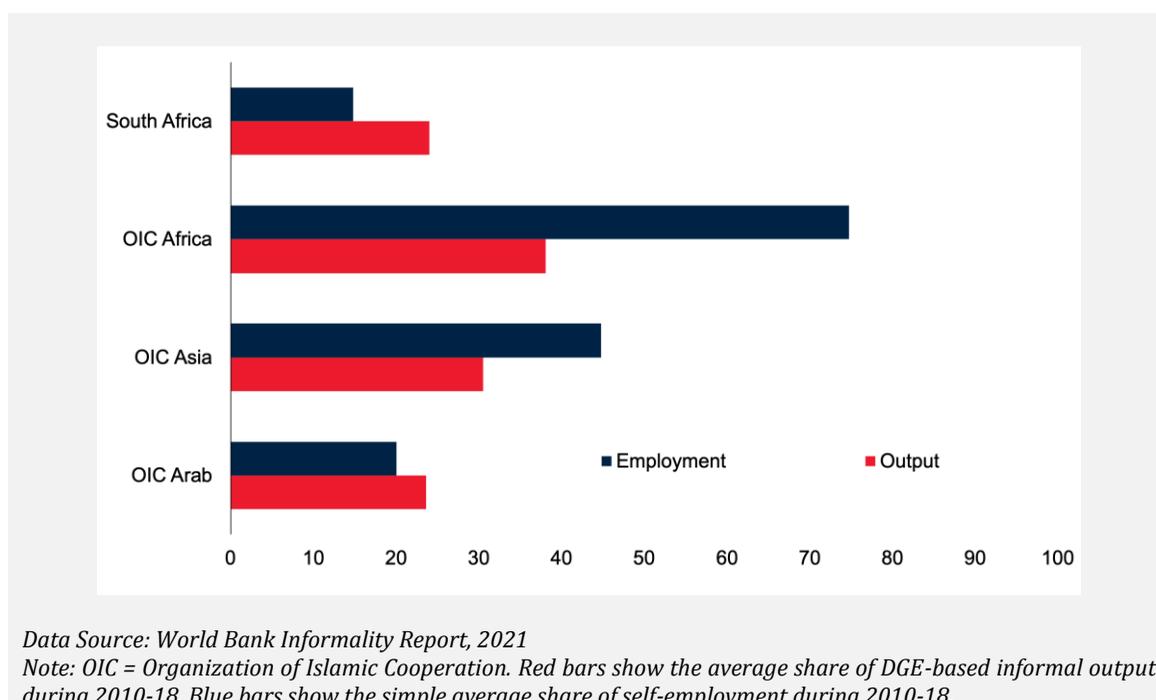


It is well known that informal workers are affected the worst during the pandemic since they are, by definition, out of the coverage of government subsidies and job guarantee schemes. The rate of employment informality (15 percent) is very low in South Africa (Figure 5.4.5).

However, informality is not the main problem of labor markets in South Africa. The country has been deeply hurt by recurrent high unemployment and inactivity. The unemployment rate, for example, has been above 25 percent since 2016 and reached 29 percent at the beginning of the COVID-19 pandemic. Furthermore, the share of NEET was also high at 24 percent. In other words, even before the pandemic, two out of five working-age people were NEET (World Bank, 2021d).

Against this backdrop, the pandemic undermined the labor markets even more. A record 2.2 million jobs were lost by mid-2020, of which less than 40 percent had been recovered by the end of the year. On balance, 1.4 million jobs have been lost since March 2020, more than double the number lost during the global financial crisis (World Bank, 2021d). The unemployment rate reached 32.6 percent by March 2021.

Figure 5.4.5. Informality in South Africa compared to OIC regions



3. Education

When the COVID-19 pandemic hit South Africa in early March 2020, school closures were among the first measures taken in the country. Schools were on and off during the pandemic depending on the severity of the waves of infection. Students in South Africa alternated between different forms of instruction, face-to-face, distance, and hybrid as the pandemic progressed. In fact, schools in South Africa were completely closed for 54 days and partially closed for 40 days between March 11, 2020, and February 2, 2021, according to the School Closures database from UNESCO.

South Africa is a country of 19.6 million children, who make up about 35 percent of the total population. Of these nearly 20 million children, about 98 percent have attended "some form of educational institution." However, these high attendance rates do not translate into quality education and the lack of academic resources is a large factor contributing to the correlation between South African poverty and education.

Despite high enrollment rates, the quality of education in South Africa is poor. Reports have shown that of the students who have attended school for five years, only half have mastered basic arithmetic. In addition, there are little to no standards against which teachers must measure themselves. About 10 percent of teachers across the country are absent from school on any given day, and 79 percent of sixth grade math teachers do not have the content knowledge to teach at their respective levels.

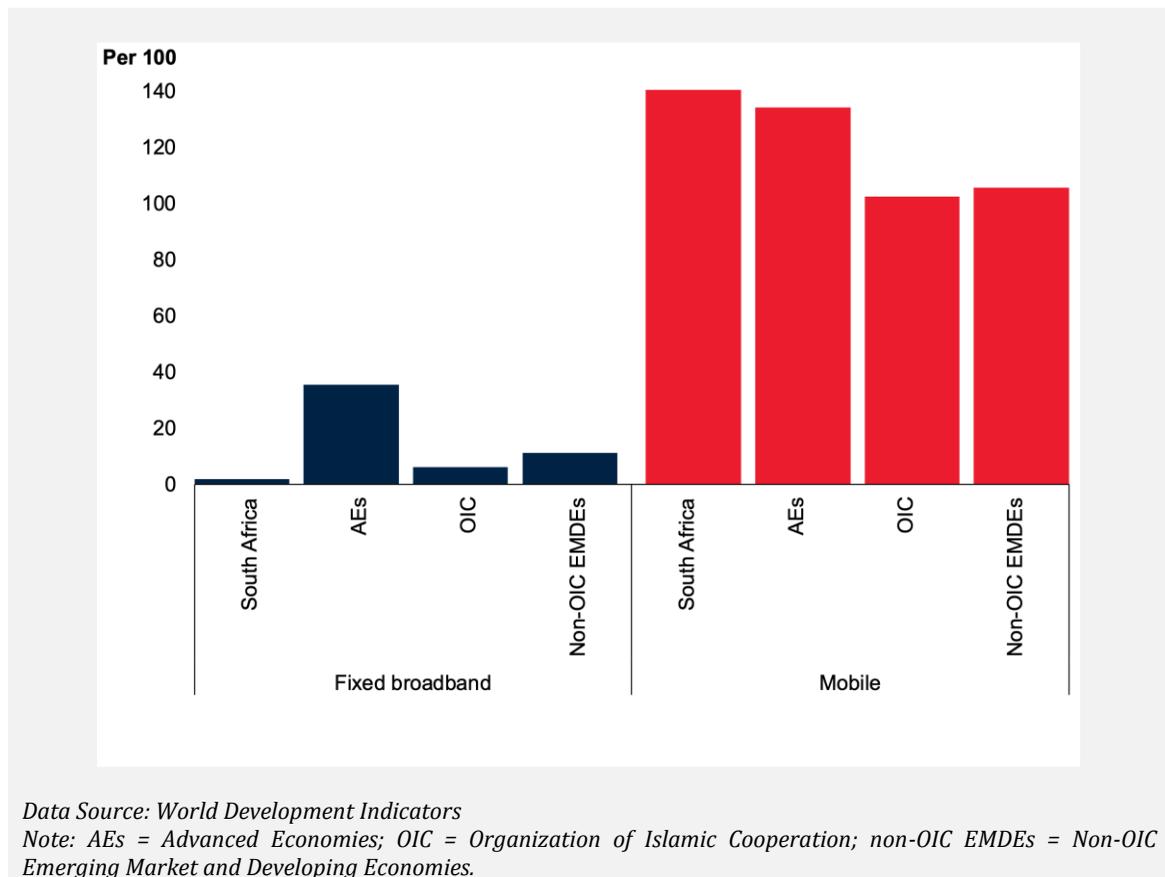
It is expected that the major disruption in education due to COVID-19 will reinforce existing inequalities in education in South Africa. For example, the Bantu education system, which enforced racially segregated educational institutions with different quality of education, was the norm before 1994 in South Africa. Despite slow and steady progress, even today, the legacy of "Bantu education" continues to rob South Africa of the skills its economy needs.

Against this backdrop, the impact of school closures on educational poverty is expected to be even higher for at least two reasons: (i) Loss of learning is harder to reverse given the existing low quality of education; (ii) Due to inequality in access to good quality education, black children would be among the hardest hit and are therefore more vulnerable to further increases in their projected poverty rates.

Furthermore, other challenges became apparent during the pandemic particularly when online education mode was turned on: (i) Teachers were mainly trained to interact with students on a face-to-face basis. The transition to online education was a major challenge for teachers. (ii) Access to online education was an issue for disadvantaged children. The availability of the internet and electronic devices in the home environment limited the number of students benefiting from online education, potentially reducing the effectiveness of online education. (iii) A quiet place to study and a dedicated device to follow lessons per child are also among the challenges for families with multiple school-age children. (iv) Student adjustment to self-directed learning was not smooth.

Figure 5.4.6 shows that in South Africa, the number of fixed broadband connections per 100 inhabitants is 2 (35 in AEs, 6 in OIC, and 11 in non-OIC EMDEs) and the number of mobile connections per 100 inhabitants is 160 (134 in AEs, 102 in OIC, 106 in non-OIC EMDEs). South Africa is far from the average of advanced economies when it comes to fixed broadband connections, however, has a stellar standing when it comes to mobile connections. This makes access easier, yet all other problems in online education remain in the case of South Africa, similar to many the emerging economies of the world.

Figure 5.4.6. Internet infrastructure in South Africa, various comparisons



4. Healthcare

Since the beginning of the COVID-19 crisis, it has become clear that the effectiveness of the health care system is among the most important determinants of how COVID-19 shakes socio-economic conditions in a country. Following the onset of the pandemic, health care systems in major industrialized countries (including the United States, United Kingdom, France, Spain, and Italy) were unable to respond effectively to the rapidly increasing number of COVID-19 cases. The number of hospital beds in many countries was insufficient to accommodate all COVID-19 patients who required intensive care. Other serious shortages included the number of ventilators, basic supplies, and the number of health care workers. During peak periods, many critically ill patients were not admitted to hospitals and were unfortunately left to die.

Figure 5.4.7. Assets and liabilities of health system in South Africa

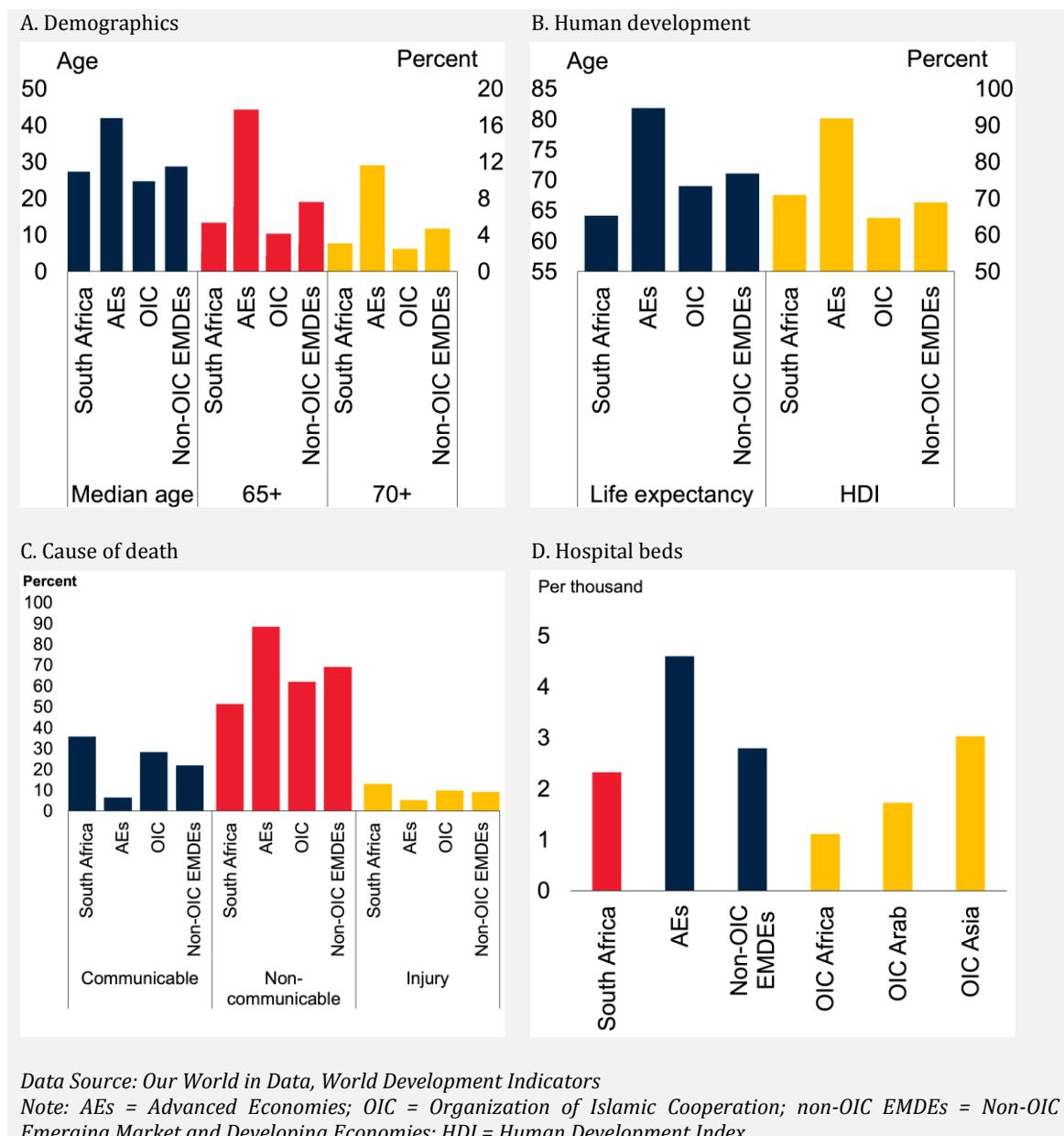


Figure 5.4.7 shows a selection of metrics used to evaluate the assets and liabilities of the healthcare system in South Africa. The country's age structure is a clear asset in the fight against COVID-19. The median age in South Africa is only 27 years, and the percentage of the population older than 65 and 75 years is 5 and 3 percent, respectively. These figures are close to the averages of OIC countries and non-OIC EMDEs, but below the average of AEs (Figure 5.4.7.A).

As opposed to the demographic advantage, South Africa performs somewhat poorly in terms of human development scores. Life expectancy in South Africa is 64 years and the HDI score is 71 out of 100. Compared to the OIC averages of 69 years of life expectancy and an HDI score of 65, South Africa shows vulnerabilities in terms of health system quality (Figure 5.3.7.B).

The cause of death is one of the indicators to measure health risks in a country. Various regions of South Africa continue to be haunted by vaccine-preventable diseases such as cholera and measles. Unequal access to healthcare and education are among contributing factors to the otherwise preventable outbreaks of cholera, polio, and measles.

Figure 5.4.7.C categorizes the cause of death into three groups: (i) by communicable diseases and maternal, prenatal, and nutritional diseases (% of total); (ii) by noncommunicable diseases (% of total); (iii) by injuries (% of total). In all countries, the proportion of (ii) is high in contrast to (i) and (iii). However, within each cause-of-death across country groups, South Africa looks very different from OIC countries and non-OIC EMDEs. On the one hand, a high mortality rate related to communicable diseases (36 percent in South Africa compared to 28 percent in OIC countries and 23 percent in non-OIC EMDEs) is a great disadvantage in terms of COVID-19 management because it is an indicator of the strength of the health system in dealing with other infectious diseases. On the other hand, a low mortality rate related to noncommunicable diseases such as cancer, diabetes, or heart illness (51 percent in South Africa compared to 62 percent in OIC countries and 69 percent in non-OIC EMDEs) is an asset because it shows a lack of comorbidities in the fight against COVID-19.

Finally, one of the important, widely available indicators of health system capacity is the number of hospital beds per thousand population in a country. The number of hospital beds in many countries was insufficient to accommodate all COVID-19 patients who required intensive care. Other serious shortages included the number of ventilators, basic supplies, and the number of health care workers. During peak periods, many critically ill patients were not admitted to hospitals and were unfortunately left to die. The latest available figures for South Africa, AEs, non-OIC EMDEs, OIC-Africa, OIC-Arabia, and OIC-Asia are 2.3, 2.8, 4.6, 1.1, 1.7, and 3.0, respectively (Figure 5.4.7.D). In this metric, South Africa is on par with other non-OIC EMDEs.

5.4.3 Policy Response

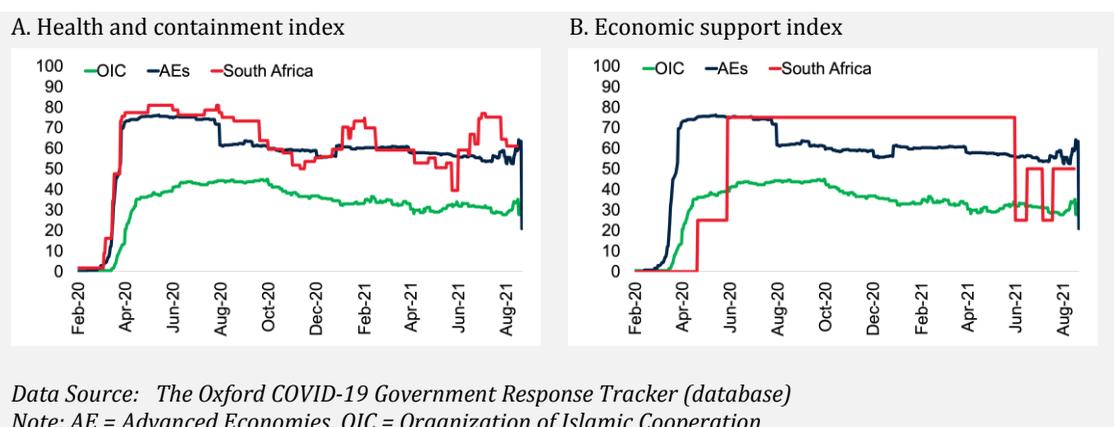
Overview

South Africa's policy response to the COVID-19 pandemic was initially rapid and strong. To discuss the pandemic-long policy performance, two measures will be discussed here:

Containment and health index combined "lockdown" restrictions and closures with measures such as testing policies and contact tracing, short-term investments in health care, and investments in vaccines. Like many other countries in the world that were first hit in the first wave of infection, South Africa has applied very stringent health and containment measures

(Annex V). Except for periods of relaxation between waves, the index remained above the average of OIC and moved with that of AEs from the beginning of the pandemic. The index peaked during the first wave, which was very controversially managed by the government (Figure 5.4.8.A).

Figure 5.4.8. COVID-19 policy response summary in South Africa



Economic support index captures measures such as income support and debt relief. Throughout the pandemic, advanced economies provided larger support packages compared to OIC countries. The timing and magnitude of economic support in South Africa followed a very different pattern than in advanced economies and OIC countries (Figure 5.4.8.B). The onset of economic support activities is expected to correlate strongly with the timing and magnitude of the infection waves. Accordingly, the economic support magnitude in South Africa reached its highest levels in June 2020, exceeding the averages of AEs and OIC countries, and remained there until June 2021. After a brief decline, the index moved in a region above OIC countries and below advanced economies until August 2021.

Fiscal Measures

According to IMF COVID-19 Policy Tracker, the South African government provided assistance to businesses and workers in need through the Unemployment Insurance Fund (UIF) and special programs of the Industrial Development Corporation. UIF benefits, which had been extended through January 2021, were further extended through April 2021.

Additional funds were made available for health response at COVID-19, workers with incomes below a certain threshold received a small tax subsidy for four months, and the neediest families received temporarily higher welfare subsidy amounts through the end of October 2020.

A new temporary COVID-19 grant created to assist unemployed workers not receiving grants or UIF benefits has been extended through April 2021.

The number of food packages to be distributed was increased and additional funds were allocated in the 2021 budget for public work programs. Funds have been made available to support stressed small and medium size enterprises, especially in the tourism and hospitality sectors, and small farmers in the poultry, livestock and vegetable sectors, including a new 1.2 billion Rand Tourism Equity Fund, announced at the end of January 2021.

An official loan guarantee program was established to provide bank loans, guaranteed by the government, to eligible businesses to assist them with operating expenses during the pandemic. The program was extended to July 11, 2021, to allow for the drawdown of loans already in progress and to facilitate an orderly wind-down.

Allocations were made to a Solidarity Fund to help combat the spread of the virus through private contributions and to support municipal provision of emergency water supplies, increased sanitation on public transportation, and food and shelter for the homeless.

The Internal Revenue Service accelerated refunds and tax credits that allow SMEs to defer certain tax liabilities, and issued a list of essential goods for a full refund of customs duties and an import exemption VAT. It also introduced a 4-month tax exemption for qualification duty.

According to the World Bank (2021d), in South Africa, historically, spending inefficiencies contributed to weakening the impact of fiscal policy on economic and social outcomes. Public spending efficiency was reduced by weak public administration capacity, government capture, poor interagency coordination and integration, and fragmented procurement, which contributed to waste, leakage, and high public service costs.

The COVID-19 crisis has further weakened the fiscal position of South Africa. Overall, consolidated spending in fiscal year 2020 was estimated to be about 4 percent higher than projected in Budget Review. During the pandemic, the government increased spending to support the health sector, businesses, and households in the restricted zone, which was partly financed through budget reallocation. At the same time, the economic collapse-and lost tax revenues-created a significant revenue gap. It is estimated that revenues were about 12 percent lower than projected in the February 2020 budget. According to World Bank estimates (20201c), the deficit doubled in fiscal year 2020, reaching 12.9 percent of GDP. The debt-to-GDP ratio is estimated at 78.8 percent in fiscal year 2020, and interest payments at 4.9 percent of GDP.

Monetary Measures

According to IMF COVID-19 Policy Tracker, the South African Reserve Bank (SARB) eased monetary policy to support the economy during the pandemic (World Bank, 2021d). Inflation was low before COVID-19 and averaged 4.1 percent in 2019, anchored in the lower part of the target range of 3-6 percent. It declined even further, averaging 3.3 percent in 2020, as fuel prices fell and domestic demand collapsed during the lockdown. This allowed the SARB to reduce the repo rate by a total of 2.75 percentage points between January and July 2020 to

support the economy. Inflationary pressures remained contained until early 2021. Inflation reached 5.2 percent in May due to a low-base effect, but average inflation is well within the target band at 3.8 percent in January-May 2021. Monetary policy remains accommodative; at its last Monetary Policy Committee meeting on May 20, the SARB left its policy rate unchanged at 3.5 percent.

Lending to the private sector slowed significantly. Total loans and advances grew 2.7 percent in 2020, down from 6.4 percent in 2019. Although low real interest rates supported household demand for mortgage and installment loans, lower consumer confidence due to subdued economic growth and job losses led to a slowdown in the growth of loans to households from 6.4 percent in 2019 to 3.9 percent in 2020. Weak business confidence, combined with lockdown restrictions, caused growth in bank loans to businesses to slow to 1.6 percent in 2020 (from 6.3 percent in 2019). Total claims on the domestic private sector increased by 4.9 percent in 2020 (from 6.8 percent in 2019). The transmission of monetary easing was mainly through a reduction in banks' policy rates, which are linked to SARB repo rates, rather than new lending. Private sector lending remains weak so far in 2021, with total loans to households growing 3.9 percent from January to May and those to businesses contracting 2.7 percent.

The government launched a COVID-19 loan guarantee program to encourage lending to the private sector, but take-up was low. This initiative aimed to provide significant amounts of guaranteed credit to help businesses affected by the pandemic cover their operating costs. It had an initial framework of 100 billion Rand, with the possibility of doubling it if needed. However, uptake of the program has been low, with only 18 billion Rand approved by banks and disbursed to small and medium enterprises by March 2021. Reasons cited for the weak take-up include strict conditions (e.g., banks require personal guarantees from business owners), the delayed introduction of the program (which meant that many banks and debtors had already negotiated urgent debt relief measures), and weak lending due to weak economic growth and an uncertain business environment, even before COVID-19. Given the low take-up, the government decided to end the program at the end of July 2021.

Social Assistance Measures

According to IMF COVID-19 Policy Tracker, South Africa had a comprehensive social protection system before the pandemic COVID-19 that was strongly pro-poor. At that time, 30 percent of the population-about 18 million people-received poverty-related social assistance in the form of at least one social grant payment per month. The three largest grant programs covered 97 percent of all grant recipients: the child grant (71 percent), the elderly grant (20.3 percent), and a disability grant (5.9 percent). Most recipients were in the poorest quintiles, and transfers represented nearly 30 percent of their consumption (World Bank, 2021b).

The social protection system was effectively used to provide emergency assistance to vulnerable people. In response to the pandemic, the government increased grant amounts: Grants for the elderly and disabled were increased by 250 Rand per month for six months

(May-October 2020) for its 4.7 million beneficiaries. More than 12.8 million child social grant beneficiaries received a one-month increase of 300 Rand per beneficiary in May. The 7.1 million child social grant caregivers who were registered in the Child Social Grant database in February 2020 received monthly top-ups of 500 Rand from June to October 2020 under the Temporary Child Social Grant Caregiver Program.

The contributory social security system, which includes UIF, was also used. Before the pandemic, about 8 million people (or 54 percent of the labor force) paid into the fund. In response to the pandemic, the UIF paid out 7.5 billion Rand in 1.3 million payments through February 2021. The authorities also introduced Temporary Employee /Employer Relief Scheme (TERS) to provide wage support in cases where employers had closed all or part of their operations. It covered a portion (38-60 percent) of a firm's wage costs, with a maximum wage threshold of 17,712 Rand per worker per month, for up to three months. Originally, TERS was available only to those who paid into the UIF, but this restriction was lifted at the end of May 2020. As of February 2021, TERS had paid out about 57 billion Rand in more than 13 million payments to more than 4.5 million individuals. This represents about one in three individuals employed in the formal sector, or half of all UIF contributors.

5.4.4 Evaluation of Findings

ESCAPING THE CRISIS

What Worked

In response to COVID-19, the South African government has implemented one of the strictest lockdowns in Africa. Without the government's tough response, the human toll of the pandemic could have been even higher.

A combination of credit guarantees, targeted direct fiscal measures, loose monetary policy, and other regulatory policies arrested the size of the downturn along with favorable commodity prices in the world markets and improving economic conditions in the trade partners.

What Could be Done Differently

A lockdown, if managed well, can save lives, reduce pressure on health care facilities, and also limit economic damage and put the economy on the path to a more secure long-term recovery. South Africa's testimony has turned from praise to protest in a short time because the initial lockdown has not been well managed. The heavy-handed enforcement from the government, sometimes bordering on irrationality, has led to widespread protests from the business community to end the lockdown. This has certainly led to a much larger wave of secondary infections than would otherwise have occurred, with severe socioeconomic consequences. Poor management of a lockdown also draws the ire of other countries when a country becomes a potential reservoir for the incubation and spread of COVID-19 to the rest of the world. If the disease once more erupts in this manner, there is a risk that South Africa will be isolated worldwide -which could come at a high price.

Among other things, the crisis brought to light structural weaknesses in the labor market. Even in the best of times, the labor market of South Africa was characterized by high unemployment and inactivity. The crisis has exacerbated a bad situation. By the end of 2020, despite two quarters of job growth, the labor force had fallen by nearly 1.5 million, and the wages of workers who still had jobs had fallen by 10-15 percent. The combined loss of employment and earnings left the average South African working-age person about 18 percent worse off at the end of the year than at the beginning (World Bank 2021d).

The crisis has broadened the very high-level inequalities in the country. A welfare loss of this magnitude was to be expected in a severe crisis. Even more worrisome in a country that is already the most unequal in the world is the differential impact of the crisis on the poorer half of the population. In particular, the differential sectoral and occupational impact of the closures and the decline in demand has meant that poorer workers have lost more jobs than the better-off. In contrast, the wages of those who have kept their jobs have fallen more for the better-off. However, because job losses have broader implications for income, the pandemic has increased the overall level of inequality in the country.

CURRENT BOTTLENECKS

The reappearance of COVID-19 and risks to progress on vaccine uptake could put the brakes on growth. While the vaccination program launched in South Africa has made good progress, there is a wide range of estimates for when the majority of the population could be fully vaccinated due to risks to vaccine hesitancy and efficiency of existing vaccines against new variants of the disease.

With high levels of inequality, stagnant growth for a decade, a shrinking economic pie, dwindling confidence in government, and a defensive posture in business, the prevailing game in South Africa has become a zero-sum game. In a zero-sum game society, polarization and conflict over the existing economic pie leads to incentives against investment, innovation and entrepreneurship, and for unproductive, destructive and rent-seeking behavior.

Increasing poverty can distress the well-being of millions of people. Together with job losses that hit the disadvantaged groups harder: Pandemic-related job losses have broadened already wide income gaps. Amongst low-wage individuals, employment plummeted by 35 percent between the first and second quarters of 2020.

COVID-19 has brought the worst recession since the end of apartheid. South Africa's GDP shrank by 7 percent in 2020, more than almost any other emerging market. The decline in GDP and tax revenues, together with a large stimulus package, pushed the budget deficit to 12.9 percent of GDP and public debt to 78.8 percent of GDP. Unlike advanced economies that can service their debt at low interest costs, South Africa faces high debt costs; the debt service burden is now close to 5 percent of GDP. This crowds out funds for much-needed development spending, including public investment.

Increased internal imbalances and external volatility could disrupt growth. The relative strength of South Africa's current fiscal position may not be sustainable, given the possibility that the stimulus given during the pandemic could worsen the budget in the future if and when contingent liabilities are realized. Increasing inflationary pressures in advanced economies, especially in the U.S., and intensifying expectations about an end to expansionary monetary policy in advanced economies could withdraw global liquidity away from South Africa.

OPTIMAL POLICY MIX

Safeguarding Recovery

No one is safe until everyone is safe. Global vaccine deployment is at the forefront of ensuring recovery. The highest urgency is to guarantee swift global access to vaccines and a significant acceleration of the timeline. The global actors must significantly increase their efforts to vaccinate sufficient numbers of people to achieve global herd immunity. This would save lives, prevent the emergence of new variants, and contribute trillions to global economic recovery.

A stronger-than-expected next wave of infections may slow recovery. Stubbornly high infection rates would strain the healthcare system and require more stringent containment measures, negatively impacting growth and job creation. Deteriorating economic and social conditions would increase pressure to extend COVID-19-related aid, which would translate into a higher budget deficit. The government should deploy the vaccine more aggressively and take the necessary containment and relief measures to limit the impact of the pandemic on people and the economy. In addition, structural reforms should be implemented once the pandemic is brought under control to pave the way for a faster recovery.

A strong, well-developed, and well-organized health care system is critical to controlling the pandemic. Investments in healthcare capacity is essential even with limited resources since it is the human lives that are at stake. Within this system, in terms of contagious disease management, the disease treatment and surveillance protocols should be designed early, strictly implemented, and improved over time.

A weaker-than-expected global recovery may derail the recovery in South Africa. Weaker external demand would translate into a slower economic recovery and a lower-than-expected contribution of net exports to growth, while domestic growth factors are weak. Lower export revenues due to lower world prices would translate into a weaker current account balance and weaker tax revenues. The authorities should implement structural reforms to increase competitiveness and encourage private investment. Fiscal resources should be allocated to programs with the greatest developmental impact. Monetary policy space consistent with the inflation target should be maintained.

Increasing global risk aversion caused by tightening financial conditions (e.g., faster monetary tightening in the United States) can lead to net portfolio investment outflows and a rise in risk premia at South Africa. The government should consider increased financing from international financial institutions, which tend to put less strain on the budget and domestic financing, and implement an appropriate policy mix to maintain investor confidence.

Even the expanded policies to protect disadvantaged workers and vulnerable remain low given the challenges COVID-19 especially for women and youth. Instruments and mechanisms of these measures should keep an eye on the balance between meeting urgent needs and developing long-term strength. While countries respond in different ways, in-kind and cash public assistance is likely to be needed in the medium term, either directly to workers and households or through businesses.

Above-average tax revenues from higher exports and stronger growth help South Africa recover in the short term. This would facilitate the fiscal adjustment needed on the expenditure side to achieve the government's budget and debt path and could support domestic demand in the medium term. The government should maintain the fiscal stance as planned in the 2021 budget and take advantage of the temporary fiscal space by balancing development spending and deficit reduction.

Investing in Future

Structural reforms are essential to increase competitiveness and productivity in the country and promote higher growth. Access to electricity remains the biggest obstacle to private sector activity. About 55 percent of companies cited this as the biggest difficulty to their operations (World Bank 2021d). This needs to be addressed through electricity sector reform. Stimulating private investment is critical to reignite growth after the pandemic, especially as public finances are strained. South Africa potential of the economy must be unleashed to support fiscal consolidation and mitigate its impact on economic growth. Although structural reforms take time, the signal effect of reforms can boost confidence immediately.

To create jobs, South Africa would have to address three chronic problems in the labor market: the extremely high inactivity rate, the high unemployment rate, and the low self-employment rate. In addition to enacting carefully selected regulations to improve the business climate and investing in the workforce through better training, the government can implement reforms to encourage self-employment and support the growth of micro and small businesses. In addition, active labor market policies could help match job seekers with employment opportunities that match their skills.

Revitalizing the labor market is even more important to capitalize on the projected growth in the working-age population. The country's demographic trend line is encouraging: the population is growing because South Africans is living longer and healthier than their parents, even as life expectancy remains among the lowest in the world. With a much-improved health care system, South Africa could have an even larger population, which would reinforce the current trend. More South Africans would live longer and the country would add more adults to its population. Resuming job creation is key to turning this demographic dynamic into a development opportunity.

6 POLICY RECOMMENDATIONS

“It’s your road, and yours alone, others may walk it with you,
but no one can walk it for you.”
- Jalāl ad-Dīn Mohammad Rūmī

How can OIC member countries address the negative impact of the COVID-19 pandemic on socioeconomic inequalities? Based on the analysis conducted in the previous sections, this section aims to outline several policy recommendations for OIC countries to mitigate the negative impact of COVID-19 on key socioeconomic outcomes that are proxies for inequality.

It should be noted that the existing recommendations are based on the limited experience gained since the onset of the COVID-19 pandemic. Previous experience with recessions is of little help in dealing with the COVID-19 shock, which is new. We also still lack sufficient data to conduct more detailed analyzes, particularly at the household and individual levels, to obtain accurate estimates of socio-economic impacts. However, the learning curve is quite steep and every day we are getting better at assessing the impact and developing a better understanding of the mechanisms through which the COVID-19 crisis affects socio-economic inequality in OIC countries.

After setting out the underlying logic in this introductory part, section 6.1 discusses a set of general policy interventions to increase resilience in key areas related to inequality in all OIC countries. Then, based on the findings of this report, a non-exhaustive list of policy interventions needed to control the most important risks in terms of *escaping the crisis* and *safeguarding recovery* along with some pointers in terms of *investing in future* are presented compactly in two sections: For OIC members with sufficient institutional capacity (Section 6.2) and for OIC members with limited institutional capacity (Section 6.3).

The term "institutional capacity" is used here in its broadest sense: It is the capacity of the state institutions to carry out its intended policies -economic, social, and otherwise. Institutional capacity is not absolute, but changes over time and in different policy areas. Therefore, with respect to this report, countries are free to take up specific policy recommendations and interpret them as they see fit with respect to their state capacity at different levels of public policymaking.

Resilience

*The key concept while writing the policy recommendations of this report is **resilience**, borrowed from the new book of Markus Brunnermeier, *The Resilient Society*. This introduction is, in fact, a summary of some of the ideas in this book that are applicable to OIC countries in finding solutions to the diverse and uneven impact of COVID-19 on different segments of their societies.*

Resilience signifies the ability to rebound, whereas robustness is the ability to resist. Resilience is about the ability to endure a storm and recover, as Jean de La Fontaine describes in his famous fable called “The Oak and the Reed”.

“The oak is robust. It is mighty and looks indestructible in the face of normal winds. By contrast, the reed is resilient. Even light breezes bend the reed. But when a strong storm erupts, the reed declares: ‘I bend but do not break.’ That phrase incorporates the essence of resilience. The reed bounces back when the storm is over. It fully recovers. The robust oak can withstand strong winds, but it breaks when the storm becomes too severe. Once it has fallen, no recovery is possible. Its lack of resilience prevents restoration. The reed, always in motion, might look vulnerable, but it is much more resilient than the oak.” (Brunnermeier, 2021, p.7)

Up to now, production systems have been managed on a *just in time* basis, i.e., maximizing flows and minimizing inventories, which is the goal of global value chains. In contrast, the concept of resilience leads to emphasize a *just in case* approach that creates the ability to rebound quickly after a shock. To do this, decision-makers should prioritize resilience, which makes redundancy an asset rather than a liability. Shortly, a resilience mindset offers a new perspective on cost-benefit calculations.

Redundancies are safety cushions. They are critical to both robustness and resilience. Robustness necessitates redundant backups for every part and task that could be exposed to a shock. If a part fails, an instant replacement is required. A resilient system, on the other hand, handles shocks by rearranging resources after short-term withdrawals. Among key abilities are agility, flexibility, liquidity, and education to reorganize a resilient system after a shock. Furthermore, resilience is a vital component of sustainability. If resilience is lacking, a society can no longer be sustainable.

The COVID-19 pandemic showed countries that resilience requires individuals in a society to work together. A society depends on healthy collective functioning, which critically depends on the quality of the prevailing social contract. This contract arises from the recognition that the behavior of individuals has effects on others. These effects are called *externalities* by economists. In the absence of a social contract, people tend to inflict negative externalities on each other. Consequently, some parts of society become stuck or approach a tipping point. Taken together, negative externalities cause social fragility to rise and resilience to erode, especially when a shock like the COVID-19 pandemic occurs.

During the recent pandemic, the world witnessed three salient examples of externalities: First, masks were positive externalities by protecting the health of those who wore them and those around them. The second example is social distancing. When people reject recommendations for social distancing, they put others at risk for infection. A third example is refusing to be vaccinated, which limits the benefits of vaccines and exposes others to risk.

Over and above these individual-level externalities, countries can also generate externalities that spread to other countries during COVID-19 pandemic. There is a risk that the virus will

develop to a point where existing vaccines become ineffective. As a result, countries that do not contain COVID-19 could create negative externalities by becoming incubators of new variants that would spread around the world.

Executing a Social Contract

Against these externalities, a social contract can be enforced by in different ways: Governments use direct force or rely more on persuasion. Externalities can also be internalized by social norms unique to each society. Markets, by aggregating information that is disseminated in a society, can also play an important role.

Depending on the nature of the crisis, the mix of social norms, government directives, and the market must be fine-tuned. These modifications require careful consideration. Just as too little, too much flexibility can be damaging. Individuals require clear and consistent social frameworks to make plans with at least some certainty.

Therefore, it is important to understand how human behavior changes when shocks occur in waves, as was the case with this pandemic. In March 2020, people's behavior was controlled by fear. Without knowing exactly how the virus would spread or how deadly it would be, many people withdrew from as much contact as possible and prioritized their own safety. Subsequent waves were much more branded by COVID-19 fatigue, rejection, or even defeatism. Finally, as vaccines became increasingly available in advanced economies in early 2021, an end to the COVID-19 crisis loomed on the horizon. If countries held on to public health measures for a few more months, they could hypothetically buy enough time to vaccinate large segments of their populations. Instead, additional waves occurred in many countries beginning in the spring of 2021. This is called the last-mile phenomenon. People often find it difficult to persevere when the end of a task is in sight.

Shortly, managing a crisis requires information. Understanding new situations and deciphering new behaviors require experimentation. Under these circumstances, accurate communication becomes important because it has such a strong influence on human behavior.

Long-Run Concerns

If countries are to achieve long-term growth, they must adapt flexibly and embrace disruptive technologies.

Shocks such as the recent pandemic can trigger two long-run forces in the post-shock recovery phase. On the one hand, the COVID-19 pandemic triggered scientific progress and innovations in various areas of life. These new technologies (mRNA technology, digitization, telemedicine, online education, etc.) could promote resilience and thus create additional capacity to adapt to future shocks. On the other hand, there is a risk of long-run damages that could weaken resilience. Workers who have lost their jobs could lose their skills and have difficulty returning to the labor market. Disruptions in the education system could lead to hard-to-reverse

damages to human capital. Finally, businesses could suffer from a debt overhang. If a high debt burden discourages businesses from investing, the economy could suffer in the long run.

To preserve resiliency, countries must prevent devastation in financial markets. During the COVID-19 shock, after an initial shakeup in March 2020, central bank intervention quickly removed tail risk from markets and soothed asset prices. As central banks around the world limited the risk of extensive adverse outcomes, businesses in need of liquidity benefited from lower interest rates.

Government debt typically increases in crisis times, as it did during the COVID-19 crisis. The extensive stimulus programs have so far prevented an outcome like the Great Recession, even though the pandemic caused a much greater fundamental shock than what it was experienced in 2008. Still, there are concerns about debt sustainability as an economy is as resilient as the degree of its government debt sustainability in the long-run. Otherwise, that economy faces a significant risk of inflation and also the risk of deflation as a result of debt overhang. Therefore, vigilance against these potential negative jumps in debt markets is vital.

Finally, a social contract is resilient if and only if there is justice and inequalities are tolerably small. During the recent pandemic, the world has witnessed the problem of unequal access to health care and how it has impacted diverse communities. Indeed, the COVID-19 pandemic represented a litmus test in revealing the unseen challenges beneath the surface of many societies.

Global Resilience

First of all, the COVID-19 pandemic reminded people that they are part of a global society and that they need global resilience to survive extreme events. However, worldwide coordination failed to appear as a high priority since the onset of the pandemic, as evidenced by the relentless race to procure vaccines.

Against this backdrop, developing countries face specific challenges in maintaining resilience while escaping the poverty trap and the middle-income trap. In many of these countries, policy space to counter the shocks is rather limited. For example, lockdown policies during the COVID-19 crisis led to food insecurity and other unseen deaths because vaccinations against other diseases were missed. In addition, most of these countries are endowed with a limited fiscal space, which limits their ability to promote resilience. Stressed public finances leave almost no room for further stimulus if another crisis befall out of nowhere.

Shocks are products of a diverse set of factors, of which pandemics are only one. The COVID-19 crisis clearly demonstrated that a lack of preparedness for risk can have devastating global consequences, especially in countries that lack resilience to unforeseen circumstances. When the next unforeseen crisis occurs -a sweeping internet outage, a cyber-attack, the failure of a biotechnology experiment, a climate catastrophe- all humans will be better off if the social contract is such that societies can recover from such a disaster.

With these guiding principles in mind, the following sections outline concrete policy actions for OIC countries to escape the crisis, ensure recovery, and invest in the future.

6.1 For All OIC Members

1. Diversify extreme exposures and address over-reliance.

A common problem for countries hit hard by the COVID-19 crisis is extreme dependence on a single or small number of suppliers for essential goods and services. There were particular forms of extreme dependence that exposed OIC countries to the negative socio-economic effects of the COVID-19 shock.

Over-reliance on tourism revenues posed serious economic challenges for many countries. Lower tourism revenues not only constrained external financing but also contributed to unemployment. Tourism is a sector that employs a high proportion of low- and medium-skilled individuals, suggesting that job losses in the tourism sector can exacerbate socio-economic inequalities. Countries that rely heavily on tourism revenues are more likely to have pessimistic recovery prospects.

Over-reliance on imported commodities (both intermediate and finished) also posed significant challenges for many countries in the OIC region. The supply and prices of agricultural commodities, oil, and metals were mostly problematic throughout the pandemic. Supply shocks affected domestic supply chains, while price shocks manifested themselves in the form of inflationary spikes-particularly in food. Over-reliance on export revenues from commodities was also problematic, especially in the early stages of the pandemic, when commodity prices fell sharply.

Over exposure to single or few trading partners (for both exports and imports) for all types of goods or services was also a risk factor that directly affected supply chains and inflation during the pandemic. Even within sectors or firms, over-reliance may pose a significant risk to macroeconomic stability.

In a globalized world, there are strong incentives to specialize, creating comparative advantage in a small number of high-return tasks and drawing on the expertise of others in different fields are inevitable. However, the COVID-19 pandemic has taught us that, countries -especially OIC countries- should identify the potential weaknesses due to the problem of over-dependence and diversify those risks as much as possible to minimize the potential damage of future crises.

2. Improve labor market policy mix.

Two important labor market policy lessons were learned during the COVID-19 crisis. First, a balanced labor market policy combination of reallocation and retention policies should be maintained to mitigate the negative impact of COVID-19 on socio-economic inequalities in OIC countries. After a long period of unemployment (or a period of unemployment during a deep

crisis), workers are more likely to switch jobs between sectors and occupations. However, job changes tend to be costly, as they are associated with non-negligible income losses, both in terms of levels and subsequent growth performance. For this reason, policies aimed at maintaining the existing match between job and worker (i.e., job retention policies) can minimize job separation, especially for low-skilled workers, while job reallocation policies can improve the prospects of finding a new job. Maintaining this balance can benefit employment outcomes in OIC countries before job separation occurs, as costs become much greater after separation. Our experience during the pandemic has shown that job retention measures are very effective in cushioning the uneven impact of the COVID-19 shock on workers. On the other hand, job creation measures can help facilitate adjustment to the more permanent effects of the COVID-19 shock on the labor market. Job retention measures are most appropriate while the shock is acute and social disengagement is high to ultimately maintain viable jobs, with support relying more on reallocation measures as the pandemic subsides. Careful monitoring of the intensity of the pandemic (including cases and deaths, the extent of social distancing, and vaccine introduction) is needed to assess when the economy can withstand reductions in job retention support and switch toward greater reliance on reallocation.

Second, the most vulnerable populations in many OIC countries are disproportionately employed in informal jobs. Informal jobs were not covered by job guarantee programs during the COVID-19 pandemic. To mitigate the negative effects of this lack of insurance, unemployment subsidies and benefits should be extended to the informal sector and informal workers to the extent possible. The policies being implemented in Indonesia are a good example in this regard.

3. Utilize online databases to effectively distribute social assistance.

To have an effective social assistance of framework, effective distribution channels and detailed information databases are at least as important as the availability of funds. The COVID-19 crisis highlighted the importance of well-designed and effectively functioning social protection institutions. Identifying those in need, monitoring the changing situation of individuals and households, building decision-making systems to verify eligibility, a flexible legislative structure to respond to new needs, well-functioning application and distribution channels, establishing a productive task force to conduct field operations, and building research capacity to assess the availability of funds and identify vulnerabilities are essential elements of a modern and effectively functioning social protection system. Such systems are especially needed in low-income countries where vulnerabilities require more urgent intervention.

Developing new social assistance schemes and strengthening existing systems to limit the impact of the COVID-19 crisis on the disadvantaged and most vulnerable groups should be a high priority in OIC countries. A well-established and institutionalized social assistance system will reduce the burden of the current crisis on households and can also serve as a direct/automatic policy response during the recovery phase. Several OIC countries have established effective social protection policy frameworks during the crisis. For example,

Indonesia has extended the scope of its unemployment benefits to the informal sector. Togo established a digital platform linked directly to the identity cards of all citizens and provided emergency cash assistance through this platform during the pandemic. Turkey has also established a centralized digital platform that aggregates all relevant information, automatically detects eligibility, and distributes assistance without requiring beneficiaries to apply (or appear in person). Building comprehensive systems that embody all of the above features can only become possible with the help of digital technologies. Box 3 details the social protection framework implemented by Turkey during the COVID-19 pandemic as a best practice. The policy implemented in Togo can be considered another best practice.

4. Develop food safety strategies to reduce food insecurity and undernourishment.

The COVID-19 crisis has led to a dramatic decline in income levels, especially among disadvantaged populations, which has increased concerns about food insecurity in some regions and for some populations. The problem of food (in) security is multidimensional. The first dimension is about the sustainability of food supply chains. Supply chains in food and agricultural markets have been disrupted to varying degrees in most OIC countries, which has led to concerns about the long-term sustainability of food supplies, particularly for imported products. Second, related to the first point, the extreme dependence on imports (both inputs and final products), and especially on imports from a small number of countries, exacerbates sustainability problems. Third, the importance of holding strategic reserves of certain storable commodities became clear. Fourth, sustained access to food for vulnerable groups is critical to prevent the negative effects of malnutrition. Fifth, affordability of staple foods has also become an issue as high food inflation has severely affected several OIC countries. Finally, the COVID-19 crisis has also shown the importance of developing self-sufficiency in all essential food items at home.

To address these challenges, detailed national plans should be made to develop food security strategies capable of addressing the multidimensional issues highlighted above. These strategies should be enhanced and supported by investments in digital technologies that improve agricultural productivity and provide a monitoring platform for the sustainability of food supply chains. The case study on Qatar is a good example of this policy recommendation.

5. Increase priority spending to reverse learning losses.

As noted above, OIC countries generally have little fiscal space to intervene massively in crises by aggressively increasing government spending. Nonetheless, general government debt holdings increased substantially after the onset of the crisis, and OIC governments made enormous efforts to support households and businesses during these difficult times. The remaining limited fiscal space should be spent as efficiently as possible on priority areas.

One of the most important areas where extensive government action is needed in all OIC countries is education. Learning loss among children and youth has reached alarming levels. Recent research suggests that (1) across countries, learning losses are greater in lower-income

countries and (2) within a country, the most disadvantaged groups (i.e., girls and children from poorer households living in slums) are more affected. These patterns imply that both differences in living standards across countries and socio-economic inequalities within countries would worsen substantially if these learning losses persist in the future. In other words, asymmetric shocks to schooling could further exacerbate income inequality along several dimensions.

Economic research on the development of children's human capital suggests that it is much more cost-effective to close the gaps early (through remedial programs) than to try to close those gaps later in life. Therefore, additional resources-through increased and more targeted spending on education-should be allocated to make up for learning losses among children who lost significant instructional time during the pandemic. Learning losses are typically measured by the number of school days lost during the pandemic. It should be noted that this measure may underestimate true learning losses because it does not take into account the likely lower effectiveness of online instruction.

6. Invest in health infrastructure to ensure health equity.

The COVID-19 pandemic was a significant shock to public health systems around the world and exposed several gaps in health care for disadvantaged and vulnerable groups. In the context of the social determinants of health, health system preparedness is paramount to protecting the overall health of society. In the face of old threats (e.g., the resurgence of measles), disruptive new technologies (e.g., electronic cigarettes), growing challenges (e.g., drug-resistant organisms), and new threats (e.g., the current pandemic, climate change, politicized misinformation), our health systems must be robust and resilient. The response must include those who are now disproportionately affected - the poor and vulnerable.

The current priorities of WHO require infrastructures capable of detecting, monitoring, and responding to health emergencies such as COVID-19 and the health impacts of climate change in the context of health for all. Health care infrastructure can be better prepared and more equitable if systems are strengthened by building on core competencies and following recommendations for leadership, stakeholder engagement, accreditation, data collection, and financial resources. Ensuring health equity in a pandemic requires a robust and resilient public health infrastructure in normal times.

7. Increase priority actions to ensure equal access to vaccines.

No one is safe until everyone is safe. Worldwide use of vaccines to achieve global herd immunity is at the forefront of ensuring recovery. It would save lives, prevent the emergence of new variants, and contribute trillions to global economic recovery.

In the low-income OIC countries, only a very small percentage of the population had received a dose. Most of these countries rely primarily on the collective vaccine procurement agencies COVAX and AVAT. The global community has recently provided additional funding for COVAX, which is considered sufficient to cover about 30 percent of the population in 91 low-income

countries. Although nearly all EMDEs are expected to eventually reach 60 percent coverage (through a combination of COVAX orders, regional arrangements such as AVAT, and bilateral agreements), most deliveries are unlikely to occur before the end of 2021 or 2022. This delay leaves large segments of the world's population vulnerable to the virus and increases the risk of new mutations. There is therefore an urgent need for *vaccine donations* from countries that have procured surplus doses, for vaccine manufacturers to *prioritize deliveries* to low- and middle-income countries, and for *elimination of export restrictions* on vaccines and raw materials. Investments in additional global vaccine capacity are needed to provide booster doses and buffer against unforeseen setbacks in current production facilities.

8. Achieve stronger international policy coordination.

International policy cooperation-both within the OIC group and between OIC countries and the rest of the world-should be strengthened to effectively implement the policy recommendations listed above. Such strong cooperation would ensure that OIC countries can further narrow the gap between their living standards and those of advanced countries. In the area of healthcare, this means ensuring adequate global production of vaccines and their universal distribution at affordable prices so that all countries can quickly and decisively fight back against the pandemic. The OIC community should further enhance the cooperation efforts to ensure that financially constrained economies have adequate access to international liquidity so that they can make the health care and other social and infrastructure expenditures necessary for development and convergence to higher per capita incomes. In addition, close cooperation is needed to address the economic problems underlying trade tensions and protectionism.

6.2 For OIC Members with Sufficient Institutional Capacity

ESCAPING THE CRISIS

Risk 1: *Despite their important signaling function, general lockdowns may be untenable.* Lockdowns can be an important tool to signal the seriousness of the health crisis to the population. However, after very strict lockdowns were imposed early in the pandemic, many countries had to reopen before the virus was contained, resulting in significant economic damage and sometimes disappointing health outcomes. Intergenerational living conditions can weaken adherence to social distancing. Crowded neighborhoods and the close proximity of housing also pose challenges to the enforcement of public health measures.

Policy Response:

- Use semi-targeted lockdowns consisting of restricting the movements of infected individuals. This requires a testing program. Contact tracing could serve as a preliminary tool before testing. When tests are scarce, contact tracing becomes more valuable.
- Ask vulnerable populations, such as the elderly and those with preexisting health conditions, to remain at home. This is a less costly targeted lockdown.

Risk 2: *Even when there are targeted and well-executed public health interventions, inefficiencies in managing pandemic data could drive behavior in undesirable directions.* Underreporting sets the stage for an environment that leads to prematurely relaxed behavior toward the virus. Reporting totals on a weekly basis and/or without regional or age-specific details could weaken the basis for more decentralized pandemic policies, worsen compliance with pandemic-related rules and regulations, and increase family concerns about the spread of the disease among children, leading to prolonged school closures.

Policy Response:

- Prioritize transparency of health data and avoid sudden changes in data disclosure practices.
- Share data stratified by appropriate regional level and age groups with public on a regular basis.
- **Remark.** The level of detail should be chosen carefully, because the use of communicative means is like walking a tightrope. The government may want to create some level of fear to highlight the severity of a health crisis, but it also wants to avoid widespread panic. A balance must be struck between creating fear and preventing panic. Whether the government uses communication effectively to persuade the public depends on trust in government and, more broadly, in science.

Risk 3: *Rising poverty could deteriorate the well-being of millions of people.* Coupled with job losses that affect the underprivileged groups more, the share of people in poverty has increased in many countries and represents a mounting challenge.

Policy Response:

- Utilize online databases to effectively distribute social assistance.
- Use job retention policies to mitigate the unequal impacts of the COVID-19 shock across workers.
- Employ job creation policies help ease the adjustment to the more permanent effects of the COVID-19 shock on the labor market.
- Offer unemployment subsidies/benefits not only to formal workers but also to informal workers as much as possible to mitigate the lack of insurance in the informal sector.
- Develop food safety strategies to reduce food insecurity and undernourishment.

Risk 4: *The gentle balance between health and education outcomes could be broken in favor of health outcomes.* This was due to public fears that schools would become incubators for the virus, causing children to become ill first and then other family members. There is no doubt that children are the most important part of a society in terms of their future and their health must be protected. However, learning losses have increased greatly in the last 18 months and have the potential to undermine the lifetime earnings of today's children and exacerbate existing inequalities. In addition, prolonged absence from school has several negative impacts

on children's psychosocial development and risks more dropouts becoming child brides or child labor.

Policy Response:

- Keep school closures to an acceptable minimum.
- Take necessary precautions (mask wearing, thinned-out class populations, well-ventilated classrooms, etc.) to contain the spread of the virus in schools.
- Consider hybrid education opportunities: Partly face-to-face, partly distance. This requires the strengthening of distance education infrastructure as well as acquisition of distance education material and program development.
- Employ need based, tailored solutions devised by local authorities rather than centralized decision making for the entire country.

SAFEGUARDING RECOVERY

Risk 1: *The resurgence of COVID-19 and risks to progress on vaccine introduction could slow growth.* Although vaccination programs launched in 2021 have made good progress, there is considerable uncertainty about when the majority of the population might be fully vaccinated. This is due to risks in vaccine procurement and delivery, as well as vaccine hesitancy and the effectiveness of existing vaccines against new variants of the disease.

Policy Response:

- Implement targeted lockdowns based on a data-driven approach.
- Adopt rapid and effective responses to changing conditions to help disrupt the spread of the virus and maintain supply chains and economic activity.
- Use information systems effectively in monitoring COVID-19 developments, mobility, and contact to improve efficiency in the delivery of health services.
- Maintain a strong, well-developed, and well-organized health care system.
- Incentivize vaccine development efforts by either granting temporary monopoly rights to the firms or providing insurance against losses arising from failure.
- Develop a clear vaccine rollout policy that gives priority to vaccinating vulnerable populations, critical workers or super-spreaders.
- Openly address vaccine hesitancy by vaccinating politicians early and in public or by incentivizing the vaccinated privileges.

Risk 2: *Increasing internal imbalances and external volatility could disrupt growth.* Internal imbalances include (i) reduced fiscal capacity, (ii) debt overhang, (iii) declining remittances, (iv) declining tax revenues, (v) existing financial vulnerabilities, (vi) opaque fiscal practices. Key elements of external volatility include (i) rising inflationary pressures in advanced economies, particularly in the U.S., and increasing expectations of an end to expansionary monetary policy in advanced economies, which could drain global liquidity from OIC countries; (ii) abrupt changes in commodity prices, which could cause volatility in revenues; (iii)

disruptions in global value chains, which could affect both the current account and production lines.

Policy Response:

- Use a combination of credit stimulus, targeted direct fiscal measures, liquidity support, debt restructuring, temporary deferral of taxes, loose monetary policy, and other regulatory policies to achieve recovery.
- Employ timely, targeted and temporary fiscal support to protect vulnerable households and alleviate employment losses.
- Improve the transparency and accountability of public entities to reduce fiscal weaknesses. This includes strengthening mechanisms to enhance control over contingent liabilities, rule-based formal reporting requirements for state owned enterprises, collection of relevant data for fiscal hazard analysis, and establishing clear standards (based on credit risk appraisals) for issuing guarantees.
- Have a measured approach towards premature fiscal consolidation that could harm the vulnerable and interrupt a systematic recovery.
- Reduce inflationary pressures and avoid early and impulsive monetary easing to prevent unnecessary volatility in capital markets, tackle dollarization, anchor inflation expectations and reduce pressures on the currency.

INVESTING IN FUTURE

The recovery effort from the COVID-19 shock provides an opportunity for OIC countries to restructure their economies onto a more resilient, inclusive, and sustainable growth path. As the global trade landscape changes through rapid technological developments and shifting consumer preferences, OIC countries must adapt to maintain their competitive advantage in world markets. This can be achieved through targeted support measures and fundamental policy reforms.

For OIC countries rich in hydrocarbon resources, economic diversification is a critical structural reform for development and long-term prosperity. Diversification provides a hedge in case the demand for the resource or the supply of the resource begins to deteriorate. Diversification enables resource-rich countries to better cope with commodity price volatility. Third, diversification creates new employment opportunities, considering that resource extraction is highly specialized and capital intensive.

Given the frequent natural disasters due to climate change, measures to promote a green recovery and/or launch a green revolution can give OIC countries a competitive advantage in the decarbonization process of global markets. OIC countries can take the opportunity to adapt their existing policy structures, especially those associated with COVID-19, to help households and businesses plan for gradual adaptation to low-carbon markets.

6.3 For OIC Members with Limited Institutional Capacity

ESCAPING THE CRISIS

Risk 1: *Inefficiencies in the implementation public health measures could undermine the containment efforts in terms of spread of the virus.* This would increase the human toll, cause new variants of the virus emerge, prolong the pandemic and exacerbate existing inequalities.

Policy Response:

- Implement targeted lockdowns based on a data-driven approach.
- Adopt rapid and effective responses to changing conditions to help disrupt the spread of the virus and maintain supply chains and economic activity.
- Use information systems effectively in monitoring COVID-19 developments, mobility, and contact to improve efficiency in the delivery of health services.
- Decentralize national COVID-19 measures to allow different regions/municipalities to implement the measures they deem appropriate for their respective populations.
- Communicate effectively with the public to ensure maximum adherence to the rules and regulations.
- Raise awareness of the importance of face masks in COVID-19 prevention, combined with the provision of free/low-cost fabric masks designed to optimize user comfort, could significantly increase mask use.
- Educate the public about the importance of lockdowns to prevent transmission of COVID-19.
- Develop and a strong, well-developed, and well-organized health care system.
- Develop a national plan for vaccine preparedness and deployment.

Risk 2: *Even though the human toll of the COVID-19 in many OIC countries have been less severe than many EMDEs and AEs, socio-economic costs of the pandemic could be heavy due to existing inequalities.* Unequal access to education, employment and health facilities particularly by women, youth and unskilled workers poses large scale risks.

Policy Response:

- Develop and utilize online databases to effectively distribute social assistance.
- Use job retention policies to mitigate the unequal impacts of the COVID-19 shock across workers.
- Employ job creation policies help ease the adjustment to the more permanent effects of the COVID-19 shock on the labor market.
- Offer unemployment subsidies/benefits not only to formal workers but also to informal workers as much as possible to mitigate the lack of insurance in the informal sector.
- Develop food safety strategies to reduce food insecurity and undernourishment.

Risk 3: *The learning losses of children and young people could reach alarming levels.* If these losses persist in the future, both differences in living standards between countries and socio-economic inequalities within countries would worsen considerably. In other words, asymmetric shocks to schooling could further exacerbate income inequality along several dimensions.

Policy Response:

- Close the learning gaps early on through remedial educational programs.
- Strengthen the distance education infrastructure
- Acquire distance education material and invest in program development.
- Employ need based, tailored solutions devised by local authorities rather than centralized decision making for the entire country.

SAFEGUARDING RECOVERY

Risk 1: *A stronger-than-expected next wave of infections may slow recovery.* Stubbornly high infection rates would strain the healthcare system and require more stringent containment measures, negatively impacting growth and job creation. Deteriorating economic and social conditions would increase pressure to extend COVID-19 related aid, which would translate into a higher budget deficit.

Policy Response:

- Deploy vaccines more widely and address vaccine hesitancy with multi-faceted policies targeted for different segment of the society.
- Take the necessary containment and relief measures to limit the impact of the pandemic on people and the economy.
- Implement structural reforms once the pandemic is brought under control to pave the way for a faster recovery.

Risk 2: *A weaker-than-expected global recovery may derail the recovery.* Weaker external demand would translate into a slower economic recovery and a lower-than-expected contribution of net exports to growth, while domestic growth factors are weak. Lower export revenues due to lower world prices would translate into a weaker current account balance and weaker tax revenues.

Policy Response:

- Implement structural reforms to increase competitiveness and encourage private investment.
- Allocate fiscal resources to programs with the greatest developmental impact.
- Maintain monetary policy space consistent with the inflation target.

Risk 3: *Increasing global risk aversion caused by tightening financial conditions (e.g., faster monetary tightening in the United States) can lead to net portfolio investment outflows and a rise in risk premia.*

Policy Response:

- Consider increased financing from international financial institutions, which tend to put less strain on the budget and domestic financing.
- Implement an appropriate policy mix to maintain investor confidence.

Risk 4: *Increased internal imbalances could disrupt growth.* The fiscal outlook could be parsimonious, as incentives provided during the pandemic could worsen the budget in the future if contingent liabilities are realized. Other internal imbalances include (i) reduced fiscal capacity, (ii) debt overhang, (iii) declining remittances, (iv) declining tax revenues, (v) existing financial vulnerabilities, (vi) opaque fiscal practices.

Policy Response:

- Use a combination of targeted direct fiscal measures, debt restructuring, temporary deferral of taxes, loose monetary policy, and other regulatory policies to achieve recovery.
- Employ timely, targeted and temporary fiscal support to protect vulnerable households and alleviate employment losses.
- Improve the transparency and accountability of public entities to reduce fiscal weaknesses. This includes strengthening mechanisms to enhance control over contingent liabilities, rule-based formal reporting requirements for state owned enterprises, collection of relevant data for fiscal hazard analysis, and establishing clear standards (based on credit risk appraisals) for issuing guarantees.

INVESTING IN FUTURE

The recovery effort from the COVID-19 shock provides an opportunity for OIC countries to restructure their economies onto a more resilient, inclusive, and sustainable growth path. As the global trade landscape changes through rapid technological developments and shifting consumer preferences, OIC countries must adapt to maintain their competitive advantage in world markets. This can be achieved through targeted support measures and fundamental policy reforms.

Sufficient resources should be allocated to social protection measures that address crisis-related needs, especially social transfer programs, as they help support the immediate and often basic needs of existing and emerging groups of poor and vulnerable people so that they do not remain in poverty. Regulations and programs should include a gender perspective and be tailored to the needs of women and other disadvantaged workers in the informal economy.

Building on the temporary measures taken during the COVID-19 pandemic, investment in social protection systems should be increased to include not only cash and in-kind transfer programs,

but also a much broader range of systems, including social insurance and universal benefit programs, such as child support or social pensions. It is important to use a mix of funding sources, primarily through domestic resources such as taxes and social security contributions, to ensure fiscal and financial sustainability and reduce pressure on government budgets.

Universal social protection through nationally outlined policies and programs that protect all people throughout their lives from poverty should be supported to ensure that no one is left behind. Such programs could include noncontributory systems that guarantee at least a basic level of income security and access to health care for all.

Institutional and international coordination and integration should be promoted in the design of social protection policies and programs. The power of digital technology (such as mobile money platforms) should be harnessed to quickly deliver services in a secure and responsible way that respects individual privacy.

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ANNEX I

COVID-19 Economic Stimulus Index Database:

<http://web.boun.edu.tr/elgin/COVID.htm>

IMF Fiscal Monitor Database:

<https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19>

IMF WEO Database:

<https://www.imf.org/en/Publications/WEO/weo-database/2021/April>

IMF-WHO COVID-19 Vaccine Supply Tracker:

<https://www.imf.org/en/Topics/imf-and-covid19/IMF-WHO-COVID-19-Vaccine-Supply-Tracker>

Our World in Data (OWID) Database:

<https://ourworldindata.org/coronavirus>

Oxford COVID-19 Government Response Tracker (OxCGRT) Database:

<https://www.bsg.ox.ac.uk/research/research-projects/covid-19-government-response-tracker>

World Bank GEP Database:

<https://www.worldbank.org/en/publication/global-economic-prospects>

World Bank PovCal Database:

<http://iresearch.worldbank.org/PovcalNet/povOnDemand.aspx>

World Development Indicators (WDI) Database:

<https://databank.worldbank.org/source/world-development-indicators>

ANNEX II

The following is a selection of containment, closure, and health system measures taken by Turkey since the beginning of the COVID-19 pandemic. The list does not claim to be exhaustive in this depth and breadth. The information in the list is compiled from the OxCGRT database and national data sources.

January 2020:

- An emergency operation center was established within the Ministry of Health.
- Scientific Advisory Board, consisting of experts in infectious diseases and clinical microbiology, was set up and started to closely monitor the COVID-19 developments.
- Health examinations were initiated for all passengers arriving from China, Hong Kong, Indonesia, India, Philippines, Malaysia, Myanmar, Singapore, Thailand, Taiwan, US, Russia, and Vietnam.
- The Ministry of Foreign Affairs started issuing travel safety warnings.

February 2020:

- Turkish citizens stuck in Wuhan/China were evacuated and quarantined.
- Flights to/from China and Iran were stopped, and the Iranian border was closed.
- Additional travel bans (Italy, South Korea, and Iraq) became effective.

March 2020:

- All educational and social activities were stopped for 2 weeks in general schools -3 weeks for universities. Centralized exams were postponed.
- Foreign nationals who stayed in Italy within the past 14 days were prohibited to enter Turkey.
- Turkish citizens returned from abroad were required to stay in quarantine for 14 stays.
- Sanitizer and mask production started in vocational and technical schools with suitable facilities.
- Annual leaves of all health personnel were suspended.
- Vacant student dormitories started to be used as quarantine centers.
- Flights to/from all countries were suspended until further notice.
- All public gatherings (cinemas, concerts, art/culture events, weddings, restaurants, cafes, play grounds, parks, museums, swimming pools, SPAs, sport centers, public libraries, meetings, conferences, conventions, shopping centers, fairs, trainings, general assemblies, etc.) were temporarily suspended, and beauty centers, barber shops, and hairdressers were closed.
- All sport activities (including professional football, basketball, and volleyball games) were postponed.
- A total curfew was announced for those who are over the age of 65 or persons whose immune system is compromised due to chronic diseases.

- Supermarket/shopping store opening hours, and the number of concurrently admitted individuals to those places and all public transportation vehicles were restricted. Seating plans in public transportations vehicles were rearranged.
- Strict curfews/closures and quarantines were implemented in numerous heavily infected villages and neighborhoods.
- All hospitals employing at least two specialists (on infectious diseases and clinical microbiology, pulmonology, and internal diseases) and having level-3 adult ICU beds were declared as “pandemic hospitals.” Hospital capacities were expanded (re-opening of Okmeydanı Hospital, etc.).
- Internal travel (i.e., between provinces) became subject to official permission by Provincial Governorates.
- Flexible work arrangements (i.e., work from home) started both in public and private sectors subject to minimum physical presence of employees.
- Provincial “pandemic committees” were established to assess the local conditions and take additional measures when required.
- “Contactless foreign trade and customs procedures” were introduced by the Ministry of Trade.
- The Ministry of Health authorized the Japanese anti-flu drug Favipiravir for emergency use (based on research showing shorter recovery times) as part of COVID-19 treatment protocol.

April 2020:

- 30 metropolitan municipalities and Zonguldak (a province with a high incidence of lung diseases) were closed to passenger travel and vehicle entry/exit—exceptions include emergency conditions and necessities to sustain supply chains in key sectors.
- (In addition to age 65 and above) A total curfew was announced for those who are below age 20—exceptions included those between 18-20 who were employed in public institutions, who could prove through social security documents that they were employed full time in private firms, or who were employed as seasonal agricultural workers.
- Wearing masks and obeying social distance rules in all public spaces became mandatory.
- Free medical masks were distributed through postal services and/or local pharmacies to all individuals of age 20-65 (5 masks per week). Applications were collected through the e-government system.
- The Ministry of Health formed contact/affiliation teams to effectively monitor contact and isolation. Automated/digital information systems were introduced to facilitate monitoring and inform police forces in case of deliberate violation.
- National weekend curfews started to disrupt spread of virus.
- The government announced building two new hospitals in Istanbul that can accommodate 2,000 patients.
- Cabs were allowed to operate in alternating days based on odd and even plate numbers.

May 2020:

- Curfews for individuals of below 20 and 65 were relaxed by allowing them to go out a few hours in certain days.
- Travel restrictions and closures were removed for 7 of the 31 provinces (Antalya, Aydın, Erzurum, Hatay, Malatya, Mersin and Muğla). The remaining 24 provinces were subject to ongoing restrictions.
- Restrictions on cabs/taxis were removed.
- Subject to certain rules and restrictions, shopping malls, barber shops, beauty centers, and hairdressers were reopened.
- The number of pandemic hospitals were reduced gradually.
- Centralized exams were rescheduled (to be held in June 2020).
- Travel restrictions were lifted for tea producers and employees.
- As part of the normalization efforts, workers were allowed to go back to their workplaces subject to pandemic rules and restrictions.

June 2020:

- All travel restrictions (including international flights) were lifted subject to pandemic rules and restrictions.
- Childcare facilities were reopened.
- Curfews for individuals of age 18-20 were removed. Curfews for individuals of age above 65 and below 18 were substantially relaxed.
- All public spaces (including restaurants) reopened subject to restrictions on opening hours and pandemic rules and regulations.
- All sport activities (including professional sports) resumed.
- Restrictions on all tourism-related activities were lifted.

September 2020:

- Capacity restrictions on public transportation were re-introduced.
- Fines for not wearing masks and not obeying social distance rules were increased.
- Flexible work arrangements were reintroduced and advised to be strictly enforced in both public and private sectors.

October 2020:

- Face-to-face education started for 2 (two) days a week in primary schools' 1st, 2nd, 3rd and 4th grades and 8th grades of lower secondary schools.
- During the week covering September 28 – October 2 and afterwards, face-to-face education was held in pre-school education institutions and primary schools' 1st grades 2 (two) days a week. Our students in pre-school and primary schools' 1st grade are not obliged to participate in face-to-face education in schools and it is left to the decision of the parents.
- As of October 12, face-to-face education started in all pre-school education institutions for 5 (five) days a week and 6 (six) activity hours a day.
- Ministry of Internal Affairs instructed all provinces to prohibit holding large public meetings until December 1, 2020.

November 2020:

- As of November 2, face-to-face education has started 2 (two) days a week in the 5th grades of lower secondary schools.
- From November 20 until January 4 face-to-face education activities in public and private formal education and lifelong learning institutions have been suspended and all education and training activities will continue through distance education.
- Centralized exams were postponed.
- Operation hours of all public spaces (including restaurants and shops) were restricted. Cinemas remained closed.
- Smoking is prohibited in public open-air areas—which is normally not restricted.
- Ministry of Health reinstated the curfew on people of age 65 and older and people 20 and younger.
- Ministry of Internal Affairs ordered businesses and other public spaces to halt indoor activities.
- Weekend curfews and online education were continued.

December 2020:

- Childcare centers and kindergartens were also closed for only one day and then all public and private pre-school education institutions have reopened face-to-face education for 5 (five) days a week
- As of December 10, as in other grades, distance education has been started in pre-school education institutions (kindergarten, kindergarten and practice class).
- On December 14, face-to-face education was started again in pre-school education institutions affiliated to the General Directorate of Private Education Institutions.
- All passengers entering the country were required to present the (negative) result of a PCR test taken in the past 72 hours.
- In addition to weekends, curfews were extended to also cover weekdays from 21.00 to 05.00.
- Restaurants would only provide delivery service.
- All restrictions related to public spaces—that were implemented during the first wave—were reinstated.

January 2021:

- Between January 4 and 22, education activities will continue through distance education, and only assessment practices will be carried out face to face.
- Within the scope of the COVID-19 vaccine program, Turkey started vaccinating residents and workers in the disabled and elderly care institutions in January 19. The program is completed in a week. In this scope, second tour of vaccination started February 23.
- Vaccination roadmap were announced and vaccination started.

February 2021:

- On February 15, it was decided to conduct face-to-face education for 5 days a week in all primary schools, lower secondary schools in villages and sparsely populated areas, and all independent public kindergartens and special education kindergartens and private pre-school education institutions.

- Based on data and infection trends, provinces started to be monitored in 4 categories by the Ministry of Health; and, normalization was announced to start based on province-level riskiness from the beginning of March 2021.

March 2021:

- Face-to-face education started for pre-schools, primary schools, and for 8th and 12th grades in all provinces. In low and medium risk provinces, face-to-face education started for all other grades. 2 (two) days of face-to-face and 3 (three) days of distance education was held in primary schools in provinces in all risk groups. In the 5th, 6th and 7th grades of lower secondary schools located in low and medium risk provinces, 2 (two) days of face-to-face and 3 (three) days of distance education were provided per week. Face-to-face education was started in the 8th grades of lower secondary schools in all provinces.
- Gradual normalization started based on four-scale categorization (very high risk, high risk, medium risk, and low risk) of provinces. Province status would change according to infection rates and trends.
- Weekend curfews were lifted in low and medium risk provinces, and would only continue in Sundays in high and very high-risk provinces. Weekday curfews (from 09.00 to 17.00) would continue in all provinces. Curfews for individuals above 65 and below 20 were removed in low and medium risk provinces, and relaxed in high and very high-risk provinces.
- Restaurants would resume their regular operations with 50 percent capacity between 07.00 and 19.00 in all provinces except very high-risk ones. Similar relaxations would also hold for other public spaces.

April 2021:

- Full-time distance education has been started in the 1st, 2nd, 3rd and 4th grades of all public and private primary schools.
- Strict lockdown measures became effective beginning from the second half of the Ramadan (also covering the Eid) to limit the rise in infection rates after gradual re-opening. The hours of the curfew on weekdays have been updated from 19.00 and 05.00.

May 2021:

- Strict lockdown measures relaxed on May 17. Curfews, which previously came into effect at 19.00, placed between 21.00 and 05.00 on weekdays and Saturdays, while a full lockdown imposed on Sundays.
- As of May 17 face-to-face training initiated in pre-school education institutions, special education schools and classes of our students with special needs, special education and rehabilitation centers and support and training courses / reinforcement courses of 8th and 12th grades. Distance education continued until Tuesday, June 1 in all formal and private, formal and non-formal education and training institutions at other levels.
- Foreign tourists who were in Turkey for a temporary period within the scope of touristic activities exempted from all restrictions provided that they have their passports with them. PCR test requests from Hong Kong, China, Vietnam, Australia,

New Zealand, Singapore, Thailand, South Korea, Japan, United Kingdom, Latvia, Luxembourg, Ukraine, and Estonia to enter Turkey from May 15. Passengers arriving from Brazil and South Africa and arriving in Turkey were suspended temporarily. Passengers from countries other than these countries, who have been in Brazil or South Africa in the last 10 days, quarantined for 14 days in a place to be determined by the Turkish official authorities. These passengers were re-tested on the tenth day of the quarantine period, and their quarantine terminated if the test result is negative.

June 2021:

- On June 1 curfews, extended to 21.00 and 05.00 on weekdays and Saturdays, while a full lockdown imposed on Sundays.
- Grocery store, market and bakeries opened between 10.00-17.00 on the weekend.
- Shopping centers operated between 10.00-20.00 on weekdays. Tea shops, on the other hand, will be able to continue their activities on the condition of removing their tables, chairs/stools and only serving the tradesmen. Shops such as clothing, haberdashery, glassware, hardware, tailors, barbers in the retail and service sector, which are out of the above-mentioned workplaces and whose activities were suspended during the closing period.
- Restaurants and cafes were allowed to offer indoor dining under certain restrictions between 07.00 and 21.00, while their delivery services could continue until midnight. Eateries could serve only two customers at the same table inside the venues while there was a maximum of three people to a table in outdoor seating. Gyms reopened on June 1, while movie theaters were allowed to operate at 50 percent capacity.
- Indoor and outdoor wedding ceremonies could be held in line with virus rules. At indoor venues, the number of guests was limited to 100 people.
- Offices and offices will be able to operate between 07.00-20.00 on weekdays, provided that they comply with all the anti-epidemic measures specified for the business line in the Ministry of Health Outbreak Management and Work Guide.
- Primary school students could return to classrooms on June 11. Attendance was not compulsory.
- PCR testing for foreigners was limited to those who had symptoms, or those who may have an entry requirement back to their home country as of June 11. Testing is paid by the traveler.

July 2021:

- Curfew and all stay-at-home restrictions were lifted as of July 1.
- All places of work, whose activities have been suspended, became operational as of July 1.
- Outdoor wedding ceremonies could be held without a guest limit and food/drink could be served, while some restrictions were still in place for indoor ceremonies. Events such as concerts, festivals, and youth camps were allowed provided that the previously set rules are followed.
- Basic principles of cleanliness, mask-wearing, and social distancing continued to be extremely important, even for vaccinated individuals.

ANNEX III

The following is a selection of containment, closure, and health system measures taken by Qatar since the beginning of the COVID-19 pandemic. The list does not claim to be exhaustive in this depth and breadth. The information in the list is compiled from the OxCGRT database and national data sources.

January 2020:

- Precautionary screening of passengers arriving at Hamad International Airport from China started.

February 2020:

- Suspension of flights to mainland China from February 3 until further notice.
- Evacuation of Qatari citizens from Iran.

March 2020:

- International travel to/from Bangladesh, China, Egypt, India, Iran, Iraq, Italy, Lebanon, Nepal, Pakistan, the Philippines, South Korea, Sri Lanka, Syria and Thailand was banned.
- A nationwide closure of schools and universities was announced.
- MoPH called upon all citizens and residents to avoid crowded places and postpone holding social gatherings for the time being, for their own wellbeing and that of the community.
- Public transportation, including Doha Metro and Karwa buses, ceased to operate.
- Industrial Area was locked down.
- Closure of all shops and bank branches, except for food stores and pharmacies.
- Eighty percent of government employees were also ordered to work from home.
- All inbound flights, except for cargo and transit flights, were banned. The entry ban did not apply to Qatari citizens. Nationals of Qatar were not allowed to exit the country.
- All gatherings were banned; patrols were deployed to contain coronavirus.

April 2020:

- 80 percent of the work force of the private sector were to work from home from April 1, with certain exceptions the working hours of employees and workers in the public and private sector who are still required to attend their workplace were reduced to 6 hours per day from 07.00-13.00, although some projects considered to be in the national interests have been exempted from this restriction.
- The drive through testing was reserved for those people who meet all the following criteria: Those who have returned to Qatar from overseas between March 10 and March 21; those who have been undergoing quarantine at home and have signed an official undertaking for this; Those who have not been swabbed to test for COVID-19 since returning home.
- Except for families, only two individuals in a car were allowed.
- The gradual lifting of Industrial Area lockdown starting on April 22.

- The Cabinet has made wearing of face masks mandatory from April 26, 2020 until further notice for government and private sector employees and clients, shoppers at food and catering stores and workers in the contracting sector.

May 2020:

- A two-day pilot was launched for asymptomatic residents and citizens contacted to participate in voluntary tests at several clinics across the country.
- As of May 12, restaurants and cafés were allowed to resume the activity of delivering or handing over orders to customers outside the business place, with those establishments located in malls only allowed to process delivery orders and not hand over orders to customers both inside and outside the workplace.
- Drive-through testing became available to all.
- All Qatari residents were required to wear face masks outside of their homes beginning May 17, to curb the spread of the coronavirus disease. The only exception applies to those driving in a car with no other passengers. Those who fail to comply with the measures were sanctioned, either with a maximum of three days in prison and/or a fine of QR 200,000 (USD 55,000). Previously, masks were compulsory for employees of select sectors and in some public spaces.
- Starting May 22, 2020 all citizens and residents were required to install the Ehteraz App on their mobile phones before leaving their residence, to help track COVID-19 transmission chains, help prioritize testing, and provide COVID-related updates.

June 2020:

- The Ministry of Finance instructed government ministries, institutions and entities funded by the state to reduce monthly costs for non-Qatari employees by 30% from June 1, 2020, either by cutting salaries or laying off workers with a two-month notice.
- The strict measures on mask wearing outside were eased on June 4.
- Some of the mosques were opened on June 15, 2020. There was no change in policy for other gatherings.

July 2020:

- Phase 1 reopening on July 1
 - Qatar Airways reactivated services to 11 destinations, including three services to the United States of America.
 - From July 1, (1) 50 percent of public and private sector employees were allowed at the workplace as needed, provided that employers meet hygienic requirements, implement precautionary measures, and continue to protect vulnerable employees by allowing them to work remotely; (2) The capacity of private health facilities was increased to 60 percent; and (3) Restaurants, libraries and museums were allowed to reopen with limited capacity and limited working hours.
 - Families were allowed to rent boats and yachts in groups not exceeding 10 people; (2) The maximum number of public and private gatherings was reduced from 10 to 5 people following the discovery of numerous cases amongst Qatari nationals due to majlis gatherings and family visits, and

- amongst white-collar expats due to uncontrolled contact with no precautionary measures; and (3) Sports training in open spaces and large halls were permitted for professional athletes in groups not exceeding 10 people.
- All parks and beaches as well as the corniche could be reopened for people of all ages while continuing to practice social distancing. Play areas remained closed.
 - Phase 2 reopening on July 5
 - No changes
 - Phase 3 reopening on July 28
 - Citizens and permanent residency holders were allowed to travel outside the country and return at any time, and residents outside the country to return from August 1. Arrivals from low-risk countries were required to take a coronavirus test at the airport and sign a formal pledge to adhere to quarantine at home for a week.
 - The regulations allow limited gatherings of up to 10 people indoors, 30 people outdoors and the restricted mosques opening for Friday prayers at 54 mosques.
 - Full reopening of shopping malls was allowed. However, Courts Food and restaurants not registered through Qatar Clean program remained closed, except for delivery and pick up. Cinemas were still closed.

September 2020:

- Phase 4 -Part 1 reopening on September 1
 - Public and private schools in Qatar reopened, September 1, introducing a new concept of “blended learning” where students would attend school up to a maximum of 2 days a week and rest of the learning would be done online. With a maximum of 30 percent of children in school each day, in addition to supporting preventive measures.
 - Cinemas were allowed to screen movies from today, September 1, onwards with a capacity of 15 percent. The cinemas had to follow precautionary measures and only people above 18 years were allowed entry.
 - Bus and rail services were allowed for the first time since March, with reduced capacity and tough restrictions to limit the risk of coronavirus spreading between passengers.
- Phase 4 -Part 2 reopening on September 15
 - Gatherings of 15 people indoors and 30 people outdoors -Weddings with a maximum of 40 people indoors and 80 people outdoors -All mosques open to perform daily and Friday prayers
 - Souks at 75% capacity -80 percent of employees allowed in public and private workplaces
 - Wholesale markets at 50 percent capacity
 - Cleaning and hospitality services in workplaces at 30 percent capacity and resumption of home services

- Local exhibitions allowed at 30 percent capacity
- Malls at 50 percent capacity, with normal hours and children welcome
- Food courts in malls at 30 percent capacity
- Restaurants at 30 percent capacity and playgrounds and leisure centers remained closed
- Massage and sauna centers at 30 percent capacity
- Theatres and cinemas at 30 percent capacity for those 18 and older
- Museums and libraries at full capacity
- Continuing the suspension of home beauty, barber, massage and fitness training services
- Personal boat and yacht rentals at 30 percent capacity
- Metro and bus at 30 percent capacity
- Driving schools at 50 percent capacity
- Health clubs, gyms and pools at 30 percent capacity
- Continued closure of playgrounds and sports equipment in public parks
- Private healthcare facilities at 100 percent capacity
- Private education and training centers at 50 percent capacity

October 2020:

- Strict quarantine rules (14 days of isolation upon arrival) for incoming travelers from low-risk countries have been extended until December 31st.

November 2020:

- Non-Qatari citizens were banned to enter Qatar. Qatari citizens entering Qatar were subject to a two-week quarantine.
- Vulnerable groups (including those above the age of 60, pregnant women, or those suffering from chronic conditions) were advised to remain at home.
- Distance requirements were introduced: -Keep 1.5 meters minimum distance between people (9 m² of space per person). - Maintain a maximum of 15 people in doors and 30 people outdoors. -No physical contact was allowed including handshakes, hugging or kissing.
- New workplace requirements: -continue with 80 percent of staff in the workplace - consider working in split teams, alternating shifts, or alternating days to comply with capacity and physical distancing guidance -allow flexible working hours for vulnerable employees or those who were concerned about being present in office locations for health reasons.
- The Ministry of Public Health advised against unnecessary travel at this time because of the risk of contracting COVID-19 while abroad.

January 2021:

- Health Ministry dedicated COVID-19 information web site with comprehensive information, plus telephone helpline available.
- On January 26 a raft of restrictions on education, leisure, and business activities, including closing indoor swimming pools and theme parks and restricting restaurant capacities were reintroduced.

- Quarantine requirements for all arrivals in Qatar have been extended through May 31, 2021.
- Customs duty exemption for food, medical equipment: the General Authority of Customs in addressing the effects of the coronavirus (COVID-19) pandemic has issued a directive exempting food and medical equipment from customs duties for a period of six months. The exemption from customs duty applied for 905 different items listed in the customs clearance system. These included basic food items and a number of medical devices.
- On January 26, students partially returned to classes in different schools in Qatar for their second semester amid strict measures against the coronavirus.

February 2021:

- The 32-point plan -a new set of tailored restrictions- was made public on February 2.
- Qatari citizens and residents who have been vaccinated against COVID-19 were exempt from quarantine requirements when arriving in Qatar. However, they must meet certain requirements, including being vaccinated in Qatar, presentation of a negative COVID-19 result on arrival, and fourteen days must have elapsed since receiving the second vaccination.

April 2021:

- Ministry of Education and Higher Education decided to move to the distance learning model for all students in public and private schools, preschools and universities, and suspend the in-person attendance starting Sunday, April 4.
- Effective April 9
 - Social gatherings and visits in closed places were suspended. Permitted were gatherings at a maximum of 5 fully-vaccinated people in open spaces.
 - Reduction employee numbers in public and private sector workplace to 50 percent excluding the military, security, and health sectors.
 - Reduction of bus and metro services to 50 and 20 percent capacity, respectively.

May 2021:

- Phase 1 of gradual lifting on restrictions on May 28

June 2021:

- Phase 2 of gradual lifting on restrictions on June 18
- Mandatory weekly rapid antigen testing for all public and private sector employees, excluding those who have received two vaccine doses, have recovered from COVID-19, or have medical conditions which prohibits testing.

ANNEX IV

The following is a selection of containment, closure, and health system measures taken by Cameroon since the beginning of the COVID-19 pandemic. The list does not claim to be exhaustive in this depth and breadth. The information in the list is compiled from the OxCGRT database and national data sources.

February 2020:

- There was evidence of limited contact tracing as far back as the first case confirmed of COVID in Cameroon on February 24.

March 2020:

- Cameroon closed its borders –land, sea and air, suspended all academic activities but has not imposed a lockdown or curfew.
- People must wear masks in public.
- People must follow hygiene rules.
- Gatherings of more than fifty persons are prohibited.
- Bars, restaurants and entertainment spots will be systematically closed from 18.00
- Authorities asked the public to avoid intercity travel unless absolutely necessary.
- Authorities urged to avoid overloading buses and taxis.
- All public and private training educational establishments of various levels of education from nursery school to higher education, including vocational training centers and professional schools were closed.

April 2020:

- Massive anti-COVID-19 campaign started.
- Testing campaign launched.
- Wearing a mask in all areas open to the public
- Establishment of specialized COVID-19 treatment centers in all regional capital
- Intensification of the screening campaign with the collaboration of the Center Pasteur
- Intensification of the awareness campaign in urban and rural areas in both official languages;
- Continuation of activities essential to the economy in strict compliance with the directives of March 17.

May 2020:

- Cameroon announced that schools will reopen June 1.
- Urban and inter-urban travel advised to be undertaken in cases of extreme necessity.

June 2020:

- Announcement that some measures in place to limit the spread of COVID-19 were eased from Monday, June 1. Schools, universities, and training centers, which have been closed since March 17 were permitted to reopen nationwide provided they adhere to the strict health measures in place. Nursery schools and intermediate classes in primary and secondary schools could not reopen.

July 2020:

- Schools and other educational establishments have partly reopened. International schools have indicated that they planned to reopen in September.

September 2020:

- Schools were planned to resume October 5.
- There were government facilities in all ten regions that provide testing at no charge. Results were usually provided within 24–48 hours.
- Cameroonian borders remained officially closed; however, several airlines have been given permission to operate international flights from Douala and Yaoundé. In fact, those that had visas were allowed to fly into Cameroon. Passengers only needed to show evidence of a negative COVID-19 test. The Cameroonian government has also updated the previous policy of mandatory quarantine for travelers. Air passengers with a positive COVID-19 test result will be required to enter isolation at home or in a government facility at their own expense depending on their symptoms.

October 2020:

- The presidency banned any demonstration until the upcoming December elections with the excuse of the pandemic.
- Older students started school with strict safety measures: masks, social distancing, frequent hand sanitation, etc. Schools in separatist region were closed.

March 2021:

- The country was expecting about a million doses according to the prime minister but the doses have not arrived the country.

August 2021:

- People aged 18 years old and over were vaccinated.
- UN agencies and non-governmental organizations have worked together to launch vaccination and awareness raising campaigns.

ANNEX V

The following is a selection of containment, closure, and health system measures taken by South Africa since the beginning of the COVID-19 pandemic. The list does not claim to be exhaustive in this depth and breadth. The information in the list is compiled from the OxCGRT database and national data sources.

January 2020:

- Travelers screened at major airports, especially those travelling from destinations in Asia.

March 2020:

- Declaration of COVID-19 pandemic a national disaster.
- Schools closed from on March 18.
- The country went into full lockdown from midnight 26 March to 30 April 2020 (Alert Level 5). Only essential services and businesses are operating. No alcohol or cigarette sales are permitted, and citizens may not travel or attend any form of gatherings.

April 2020:

- Announcement that the country's national lockdown would be extended by two weeks, beyond the initial 21 days.
- First outline of a phased relaxation of the lockdown restrictions and a 5-level alert system with clearly defined levels.

May 2020:

- Movement to Alert Level 4 on May 1.

June 2020:

- Movement to Alert Level 3 of the national lockdown. Alcohol was permitted to be sold for home consumption on specified days and hours. The sale of tobacco products remained prohibited.
- Schools and universities reopening with a phased approach.
- After 10 weeks of the ban on commercial flights in the country limited domestic air travel was permitted for business purposes.

July 2020:

- Announcement of the immediate ban of alcohol sales to alleviate the pressure on hospitals while the country remains in Alert Level 3.
- A curfew from 21.00-04.00 was introduced and family visits were prohibited.
- Temporary closure of schools.

August 2020:

- Movement to Alert Level 2 on August 15. Prohibition on the sale of alcohol and tobacco products lifted, gyms and fitness centers were reopened, and restaurants, bars and taverns were permitted to operate according to approved protocols.
- Extension of the national state of disaster by another month.

September 2020:

- Movement to Alert Level 1. The sales of alcohol from licensed vendors were allowed between 09.00-17.00 on weekdays. The national overnight curfew remained in place between 0.00-04.00.
- The use of face masks remained mandatory in public places and members of the public were still required to comply with social distancing measures. Beaches and public parks were open but subject to strict health protocols.

October 2020:

- Opening of borders for travel within Africa and internationally, effective from October 1. All travelers were required to provide evidence of a negative COVID-19 test taken within 72 hours prior to arrival in the country and would be screened on arrival.
- Universities and tertiary education facilities were also permitted to reopen and accommodate students at full capacity. This measure included foreign students in line with international travel regulations and compulsory quarantine measures.

November 2020:

- Cancelling of the list of high-risk travel countries, which had been in place since borders were reopened earlier this month.
- Schools open in line with numbers that could be accommodated to enable physical distancing, the handling of communal spaces, hygiene requirements and dining hall arrangements.

December 2020:

- Announcement of that end-of-school parties known as "rage parties" were super spreader events.
- Closure of some beaches, lowering of the number of people that can attend gatherings and the tightening of other measures on December 14.
- Movement to Alert Level 3 on December 28 for two weeks.
- As of December 30, the country was at Adjusted Alert Level 3. A nationwide curfew was in place from 21.00-06.00. Cloth face masks were mandatory in public across South Africa.

February 2021:

- Schools reopened after delay over COVID-19 variant. Schools were originally planned to reopen on January after the semester break, but the government pushed the date back by two weeks as infections soared, fueled by the new strain that was identified in the country.

March 2021:

- The lockdown was lowered from Adjusted Alert Level 3 to Adjusted Alert Level 1 starting on March 1.
- Temporary restrictions on offsite holiday alcohol sales and the easing of measures around religious gatherings on March 30.

April 2021:

- Schools were closed until May 3.

May 2021:

- On 31 May 2021 the country was moved from Adjusted Alert Level 1 to Adjusted Alert Level 2, due to a third wave of infections.

June 2021:

- On 15 June 2021 the country was moved to Adjusted Alert Level 3.
- On 28 June 2021, the country was moved to Adjusted Alert Level 4, with the Delta variant fast becoming the dominant strain in the country.

July 2021:

- On 25 July the country was lowered to Adjusted Alert Level 3.