Impact of COVID-19

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The base case: The long climb

Real GDP forecast

KEY TAKEAWAYS

Full recovery to pre-crisis levels likely to take until 2022 – even with a near-term mechanical bounce – due to:

- **Social distancing** (voluntary and mandated), as many sectors will operate below capacity
- **Impaired global supply chains**, as re-openings are uneven across countries, regions and sectors
- **Time needed to reallocate labor and capital** from losing to winning sectors and companies
- **Debt overhang** to weigh on personal and corporate spending

For illustrative purposes only
As of June 2020
Source: Haver Analytics, PIMCO
Developed markets represented by GDP weighted average for Japan, Euro Area, U.S. and U.K.
**Key swing factor: Evolution of virus**

Risk factors may increase well after “re-opening”

### Positives

- Broad mask-wearing
- Elevated perception of risk
- Social distancing enforcement
- Continued work-from-home
- Kids out of school
- Less international travel
- Outdoor activities
- Warm weather

### Risks

- Air conditioning
- Performative non-compliance
- Protests and large gatherings
- Occasional local flare-ups

### Summer

### Fall

- Improvements in contact tracing
- More hospital capacity
- More population immunity
- Return to work/school
- Interaction with seasonal flu
- Social distancing fatigue
- Resistance to new lockdowns
- Easing of travel restrictions
- Possible viral mutation

Source: PIMCO
The “good” scenario: Medical breakthrough revives confidence, alongside unprecedented fiscal and monetary support

Consumer sentiment and consumption have been depressed due to the virus

Progress has occurred in vaccine development

Left chart: Source: Haver, as of 30 April 2020.
Right chart: For illustrative purposes only. Source: Morgan Stanley Research, Company reports.
The “bad” scenario: A second wave of virus cases and more disruptions in economic activity

SMEs entered this crisis from a challenged position and may need additional support to survive more shutdowns

Increasing business closures could make job losses permanent

Left chart as of 1Q 2020. Right chart as of April 2020.

Source: Haver, PIMCO, Census Bureau
How deep will the COVID-19’s economic impact be?

Current forecasts suggest that the COVID-19 recession will involve the sharpest deterioration in multiple measures of economic activity since 1960.

A. GDP

B. Per capita GDP

C. Retail sales volume

D. Trade volume

E. Unemployment rate

F. Oil consumption

Source: Haver Analytics; International Energy Agency; International Monetary Fund; Kose, Sugawara, and Terrones (2019, 2020); Organisation for Economic Co-operation and Development; World Bank.

Note: Year “t” denotes the year of global recessions (shaded in light gray). The darker shaded area refers to the range of the three global recessions—1975, 1982, and 1991—with available data. GDP, per capita GDP, retail sales, trade, and oil consumption are index numbers equal to 100 one year before year “t” (i.e., t-1 = 100). Retail sales for 2020 are based on data for the first quarter and shown as a year-on-year percent change. It shows that retail sales declined by around 4 percent in 2020Q1. Unemployment rates for 2020-21 are based on forecasts by the International Monetary Fund in April 2020. Oil consumption for 2020 is taken from forecast data by the International Energy Agency in May 2020.
Possible growth outcomes:
Emerging Market Economies will likely fare better but…

A. Global growth

B. Growth in advanced economies

C. Growth in EMDEs

D. Trade growth

E. Growth in EMDE regions in 2020

F. Growth in EMDE regions in 2021

Aggregate growth rates calculated using GDP weights at 2010 prices and market exchange rates.
Baseline scenario: three months of mitigation measures would be enough to stem the pandemic. A recovery would get underway once mitigation measures are lifted but would be hesitant.
Downside scenario: Three months of stringent lockdowns would prove insufficient and another three months of mitigation would be required before the pandemic can be brought under control.
Upside scenario: Mitigation measures would be lifted after three months, and all major economies would sputter back to life in the third quarter of 2020. Monetary and fiscal stimulus would remain in place and would be highly effective in supporting growth over the next 18 months.
... it is highly path dependent and many do not have fiscal room to deal with a prolonged crisis or another downside shock.

**Exchange rate market pressures in major Emerging Market Economies**
Exchange rates adjusted to a larger extent, reserves were used sparingly.

**A worrisome lack of fiscal space**
One-third of Emerging Market Economies have limited or no room for fiscal policy to counter a prolonged crisis.

(EMBI bps in log scale; percent)

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Sources: The IMF's International Financial Statistics database and IMF staff calculations.
Note: Major Emerging Markets Economies include the 20 largest Emerging Market Economies measured by GDP: China, India, Russia, Brazil, Indonesia, Mexico, Turkey, Poland, Thailand, Argentina, The Philippines, Egypt, Vietnam, Malaysia, South Africa, Colombia, Romania, Chile, Peru, and Kazakhstan. All periods are peak to trough. GFC (August 2008-March 2009), Taper Tantrum (May 2013-February 2014), 2018 selloff (April 2018-October 2018), Covid19 (January 2020-April 2020).

Sources: Bloomberg; WEO live; VE database; and IMF staff calculations.
Note: EMBI changes account for the period 1/1/2020 - 7/10/2020. Colors of dots represent fiscal space assessments. Fiscal space is defined as the room for undertaking discretionary fiscal policy relative to existing plans without endangering market access and debt sustainability.
Heavier economic and humanitarian toll on Low Income Countries

A. GDP growth

<table>
<thead>
<tr>
<th>Year</th>
<th>LICs</th>
<th>Other LICs</th>
<th>Industrial-commodity-exporting LICs</th>
<th>2010-18 average</th>
<th>Downside scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
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<td>2019</td>
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<td>2021</td>
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B. Growth per capita

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<thead>
<tr>
<th>Year</th>
<th>LICs</th>
<th>Other LICs</th>
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<tbody>
<tr>
<td>2017</td>
<td></td>
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<td>2018</td>
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<td>2021</td>
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C. Children affected by disruptions to school feeding programs in LICs

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<thead>
<tr>
<th>Type of LIC</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
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<tr>
<td>Fragile LICs</td>
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<td>Other LICs</td>
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D. Health sector preparedness in LICs

<table>
<thead>
<tr>
<th>Index</th>
<th>AE</th>
<th>EMDEs</th>
<th>LICs</th>
<th>AE</th>
<th>EMDEs</th>
<th>LICs</th>
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E. Food insecurity in LICs

<table>
<thead>
<tr>
<th>Region</th>
<th>Number of people in crisis</th>
<th>Population share (R-I)</th>
<th>Percent</th>
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<tbody>
<tr>
<td>SSA</td>
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<tr>
<td>MNA</td>
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<tr>
<td>Median (R-I)</td>
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F. Agricultural GDP growth in years of locust outbreaks

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<tr>
<th>Location</th>
<th>Agricultural GDP growth</th>
<th>Contribution to GDP (%)</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Mali (2004)</td>
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<td>Madagascar (2013)</td>
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Source: Johns Hopkins Center for Health Security and NTI. Global Health Security Index; World Bank; World Food Programme.

Note: Shaded area indicates forecasts. LICs = low-income countries. Fragile LICs are LICs affected by fragility, conflict, and violence.

A. Aggregate growth rates calculated using GDP weights at 2010 prices and market exchange rates. Other LICs include agricultural commodity exporters and commodity importers. Industrial-commodity exporting LICs include metal and oil exporters.

B. Aggregate per capita growth rates calculated by dividing the total GDP at 2010 prices and market exchange rates for each subgroup by its total population. Sample includes 27 LICs and 14 “Fragile LICs”.

C. Calculated based on World Food Programme’s implementation plan as of March 2020.

D. “Early detection and reporting” reflects countries’ capacity for detecting and reporting epidemics of potential international concern. “Rapid response and mitigation” reflects their ability to respond to and mitigate the spread of an epidemic; and “Sufficient and robust health sector” reflects the capacity of health sectors to treat the sick and protect health workers. Data reflects 2019. Sample includes 31 LICs, 123 EMDEs, and 34 advanced economies. EMDEs exclude LICs.

E. “Number of people in crisis” reflects those classified as Integrated Food Security Phase Classification (IPC/PH) Phase 3. i.e., in acute food insecurity crisis or worse, in 2019. “Population share” reflects the sample median. Whiskers reflect the interquartile range. Sample includes 25 LICs.

F. Brackets reflect years of past locust outbreaks.
Prominence of informal sector a further challenge in EM countries

Source: Elgin et al. (forthcoming); World Bank, World Development Indicators; Haver Analytics; International Labour Organization.

Unweighted averages. Informal employment (in red) uses self-employment shares (with additional informal employment shares in shaded red) in the closest (latest) available year around 1990 and 2016. World averages between 1990 and 2016 are in yellow.

A. Income in the informal sector

B. Agricultural sector

C. Risk of impoverishing expenditure for surgical care

D. Social insurance

E. Informality in manufacturing and services

F. Wage premium for formal over informal employment

Source: Elgin et al. (forthcoming); Amin, Ohno-Ohta, and Okou (2019), World Bank, Enterprise Survey; World Development Indicators; World Bank (2019a); Global Surgery and Social Change (PGSSG) at Harvard Medical School.

A. Firm productivity is measured as sales per worker. **** indicates the group differences between formal and informal firms are not zero at 10 percent significance level.

B-D. Bars are group means calculated for EMDEs with “high informality” (i.e., the highest one-third EMDEs by DGE-based informal output measure) and those with “low informality” (i.e., the highest one-third EMDEs by DGE-based informal output measure) over the period 2010-18. **** indicates the group differences are not zero at 10 percent significance level.

D. Adequacy of social insurance programs are measured in percent of total welfare of beneficiary households.

E. Data coverage of the share of informal (formal) firms in the manufacturing (service) sector is the same in Amin, Ohno-Ohta, and Okou (2019).

F. The wage premium is obtained from 18 empirical studies on the wage gap between formal and informal workers. See World Bank (2019a) for details. UKR=Ukraine, VNM=Vietnam, RUS=Russia, BRA=Brazil, MEX=Mexico, MDG=Madagascar, PER=Peru, ECU=Ecuador, TUR=Turkey, CRI=Costa Rica, ZAF=South Africa, SLV=El Salvador. The number of studies or estimates for each country is shown in parenthesis; country means are calculated using a random-effects meta-analysis model.
Disproportionate impact of crisis:
Low wage earning cohort bearing the brunt of economic adjustment

Source: https://trackrecovery.org
Disproportionate impact of crisis: Gender and education gaps at risk of worsening further

**Informal employment for women is the norm**
Women rely more than men on informal work in low-income countries.

Female to male informal employment share vs. GDP per capita (latest year available)

**Jobs Vanish**
Pandemic-related job losses disproportionately harm workers with only basic levels of education.

Change in the employment-to-population ratio in 76 countries for five years after a pandemic, 1990-2017.

Sources: ILO STAT and World Bank Development Indicators.
Note: Y axis is the ratio of female informal employment share over male informal employment share. Ratios above one indicate women have larger informal share than men in that country.

Source: Furceri, Loungani, Ostry and Pizzuto (2020)
Combination of lower labor income and higher food price inflation pushing poverty up

Mexico 12m Inflation by Income Level (y-o-y)

Contribution to y-o-y inflation

Source: Haver, INEGI, UBS
Already a big step back in war against global poverty.
How COVID-19 might affect hunger in the world?

Projections below are based on IMF’s WEO growth forecasts (and downside risk scenarios). The analysis is limited to the potential impact of the pandemic on net food supplies only, as the pre-COVID-19 projections for the population size and compositions and for the food consumption inequality are not altered. As a result, the analysis does not capture the full impact of the economic recession, as it does not consider possible consequences in terms of inequality in food access within countries. Therefore, it may underestimate the total potential impact of COVID-19 on food insecurity should the simulated economic growth scenarios materialize.

**Scenario assumptions:**

<table>
<thead>
<tr>
<th>Year</th>
<th>World GDP growth in 2020</th>
<th>World GDP growth in 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>-4.9% (First)</td>
<td>+5.4%</td>
</tr>
<tr>
<td>2021</td>
<td>-2.8% (Second)</td>
<td>+3.3%</td>
</tr>
<tr>
<td>2022</td>
<td>-10.0% (Third)</td>
<td>+0.3%</td>
</tr>
</tbody>
</table>

NOTES: The shaded area represents the projections for the longer period from 2019 to the 2030 target year.

SOURCE: FAO.