mpact of Covid-19 on **Emerging Market &** Developing Economies

By M. Ayhan Kose, Franziska Ohnsorge & Dana Vorisek

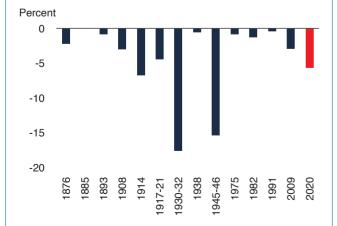
The Covid-19 pandemic has dealt a heavy blow to emerging market and developing economies (EMDEs). The pandemic, the widespread restrictions put in place to stem it, and the spontaneous reactions of many consumers and producers have already caused the deepest global recession since World War II (Chart 1). Commodity prices plunged, capital inflows to EMDEs reversed, and financial conditions tightened severely in March and April. Prompt policy stimulus on an unprecedented scale in many economies helped ease the severity of the recession. A partial and precarious recovery has since taken hold in the global economy.

This article takes stock of the consequences of the pandemic for EMDEs. Specifically, it addresses the following questions. First, how has the pandemic evolved? Second, through which channels does the pandemic affect EMDEs? Third, what are the likely long-term growth implications of the pandemic?

The article reports several findings. First, while outbreaks in most advanced economies had abated for a few months before rising again in the third guarter of 2020, the pandemic has rapidly spread across EMDEs, including low-income countries (LICs), where healthcare systems have very limited capacity.

Second, the pandemic's short-term impact was severe. Along with

CHART 1 Global per capita GDP growth in global recessions



Note: Data for 2020 are forecasts

Sources: "Global Recessions" by M. Ayhan Kose, Naotaka Sugawara, and Marco E. Terrones, World Bank Policy Research Working Paper 9172, March 2020; Global Economic Prospects by World Bank, June 2020







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the public health crisis and the impact of pandemic-related restrictions, EMDEs initially faced tighter financing conditions, plunging oil and other commodity prices, sharp declines in remittances, and collapsing international trade. While the external environment has improved for most EMDEs since the middle of 2020, the recovery has been at best halting.

Third, the pandemic is likely to leave lasting damage in the long run. Covid-19 and the resulting recessions that engulfed vast swaths of the developing world will leave lasting scars, eroding productivity and potential output for many years to come. In the average EMDE, over a five-year horizon, past deep recessions lowered potential output by about 6%. The pandemic is expected to exacerbate the weakness in productivity growth and private investment that were features of the past decade.

Fourth, the pandemic's long-term impact will aggravate preexisting long-term challenges. Recessions associated with the pandemic will likely have an even larger impact on long-term growth prospects because of pre-existing vulnerabilities, fading demographic dividends and structural bottlenecks, and permanent changes in behavior patterns, including consumption habits, and human capital formation. In most years during the past decade, EMDE growth fell short of its long-term average. The pandemic is expected to exacerbate the multi-decade trend slowdown in potential output growth and productivity growth.

Fifth, while the immediate priorities of policymakers are to address the health crisis and moderate the short-term economic losses, the likely long-term consequences of the pandemic highlight the need to forcefully undertake comprehensive reform programs to improve the fundamental drivers of economic growth.

The next section discusses the spread of the pandemic and the measures taken to stem it. The subsequent section reviews the

channels through which the pandemic affects economic activity in EMDEs. Section 4 describes the severe initial disruptions to the global economy caused by the pandemic. Sections 5 and 6 discuss and quantify the likely lasting damage from the pandemic. The last section concludes with policy implications.

Spread of the Pandemic

An extraordinary number of countries have restricted economic activity to stem the spread of the Covid-19 pandemic. Nevertheless, it continues to spread rapidly in EMDEs, in some cases despite lockdowns and other measures.

As of Oct. 26, almost 43 million cases of Covid-19 have been confirmed globally, alongside about 1.15 million deaths attributed to the disease. Of these, 28 million cases have been confirmed and 0.7 million deaths have been attributed to Covid-19 in EMDEs. Although the number of confirmed cases represents just 0.5% of the global population, cases continue to rise rapidly in most countries, including in EMDEs. Reported cases may be significantly lower than the number actually infected, given the sparseness of testing in some countries.

The Covid-19 pandemic is the latest in a long series of epidemics and pandemics during the 20th and 21st centuries. These have included Ebola in West Africa (2014-15), MERS in the Middle East (2012), swine flu (2009-10), SARS in East Asia (2002-03), Hong Kong flu (1968-69), Asian flu (1957-58) and Spanish flu (1918-19). Preliminary estimates suggest that Covid-19 may be considerably more infectious than many of these diseases, but not among the most deadly for those infected (Global Economic Prospects by World Bank, June 2020).

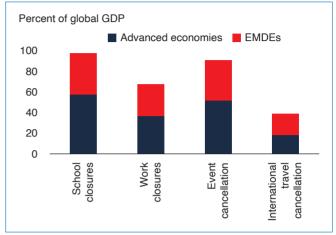
One feature of Covid-19 is that its lethality has been highest among the elderly ("Severe Outcomes among Patients with Coronavirus Disease 2019 (COVID-19) – United States, February 12-March 16, 2020" by Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report Vol. 69. March 2020). This has helped lower the case fatality rate in EMDEs, including LICs, which typically have younger populations. The proportion of the population older than 60 years is 11% on average in EMDEs, and only 5% in LICs (as well as in Sub-Saharan Africa more broadly), compared with 26% in advanced economies.

However, EMDEs generally are less prepared for epidemics and have poorer public health and medical care systems than advanced economies, making the likelihood of recovery from Covid-19 lower should medical attention be needed. The median LIC, for instance, has less than one hospital bed per 1,000 people - compared to more than four in the median advanced economy. Finally, a higher proportion of the population of EMDEs live in informal, crowded housing conditions where access to clean water and sanitation services is limited, making the hygiene and physical distancing measures needed to contain the virus impractical or impossible.

Restrictions and voluntary actions taken to stem the pandemic,

CHART 2

Share of global GDP affected by mitigation measures



Note: Figure shows the share of GDP accounted for by economies with restrictions. Restrictions are counted if required (i.e., not only recommended) and, for school and work closures, if applied across all levels and sectors, respectively. Travel restrictions are counted if they entail a ban on arrivals from all regions or a total border closure. Data are for April 1, 2020. Sample includes 34 advanced economies and 125

Sources: University of Oxford COVID-19 Government Response Tracker, World Bank

including social distancing, have helped to lower the infection rate and thus to delay, and lower, the peak number of infections. A key part of the policy response to Covid-19 has been the implementation of restrictions on people's movements and economic activity of unprecedented scope and scale, beginning in China and extending to most countries (Chart 2). By mid-April, nearly 150 countries had closed schools and mandated cancellation of events, and more than 80 had closed all workplaces. Travel restrictions were widespread. Many, but by no means all, of these restrictions have since been lifted and have made room for a tentative economic recovery.

The Economics of the Pandemic: **Shocks & Spillovers**

Covid-19 has caused unprecedented disruptions to global trade, travel, and tourism; stress in global financial markets; and sharp declines in commodity prices. While the measures taken by governments, consumers, and firms to reduce social interaction have been critical to slow the spread of the virus, they have entailed significant disruptions to economic activity. Reduced consumption of goods and services has been one of the main drivers of lost output in a range of model-based estimates of the effects of pandemics. Investment has also been curtailed, not only by difficulties in maintaining production and construction but also by sharply weaker growth prospects, rising financing costs, eroding confidence, and increased uncertainty.

Air travel, schools and universities, restaurants, theaters, sports venues, and other facilities servicing masses of people were largely closed down for several weeks. Workers able to work at home have in many countries been encouraged or instructed to do so, but fewer jobs can be undertaken remotely in EMDEs than in advanced economies, partly because of more limited Internet connectivity. In some advanced economies, such restrictions as guarantine requirements on the entry of temporary foreign workers temporarily threatened agricultural production. Delays in input deliveries and limited access to financing, in the context of global value chains, at times caused operational challenges for firms.

These adverse shocks resulted in cross-border spillovers to EMDEs through multiple channels – real channels, including disruptions in global trade, supply chains, travel, and tourism; and financial channels, including sharp declines in remittance flows in Q2 2020 and large capital outflows amid a flight to safety in March. Commodity prices, especially oil prices, collapsed in March and April amid a sharp decline in demand that outpaced historic production cuts. These cross-border spillovers were amplified by plunging confidence and rising uncertainty. Since the trough of the global recession in April, conditions have improved and a recovery has gained momentum. However, it remains fragile and partial.

Initial Global Economic Impact

The pandemic initially caused major disruptions in global activity and trade, a sharp tightening of financial conditions, and a severe decline in commodity prices. As unprecedented policy stimulus was implemented and lockdowns eased, economic activity began to recover in mid-2020.

Along with the implied sharp drop in output, global trade contracted significantly. April's 11-point fall in the new export order purchasing manager's index from March was the steepest on record and considerably steeper than at the onset of the global financial crisis, during the Euro Area crisis (2010-13), or during the recent period of trade tensions (2018-19). Since April, global goods trade has recovered but remains below its pre-pandemic level in January. With international travel restricted and internal travel discouraged in most countries, global tourism and travel have been severely curtailed.

Global equity markets initially fell sharply as the pandemic spread across the world. Flight to safety resulted in a sharp tightening of EMDE financing conditions. Net portfolio outflows from EMDEs during each of the last three weeks of March were the three largest on record (Chart 3). Since May, global risk sentiment has improved amid large-scale liquidity injections by major central banks and a gradual relaxation of lockdown measures in some countries. Capital outflows from EMDEs have subsided and equity market valuations have retraced some of their earlier losses. Nonetheless, financial conditions remain fragile for many EMDEs. Foreign aid flows may also shrink in 2020 as donors focus on supporting their own economies.

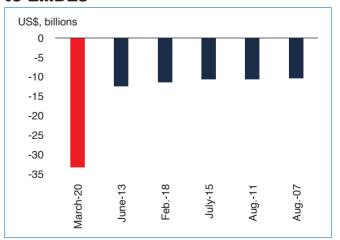
As a result of the sharp decline of global commodity demand, the

prices of most commodities initially fell steeply, particularly of those commodities used in the transport industry. The restrictions implemented to control the outbreak resulted in particularly sharp declines in travel and transport – which account for two-thirds of oil consumption – and in other energy-using economic activities. As a result, benchmark oil prices have been most affected, with the European Brent spot price plunging by 85% between late January – when the first human-to-human transmissions of the virus were announced – and its trough in late April and the WTI price briefly trading at negative levels, before a gradual recovery in May. The decline in oil prices in March was the largest one-month price plunge on record. Notwithstanding a recovery as economic activity picked up and OPEC and its partners agreed to historic production cuts, oil prices remain less than two-thirds of their pre-pandemic levels in January.

Industrial metals prices initially declined steeply, by 24% between late January and late April, but since then have rebounded to prepandemic levels on strong demand from China. Most agricultural commodity prices have experienced only minor swings since January, reflecting their less direct relationship with economic activity (Commodity Markets Outlook: Implications of COVID-19 for Commodities by World Bank, April 2020).

EMDEs therefore faced a perfect storm of both domestic shocks (health crises, restrictions to promote social distancing) and external shocks (plunging trade, collapsing tourism, capital outflows, falling commodity prices) in 2020. Most immediately, the domestic shocks were often more disruptive to economic activity than the external shocks. For the first time in 60 years, EMDE output contracted in 2020. Nevertheless, to support their economies through the

CHART 3 Lowest weekly net portfolio inflows to EMDEs



Note: One-week sum of net daily purchases of EMDE stocks and bonds by non-residents (published by the Institute of International Finance) for 20 EMDEs. Data available from 2005. Chart only considers dates that are at least six weeks apart. Consecutive weeks not shown.

Sources: Institute of International Finance; World Bank

shutdowns, policymakers have implemented relief programs of an unprecedented scale. The immediate fiscal policy response has included support for healthcare systems, expanded social benefit programs, and measures to help firms and households. EMDE monetary authorities across the world have eased monetary conditions to support activity and provided emergency liquidity support to stabilize financial markets.

Long-Term Growth Effects

Prior to the pandemic, the global economy already faced prospects of slower long-term growth, with long-term (10-yearahead) growth forecasts having been repeatedly revised down for all country groups since the global recession of 2009. This, in part, reflected a recognition of slowing potential growth in EMDEs. particularly China, over the past decade and reaching into the next decade ("Subdued Potential Growth: Sources and Remedies" by Sinem Kilic Celik, M. Ayhan Kose, and Franziska Ohnsorge, Growth in a Time of Change: Global and Country Perspectives on a New Agenda, February 2020; Global Economic Prospects: Broad-Based Upturn, but for How Long? by World Bank, January 2018).

In addition to its devastating short-term health and macroeconomic effects, the pandemic may have significant longterm effects. The substantial economic dislocations, deep output contractions across large numbers of countries, and heightened and wide-ranging uncertainties that have arisen from the pandemic may dampen human and physical capital accumulation. Supply chains and working arrangements in many industries may go through costly reconfigurations. There may also be long-lasting shifts in consumer behavior, including in the composition of spending. Households may also opt for increased precautionary saving in view of heightened uncertainty about employment and income prospects. Both consumer spending and business investment may suffer from sustained declines in confidence. Depressed capital spending would be particularly damaging to long-term growth prospects in EMDEs. coming on the heels of several years of weak investment (Global Economic Prospects: Heightened Tensions, Subdued Investment by World Bank, June 2019).

There is little research on the medium- or long-term effects of disease outbreaks on output ("The Economic Impact of COVID-19" by Warwick McKibbin and Roshen Fernando, Economics in the Time of COVID-19, 2020). However, it is well-known that other major adverse economic shocks, such as financial or currency crises, have been associated with persistently negative effects on growth. This suggests that the current pandemic may also leave lasting scars on the global economy by lowering potential output and productivity.

Severe recessions have been associated with highly persistent losses in output in both advanced economies and EMDEs ("Inflation and Activity – Two Explorations and Their Monetary Policy Implications" by Olivier Blanchard, Eugenio Cerutti, and Lawrence Summers, National Bureau of Economic Research Working Paper

21726, November 2015). Low levels of capacity utilization discourage investment and lead to a legacy of obsolete capacity; expectations of weak growth also discourage investment and become self-fulfilling; protracted unemployment causes losses of human capital and reduces job-search activity ("Hysteresis in Unemployment: Old and New Evidence" by Laurence M. Ball, National Bureau of Economic Research Working Paper 14818. March 2009). All these forces will tend to lower long-run as well as shortrun labor productivity.

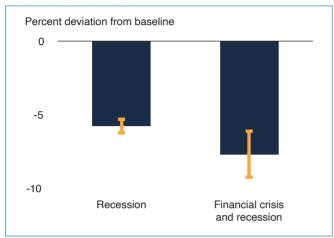
Quantifying the Impact of Recessions on Potential Output

A local projection model is used to assess and quantify the effects of recessions on potential and actual growth and output levels (Global Economic Prospects by World Bank, June 2020). Three shocks are considered: recessions, financial crises, and a combination of recessions and financial crises. Potential growth is based on a production function approach ("Subdued Potential Growth: Sources and Remedies" by Sinem Kilic Celik, M. Ayhan Kose, and Franziska Ohnsorge, *Growth in a Time of Change: Global* and Country Perspectives on a New Agenda, February 2020). Annual data is available for up to 95 EMDEs for 1982-2018. Recessions are defined as years of negative output growth. Depending on data availability for potential growth estimates, this definition yields up to 65 recession events in 32 advanced economies and up to 203 recession events in 75 EMDEs during 1982-2018. Hence, outright output contractions are rare, at about 6% of the country-year pairs in the sample. Financial crises are defined as systematic banking crises. currency crises, or sovereign debt crises ("Systemic Banking Crises Revisited" by Luc Laeven and Fabian Valencia, International Monetary Fund Working Paper 18/206, September 2018). During 1982-2018, there have been 42 financial crises in 26 advanced economies and 274 financial crises in 87 EMDEs in the regression sample – almost 7% of country-year pairs in the sample.

In line with earlier findings, recessions left a legacy of lower potential output for four to five years after their onset. Five years after the average recession, potential output was about 6% below baseline in EMDEs (Chart 4). Financial crises – including those which were not associated with outright recessions – also tended to be associated with lower potential output over the medium term. Five years after a financial crisis, potential output in EMDEs was about 4% below the baseline. Recessions that were accompanied by financial crises caused larger long-term potential output losses in EMDEs than recessions without financial crises. Five years after a recession-cum-crisis, potential output in EMDEs remained almost 8% below baseline – more than the 6% potential output loss following the average recession.

CHART 4

Potential output after recessions & financial crises



Note: Cumulative potential output response in four years after the event, based on local projections model. Bars show coefficient estimates, vertical lines show 909 confidence bands. The dependent variable is cumulative slowdown in potential output after the beginning of events. Sample includes 75 EMDEs Source: Global Economic Prospects by World Bank, June 2020

Unique Nature of the Pandemic-Induced Recession

The deep recessions associated with the current pandemic are likely to leave more permanent economic scars than typical recessions because of lasting effects of the pandemic and related mitigation policies on the behavior of households and firms – effects that will be exacerbated in many countries by pre-existing vulnerabilities.

Persistently weak confidence could result in a buildup of precautionary savings by households and also more cautious spending by firms, markedly reducing aggregate demand and supply ("Survey Data and Subjective Beliefs in Business Cycle Models" by Anmol Bhandari, Jaroslav Borovička, and Paul Ho. Federal Reserve Bank of Richmond Working Paper 19-14, September 2019). There could be long-lasting changes in consumption patterns motivated by the aim of lowering infection risks. The learning disruptions associated with widespread school and university closures, as well as income losses, may cause lasting setbacks to human capital accumulation (https://en.unesco.org/covid19/educationresponse). For example, evidence from the Ebola epidemic in West Africa in 2014 suggests that school closures were associated with higher dropout rates and wider gender gaps in educational attainment ("Confronting the Gender Impact of Ebola Virus Disease in Guinea, Liberia, and Sierra Leone" by United Nations Development Programme, UNDP Africa Policy Note Vol. 2, January 2015). Large declines in household income are also associated with increased school dropout rates in EMDEs.

Conclusion

The Covid-19 pandemic has taken an exceedingly heavy human toll and ravaged the global economy. Both advanced economies and EMDEs experienced an unprecedented combination of public health crises; sharp increases in borrowing costs, especially in EMDEs; a collapse in global trade, travel, and tourism; and a plunge in commodity prices. These shocks have already led to sharp contractions in many economies.

Meanwhile, governments in many countries have taken fiscal and monetary policy action on unprecedented scales in response to the pandemic to support demand and activity. Great care will need to be taken when withdrawing this support, as multiple objectives will need to be served, including sustaining the recovery of output and employment, ensuring the sustainability of public debt, maintaining price stability, promoting long-term growth, and ensuring social cohesion.

Beyond the short term, the pandemic is expected to have severe adverse effects on long-term economic growth. The exceptional severity of the pandemic and economic collapse raises concerns about the risk of "super-hysteresis": not only a permanent loss of output levels but a permanent slowdown in potential output growth ("Long-Term Damage from the Great Recession in OECD Countries" by Laurence Ball, European Journal of Economics and Economic Policies: Intervention Vol. 11, September 2014). The pandemic could alter the very structures upon which the growth of recent decades was built, since it could cause prolonged damage to global supply chains, global trade and financial flows, and global collaboration.

Note: This piece is based on the main findings of our analysis in the Global Economic Prospects report by the World Bank published in June 2020. We would like to thank Kevin Clinton, Hali Edison, Antonio Fatas, Ugo Panizza, and Christopher Towe, as well as participants at seminars and institutions around the world, for many useful suggestions and comments. We thank Hrisvana Dovtchinova for excellent research assistance. The findings, interpretations, and conclusions expressed in this paper are those of the authors. They do not necessarily represent the views of the institutions they are affiliated with. JS

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