

2. Addressing Economic Scarring from the Crisis

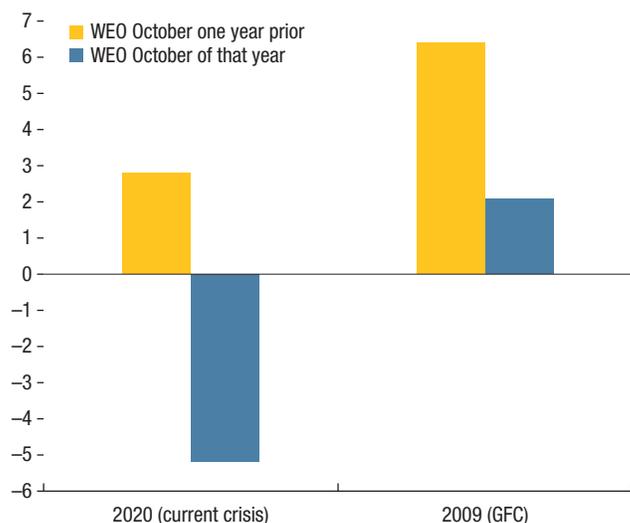
The coronavirus disease (COVID-19) pandemic may inflict a deeper and more persistent economic impact than previous recessions in the Middle East and Central Asia (MCD) region did, as the unique characteristics of a global pandemic shock collided with long-standing vulnerabilities in the region. In particular, the region's large exposure in the hard-hit services sector (including tourism), strained corporate balance sheets, low ability to work from home, and dependence on remittances will weigh heavily on recovery prospects. Real GDP in the region could remain below precrisis trends for a decade. As the pandemic continues, policymakers must carefully balance preserving livelihoods, minimizing scarring, and promoting recovery, without hampering necessary reallocation. In the medium term, it will be key to rebuild buffers to guard against future shocks.

A Crisis Like No Other amid Limited Policy Space

The COVID-19 crisis represents the fastest moving economic shock of its depth in recent history. In addition to its significant human toll, the crisis's indirect economic impact through lockdowns, labor disruptions, and global spillovers has been unprecedented. The impact was particularly strong on the services sector. Dampened activity also led to a fall in global oil demand and plummeting oil prices. As a result, growth in 2020 has been severely marked down for the region (Chapter 1, Figure 2.1).

Whether the current crisis is a temporary contraction in activity or a permanent setback to the region's development will depend on the extent of economic scarring. The literature has defined this phenomenon as lower supply capacity that remains after shocks have dissipated, and the

Figure 2.1. MCD Real GDP Growth (Percent change)



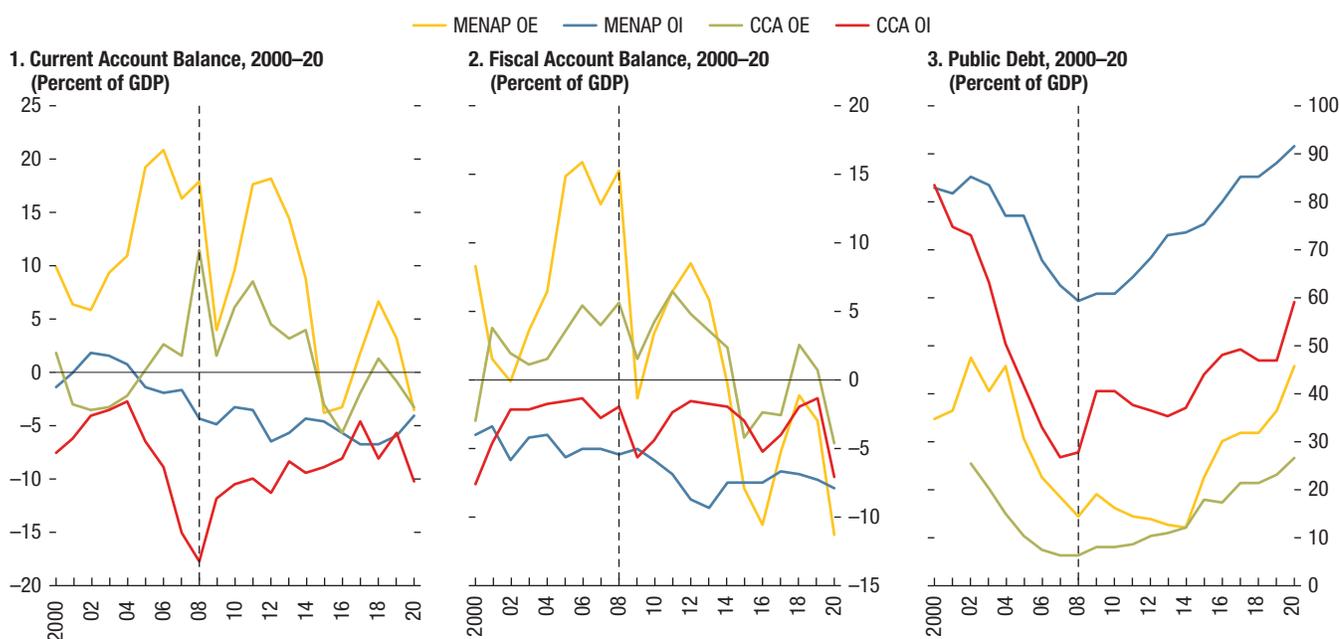
Sources: National authorities; and IMF staff calculations.
Note: GFC = global financial crisis; WEO = *World Economic Outlook*.

persistently subdued demand driven by lasting negative labor market outcomes. The extent of scarring depends not only on the depth of the shock but also on each country's initial conditions and policy reactions during the crisis.

The region entered the crisis with little policy space.¹ In the run-up to the crisis, weak external demand and subdued oil prices lowered current account balances, while persistent fiscal deficits contributed to rising debt levels. Compared with conditions before the global financial crisis (when countries in the region averaged fiscal and current account surpluses of 4.7 and 7 percent of GDP, respectively), in 2019 countries averaged deficits of 2.5 and 2 percent of GDP. Meanwhile, debt to GDP rose from 43 percent in 2006 to 59 percent by 2019 (Figure 2.2).

Klakow Akepanidaworn, Gareth Anderson, Dalmacio F. Benicio, and Joyce C. Wong prepared this chapter, and Oluremi Akin-Olugbade provided research assistance.

¹Chapter 3 examines the concept of fiscal space in the region more closely.

Figure 2.2. Preexisting Economic Conditions

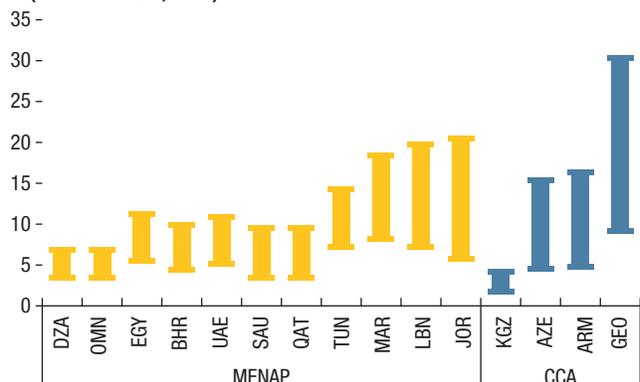
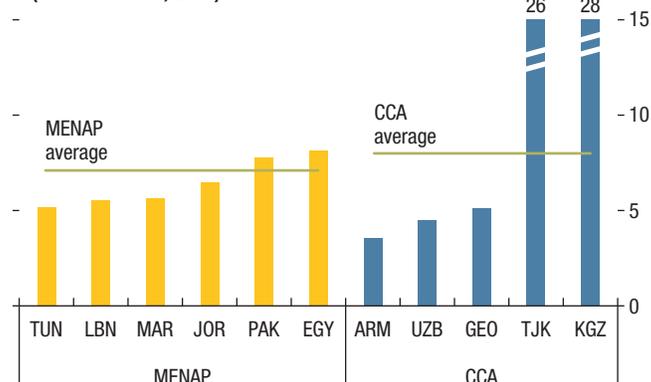
Sources: National authorities; and IMF staff calculations.

Note: CCA OE = Caucasus and Central Asia oil exporters; CCA OI = Caucasus and Central Asia oil importers; MENAP OE = Middle East, North Africa, Afghanistan, and Pakistan oil exporters; MENAP OI = Middle East, North Africa, Afghanistan, and Pakistan oil importers.

The COVID-19 crisis has also highlighted the region's long-standing structural vulnerabilities. Oil exporters remain largely undiversified, with dominant energy companies. Among oil importers, tourism and remittances (both of which were affected by the pandemic) each account for greater than 10 percent of GDP in some countries (Figure 2.3). The region entered the crisis with a structurally high unemployment rate of about 9 percent for the last 10 years, with youth unemployment over 20 percent for half of the countries. The estimated size of the informal sector remains high across the region and is most pronounced in the Caucasus and Central Asia region (CCA), standing at 40 percent of GDP. Social safety nets remain largely subsidy-based, with better-targeted support still underused. The region is also home to several fragile and conflict-affected states, which will likely see a significant worsening in their humanitarian situation (Box 1.2).

Implications of Economic Scarring for the Recovery

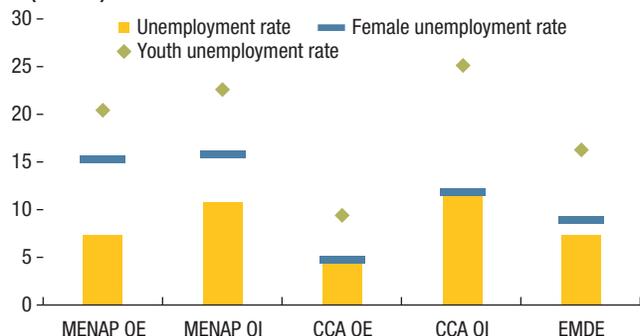
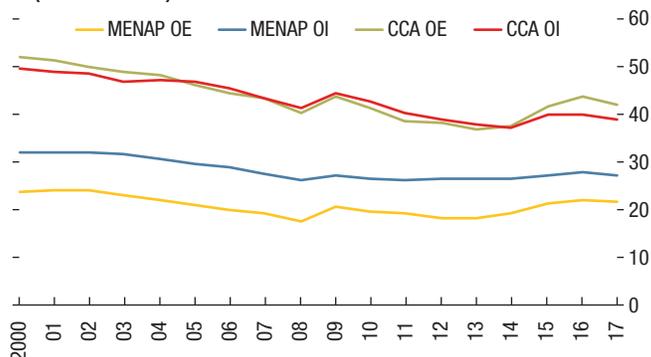
Given the backdrop in the MCD region, how deep could the economic scarring from the COVID-19 crisis be? For example, the global financial crisis inflicted significant scarring (Box 2.1). Five years after that crisis, real GDP in MCD countries remained more than 4 percent below its precrisis trend. By the end of 2019, 12 countries still had not returned to their precrisis growth trends, and for those that had, it took more than five years, on average. This time, given preexisting vulnerabilities, it is estimated that five years from now, countries in the region could be 12 percent below the GDP level implied by precrisis trends, and a return to the trend level could take more than a decade. Although these numbers are sizable, they are likely underestimates, given the unprecedented nature of the current shock and downside risks, as highlighted in Chapter 1.

Figure 2.3. Travel and Tourism, Remittances, and Structural Vulnerabilities**1. Travel and Tourism Contribution to GDP¹**
(Percent of GDP, 2019)**2. Remittances**
(Percent of GDP, 2019)

Sources: World Travel and Tourism Council; national authorities; and IMF staff calculations.

Note: CCA = Caucasus and Central Asia; MENAP = Middle East, North Africa, Afghanistan, and Pakistan. Country abbreviations are International Organization for Standardization (ISO) country codes.

¹The data show the ranges between direct and total contribution of travel and tourism spending to GDP and employment, respectively. The direct impact is defined as GDP (employment) generated by industries that deal directly with tourists; i.e., hotels, travel agencies, airlines, other passenger transport services, and activities of restaurant and leisure industries. It is equivalent to total internal travel and tourism spending (by residents and international visitors) within a country minus the purchases made by those industries (including imports). The indirect impact (as described by the Organisation for Economic Co-operation and Development Tourism Satellite Accounts) is defined as the impacts generated by the intermediate consumption of the producers who are directly in contact with the visitors plus the induced impacts, defined as the impact generated by the production factors implemented by these producers who are in contact with the visitors.

3. Unemployment Rate, 2019
(Percent)**4. Size of the Shadow Economy, 2000–17**
(Percent of GDP)

Sources: International Labour Organization; Medina and Schneider (2019); and IMF staff calculations.

Note: CCA OE = Caucasus and Central Asia oil exporters; CCA OI = Caucasus and Central Asia oil importers; MENAP OE = Middle East, North Africa, Afghanistan, and Pakistan oil exporters; MENAP OI = Middle East, North Africa, Afghanistan, and Pakistan oil importers.

What are the drivers of this persistently negative outcome? Although there are many channels through which scarring can occur, this section identifies four key channels:

- Large exposure in the hard-hit services sector, particularly tourism, could reduce baseline GDP and employment growth for MCD tourism-intensive countries by about 5 percentage points each on average in

2020, with potential lingering effects for the next two to five years.

- High leverage and a sizable contraction in revenues and profitability for firms in 2020 have raised medium-term solvency risks, with firms about twice as likely to default by early 2021 as they were before the pandemic.

- The protracted impact of the crisis on contact-intensive sectors, coupled with limited ability to work from home in the region, will exacerbate unemployment. A slow reallocation of labor away from the most affected sectors could lead to higher unemployment for several years, as has been the case following past recessions.
- The sharp drop and protracted recovery in remittances could increase the number of new extreme poor by 1.3 million, reaching a poverty headcount of about 5.25 percent of the population of MCD remittances-dependent countries, with fragile and conflict-affected states overwhelmingly representing the new extreme poor.

A Protracted Rebound in Services

The first channel through which scarring can occur focuses on the large exposure of some MCD economies to services. Because the services sector's contribution to value added exceeds 34 percent for more than two-thirds of MCD countries, a severe disruption in these activities will markedly weigh on the eventual overall recovery. This is particularly the case for travel and tourism activities, which account for up to 26.6 percent of total employment and contribute as much as 30.5 percent of GDP in some MCD tourism-intensive countries. For these countries, a severe six-month disruption to these activities, calibrated to match broadly the evolution of high-frequency indicators between April and June 2020, is expected to reduce baseline GDP and employment growth in 2020 up to 5.4 and 4.9 percentage points on average, respectively, with Georgia, Jordan, Lebanon, and Morocco being hurt the most (based on the direct and indirect contribution of these activities to overall GDP and employment; Figure 2.4, panels 1–2).

An event study of past shocks in the region indicates that the resumption in travel and tourism could take several years. In the five years since the global financial crisis and Arab uprisings, tourism receipts remained on average 13 percent below

their precrisis levels in the Middle East, North Africa, Afghanistan, and Pakistan oil importers (Figure 2.4, panel 3). This reflects particularly protracted contractions in Egypt (where tourism receipts in 2015 remained 50 percent below 2010 levels) and Tunisia (about 50 percent below 2010 levels).² The 2014–15 oil shock also reduced tourism inflows to Egypt, Jordan, and Morocco, though for a shorter period (between two and four years). The protracted impact after the Arab uprisings seems to be driven by tourists choosing different destinations, but the experience after the 2014–15 oil shock was temporary because negative wealth effects kept tourists from oil-dependent countries at home. This time the recovery could be even more protracted because of both the negative wealth effects from the crisis and the potential that travelers could avoid MCD countries if the region lags the rest of the world in controlling COVID-19 and reopening to air travel.

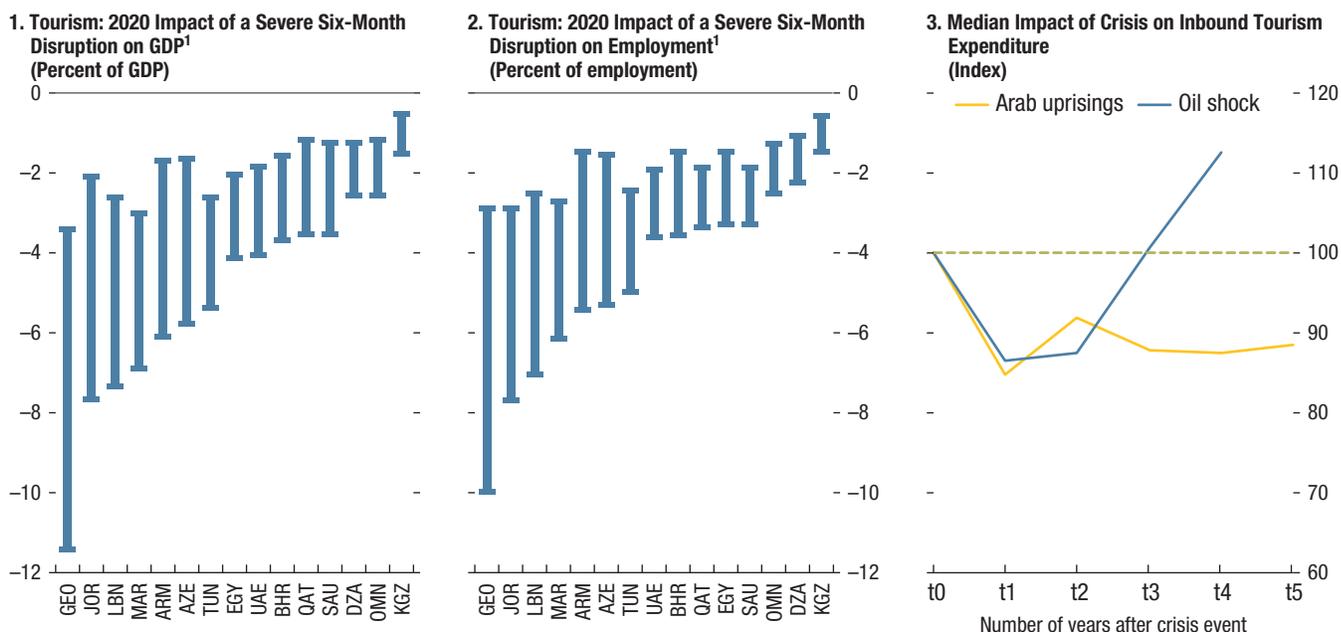
Further Strains on Corporate Balance Sheets

Firms in the region entered the pandemic with relatively weak fundamentals. Compared with preexisting conditions in other crises, firms had, on average, lower profitability, liquidity, and revenue growth before the current crisis (Figure 2.5).³ Compared with other regions, MCD firms entered the pandemic with higher leverage and lower capacity to cover interest expenses (Table 2.1, panel 1). Firms in oil-exporting countries, although more liquid, had worse pre-pandemic revenue growth and

²Although terrorism incidents in Tunisia in 2015–16 had a more pronounced impact than the global financial crisis and the Arab uprisings.

³Quarterly data on listed companies were obtained from the S&P Global Intelligence Compustat database. The average number of firms per quarter in the Middle East and Central Asia since 2007 is about 1,200, covering eight oil-importing countries (Egypt, Georgia, Jordan, Lebanon, Morocco, Pakistan, Sudan, Tunisia) and seven oil-exporting countries (Bahrain, Kazakhstan, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates). Selected financial indicators are defined as (1) return on equity = net income ÷ equity; (2) net profit = net income ÷ cost of goods sold; (3) revenue growth; (4) leverage = total liabilities ÷ total assets; (5) liquidity = (cash + receivables) ÷ current liabilities; and (6) interest coverage ratio = earnings before interest and tax ÷ interest expense.

Figure 2.4. Impact of Crisis on Tourism in MCD Countries



Sources: World Tourism Organization; World Travel and Tourism Council; and IMF staff calculations.

Note: Country abbreviations are International Organization for Standardization (ISO) country codes.

¹These estimates do not consider the potential mitigating effect from residents substituting foreign travel for domestic tourism. The data show the ranges between direct and total contribution of travel and tourism spending to GDP and employment, respectively. See Figure 2.3 for the definition of direct and indirect contribution of travel and tourism to GDP and employment.

slightly higher leverage than those in oil-importing countries, reflecting the lasting impact from the 2014–15 oil shock.

These conditions deteriorated further during the first half of 2020, compared with the average performance in 2018–19. Revenue growth contracted by 11 percentage points, reflecting a deeper impact on oil importers than on oil exporters (–17.5 and –7.5 percentage points, respectively). As a result, profitability has taken a bigger hit in oil-importing countries, where it has more than halved. Leverage throughout the region has increased during the pandemic. Performance during the second quarter shows a deeper impact on revenue growth (a contraction of 19 percentage points) and a continued increase in leverage (Table 2.1, panel 2).

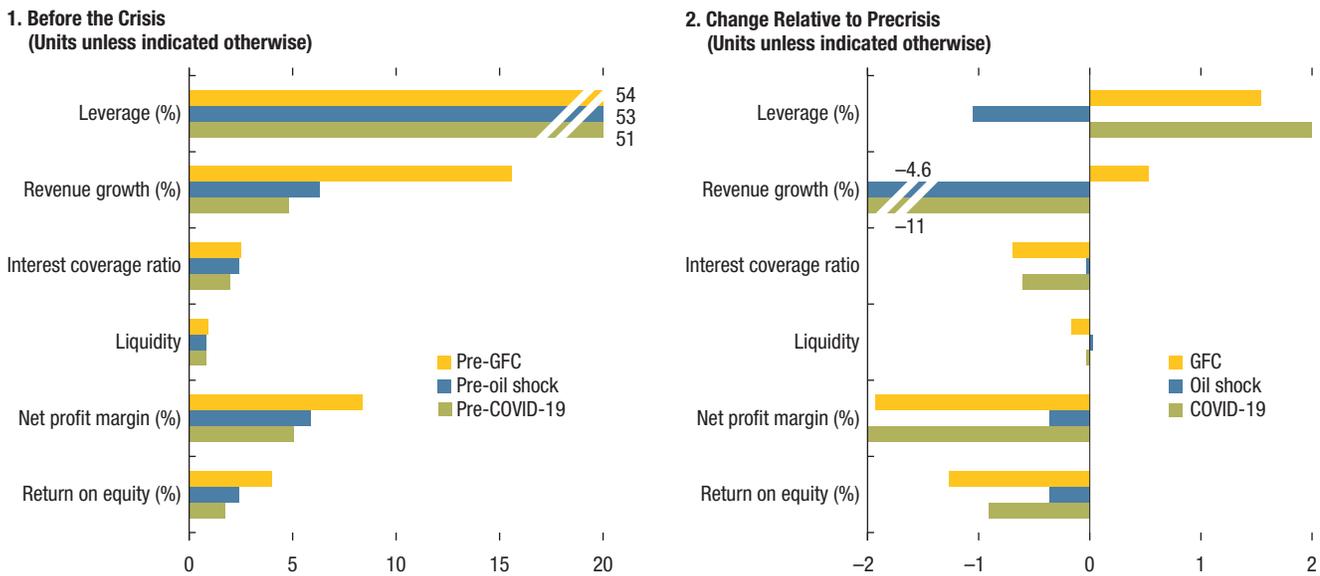
The pandemic has also had a significant adverse impact across sectors (Table 2.1, panel 3). The energy sector, the main revenue source in the

region, has been hit severely, with revenue growth and profitability contracting by 28.4 and 4 percentage points, respectively. Services, durable goods, business equipment, and manufacturing also saw double-digit declines in revenues.⁴ In most sectors, profitability dropped and leverage rose, hampering the ability to cover interest expenses. Liquidity and solvency risks have risen as the capacity to service debt deteriorated, including through a 6 percent increase in the number of firms whose interest coverage ratio dropped below 1.

The damage to firms in the region will likely take years to undo, raising medium-term solvency risks. To assess such risks, stress tests were conducted under two macroeconomic scenarios:

⁴The service sector has been hit the hardest, with plummeting revenues, a marked contraction in profitability, and a significant deterioration in its capacity to cover interest expenses (the only sector with a negative interest coverage ratio).

Figure 2.5. Fundamentals Relative to Crisis Episodes



Sources: S&P Global Market Intelligence, Compustat; and IMF staff calculations.
 Note: GFC = global financial crisis. Precrisis is defined as two years before each crisis episode.

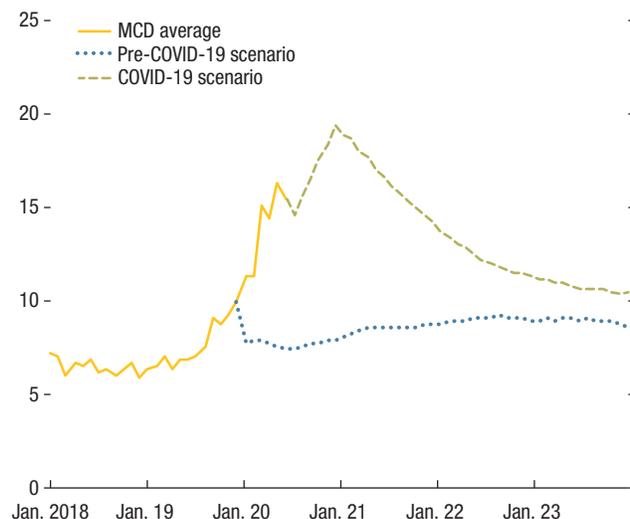
pre-pandemic *World Economic Outlook* (WEO) projections and current WEO projections.

The approach uses a Bottom-Up Default Analysis that projects probabilities of default of individual firms conditional on macroeconomic conditions and financial risk factors. Results suggest that firms on average are now about twice as likely to default by early 2021 as they were before the pandemic, raising their risk of a credit rating downgrade. All industries, except technology, face greater default risks, albeit more pronounced in the case of services and energy-related firms. Although default risks improve steadily over time in the stress scenario, they remain higher than pre-pandemic levels, three years later (Figure 2.6).

Persistent Adverse Labor Outcomes

By affecting firms, lockdown measures will exacerbate adverse labor market outcomes, though somewhat less so in countries where there are more opportunities to work from home. However, using recent studies on the types of occupations that can be performed from home (see Dingel and

Figure 2.6. Firms' Probability of Default (Basis points)



Sources: CRI (2019); and IMF staff calculations.
 Note: MCD = Middle East and Central Asia. The series show the average one-year-forward probability of default for listed nonfinancial firms in a few countries in the region (Kazakhstan, Qatar, Saudi Arabia, United Arab Emirates).

Table 2.1. Selected Operating Metrics
(2018–19 average versus 2020)

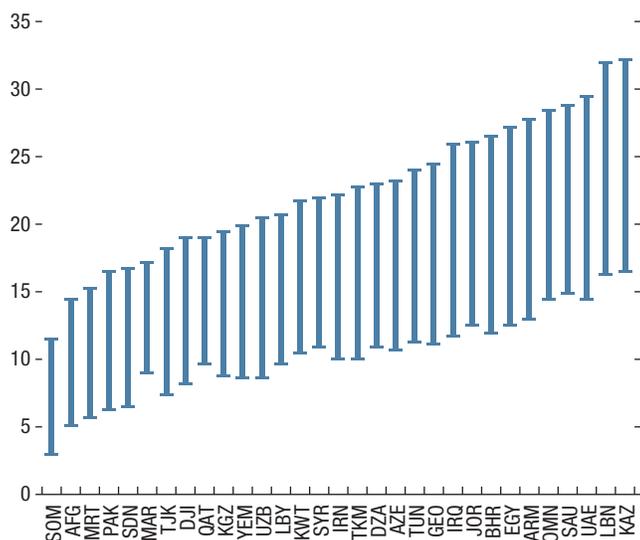
Operating Metrics	Revenue Growth (%)		Net Profit Margin (%)		Return on Equity (%)		Interest Coverage Ratio		Leverage (%)		Liquidity	
	Average 2018–19	2020	Average 2018–19	2020	Average 2018–19	2020	Average 2018–19	2020	Average 2018–19	2020	Average 2018–19	2020
Panel 1. Regional Comparison												
MCD Oil Exporters	2.9	−4.6	4.7	3.4	1.3	0.9	2.6	1.5	50.9	54.8	1.1	1.0
MCD Oil Importers	10.3	−7.2	3.7	2.1	1.9	0.8	2.2	1.2	50.3	51.2	0.7	0.7
Advanced Economies	5.1	−5.8	2.7	1.5	1.3	0.7	4.2	1.9	47.4	48.6	1.2	1.2
Emerging Markets	8.4	−9.2	4.2	2.7	1.8	1.1	3.4	2.0	46.2	47.1	1.0	1.0
Panel 2. Comparison over Time												
Q1	5.7	−2.4	4.1	2.6	1.5	0.9	2.3	1.4	50.6	54.0	0.9	0.8
Q2	4.1	−14.9	4.5	3.2	1.4	0.7	2.2	1.4	52.5	54.5	0.9	0.9
Panel 3. Sectoral Comparison												
Energy	9.9	−18.5	−0.9	−4.9	0.8	−0.9	1.4	0.4	52.9	56.7	1.1	1.2
Services	4.7	−29.7	3.9	−1.5	1.3	−0.6	6.0	−1.5	37.2	41.1	1.0	0.9
Retail	1.4	−6.2	3.7	3.0	2.2	1.7	6.9	3.2	43.1	45.6	0.7	0.6
Transportation	5.8	−2.9	11.6	7.7	2.1	1.2	5.9	2.5	39.5	41.8	1.2	1.2
Consumer Non-Durable	10.3	2.2	2.8	2.8	1.6	1.1	2.3	1.4	54.1	54.8	0.6	0.5
Consumer Durable	−1.2	−32.6	3.0	−1.5	2.1	1.4	17.8	1.1	47.4	50.7	0.9	0.8
Manufacturing	2.5	−12.0	3.1	0.0	0.9	0.3	2.3	0.7	43.8	45.7	0.7	0.7
Chemicals	17.2	−7.2	6.8	2.2	2.1	0.7	3.8	1.7	46.5	46.9	0.9	0.8
Business Equipment	5.0	−12.1	3.3	4.7	0.9	1.7	2.6	3.4	49.0	49.7	0.9	0.9
Telecommunications	3.0	−0.3	10.3	9.8	3.0	2.3	3.6	2.7	46.9	52.3	0.9	0.9
Utility	3.4	7.0	1.4	1.7	1.0	0.3	1.9	1.3	73.9	72.2	0.9	1.0
Health	9.6	6.1	8.8	8.5	2.3	2.2	7.9	4.1	36.8	39.1	1.2	1.0
Others	2.6	−22.3	5.0	4.2	1.4	0.8	2.8	1.7	38.6	39.5	1.0	1.0

Sources: S&P Global Market Intelligence, Compustat; and IMF staff calculations.

Note: MCD = Middle East and Central Asia. Results are based on firms that released annual reports in 2020, and performance is reported for the same set of firms over time in each row.

Highlighted numbers denote worsening conditions in 2020 compared with the 2018–19 average.

Figure 2.7. Share of Jobs that Can Be Performed from Home (Percent)



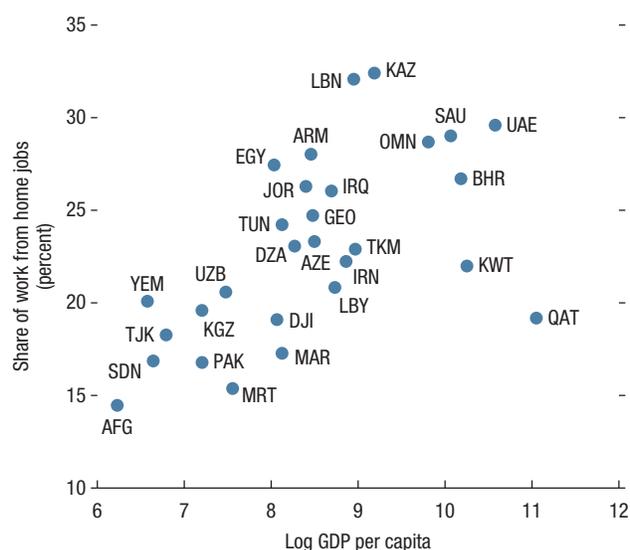
Sources: International Labour Organization; and IMF staff calculations.
 Note: Country abbreviations are International Organization for Standardization (ISO) country codes. Upper and lower bound estimates are based on analysis of occupations performed from home by Dingel and Neiman (2020) and Saltiel (2020) respectively.

Neiman 2020 for US occupations and Saltiel 2020 for developing economies) and the distribution of employment across occupations in MCD countries, estimates suggest that the ability to work from home in the region is limited. In fact, the share of jobs that can be performed at home averages between 10 and 23 percent for countries in the region (Figure 2.7)—this compares to Dingel and Neiman’s study of 86 countries in which the average share was 26 percent.

The limited ability to perform jobs at home is likely to be even more pronounced in lower-income countries with higher shares of employment in agriculture and elementary occupations (Afghanistan, Mauritania; Figure 2.8).

Those estimates likely represent an upper bound, because of low internet access in these countries (Garrote Sanchez and others 2020). In addition, there is considerable variation across workers. Evidence from labor force surveys for Egypt and Jordan suggests that workers in the informal sector are considerably more likely to be in jobs that

Figure 2.8. Per Capita Income and the Share of Jobs that Can Be Performed from Home



Sources: International Labour Organization; and IMF staff calculations.
 Note: Country abbreviations are International Organization for Standardization (ISO) country codes. Work from home estimates are based on the analysis by Dingel and Neiman (2020) of which occupations can be performed from home. GDP per capita is in 2019 current prices.

cannot be performed from home. In the Gulf Cooperation Council (GCC) countries, the ability to work from home is higher for nationals than for expatriates (Figure 2.9) because of a much greater prevalence of national workers in managerial and professional occupations and within the government sector.

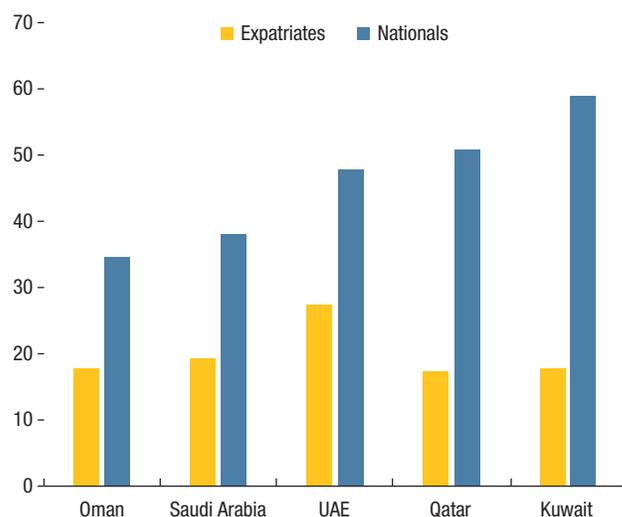
Preliminary evidence suggests that the unprecedented current crisis will likely have a deeper impact on the labor market than past recessions had. According to International Labour Organization estimates, working hours in Arab states declined by 1.8 percent during the first quarter of 2020 (equivalent to about 1 million full-time jobs), further declining by 10.3 percent in the second quarter (equivalent to about 6 million full-time jobs), both compared with precrisis conditions. The toll on employment could be much more severe than after the global financial crisis, with about one-third of individuals in the Arab region employed in sectors that are considered most at risk from the COVID-19 shock (ILO 2020).

These adverse labor market outcomes can have a long-lasting impact on individuals, either by making future employment more difficult or through discouraging labor force participation. Several studies have documented scarring effects on employment prospects from not working for an extended period, estimating persistent earnings losses in the range of 20 to 40 percent in the United States (Guvenen and others 2017). Similarly, evidence from labor panel surveys for Egypt and Jordan suggests that unemployment spells can have long-lasting effects on employment prospects. This chapter's estimates signal that in Jordan and Egypt, those who are unemployed are about 9 and 14 percent more likely to remain unemployed or out of the labor force six years later, respectively, after controlling for factors such as age, sex, education, and wealth.⁵

Evidence from past shocks also points to long-lasting hysteresis effects for the overall labor market, which is especially important in a region with relatively weak social safety nets (Box 2.2). In the short term, unemployment typically increases when output contracts—an empirical regularity known as Okun's law. However, in the MCD region, unemployment typically remains elevated several years after a downturn. Recessions, on average, have been associated with a 1 percentage point increase in the unemployment rate after five years in both oil-exporting and -importing countries (Figure 2.10). For the latter, this estimate increases to almost 2 percentage points for recessions that inflicted deeper output contractions over the past three decades. For oil exporters, the initial impact on unemployment is relatively muted, in contrast to Okun's law, potentially reflecting the reliance of GCC countries on expatriate workers, whose exit from the labor market may reduce the supply capacity of these economies, but with little impact

⁵The longitudinal dimension of the labor panel surveys is exploited. Specifically, a linear probability model is used to assess the probability of an individual being unemployed in a given survey year, given the employment status of that individual in a previous survey year, based on surveys during 2012 and 2018 for Egypt, and 2010 and 2016 for Jordan. The data sets used are the Egypt Labor Market Panel Survey, ELMPS 2018, and the Jordan Labor Market Panel Survey, JLMPS 2016.

Figure 2.9. GCC: Share of Jobs that Can Be Performed from Home for Expatriates and Nationals (Percent)



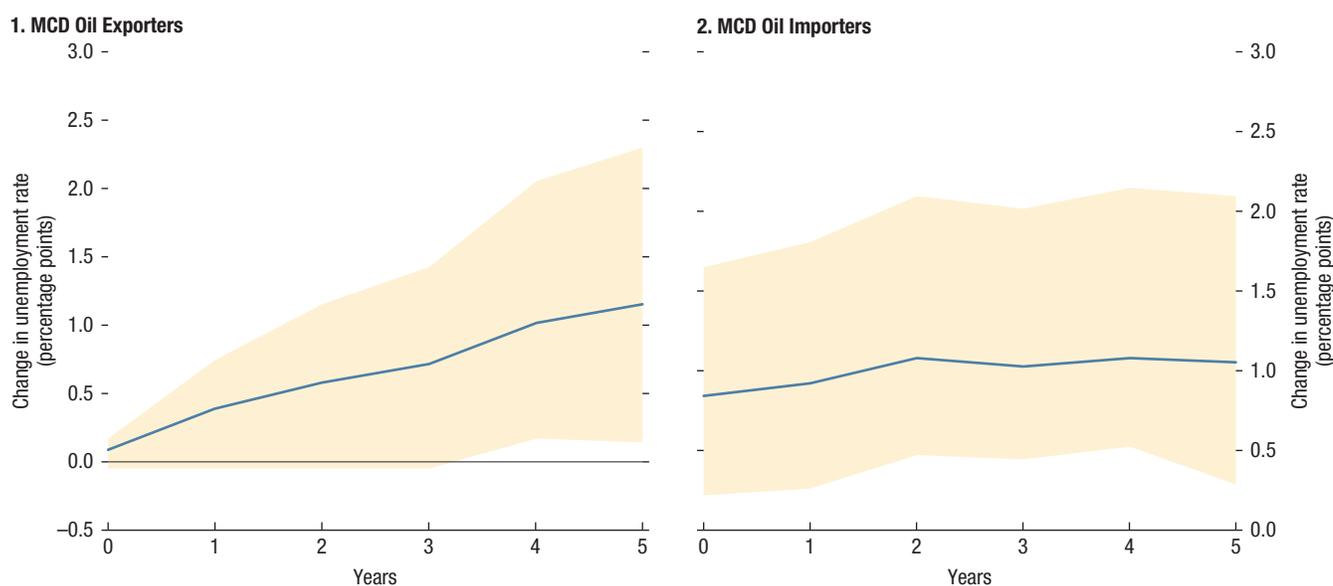
Sources: National authorities; and IMF staff calculations.

Note: GCC = Gulf Cooperation Council. Work from home estimates are based on the analysis by Dingel and Neiman (2020) of which occupations can be performed from home. Data availability varies across countries, and the data used are as follows: Kuwait (2016), Qatar and UAE (2018), Oman (2019), Saudi Arabia (2020:Q1). Data for Oman exclude the public sector, and data for Saudi Arabia exclude civil servants.

on the unemployment rate. Over the longer term, however, the impact on unemployment increases in oil-exporting countries, which may reflect the enduring impact of crises on the job-creating capacity of these economies. Given the depth of the current downturn and its uneven effect across sectors, its eventual impact on unemployment across the region could be greater if the recovery proves to be protracted or if significant structural change of the workforce is required.

Remittances, Poverty, and Inequality

Beyond labor earnings, workers' remittances are key external flows that support households in the region. Remittances are a sizable source of income for 14 countries in the MCD region, for which these flows exceed 5 percent of GDP (Figure 2.2). GCC countries, Russia, and the United States account for two-thirds of total remittances to these countries (Figure 2.11).

Figure 2.10. Impact of Recessions on Unemployment

Sources: International Labour Organization; national authorities; and IMF staff calculations.

Note: MCD = Middle East and Central Asia. The solid lines plot the impulse responses of unemployment to a recession shock, defined as a year in which annual GDP growth was negative. Year 0 is the year of the shock. The yellow shaded areas display the 90 percent confidence intervals.

¹The long-term impact of recessions on unemployment is analyzed using a local projection approach (Jordà 2005). The following specification is estimated over 1991–2019, using a panel of 31 MCD countries:

$$u_{i,t+h} - u_{i,t} = \alpha_{i,h} + \delta_{i,h} + \beta_h \text{Recession}_{i,t} + \sum_{j=1}^2 \gamma_{i,h} X_{i,t-j} + \varepsilon_{i,t+h},$$

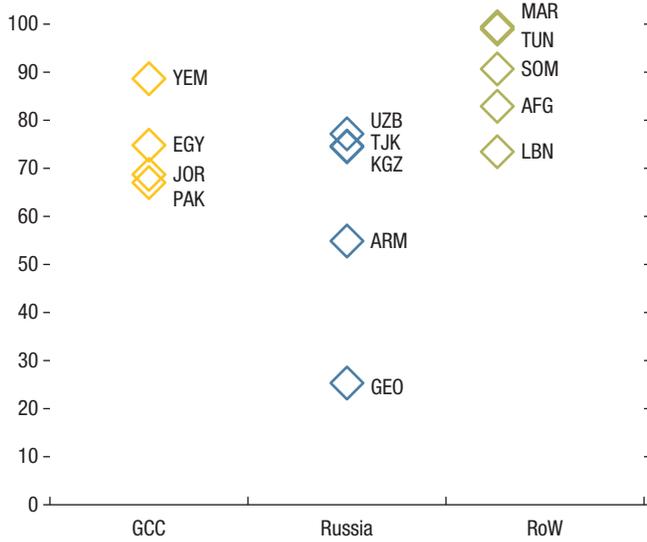
where $u_{i,t+h}$ is the unemployment rate at horizon $t + h$, $\alpha_{i,h}$ is a country fixed effect, $\delta_{i,h}$ is a time fixed effect, $\text{Recession}_{i,t}$ is an indicator equal to 1 if GDP contracts in year t and zero otherwise, and X_{t-j} is a matrix of controls including GDP growth and changes in unemployment j periods before the shock.

Remittances are estimated to have contracted by 19 percent on average, year over year, during the first half of 2020 (Figure 2.12). The contraction was particularly strong in Armenia, the Kyrgyz Republic, and Tajikistan (greater than 34 percent) during April and May, both periods of increased lockdown stringency in Russia, their main remittance source country.⁶ Under a moderate recovery in the second half of the year, remittances could fall on average by 20 percent. Countries depending on flows from the GCC region are likely to see an above average drop

⁶Pakistan and Somalia have been the exceptions so far, showing resilient remittances because of a mix of idiosyncratic factors such as migrants benefiting from the payroll protection program in the United States, to increases in the use of formal remittance channels because of obstacles the current crisis poses to sending money through informal means (flows not previously captured in official statistics).

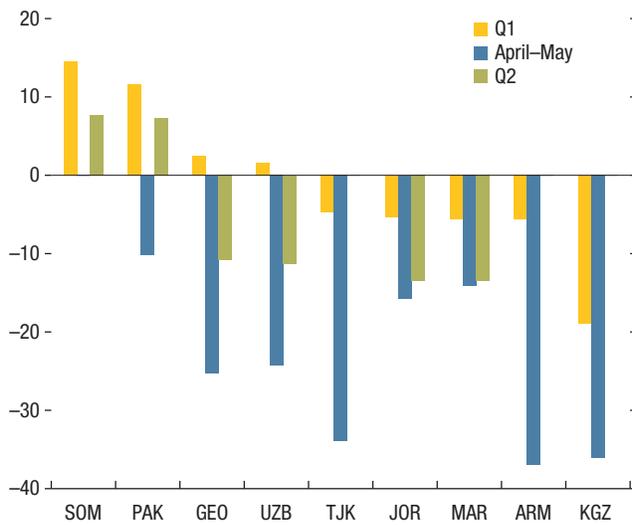
in remittances because of the GCC's subdued outlook. On average, remittances to Middle East, North Africa, Afghanistan, and Pakistan oil importers would take more than four years (twice as long as the recovery following both the global financial crisis and the 2014–15 oil shock) to recover to precrisis levels (Figure 2.13). By contrast, CCA oil-importing countries and some fragile and conflict-affected states would see a smaller-than-average drop (of about 13.5 and 18 percent, respectively) and a faster recovery (one to three years to recover to precrisis levels) because of a more favorable outlook for the countries that are their main sources of remittances (Russia and the rest of the world). However, risks are tilted to the downside. For instance, remittance flows may not recover as fast as in the period after the global financial crisis

Figure 2.11. Share of Remittances by Origin, 2018
(Percent of total remittance inflows)



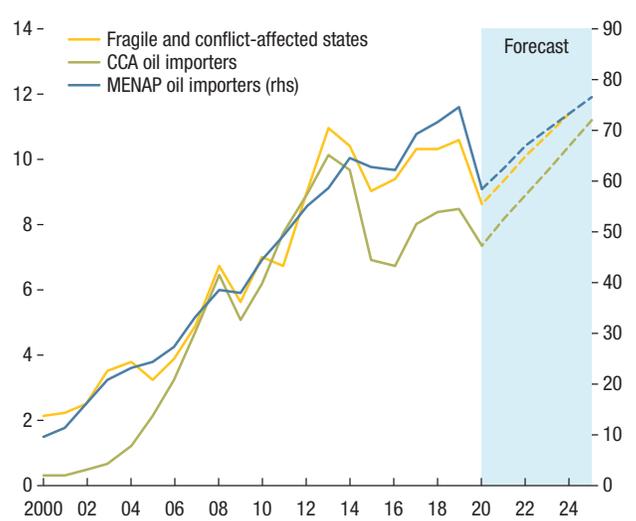
Sources: World Bank, *Migration and Remittances*; national authorities; and IMF staff calculations.
Note: GCC = Gulf Cooperation Council; RoW = rest of the world. Country abbreviations are International Organization for Standardization (ISO) country codes. Data reflect an estimate of 2018 bilateral remittance flows to observed countries.

Figure 2.12. Change in Remittance Inflows
(Percent change from 2019 to 2020)



Sources: National authorities; and IMF staff calculations.
Note: Country abbreviations are International Organization for Standardization (ISO) country codes.

Figure 2.13. Impact of Crisis on Remittance Inflows to MCD Countries
(Billions of US dollars)



Sources: World Bank, World Development Indicators databases; national authorities; and IMF staff calculations.
Note: CCA = Caucasus and Central Asia; MCD = Middle East and Central Asia; MENAP = Middle East, North Africa, Afghanistan, and Pakistan; rhs = right-hand scale.
¹Remittances were projected using the elasticity of remittances per capita with respect to sending country per capita income. The elasticity of remittances for MCD countries was estimated as in Abdi and others (2012):

$$\log(RPC_{it}) = \beta_0 + \beta_1 \log(YPCR_{it}) + \beta_2 \log(YPCS_{it}) + X'_{it} \gamma + u_i + n_t + e_{it}$$

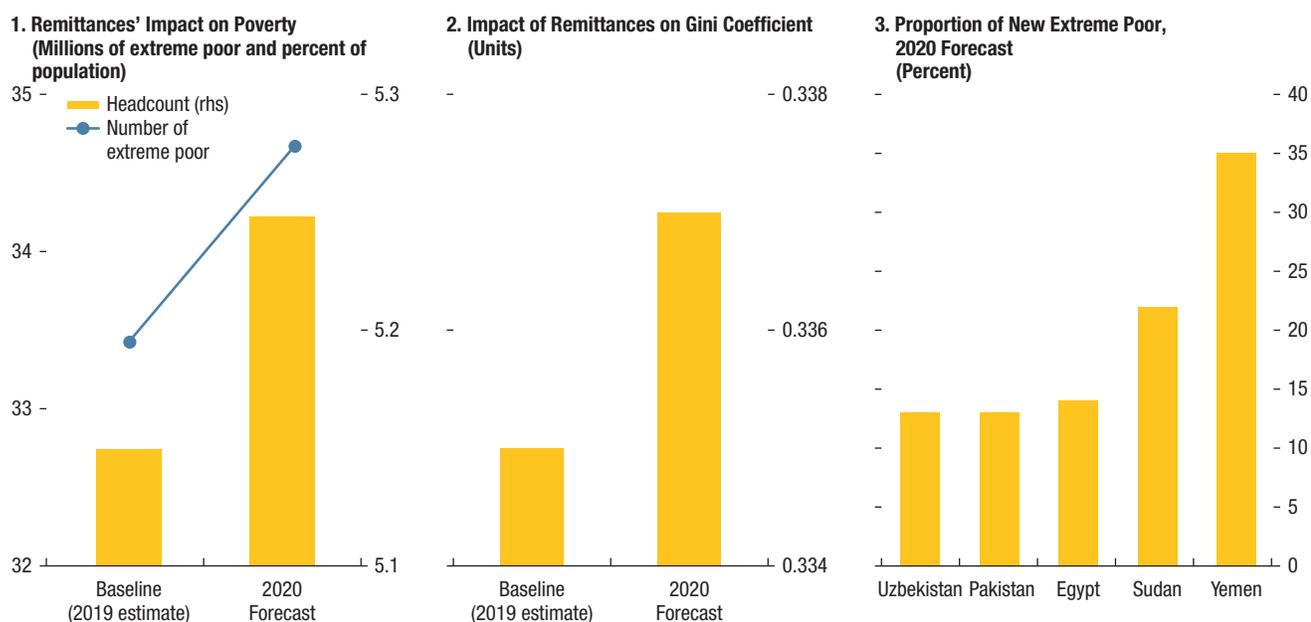
where RPC_{it} is remittances per capita, $YPCR_{it}$ and $YPCS_{it}$ represent per capita income of remittances receiving and sending countries, respectively, X_{it} is a matrix of other variables that affect RPC_{it} , u_i and n_t are country and year fixed effects, and e_{it} is the error term. β_2 is the elasticity of remittances with respect to per capita income of sending countries.

because the crisis has disproportionately affected sectors of migrant employability.

The sharp drop and protracted recovery in remittances will be one of the many factors expected to worsen poverty and inequality because of the pandemic. In 2020, poverty headcount in the region could rise by more than 3.7 percent, reaching about 5.25 percent of the population of MCD remittance-dependent countries or adding more than 1.3 million new extreme poor.⁷

Likewise, inequality measured by the median Gini coefficient would deteriorate because of lower

⁷Measure of extreme poverty refers to the \$1.90 a day international poverty line.

Figure 2.14. Impact of Remittances on Poverty and Inequality in MCD Countries


Sources: World Bank PovacalNet and World Development Indicator databases; national authorities; and IMF staff calculations.

Note: rhs = right-hand scale. The measure of extreme poverty refers to \$1.90 a day international poverty line.

¹Following Azizi (2019), the following equation was estimated over 1993–2015, for 80 countries, including 10 MCD countries:

$$\log(H_{it}) = \beta_0 + \beta_1 \log(RPC_{it}) + \beta_2 \log(YPC_{it}) + X'_{it}\gamma + e_{it},$$

where H_{it} is the poverty or inequality measure, RPC_{it} is remittances per capita, YPC_{it} is per capita income, X_{it} is a matrix of other variables that affect H_{it} , and e_{it} is the error term. β_1 is the elasticity of remittances with respect to poverty or inequality. To deal with the endogeneity problem, a first stage regression of remittances per capita was estimated on instruments (weighted per capita income, unemployment, real interest rate and real exchange rate of the sending countries, where the weight is bilateral remittances).

remittances by about 1 percent, with an estimated 2 percentage point decline in the share of income of those in the lowest 20 percent (Figure 2.14).

The new extreme poor would be overwhelmingly represented by fragile and conflict-affected states such as Sudan and Yemen (about 57 percent of the new extreme poor) and other countries that rely on remittances, such as Egypt, Pakistan, and Uzbekistan. These results are likely lower bounds for the worsening in monetary poverty and inequality in the short term because they reflect only the immediate remittance channel. For example, Furceri and others (2020) estimated a much larger and persistent worsening in inequality, for up to five years after the pandemic, because of labor market and human capital channels—a higher share of income goes to the more educated workers at the top and a lower

share to the less educated workers at the bottom of the distribution.

Policies to Minimize Economic Scarring

Evidence across the different channels points to a high likelihood of lasting scars that could significantly weigh on the post-pandemic recovery.

Given the region's high exposure to the services sector, particularly contact-intensive tourism, policymakers should strike a careful balance between preserving livelihoods, minimizing scarring, and promoting recovery without creating “zombie” sectors reliant on extended government support beyond the crisis phase. As the current crisis progresses, difficult decisions will have to

be made about when the gradual unwinding of existing lifelines should begin and which sectors should see their support cut instead of boosted. Such decisions should be made with a long-term view and, in oil-exporting countries, be supportive of ongoing efforts to diversify economies. Where businesses remain viable, policies should be put in place to support them; for sectors that will be permanently scarred by the pandemic, however, policies should encourage the retraining and reallocation of these workers and capital.

As these decisions are made, corporate vulnerabilities should be mitigated through policies that alleviate solvency pressures and ensure a swift resumption in business operations after the pandemic. Measures such as temporary support for wages, interest subsidies, and tax deferrals could help ease liquidity pressures when revenues dry up. These support measures could be implemented, conditional on firms maintaining employment, so that firms can restart immediately when the situation improves. In addition, firms are encouraged to work with creditors to refinance their debts into longer maturity to ease short-term liquidity pressures. At the same time, there will be a need to put in place strong insolvency frameworks and mechanisms for restructuring and disposing of distressed debt so that weak private balance sheets do not stall the recovery. Ensuring that the banking sector maintains sufficient capital buffers while limiting the risks from zombie lending will help minimize financial sector vulnerabilities, which could slow the recovery (Chapter 4).

In response to the higher unemployment in the region, policymakers should ensure that the most vulnerable are protected from immediate income losses. For countries with well-developed safety nets and employment benefit programs, automatic stabilizers should be allowed to work to prevent scarring. Given resource constraints among low-income countries and fragile and conflict-affected states, and the high degree of informality in the region, innovative solutions, including big data analysis and geographic and age targeting, should be deployed to reach those not

in registries. For countries with fiscal space and underdeveloped safety nets, unconditional direct cash transfers can be important stopgap measures as better targeting is developed. In view of their size, exceptional nature, and speed of deployment, it will be key to ensure that additional measures are transparently recorded and costed. Social assistance should also be calibrated to consider the fall in remittances.

Given that expatriate workers have an especially low ability to work from home, measures should be put in place to encourage greater internal mobility for expatriates in vulnerable sectors. Large-scale withdrawals of expatriates could have costly and long-lasting effects on per capita income growth, especially if they cannot be easily replaced when the crisis abates. Thus, policies to support employment retention and employment services such as job matching and search programs will be an important complement to social safety nets for expatriates. Countries receiving returning migrants should also ensure that social safety nets support their reintegration and promote retraining.

In the medium term, employment can be supported through encouraging a competitive, business-friendly environment and policies that promote labor mobility toward higher-value-added sectors. The crisis has also highlighted the importance of digital connectivity to enable people to work from home. Countries with poor connectivity should invest in improving access to high-speed internet, which will boost labor market resilience and allow countries to harness the value of the digital economy. Measures to deepen labor market reforms, including formalization and unemployment insurance, fostering re-skilling and human capital development of workers, adapting the education system for innovation and technology, promoting diversification, increasing infrastructure investment, and enabling private sector competition, will also be paramount to ensure that the region is less vulnerable to the next global shock.

Over time, to help wean the region from its high dependence on remittances (at least for basic consumption), countries should also structurally

strengthen social safety nets. Given the region's small available fiscal space, shifting resources from inefficient blanket subsidies toward better-targeted social programs would lower inequality, enhance progressivity, and improve individual benefits levels.

To ensure that the recovery is long-lasting and sustainable, the region will have to rebuild its

policy space. Improving institutional frameworks for sustainable fiscal, monetary, and financial policies (Chapters 3 and 4) will help rebuild and preserve buffers against external shocks and macroeconomic volatility. Improving governance and cutting red tape will enhance government efficiency and help provide a growth-friendly environment for the long term.

Box 2.1. Persistent Effects from the Global Financial Crisis in Middle East and Central Asia

Economic scarring can be driven by both the nature of the shock and a country's vulnerabilities. Factors such as external and fiscal buffers, openness to trade, commodity dependence, unemployment, dependence on remittances and tourism, and level of poverty at the time of the shock can all play a role in how quickly an economy recovers after a recession. Recovery can also be measured by, for example, how much lower the level of real GDP is five years after the crisis or how many years it takes for the level of real GDP to return to its precrisis trend. Such relationships are tested in a cross-section of 126 countries, excluding advanced economies, for the aftermath of the global financial crisis. Table 2.1.1 summarizes the regression results. It is important to note that many factors ultimately shape a country's recovery, including endogenous effects from the global recovery. As such, this regression is purely illustrative, pointing to *some* of the possible drivers. The results suggest the following:

- Macroeconomic buffers improve recovery. High fiscal and current account balances are associated with a faster recovery. Once these and other country-level characteristics are controlled for, debt-to-GDP ratios are insignificant.
- While results point to openness being associated with a slower recovery after a crisis (reflecting the country's exposure to global shocks), openness in general has been associated with higher growth. Similarly, commodity dependence is also associated with a wider post-crisis GDP gap and a slower recovery. This likely reflects countries' inability to pivot toward new growth sectors that emerge after the crisis.
- Entering the crisis with a higher unemployment rate is associated with a slower recovery, because space for labor market adjustments and reallocation is more limited.

Box 2.1 (continued)

Table 2.1.1. Regressions of Real GDP Levels after the Global Financial Crisis

VARIABLES	(1) Level 5 years	(2) Duration	(3) Level 5 years	(4) Duration	(5) Level 5 years	(6) Duration	(7) Level 5 years	(8) Duration
Current Account Balance	0.843* (0.453)	-0.0609* (0.0344)	0.828* (0.443)	-0.0511 (0.0315)	1.238*** (0.459)	20.00161 (0.0588)	-0.220 (0.934)	0.133 (0.145)
Fiscal Balance	0.768 (0.467)	-0.201** (0.0876)	0.759 (0.465)	-0.201** (0.0862)	1.517* (0.869)	20.235** (0.113)	1.100* (0.647)	-0.490*** (0.129)
Openness (X+M/GDP)	-0.0140 (0.0433)	0.0251** (0.0118)	-0.00571 (0.0459)	0.0267** (0.0120)	0.00514 (0.0623)	0.0181 (0.0132)	-0.0763 (0.0712)	0.0289* (0.0160)
Debt to GDP	0.127 (0.185)	-0.0236 (0.0272)	0.115 (0.187)	-0.0216 (0.0293)	0.757 (0.567)	20.00277 (0.0713)	0.131 (0.947)	0.0199 (0.0940)
Commodity Dependence	-0.000907* (0.000529)	0.000144 (9.48e-05)	-0.000863 (0.000571)	0.000127 (9.59e-05)	-0.000948* (0.000520)	0.000211** (0.000100)	0.00105 (0.00251)	-0.000379 (0.000253)
Unemployment Rate	-0.572 (0.393)	0.293** (0.122)	-0.515 (0.399)	0.293** (0.120)	-0.813* (0.413)	0.371*** (0.131)	-0.755 (0.995)	0.130 (0.182)
Remittances to GDP			-3.109 (2.100)	0.370 (0.378)				
Poverty					-1.310 (1.838)	0.217 (0.356)		
Tourism Arrivals							0.165 (4.585)	1.073 (0.705)
Constant	-43.19*** (12.28)	14.73*** (2.534)	-42.31*** (14.18)	13.97*** (2.569)	-45.58*** (12.99)	18.76*** (2.795)	-25.93 (79.29)	-3.502 (10.87)
Observations	126	127	126	127	103	103	75	76
R-squared	0.341	0.316	0.366	0.334	0.418	0.391	0.286	0.382

Sources: National authorities; and IMF staff calculations.

Note: Robust standard errors are in parentheses.

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

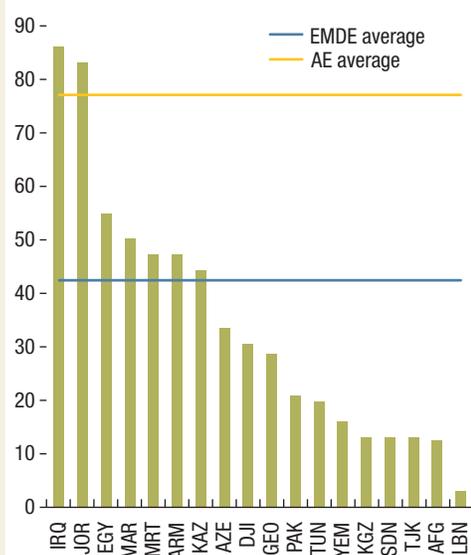
Box 2.2. Social Safety Nets in the Middle East and Central Asia Region

The level and adequacy of social safety nets in the Middle East and Central Asia region vary widely across countries. Some provide coverage to the most vulnerable, in line with levels seen in advanced economies, but the coverage of even the poorest groups remains inadequate among others (Figure 2.2.1). Although there have been advances in recent years, most of the region's spending on social safety measures remains focused on subsidies, which crowds out more effective interventions. Countries in the Middle East and North Africa and in the Caucasus and Central Asia spend, on average, 14 and 17 percent of GDP, respectively, on subsidies, compared with a world average of 7 percent. By contrast, health spending in the region averages about 6 percent, compared with a world average of 10 percent. Furthermore, direct social programs average only less than 1 percent of GDP in the region, and many programs are fragmented, overlapped, and ill-targeted. Although subsidies are inefficient and provide more benefit for the rich, they remain key to keeping many households out of poverty because of their sheer size.

Governments expanded social safety nets significantly in response to the crisis. Most countries relied on a combination of cash and in-kind transfer programs (used by more than two-thirds of countries), paid leave, unemployment benefits, and wage subsidies (Figure 2.2.2). Social programs were expanded to previously uncovered households by, for instance, waiving the requirement of previous social security system contributions. Increases in cash transfers, in some cases, were quite generous. For example, according to the World Bank, Egypt's cash transfer—which includes the Takaful and Karama Cash Transfer Program and a one-off monetary compensation program for informal workers—increased by more than 150 percent compared with pre-COVID-19 levels (Gentilini and others 2020).

The widespread use of cash and in-kind transfers in the region reflects the need to provide immediate but temporary relief to informal and migrant workers, who are often outside traditional social safety nets. According to the Organisation for Economic Co-operation and Development, formal private employment is limited and accounts, on average, for less than one-fifth of employment in the region. Informal employment reaches up to 74 percent in Yemen, 71 percent in Lebanon, and 63 percent in Morocco and represents, on average, 68 percent of employment in the region. For example, Iraq reached many of its migrant workers through contacting the embassies of the main origin countries. In addition, several countries implemented innovative technological solutions, including a mobile payment mechanism, to distribute compensation for informal sector workers, with online registration and leveraging health databases for information (Morocco), digital wallets to allow beneficiaries to receive and use transfers via mobile phones (Tunisia), and online beneficiary registration and eligibility verification, with facilitated e-money payments (Jordan and Pakistan).

Figure 2.2.1. Population in the Lowest Quintile Covered by Social Assistance (Percent)



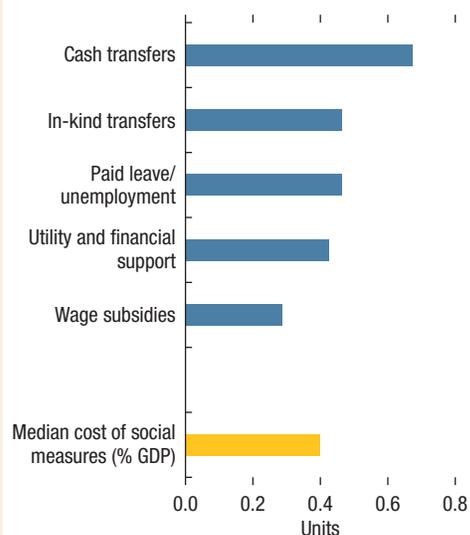
Sources: World Bank, World Development Indicators; and IMF staff calculations.

Note: AE = advanced economies; EMDE = emerging market and developing economies. Country abbreviations are International Organization for Standardization (ISO) country codes.

Box 2.2 (continued)

Utility support, temporary tax exemptions on essential goods, and tax holidays have also been widely deployed (Afghanistan, Azerbaijan, Bahrain, Egypt, Georgia, Iran, Morocco, Pakistan, Saudi Arabia, Tajikistan), as have credit lines to small and medium-sized enterprises (Djibouti, Iran, Saudi Arabia, United Arab Emirates, Uzbekistan). In addition, job retention and protection programs, flexible annual and unpaid leave, permission for foreign workers to switch employers, virtual job-matching platforms for employers and workers, and vocational and language training have been deployed (Saudi Arabia, United Arab Emirates, Uzbekistan), targeting migrant workers. Work permit fees were suspended (Bahrain, Saudi Arabia, United Arab Emirates). Online remittances have been introduced, together with education programs for workers about online remittance services (Qatar).

Figure 2.2.2. Social Protection Responses to COVID-19
 (Share of MCD countries that have implemented each measure)



Source: IMF Policy Tracker.

References

- Abdih, Yasser, Adolfo Barajas, Ralph Chami, and Christian Ebeke. 2012. “Remittances Channel and Fiscal Impact in the Middle East, North Africa, and Central Asia.” IMF Working Paper 12/104, International Monetary Fund, Washington, DC.
- Azizi, SeyedSoroosh. 2019. “The Impact of Workers’ Remittances on Poverty and Inequality in Developing Countries.” *Empirical Economics* 1–23.
- Castañeda Aguilar, R. A. Andrés, Christoph Lakner, Espen B. Prydz, Jorge Soler Lopez, Ruoxuan Wu, and Qinghua Zhao. 2019. “Estimating Global Poverty in Stata: The Povalnet Command.” Global Poverty Monitoring Technical Note 9, World Bank, Washington, DC.
- Credit Research Initiative (CRI). 2019. “Bottom-Up Default Analysis (BuDA v3.1.1) White Paper.” National University of Singapore Risk Management Institute, Singapore.
- Credit Research Initiative (CRI). 2020. “Probability of Default-Implied Rating (PDiR2.0) White Paper.” National University of Singapore Risk Management Institute, Singapore.
- Dingel, Jonathan, and Brent Neiman. 2020. “How Many Jobs Can Be Done at Home?” NBER Working Paper 26948, National Bureau of Economic Research, Cambridge, MA.
- Duan, Jin-Chuan, and Li Shuping. 2020. “Enhanced PD-Implied Ratings by Targeting the Credit Rating Migration Matrix.” National University of Singapore–Credit Research Initiative Working Paper. https://rmi.nus.edu.sg/DuanJC/index_files/files/PDiR2.0.pdf.
- Furceri, Davide, Prakash Loungani, Jonathan D. Ostry, and Pietro Pizzuto. 2020. “Will COVID-19 Affect Inequality? Evidence from Past Pandemics.” *COVID Economics* 12 (1): 138–57.
- Garrote Sanchez, Daniel, Nicolas Gomez Parra, Caglar Ozden, Bob Rijkers, Mariana Viollaz, and Hernan Winkler. 2020. “Who on Earth Can Work from Home?” Policy Research Working Paper 9347, World Bank, Washington, DC.
- Gentilini, Ugo, Mohamed Almenfi, Ian Orton, and Pamela Dale. 2020. “Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures.” World Bank, Washington, DC.
- Gottlieb, Charles, Jan Grobovšek, Markus Poschke, and Fernando Saitiel. 2020. “Working from Home: Implications for Developing Countries.” In *COVID-19 in Developing Economies*, edited by Simeon Djankov and Ugo Panizza. London: CEPR Press.
- Guvnenen, Fatih, Fatih Karahan, Serdar Ozkan, and Jae Song. 2017. “Heterogeneous Scarring Effects of Full-Year Nonemployment.” *American Economic Review* 107 (5): 369–73.
- International Labour Organization (ILO). 2020. “COVID-19: Labour Market Impact and Policy Response in the Arab States.” ILO Briefing Note, Beirut, Lebanon.
- Jordà, Òscar. 2005. “Estimation and Inference of Impulse Responses by Local Projections.” *American Economic Review* 95 (1): 161–82.
- MacDonald, Margaux, Roberto Piazza, and Galen Sher. 2020. “COVID-19 and Travel and Hospitality Sectors.” IMF Research Department, Special Series on COVID-19, International Monetary Fund, Washington, DC.
- Medina, Leandro, and Friedrich Schneider. 2019. “Shedding Light on the Shadow Economy: A Global Database and the Interaction with the Official One.” CESifo Working Paper No. 7981, CESifo, Munich.
- Open Access Micro Data Initiative (OAMDI). 2018. Labor Market Panel Surveys (LMPS). <http://erf.org/eg/data-portal/>. Version 1.1 of Licensed Data Files; JLMPS 2016. Egypt: Economic Research Forum (ERF).
- Open Access Micro Data Initiative (OAMDI). 2019. Labor Market Panel Surveys (LMPS). <http://erf.org/eg/data-portal/>. Version 2.0 of Licensed Data Files; ELMPS 2018. Egypt: Economic Research Forum (ERF).
- Okun, Arthur M. 1962. “Potential GNP: Its Measurement and Significance.” Reprinted as Cowles Foundation Paper 190, Cowles Foundation for Research in Economics, New Haven, CT.
- Organisation for Economic Co-operation and Development (OECD). 2020. “Corporate Sector Vulnerabilities during the Covid-19 Outbreak: Assessment and Policy Responses.” *Tackling Coronavirus Series*, Paris.
- Saitiel, Fernando. 2020. “Who Can Work from Home in Developing Countries?” *COVID Economics* 7: 104–18.
- Sumner, Andy, Chris Hoy, and Eduardo Ortiz-Juarez. 2020. “Estimates of Impact of COVID-19 on Global Poverty.” UNU WIDER Working Paper 2020/43, United Nations University World Institute for Development Economics Research, Helsinki, Finland.