

CITIES AFTER THE PANDEMIC



The lure of urban life remains strong, but some cities could benefit at the expense of others

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What impact will the double blow of the COVID-19 pandemic and the remote-working revolution have on cities, the heart of the world's economy?

Humans are a social species, and live interactions are particularly valuable for transmitting complex and nuanced information as well as for enjoying life. As long as we don't face a new and deadlier pandemic in the near future, the cities of the developed world will largely recover; their appeal to knowledge-intensive industries and younger workers is that strong. The cities of the developing world have already come back, but they may suffer future costs if reduced global business travel leads to a decline in foreign direct investment.

As we have seen, pandemics can be enormously costly—both in lives lost and economic disruption.

The central lesson of COVID-19 is that the wealthy world should invest more in public health and medical care systems to prevent future pandemics. This must also mean more investment in the poorer parts of the planet.

Cities connect people, and urban proximity brings many economic and social benefits. Urban connections have enabled collaborative creativity ever since Socrates and Plato bickered on an Athenian street corner. People earn more in cities than in rural areas, and cities have long been places where the dispossessed and displaced seek and often find economic opportunity. Cities also abet the pleasures of proximity, including the ability to share a meal at an urban café or share the cost of a museum or arts venue. Suicide rates are lower in cities than in rural areas, perhaps reflecting better mental health.



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From Athens to New York

But there are downsides to density; contagious disease is the most terrible of these. Humans have millennia of experience with urban epidemics. The first well-documented urban plague struck Athens in 430 BCE. It helped Sparta defeat Athens in the Peloponnesian War and brought an end to Athens' golden age. As Matthew Kahn (2005) has documented, natural disasters do far more damage when they strike weaker societies; the same is true of epidemics. The Plague of Justinian, which hit Constantinople in 541 CE, may have done even more harm. It helped plunge Europe into centuries of darkness, widespread poverty, and political chaos. The effects were so bad because it struck a continent that was already teetering on the brink.

Epidemics, terrible as they are, can have favorable aftereffects for those who survive. The Black Death killed perhaps one-third of Europe's population in the 14th century. But the survivors were richer, because labor shortages led to higher wages. The resulting increase in per capita wealth helped spur the urban renaissance of the 15th century.

The beginnings of globalization in the 19th century hastened the spread of diseases like yellow fever and cholera. Each killed a vastly higher share of the population than COVID-19. Yet despite the deaths, cities continued to attract migrants by the millions. Rural life was difficult and not rewarding economically. The very poor will do most anything to escape poverty, which explains why COVID-19 will likely do little to deter urbanization in poor countries. Nineteenth century cities also continued to grow because they invested in clean water and sanitation. The great public health investments, such as New York's Croton Aqueduct, marked a hinge of history, when governments started to save lives rather than merely killing their enemies.

Those investments helped usher in the fortunate century that lasted from 1919 to 2019, at least in the rich world. HIV devastated much of sub-Saharan Africa, but it had much less impact elsewhere, especially after the development of antiretroviral medications. Sexually transmitted infections inherently cause less concern than airborne infections. Sex can be avoided but breathing cannot. Further, potential outbreaks such as SARS, MERS, Ebola, and swine flu were contained without severe damage. That history helps explain why the rich world treated the risk of global pandemic so cavalierly before 2020. Unfortunately, we are far from confident that the human and economic harm wrought by COVID-19 will persuade policymakers to invest more seriously in plague prevention.

The wealthy world's experience of COVID-19 was shaped by the technologies that allowed many of us to socially isolate and still earn a paycheck. In May 2020, when remote work was at its height, two-thirds of Americans with advanced degrees were working from home. Google mobility data show that visits to workplaces in the United States were still down by 28 percent in August 2022 compared with the pre-pandemic period. In Manhattan and London, workplace visits were down by more than 45 percent.

This shift to remote and hybrid work raises the specter of permanently empty offices and a downward cycle for cities: fewer workers reduce demand for local services, which leads to unemployment and less spending on public services, which causes more workers to flee. To be sure, individual cities are at risk, especially if they allow crime to shred urban quality of life. The pandemic has led to a feeling of geographic freedom not experienced for some time.



The world seems to be engaging in a deadly science experiment in which it is waiting to see what new plague will emerge.

Dynamic benefits

But there are at least four reasons we believe that cities as a whole—in both rich and poor countries—will survive and even thrive. First, the hypothesis that technology will make face-to-face contact obsolete is old and has been discredited many times. The late journalist Alvin Toffler predicted empty offices in 1980, but for most of the past 40 years, the problem has been too few offices, not too many. Technological change does more than just enable long-distance communication. It radically increases the returns to learning, which is fostered by being around other people.

One sees the dynamic benefits of bringing people together in the productivity data. Nicholas Bloom (2015) and his coauthors showed that when Chinese call center workers were randomly sent home, their productivity, measured in calls per hour, actually improved. More recent work by Natalia Emanuel and Emma Harrington (2020), who look at US call center workers, finds essentially no change in productivity from working at home. But both papers also find that the workers' chances of promotion fell more than 50 percent when they worked remotely. If call center workers are alone, how are they going to pick up tips about doing their job more effectively, and how will their boss learn that they can handle more complex cases?

In the same vein, José Morales-Arilla and Carlos Daboin Contreras (2021) documented the decline in new hiring for remote work during the COVID pandemic. Even though Microsoft concluded that its programmers were just as productive when they went remote, new ads for programmers on the Burning Glass Aggregate, an online job board, dropped more than 40 percent in the course of 2020. That drop is compatible with the view that employers don't think new workers can learn the company's work culture when they don't interact with other employees. More recently, Microsoft researchers reported that "firm-wide remote work caused the collaboration network of workers to become more static and siloed," with "a decrease in synchronous communication and an increase

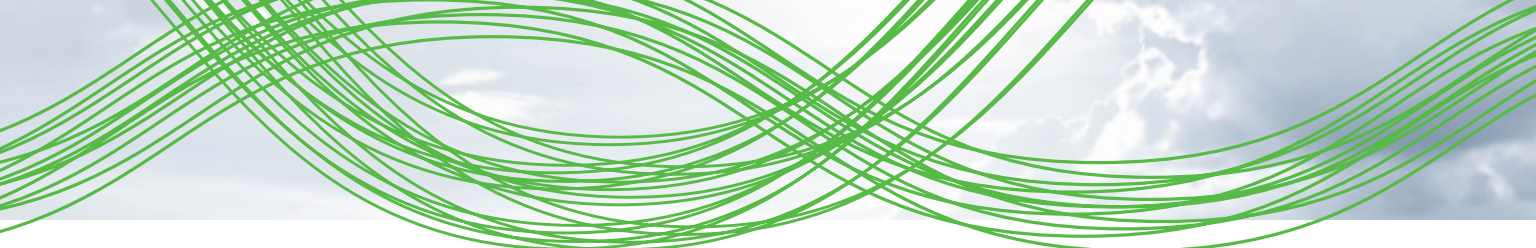
in asynchronous communication," which together "may make it harder for employees to acquire and share new information across the network." And a host of evidence documents that remote learning was disastrous for children.

Sharing costs

Second, cities thrive as places of consumption as well as production. Urban agglomeration produces better restaurants as well as better accountants. Cities allow people to share the fixed costs of museums or concert venues. Between the 1970s and the 2000s, urban prices went up much faster than urban wages, which is compatible with the view that people increasingly wanted to be in cities for the amenities they provide. While some older people have decided never to return to in-person office work, plenty of younger people have shown enormous hunger to get back to face-to-face social interactions; a job can be a source of enjoyment as well as income.

Third, prices will adjust to ensure that offices don't remain permanently empty, at least in cities where there is reasonable demand for office space. Before the pandemic, commercial real estate was in very short supply in cities like New York, San Francisco, and London, and many smaller, newer, or less profitable businesses were priced out of these markets. Landlords with unoccupied offices will cut rents and eventually find firms eager for that space. Of course, in some lower-end markets, which were near the edge of survival before COVID, demand may fall to the point where landlords prefer to walk away from their buildings rather than rent them out at bargain-basement prices. They can be turned into housing or, worse, left empty.

Fourth, much of the world remains poor, and for the poor, the economic appeal of urbanization easily overwhelms fears of health costs. Google mobility data show that workplace visits are substantially higher now than they were before the pandemic in cities such as São Paulo, Brazil, and Lagos, Nigeria. Moreover, skilled workers in poorer cities will actually benefit because videoconferencing makes it easier to connect to the wealthy world. The



slowdown in business travel may, however, reduce foreign direct investment in developing-world cities. Before the pandemic, air links between cities were significant predictors of financial ties (Campante and Yanagizawa-Drott 2018).

Winners and losers

Even if cities as a whole remain robust, individual cities may still suffer. In some ways, the patterns of urban success since 2019 look like postwar America on steroids. Sunbelt cities such as Austin, Texas, and Phoenix, Arizona, have done extremely well, measured by growth in housing prices, employment, or housing construction. Indeed, housing markets in these areas may have overshot and could easily experience a correction in the near future.

Meanwhile, rust belt cities have particularly suffered. For firms in cities like Chicago and Detroit, teleconferencing may be more important as a tool for communicating with suppliers and customers than it is as a way to enable remote work. Firms that once located in Chicago's Loop because it gave them easier access to accountants and lawyers may now find it just as easy to be in Miami and use the service industry there. The most important meetings may still need to be face-to-face, but more routine interactions can certainly take place online. Hungry start-ups tired of Silicon Valley prices are far more likely to relocate to Austin than to just give up their offices entirely and work from home. This logic suggests that the war for global talent has intensified, which will benefit areas with amenities particularly appealing to skilled workers.

Even though developing-world cities are back to work, in many cases their economies remain depressed. Unlike the United States and other advanced economies, these countries couldn't afford to pump trillions of dollars of stimulus funds into their economies to mitigate the impact of the COVID-related slump. In poor countries, borrowing is more difficult, which means internal resources matter more. Africa's GDP fell by 2 percent during 2020, according to World Bank data, and that may understate the true economic damage for many communities. Even more worrisome, vaccination rates in the poorer parts of the planet remain low.

These low vaccination rates are intrinsically problematic because they mean that more people in poor countries will die from COVID-19. And there is the risk that new COVID variants will

start in the poor world and spread widely from there. In the past six decades, the bulk of "spillover events"—health-related events that spread disease beyond a country's borders—have originated in some of the poorest parts of the planet.

In regions plagued by poverty, people often have more contact with disease-carrying wildlife, vectors such as mosquitos survive longer, and sanitation is more limited. Consequently, the world seems to be engaging in a deadly science experiment in which it is waiting to see what new plague will emerge from the relatively unmonitored and under-resourced regions and spread globally.

What can be done to reduce the risk of another pandemic? The IMF provides a model of how richer countries can aid poorer countries in exchange for policy reforms. That model could be readily adapted to prevent future pandemics. A natural path forward is for the rich world to engage in a massive health exchange with the poor world. In exchange for significant aid for public health infrastructure, recipient countries would agree to measures that keep humans away from animal carriers of disease, better monitor new illnesses, and commit to rapid response and containment.

Fortunately, the world and its cities seem to have survived COVID-19 largely intact. We may not be so lucky next time. The result of complacency in 2020 was millions of deaths and enormous economic disruption. The world must heed this warning and invest in the entire world's hygiene or risk being hit by a pandemic that is even worse. **FD**

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