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Beyond the Pandemic: Challenges and Opportunities

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The Journal of Commerce and Industry hopes to provide its readers with ideas and visions on regional economic cooperation. Articles on industrial enterpreneurship and management and on international trade and business practices also offer challenging and inspiring models.

The CACCI Secretariat welcomes opinions and comments and will be glad to consider for possible publication articles which will help advance the aims and objectives of the Confederation of Asia-Pacific Chambers of Commerce and Industry (CACCI) and of this Journal.

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IN THIS ISSUE (VOL. 1, 2020)

This issue features insights and analyses on both the challenges and unique opportunities brought about by the COVID-19 pandemic.

It includes articles published by experts from the International Monetary Fund (IMF) and the Asian Development Bank (ADB).

It also contains materials that appeared in BRINK, the news service of Marsh & MCLennan Insights, a research institute dedicated to analyzing complex risks that are reshaping industries, governments, and societies. BRINK gathers timely perspectives from experts on risk and resilience to inform business and policy decisions on critical challenges.

The editors and staff of the CACCI Journal of Commerce and Industry would like to take this opportunity to thank the authors for sharing their materials with CACCI and its members.

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The tradeoff between lost lives during the pandemic and lost livelihoods is often viewed as an all-or-nothing choice between complete lockdown versus zero restrictions. In reality, a balance can be struck.

The fight against COVID-19 is often framed as a trade-off between public health and the economy. Social distancing and lockdowns can minimize widespread infection, prevent hospitals from being overwhelmed, and save thousands of lives. But those same measures will immobilize schools, businesses, and factories, and slow down the economy.

Therefore, society inevitably faces a stark trade-off between lost lives versus lost livelihoods. To work out the trade-offs, we must first put a dollar value on human life. While this may seem unethical, governments, civil courts, regulatory bodies, and companies do it all the time. The very existence of the life insurance industry is testament to the fact that human lives can be measured in dollar terms.

One approach to measuring life, commonly used by economists who conduct cost-benefit analyses, is the "value of statistical life". It measures the loss or gain that arises from changes in the incidence of death, by eliciting people's willingness to pay for small reductions in the probability of death, or their willingness to accept compensation in exchange for tolerating a small increase in the chance of death.

For example, if a worker is willing to accept a higher wage salary, e.g. $1,000, for an increase in risk of death of one percent, then it can be inferred that his value of statistical life is $100,000. Similarly, if an employee is willing to pay $100 to install safety equipment that will lower the risk of death by one percent, then his value of statistical life is $10,000.

Take the example of a complete lockdown. We can estimate the potential number of lives saved – based on infection and fatality rates estimated from epidemiological models – and multiply that by value of statistical life to compute the dollar value of saved lives. If this number exceeds the economic costs of a complete lockdown, then we know that it is desirable.

The tradeoff between lost lives—i.e. public health—versus lost livelihoods—i.e. economy—is often erroneously viewed as an all-or-nothing choice between complete lockdown versus zero restrictions. In reality, there is a continuum in stringency of restrictions – e.g. social distancing, work-from-home rules, and limits on inter-household interaction – as well as degree of lockdowns – e.g. stay-at-home orders, community quarantines, and travel bans.

In fact, looking around Asia and the Pacific, different countries imposed varying forms and degrees of restrictions. India, Malaysia, New Zealand, and the Philippines implemented nationwide lockdowns, severely restricting the movement of residents outside their homes. On the other hand, Japan and the Republic of Korea only encouraged social distancing, while relying on other policy options such as mass contact tracing to contain the coronavirus.

One can deploy the economist's tools to analyze and compare a wide range of policy options that range between complete lockdown and zero restriction, to pinpoint the best possible course of action. We make three recommendations for analytically comparing the different policy options available to governments.

First, the value of statistical life approach can be used to inform policymaking in the current outbreak. Moreover, since we now know that COVID-19 predominantly affects the mortality of the elderly and individuals with pre-existing health conditions, an age-adjusted value of statistical life or health-adjusted value of statistical life, both of which reduces value of statistical life by taking into account remaining life expectancy and health status respectively, ought to be used.

Second, activities which are valuable but underpriced ought to be included in the calculation of costs and benefits. Most societies calculate the economic cost of lockdowns in terms of lost GDP and employment. However, cost-benefit analysis should include not only those activities with existing market prices but also those which are underpriced yet valuable. For instance, they should include the value of recreation and leisure, household production, and potential marital and family conflict.

Third, a wider range of policy options should be considered for comparison. For example, given that elderly residents are by far the most vulnerable to COVID-19, mobility restrictions could be targeted at them while allowing other segments of the economy to reopen. Innovative solutions such as wearable contact tracing and cohort-specific social bubbles could also complement mobility restrictions to minimize cross-cohort interactions. No option should be left off the table.

There are a couple of important caveats. First, lives versus livelihood is an incomplete characterization because pandemic containment measures may result in some deaths. For example, economic hardship due to lockdowns may cause deaths, especially in developing countries where government support for economic victims of COVID-19 is limited. Second, a more complete cost-benefit analysis must take into account long-term effects such as long-term impairment of learning and resulting earning losses due to school shutdowns.

Human life may be priceless from a moral perspective but in the real world, we put a dollar value on human life all the time. Ultimately, economists have much to contribute to the on-going debate on saving lives or saving livelihoods. No matter which side of the debate one stands, the economist's toolbox can help locate a policy bliss point. And the choices need not be dichotomous.

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Ripples of COVID-19: What Concerns Business Leaders for the Decade to Come?

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Unsurprisingly, 10 months into the COVID-19 crisis, with cases still rising and crippling effects to industries still playing out, "spread of infectious diseases" has rocketed up the rankings to become a top concern for businesses, according to the World Economic Forum's 2020 Executive Opinion Survey (EOS).

The responses of over 12,000 executives across 127 countries reflect not just the current health crisis but also how the fallout may reverberate across economies and societies in the years to come, aggravating pre-existing vulnerabilities to a broad swath of global risks, inflaming already tense divides and surfacing secondary complications.

COVID-19 Exacerbating Economic Weaknesses

Although the top risks on a global level remain largely unchanged since last year, the same risks attain new significance in a COVID-19-impacted world. Economic risks such as "unemployment or underemployment" and "fiscal crisis" were cited by executives as among the top 10 risks across every region and globally ranked first and third, respectively.

The Global Top 10 Concerns for Doing Business in 2020

ECONOMIC
ENVIRONMENTAL
GEOPOLITICAL
SOCIETAL
TECHNOLOGICAL

Rank	Risk	Change from 2019
1	Unemployment or underemployment	+ 2
2	Spread of infectious diseases	+ 28
3	Fiscal crisis	- 2
4	Cyber attacks	- 2
5	Profound social instability	+ 1
6	Failure of national governance	- 1
7	Energy price shock	- 3
8	Asset bubble	+ 2
9	Data fraud or theft	- 2
10	Inter-state conflict	- 2

Source: World Economic Forum

Unemployment continues to be emblematic of obstacles to growth for emerging markets and is now further hindered by stunted economic activity under the strain of COVID-19 and the necessary policy responses. However, among advanced economies, this is a fresh concern. Unemployment's rise in advanced economies from No. 13 to No. 4 emphasizes the fragility of past employment rates and the precarious nature of those jobs. A lack of job security has also led to millions losing access to medical benefits and insurance during the global pandemic, resulting in foregone preventative and early care interventions, which will inevitably increase health care costs in the future, while driving down productivity and income.

As unemployment pushes many into poverty, governments have faced immense pressure to respond with significant stimulus packages. The resulting fiscal strain has led to high levels of public and private debt and raised questions over the sustainability of quantitative easing programs. As countries move out of the immediacy of the COVID-19 health and economic crises, an opportunity to use the continuing fiscal stimulus to make more efficient markets, mitigate other critical priorities, like asset bubbles, and create more sustainable and resilient societies presents itself.

The pandemic is also forcing executives to pivot business models and operational practices in a physically distanced and digitally dependent world. Increasing reliance on digital infrastructure has reaffirmed the dangers of cyber threats to businesses globally, with added criticality. Risk of cyberattacks continues to be top of mind for business executives in advanced economies — among the top five for North America and Europe for the fourth year running — and rising rapidly up the ranks for business leaders in emerging markets (from 20 in 2016 to 10 this year). In sub-Saharan Africa, "cyberattacks" and "data fraud or theft" entered the top 10 risks at the regional level for the first time.

Social Instability Rising

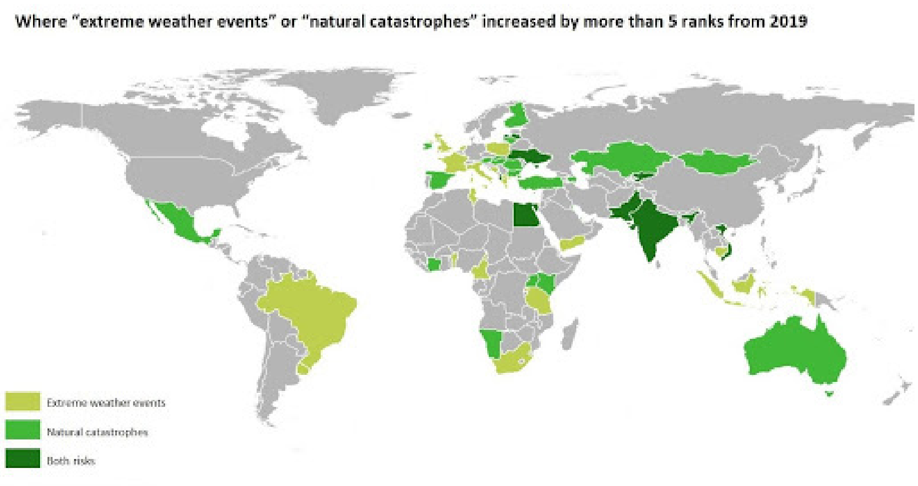
Reflecting the many recent and ongoing instances of protest and social unrest in the world, "profound social instability" appears as a rising concern for business leaders, ranked fifth in the 2020 survey. The risk featured among the top 10 risks in six of eight regions, with notably increasing recognition in more advanced economies — rising 10 places to ninth this year. While in 2019, social instability was a top five risk in countries accounting for 19% of global GDP, in 2020 the risk ranked in the top five in countries accounting for 46% of global GDP.

The pandemic has magnified systemic challenges related to access and inequality. Governments have struggled to ensure an equitable distribution of testing and treatment facilities, leading to disparate mortality rates and economic misery across different communities. As institutions and economic activities continue to move online, the technological divide in education and the workplace will similarly widen. Those who lack the necessary technologies or know-how are being left further behind, creating an ever-larger group of economically disadvantaged and often disenfranchised citizens, increasingly disillusioned with government, with the prospect of further civil unrest and violent extremism.

Emerging technologies continue to play an important role in this continued polarization of societies. Results from the 2020 survey suggest fresh concerns from business leaders toward the persistent spread of misinformation, the lack of effective regulation and the increasing deployment of surveillance tech by governments. Compared to 2019, "misuse of technology" rose five spots to rank 12th globally, featuring as a top 10 risk for executives in North America, the Middle East and North Africa, and South Asia.

These developments are fanning the flames of large-scale social dissent, insurgency and political turbulence. High levels of societal instability in parts of North America, Eurasia and Asia have already severely disrupted business operations and given rise to reputational harm. With consumers and employees expecting companies to be more engaged on social issues against a backdrop of considerable uncertainty regarding the direction of government policy, business leaders need to find a way forward that reflects the risks for political blowback, negative financial impacts and long-term damage to customer trust.

Countries Where Extreme Weather Events or Natural Catastrophes Rose More Than Five Places Compared to 2019



Fires of Climate Change Spread

Environmental concerns are gaining traction among businesses, with four of the five environmental risks featuring in the top 20 global rankings for the first time. This trend is particularly pronounced in regions that recently faced significant disaster damages and might reasonably expect similar events in years to come.

Ranging from catastrophic bushfires in Australia to large-scale flooding in Jakarta in just the opening weeks of

2020, "extreme weather events" and "humanmade environmental catastrophes" have joined "natural catastrophes" among the leading concerns for executives in the East Asia and Pacific region. In North America, where wildfires continue to rage on the West Coast, the risk of "natural catastrophes" rose by six positions in North America to fourth, while "failure of climate change adaptation" remains in the top 10. The last also entered the top 10 of the EOS for the first time in Europe, a region that suffered from a series of storms early in 2020.

Anticipate Blind Spots

This year has shown that the impacts of COVID-19 in a complex risk environment can lead to cascading and compounding effects. Blind spots arise as risks are viewed in isolation, while the confluence of longer-term trends that culminate into the crisis may be overlooked.

For instance, although geopolitical risks slip under the radar in the survey this year, they continue to simmer. Border disputes, trade wars and heightened diplomatic tensions have persisted or have been exacerbated by COVID-19. Some have been used to distract from governmental shortcomings in response to the pandemic at home or initiated while the world was looking elsewhere. Such geopolitical risks have the potential to trigger widespread impacts, similar to COVID-19, and thus indirectly influence the global economy.

Businesses will be hard pressed to predict the exact cause or timing of the next crisis, but they can sharpen their understanding of vulnerabilities and interdependencies, from capital flows to physical supply chains, and develop management strategies that enable them to buffer the impacts of disruptions and adapt to a new normal.

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Richard Smith-Bingham leads a global team of researchers that draws on the expertise of Marsh & McLennan and its networks to identify breakthrough perspectives and solutions to society's most complex challenges. He is at the forefront of the firm's thinking on the evolving macro-level risk landscape and how companies and governments can best anticipate and negotiate rising threats.

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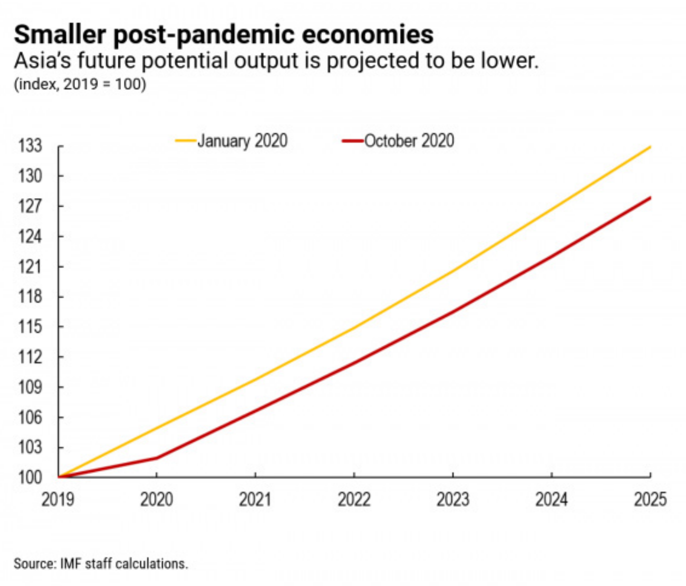
Engines Not Yet in Sync: A Multispeed Recovery in Asia

Jonathan D. Ostry
Deputy Director, International Monetary Fund (IMF)

Reflecting worse-than-expected outturns in the second quarter in a few countries, the IMF's forecast for the region has been downgraded to -2.2 percent in 2020—the worst outcome for this region in living memory. India's economy experienced a much sharper than expected contraction in the second quarter—24 percent on a year-over-year basis—and is expected to recover slowly in the coming quarters. China, which suffered the pandemic's blow earlier than other countries, has seen a strong recovery after the first quarter lockdown, and growth has been revised up to 1.9 percent this year, a rare positive figure in a sea of negatives. Advanced economies (Australia, Korea, Japan and New Zealand), while still in recession, are expected to do somewhat better than expected in 2020, reflecting a faster pickup in activity following earlier exit from lockdowns.

Drawn-out recovery

The good news is that we expect the region to grow by 6.9 percent in 2021. But even with this boost, output will be lower at the end of 2021 than our pre-pandemic projection. The scars will be deep: with declining labor force participation and weak confidence dimming private investment, potential output by the middle of the decade could be some 5 percent lower than before the pandemic.



Lessons and Challenges

The Asia-Pacific region went into this crisis first and many of its economies are emerging from it first as well. What lessons can the world learn from this experience?

First, an early public health response, when infection rates were still low, was an essential steppingstone to flattening the virus curve. Second, relaxing containment measures only after the virus has been suppressed—and with appropriate post-lockdown policies (such as testing and contact-tracing) in place—is associated with better economic outcomes. On both counts, Asia has done well in comparison to other regions, probably due to its experience from previous pandemics. Third, fiscal support has also been critical to reduce economic costs and underpin the recovery. Here Asia has pulled its weight with significant policy stimulus.

Widespread recession in 2020
World Economic Outlook forecasts stronger growth for next year.
(year-over-year change; percent)

	2019	2020	2021
Asia	**4.6**	**−2.2**	**6.9**
Advanced economies	**1.3**	**−4.0**	**2.8**
Australia	1.8	−4.2	3.0
New Zealand	2.2	−6.1	4.4
Japan	0.7	−5.3	2.3
Hong Kong SAR	−1.2	−7.5	3.7
Korea	2.0	−1.9	2.9
Taiwan Province of China	2.7	0.0	3.2
Singapore	0.7	−6.0	5.0
Emerging markets and developing economies	**5.5**	**-1.7**	**8.0**
Bangladesh	8.2	3.8	4.4
Brunei Darussalam	3.9	0.1	3.2
Cambodia	7.0	−2.8	6.8
China	6.1	1.9	8.2
India	4.2	−10.3	8.8
Indonesia	5.0	−1.5	6.1
Lao P.D.R.	5.2	0.2	4.8
Malaysia	4.3	−6.0	7.8
Myanmar	6.5	2.0	5.7
Mongolia	5.1	−2.0	6.0
Nepal	7.1	0.0	2.5
Philippines	6.0	−8.3	7.4
Sri Lanka	2.3	−4.6	5.3
Thailand	2.4	−7.1	4.0
Vietnam	7.0	1.6	6.7
Pacific island countries and other small states	**3.6**	**−7.5**	**4.2**

Sources: IMF World Economic Outlook database; and IMF staff estimates and projections.

INTERNATIONAL MONETARY FUND

Risks ahead

Prospects for a global trade-led recovery look dim, because of weak global growth, closed borders, and festering tensions around trade, technology, and security—despite the boost to the region from China's recovery. Diversifying Asia's economies away from over-reliance on exports is a work in progress: a fundamental reorientation toward domestic demand will take time and presents an exceptionally difficult challenge for the smallest economies (such as the Pacific islands) and more generally, those reliant on tourism.

Rising inequality is antithetical to sustainable inclusive recovery. Income and wealth inequality, already increasing before the pandemic, are likely to rise further unless decisive policy action is taken. Asia's labor market indicators have already deteriorated more than during the Global Financial Crisis, especially for women and younger workers. On top of that, redistributive policies in Asia are limited and the informal sector is large, making it difficult to reach and support the most vulnerable.

High indebtedness makes the region vulnerable to financial turbulence. While the unprecedented portfolio capital outflows seen at beginning of the pandemic have stabilized, thanks to monetary policy actions in advanced economies, net outflows remain large in comparison to pre-pandemic levels. A renewed bout of tighter global financial conditions could worsen credit risks and financial stability, aggravate weak public and private sector balance sheets, and potentially push vulnerable countries into a debt crisis.

The road to strong, inclusive green growth

The health crisis is far from over. Policymakers' first job is therefore to sustain strong health policies until the pandemic has abated. Timely testing, effective contact tracing, increases in hospital capacity, and improved healthcare systems remain priorities, especially for emerging markets and low-income countries in the region. Countries should plan now to secure and quickly distribute vaccine supplies when they become available, with multilateral support as needed.

Beyond the health response, a full arsenal of economic policies is needed to bolster Asia's future.

First, fiscal and monetary support should not be withdrawn prematurely, that is, before the recovery gains traction.

Second, countries need to redouble efforts to protect their most vulnerable citizens from the crisis' consequences through better targeting of fiscal support, especially to youth and women, who have taken the biggest hit. This is essential, because fiscal space is scarce or rapidly diminishing everywhere and acute inequality could still lead to social unrest if those at the bottom lose hope that better times lie ahead.

Third, vigilance against emerging credit risks in corporates and households remains essential, given potential impacts on financial institutions, particularly if growth is slower than expected. High levels of debt are a key vulnerability in the region, especially given the weak financial position of many businesses before the crisis. It is also important to address unsustainable public debt proactively, as the clear message from history is that delays are very costly.

Fourth, to enable structural change, economic policies should be laser-focused on the world of tomorrow, not yesterday. This means facilitating corporate restructuring and resource reallocation, including to sectors that will pave the way for stronger medium-run inclusive green growth.

The message is clear: the region has the wherewithal to craft a better future for its citizens. With the right policies and international support when needed, Asia's engines can work together again and power the region ahead. The IMF stands ready to support the economies across Asia and the Pacific, with financing, policy advice, and capacity development tailored to the diverse needs in the region.

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The Pandemic Will Structurally Change the Global Economy More Than We Think

Alicia García-Herrero
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Those who say there are no letters left in the alphabet to describe the evolution of the world economy after the pandemic are absolutely right. It is abundantly clear now that we cannot expect to see a rapid V-shaped recovery — nor should we expect a complete stagnation or a L-shaped recovery.

The Square Root-Shaped Economy

The newest version of recovery, the K-shape, reflects the increasing disparity between the winning and losing sectors, including the middle class.

So rather than suggest a letter, I would like to call for a different shape recovery in a post-COVID world: the square root. A square root begins with a strong upswing, much like the one we are experiencing now, even as the pandemic still lingers.

However, this rapid recovery is immediately followed by a structural slowdown. In other words, the problem is not so much a sudden collapse in activity, but the negative impact that follows.

The big question is: Why would the pandemic bring lower growth? There are several reasons.

4 Reasons Why COVID Brings Lower Growth

Firstly, companies will be less profitable and will react by cutting fixed asset investment.

Secondly, the distribution of income will worsen worldwide. In fact, the pandemic has caused a serious deterioration in business profitability throughout the world. Similar to the global crisis in 2008, companies will want to recover their profitability and profits, for which they will have to reduce employment and wages. This will worsen the already battered distribution of income worldwide.

In other words, greater downward pressure on unit labor costs, and therefore on household purchasing power, seems inevitable. To make matters worse, the asset price bubbles stemming from ultra-lax monetary policies are bound to increase the divide between the working class and those able to invest in financial assets.

Thirdly, state intervention in the economy is leading to a much larger share of zombie companies. The fact that interest rates are to remain low will make it possible for governments to continue to finance such unproductive companies and their related misallocation of savings.

The fourth potential negative consequence is that global financial instability could be one of the key unintended consequences of the pandemic, due to increasingly volatile flows in emerging economies and doubts about the role of the dollar as a reserve currency.

Unstable Capital Flows

The combination of ultra-abundant global liquidity and fluctuations in risk aversion can lead to highly unstable capital flows, which remain crucial for many emerging countries. And the more an emerging country depends on external financing, the more costly this situation can be in terms of volatility of capital flows and economic performance.

Another form of financial instability may come from the growing doubt surrounding the role of the dollar in the world economy, stemming from the lack of U.S. leadership, the sharp increase in U.S. external debt and the ultra-expansionary monetary policy of the Federal Reserve.

China is well aware of the importance to U.S. long-term hegemony of the USD as the reserve currency, and will have no qualms about using the weapons it has at its disposal, to weaken the role of the dollar in the long run.

The Hiatus in Education

The fifth and final reason is driven by the loss of human capital due to the discontinuation of education programs globally. There is bound to be a reduction in fertility rates for many years, given the negative impact of the pandemic on household income for years to come.

If we analyze each of these points in greater detail, lower growth in the medium term seems unavoidable and with it, the continuation of the ultra-low interest rate environment we are in. The loss of human capital, as well as loss of financial capital due to the sharp drop in investment, in addition to the destruction of business fabric due to bankruptcies, are all bound to have lasting effects, which demand policies cannot do much about.

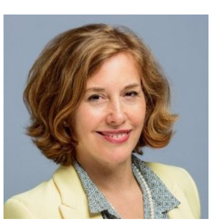
Social Reform Needed

Any cushioning effect must come from innovation and changes in societal norms, including faster digitalization and, possibly, the further greening of economic activity. Still, the efforts which would need to be made for technological and societal innovation to completely offset this trend towards lower potential growth look Herculean to me.

In summary, the economic impact that we can expect from this pandemic in the medium term is not promising for companies, families or governments. It's hard to think of a more devastating shock to the world economy and not just because of the immediate effects.

It is time to rethink many of the basic principles of our economic model to mitigate these impacts.

About the Author



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Rebooting the Economy: Preparing to Deliver a COVID-19 Vaccine

Patrick L. Osewe
Chief of Health Sector Group, Asian Development Bank

Countries should start planning now to deliver COVID-19 vaccines, in order to enjoy a faster recovery from both the health and economic impacts of the pandemic.

Given global demand, it is inevitable that the eventual supply of COVID-19 vaccines—currently in development in a dozen or so countries—will not be sufficient. But once they do become available, there will be a massive global effort to get the vaccines to all countries and territories.

As scientists continue to work at great speed to develop safe and effective vaccines, countries must also strengthen their capacity to distribute and administer them as quickly and efficiently as possible. There are a number of actions countries can take now to make sure they are prepared to prioritize, introduce, and deliver COVID-19 vaccines:

Adopt a whole-of-government approach to improve vaccine delivery planning. Every aspect of the COVID-19 response—from the development of test kits to the designation of treatment facilities—has involved partnerships across society. Preparing for the delivery of a COVID-19 vaccine is no exception. Countries should engage key stakeholders to plan scenarios, develop a national vaccine strategy, and organize operational aspects of vaccine introduction. Given the enormous scale of COVID-19 vaccination—and its broader impact on travel, schooling, and economic recovery—partnerships at every level will be critical to success.

Identify context-specific vaccine delivery resource requirements. It is likely that many of the challenges that low- and middle-income countries already face related to health systems, settings, facilities, and human resources will be amplified by the introduction of the COVID-19 vaccine. For example, it is anticipated that at least one COVID-19 vaccine candidate will require storage at temperatures as low as minus 80 Celsius (-112 Fahrenheit). Yet temperature-controlled logistics and point-of-care cold chain infrastructure are unreliable in many rural settings in low- and middle-income countries, where electricity supply is not guaranteed. These varying vaccine characteristics—along with the substantial increase in volume, ranging from millions and in some cases billions of COVID-19 doses—mean that countries will have to carefully determine not only what resources they will need for effective storage, distribution, handling, and stock management of their supply (e.g., high-capacity freezers and refrigerators, vaccine carriers, cold boxes, IT systems, and more) but also workforce requirements to deliver and administer nationwide vaccinations at scale.

Agree on the vaccine priority line. The question of who should receive the first doses of the vaccine is complex. For example, frontline workers are often at the top of proposed priority lists. Yet this category alone requires careful consideration -- who is considered a frontline worker? Which frontline workers should be prioritized? Who will follow and in what order? These are all questions that will have to be answered and clearly communicated to the public.

Countries should assess how to identify prioritized groups based on their country context and specific epidemiology (e.g., people at a higher risk of severe disease or people living in areas where the disease is spreading rapidly may be prioritized). They should also model different scenarios for vaccinating the general population and set expectations accordingly.

Strengthen vaccination infrastructure. Virtually every country in the world will have to strengthen and expand their existing vaccination infrastructure in order to be able to transport, track, store, and administer COVID-19 vaccines. This is particularly important given that most vaccination infrastructure is geared towards delivery to children, and not adults. Simultaneously, COVID-19 vaccination must be introduced while avoiding disruptions to routine national immunization programs.

Key issues for countries to consider include strengthening vaccine storage, quality assurance, and distribution systems, along with the information systems required to track every dose that has been administered, especially in the case of multi-dose vaccines. Issues of building capacity, training health workers, and expanding sites (e.g. hospitals, clinics, pharmacies, schools, occupational health settings, etc.) should also be considered.

Develop a vaccine delivery/execution plan. Once vaccines are secured by a country, they will need to be distributed broadly, including to rural, hard-to-reach, and urban areas. Implementation plans should identify how health departments will administer and track vaccines to hard-to-reach populations, such as those that are mobile, are in conflict, lack formal identities, and/or are otherwise unidentifiable.

Implementation plans should also emphasize strategic delivery of the vaccine and wide geographic accessibility. This might include designating multiple distribution points across a range of community locations (e.g., schools, parking lots, large stadiums, pharmacies, workplaces, prisons, military, conference centers, etc.) or designing innovative distribution strategies (e.g. drive-through sites).

Develop communication strategies to improve vaccine uptake. At the start of the pandemic, a parallel COVID-19 'infodemic' emerged, making it difficult for people around the world to find reliable guidance about transmission of and protection from the virus. As such, widespread campaigns will be necessary to educate the public about the benefits of COVID-19 vaccination and increase public confidence.

Clear expectations should also be communicated to the public about who has been prioritized and why, as well as when the vaccine will be made available to the general population and how they can receive it. With vaccine coverage essential to the protection of population health, developing and implementing clear advocacy and communication strategies will be critical for overall success.

Ensure appropriate vaccine reporting, monitoring, and evaluation. Given how scarce COVID-19 vaccines are likely to be at the beginning, managing and monitoring supplies will be paramount. Countries should begin now to prepare and improve their vaccine management, reporting, monitoring, and evaluation systems in order to reduce incidences of stock outs and wastage—and to ensure proper re-allocation and accountability. This also includes strengthening existing vaccine safety monitoring systems to identify adverse events.

As countries in the Asia-Pacific region, like the rest of the world, wait for one or more COVID-19 vaccines to be successfully developed and approved, there are a number of immediate actions that they can take to accelerate the national response to the pandemic. By preparing now to implement widespread vaccination, countries can position themselves to enjoy faster recovery from both the health and economic impacts of COVID-19.

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Micromobility Is Thriving in the New 'Safety Economy'

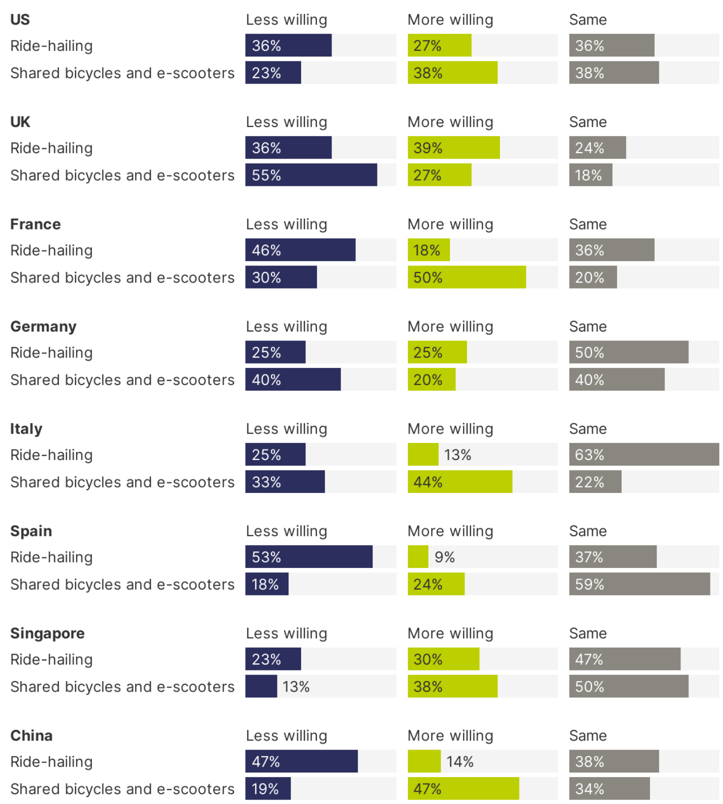
Moe Kelley
Partner at Oliver Wyman

Thanks to the coronavirus pandemic, the world is shifting from a sharing economy to a safety economy. As consumers emerge from their homes, they seem to be opting for the solitary and hygiene of their own cars, bicycles and walking. Even as economies reopen, given the new priorities, mass transit and other modes of urban transportation can look forward to tough times — perhaps until the advent of a vaccine.

But it's not all bad news. One of the modes that will not have to wait for a vaccine is micromobility, a term used to refer to bicycle- or scooter-sharing enterprises. These services are already seeing riders return — for some cities, in increasing numbers. The reason? Bicycles and scooters are used outdoors, allow for social distancing and can be wiped down before use.

How Shared Mobility May Fare Moving Forward

Riders in the US, France, Italy, and China are the most willing to take a shared bike or scooter.



Source: Oliver Wyman Forum

According to a recent eight-nation survey Oliver Wyman conducted with some 6,000 respondents, 44% of riders said they would be willing to increase their dependence on the service in the future and another 34% said they planned to use it as much as before the pandemic. Only 22% said they would decrease their use. Additionally, over a third of non-users said they were now equally or more willing to try the service.

Initially, the pandemic prompted some of the micromobility startups to close down operations in the face of stay-at-home orders, and demand pretty much dried up, according to a New York Times analysis of credit card data. That decline in ridership was driven as much by corporate decisions to shut down operations as it was by the pandemic. Resuming operations in bigger cities may be a smart first step to lure many riders back to the service. Those that have are seeing better numbers, attributed in large part to essential workers. In New York City, Citi Bike expanded service during the pandemic into the Bronx because essential workers needed alternatives to mass transit to get to their workplaces. Capital Bikeshare in Washington, D.C., also announced plans to expand. Both operations never closed during the pandemic, and both saw demand throughout.

Filling the Gap

In the meantime, shared services have had to look for revenue alternatives. To compensate for decreased ridership, some companies are adding or expanding delivery services for such items as food, medical supplies and groceries.

Even before the pandemic, several large ride-hailing and scooter-sharing operations established relationships with popular food delivery services to enhance revenue. The pandemic only made last-mile delivery more important to most city dwellers, looking for ways to get food, pharmaceuticals and other essentials without leaving the safety of home. For instance, in our survey, 42% of respondents satid they were using online grocery shopping and food delivery services more or for the first time.

The new revenue from these operations is helping, but it is probably not enough to compensate for the decline in ridership caused by the coronavirus. For many ride-hailing companies, even a doubling of their food delivery business would only partially offset the double-digit drop in ridership globally.

Modeling Safety

Contrary to what one might expect, the sharing and safety economies need not be at odds. Mobility companies that embrace a heightened focus on safety and work to reassure riders that they are watching out for their health are the ones that will emerge the strongest. For instance, many bicycle- and scooter-sharing enterprises announced implementation of extensive cleaning protocols, which include wiping down and spraying equipment regularly.

Similarly, ride-hailing companies altered their business model because of the pandemic, switching to door-to-door, single-passenger rides while discontinuing ride-sharing services. Despite continuing pandemic-related challenges, our survey shows that many travelers will come back to ride-hailing and car-sharing, with a majority saying they plan to use these services the same or more after the pandemic.

Respondents from countries where the pandemic was the worst were the least enthusiastic about returning to shared mobility modes, with respondents from Spain being the most negative about shared mobility services. In Singapore, where the pandemic only killed 27 people, there was much less resistance to the idea of using them during and after the pandemic. Based on our survey, it's clear that the sharing economy has not retreated so much as it has morphed. In the new environment, micromobility looks set to take off as cities and consumers embrace its benefits.

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Governments Need Private Capital for Economic Recovery and Future Disaster Protection

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Photo: Spencer Platt/Getty Images

It is a government's responsibility to prepare for risks that may threaten national security and social stability, and as government entities take steps to understand and manage those risks, they are turning to the reinsurance market to find ways to improve their financial resilience.

The risk landscape for public sector entities is changing faster than ever before, with extreme weather, mass migration and unfunded social liabilities set to dominate government agendas for decades to come.

For the moment, however, pandemics are at the forefront of everyone's thinking, given the tragic consequences unfolding today around COVID-19. Who could have predicted that three months into 2020, going to the movies, taking a cruise or even scheduling elective surgery would be all but impossible due to government-imposed quarantines and business closures?

The Need for Governments

Guy Carpenter's recent report, Protecting Our Planet and the Public Purse, points out that there are steps governments can take to narrow protection gaps and mitigate some of the risks and potential losses our communities face, whether they relate to pandemics or extreme weather events. The report highlights a number of public-private partnerships that have already been brought to market to help alleviate the burden from governments.

Risks such as pandemics and climate change are, by their very nature, massively disruptive, and nations are responsible for an increasing share of the costs as communities and businesses rely more and more on state disaster relief. Put simply, insurance penetration is falling behind rising loss trends, and the situation is only going to deteriorate going forward, especially as climate change causes weather events to become more extreme.

Governments therefore need to rethink how to fund events that place a strain on public resources when they occur.

The Reinsurance Market Has Plenty of Capacity

The reinsurance market exists to help risk aggregators — often insurance entities — manage the volatility embedded in their obligations to policyholders when adverse events impact many of their policies at the same time. Think of floods, wildfires, hurricanes and earthquakes as examples.

The reinsurance sector remains well-capitalized, and the level of sophistication and expertise developed over decades of dealing with market-changing events puts it in a strong position to withstand and help manage most conceivable loss scenarios.

Despite a period of unprecedented catastrophe losses over the last three years and recent turbulence in the financial markets, the sector continues to operate in an environment of plentiful capacity and abundant capital.

Indeed, total reinsurance capital increased by $115 billion, or a third, between 2012 and the end of 2019, to reach $438 billion, according to Guy Carpenter and AM Best. Although carriers' capital and earnings have been hit in recent months by declining equity markets, falling interest rates and widening credit spreads due to the COVID-19 crisis, the fundamentals of reinsurance remain strong.

Public-Private Partnership

The resilience of the sector is also being reinforced by strong liquidity in the form of capital entering the reinsurance market through a combination of insurance-linked securities (catastrophe bonds), specialist funds, sidecars and the creation of hedge fund-related reinsurance companies and collateralized reinsurance vehicles.

A public-private pandemic risk solution is our best option for enabling a smooth and quick economic recovery and protection from future events.

This influx is important, given that it makes up approximately one-fifth of total reinsurance sector capital. In fact, the week of March 16, one of the most volatile in financial markets history, saw a number of catastrophe bond transactions priced and announced. This is a market that remains open and functional.

This bodes well for the future financial resilience of governments. To reduce disaster suffering, public sector entities should take advantage of the reinsurance sector's capital and capabilities to work to create new coverages and meet evolving demands.

At a time when governments worldwide are being forced to bear a growing share of losses and face increasing costs associated with aging populations, higher debt, supply chain interruptions and economic losses resulting from business closures, governments could quantify and mitigate their risks by working closely with reinsurance carriers and intermediaries.

Limitations of Traditional Insurance

COVID-19 has exposed the potentially significant limitations of property and liability insurance to respond to pandemic-related losses. While some specialty policies may cover pandemic claims, most are not equipped to cover events like COVID-19.

On a limited basis, reinsurance will help insurers that issue large amounts of event cancellation policies, which do not typically contain pandemic-related exclusions.

At the same time, existing pandemic coverage options for businesses are rare, and many insurers are expected to exclude most pandemic risk going forward. To facilitate economic recovery now and during future pandemics, it will be important for the public and private sectors to work together to reduce uncertainties across the market and for individual businesses of all sizes.

A Federally Backed Pandemic Reinsurance Program

Following the tragic events of September 11, 2001, the U.S. government stepped in to create a backstop through the Terrorism Risk Reinsurance Act (TRIA). A public-private partnership to establish a federally backed pandemic reinsurance program can offer similar benefits.

A pandemic insurance facility is especially critical, as private insurers simply do not have the financial resources to underwrite the unprecedented losses related to the COVID-19 pandemic on their own.

The first half of 2020 has illustrated the potential harm that a serious infectious disease event can inflict on people, businesses, governments and economies — and the limitations of the commercial insurance market in delivering protection from that harm. While the insurance industry has a vital role to play in developing new solutions to outbreaks, epidemics and pandemics, it is clear that effective public-private partnerships are more valuable than ever.

Insurers and reinsurers are committed to being there for clients, helping to manage current impacts and advocating for solutions to help mitigate future risks for the entire U.S. economy.

Working toward sustainable resilience requires both meaningful investment and cultural change. Too often, governments have simply relied on debt and post-event financing from tax payers to address the negative impact from extreme events. Progress involves finding new ways to share responsibility across national and local government entities, public and private sectors, and asset owners and users.

Ultimately, a public-private pandemic risk solution — with participation by insurers, reinsurers, businesses and the federal government — is our best option for enabling a smooth and quick economic recovery and protection from future events.

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Prioritize nature in Asia-Pacific's COVID-19 recovery

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Countries in Asia and the Pacific region depend on natural resources for jobs, livelihood, health and well-being. We need to protect these valuable resources as we emerge from the pandemic.

The COVID-19 pandemic has proven to be a wake-up call for reinforcing the nexus between humans, animals, and nature. The preservation of nature has emerged as a critical pathway for transitioning to growing the economy in a more resilient and sustainable way.

Countries in Asia and the Pacific region are highly dependent on natural resources, such as water, fisheries, forests, agricultural lands, and healthy soils, for sustaining their socio-economic development. Employment and revenue generation from natural capital are also significant, supporting millions of jobs and livelihoods.

Globally, the People's Republic of China has the largest absolute amount of GDP in nature-dependent sectors, amounting to $2.7 trillion. Most reliant on these natural resources for their livelihood are rural dwellers. Yet the flow of benefits is limited, and rural poverty persists. Despite the remarkable achievement of eradicating extreme poverty by the government, about 600 million people still live below the poverty line. Two thirds of them live in rural provinces.

These conditions are not unique to the People's Republic of China. Rural areas in other Asia-Pacific countries are also experiencing rural poverty, compounded by severe natural capital decline, biodiversity loss, land use change, natural resource overexploitation, pollution and water security issues. Unsustainable agricultural practices, inadequate management of wastewater and solid waste are among the root causes of environmental degradation. The business case for valuing and investing in nature remains poorly framed and misunderstood.

Prompt action is needed to protect the health of ecosystem services, while promoting development models that look beyond economic growth. Nature can be the strongest ally in the fight against climate change and social inequalities. These issues need to be tackled together for countries to meet the Sustainable Development Goals and their obligations under the Paris Agreements.

Achieving the international targets can be supported with a nature-positive recovery. This means ensuring that nature is an integral component of investment and fiscal policy decisions in the post-pandemic economic recovery. Renewed emphasis should be given to nature-based solutions. These are a combination of practices and policy interventions to protect and restore natural ecosystems, providing ecological and socio-economic co-benefits for nature and people.

Investing in nature-based solutions will promote water security, integrated natural resources management, climate resilience, sustainable agriculture and healthy diets. Nature-based solutions are even more important in poor rural areas, in order to promote equitable green development, reduce the wealth gap and address the urban-rural divide.

Enhancing readiness and resilience calls for immediate action, and 2021 will be crucial for both nature and climate. The 15th United Nations Convention on Biological Diversity will take place in the People's Republic of China and the 26th Conference on the Parties to the UN Framework Convention on Climate Change will be held in the United Kingdom. A positive outcome at both events can help scale up actions and investment needed to unlock sustainable business opportunities. This is particularly relevant for the People's Republic of China to meet its ambitious goal of becoming carbon-neutral by

2060.

Five key policy recommendations can help inform the design of comprehensive and transformative nature-positive approaches to recovery from COVID-19 in the Asia and Pacific region.

First, prioritize investments in nature-based solutions to protect natural capital through a basin-wide approach. This will create ecological, socio-economic co-benefits for the rural-urban economy. To fulfil this endeavor, ADB has conceptualized the Natural Capital Lab, which will serve as a regional platform to scale up natural capital investments and build a marketplace for nature-positive recovery with sustained and localized impacts on the ground.

Second, enhance tools, performance-based metrics and innovative technologies to capture the value of ecosystem services as assets. The Gross Ecosystem Product was developed in the PRC as a standard measure to calculate the aggregate value of ecosystem services both in biophysical and monetary terms. These metrics can provide decision makers with scientific evidence of the monetary value of nature, contributing to better planning at all levels, with an incremental step approach.

Third, strengthen regulatory frameworks, policy instruments and voluntary-based approaches to enable ecological protection and high-quality green development. Eco-compensation, payment for ecosystem services and regulatory frameworks can be scaled up to improve integrated river basin management and market-based incentives to generate ecological and social co-benefits.

Fourth, encourage private investment into natural capital. Public finance alone will not be enough to realize systemic change at scale. Sustainable investing and blended finance mechanisms can be a vehicle to mobilize private finance and leverage public spending for nature conservation, restoration and transition projects.

Fifth, programmatic river-basin approaches, such as those promoted in the Yellow and Yangtze river basins, will help restore and enhance watershed ecological security, by addressing conflicting and competing demands for natural resources from all users, and reducing the resulting degradation of ecosystems.

To conclude, natural capital investment opportunities need to be identified and integrated into large development programs and innovative pilot projects for improving agriculture production, comprehensive river basin management and biodiversity conservation. Negative shocks, such as COVID-19, are going to be more of the norm, with multiple climate tipping points and exacerbation of social, biological and environmental stresses.

Taking the pandemic as an opportunity born out of necessity, future investments must be built on a solid social foundation and under a more robust ecological ceiling. Such an approach can provide a safer space to respect our planetary boundaries and leave no one behind.

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Closing the Gender Gap in the Ownership of Family Businesses

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The pandemic is putting pressure on small enterprises, which are disproportionately owned or controlled by men. The right policies could help close the gender gap.

Sustaining firms and protecting livelihoods has become a very challenging task for policy makers and societies during the ongoing pandemic. Studies have shown that to get through hard times such as these, families may sell their most precious assets to cope. When this is done, there is a clear gender gap when it comes to the ownership of and rights related to assets. Men are more likely to have the exclusive right to sell or bequeath several types of assets.

In addition to leveraging on assets, adjustments in the operation of enterprises – including self-employment – is another coping mechanism that could cushion families from the negative impacts of economic shocks, but at the same time it could also magnify existing gender inequalities.

Household surveys conducted in 2015 in the countries of Georgia and Mongolia, and the Philippine province of Cavite, which collected data on entrepreneurship with a gender perspective, shed light on this topic, particularly on the question of who owns non-agricultural enterprises.

Data gathered from the surveys revealed that the incidence of entrepreneurship is highest in Cavite, (17.9%), favoring women (19.9%). Meanwhile, the opposite is observed in Georgia and Mongolia where the numbers favor the men. Incidence of entrepreneurship for men and women in the urban areas are generally higher compared to their counterparts in the rural areas, except in Georgia where incidence of entrepreneurship is higher for women in the rural areas (6.4%) than in the urban areas (5.6%).

The majority of owners in Georgia, Mongolia, and Cavite, Philippines are mostly married. It is noteworthy that a high proportion of women owners are widowed, separated, or divorced as compared to being never married; while the opposite is true for men—suggesting an association between marriage and enterprise ownership for women. In terms of educational attainment, more men owners (43.0%) in Georgia attained tertiary education or above compared to women owners (30.5%). Most owners in Mongolia and Cavite, regardless of sex, attained secondary education. Most owners of non-agricultural enterprises are aged 30-49 years old.

An enterprise can be held exclusively or jointly. Joint ownership can be between members of principal couple, other household members, or household and non-household members. This measure indicates who has control over the enterprise. The data shows exclusive ownership by men is the most common form of ownership in Georgia and Mongolia (37%). In Cavite, on the other hand, joint ownership by the principal couple is prevalent (35.7%). Exclusive ownership by women is also dominant at 32.2% and is higher compared to exclusive ownership by men at 22%. In general, the gender disparity in exclusive ownership is highest in Georgia—37.7% of men exclusively owned the enterprise compared to only 20.9% of women owners.

On the other hand, enterprises operated by men tend to have larger firm size relative to those operated by women. The average income of women enterprise owners is also significantly lower than those of men enterprise owners in Georgia. Most of the male and female enterprise owners in Georgia and Cavite are engaged in wholesale and retail trade. In Mongolia, 31.4% of the male enterprise owners are engaged in manufacturing while 35.6% of women enterprise owners are engaged in wholesale and retail trade.

As the COVID-19 pandemic continues to evolve and many workers face the prospect of job loss and could turn to operating enterprise as a coping mechanism, there is a need for policymakers to ensure that it will not contribute to expansion of gender inequalities. Some results from these surveys were encouraging. For instance, response from the owners about the source of income used to start enterprises, did not reveal significant differences between men and women.

In general, more female enterprise owners applied for loans, except in Georgia, where only 18.5% of women enterprise owners applied for a loan compared to 21.8% of men. Furthermore, among those who applied for loan, a large percentage of women enterprise owners reported that their loan applications were accepted.

There are multiple ways policy could help close the gender gap in entrepreneurship.

First, for business to thrive, programs designed to develop the skills needed to successfully operate businesses with high growth potential should be equally accessible for both men and women. Given that men and women tend to operate in different sectors, there is a need to deliver training programs that are dovetailed to the varying needs of male and female entrepreneurs.

Second, as women tend to operate smaller enterprises with limited assets, policies should ensure that women continue to have equitable access to finance and other necessary resources for business operation through grants, loans, and microcredits.

Third, policymakers should explore efficient ways that social protection and other policy measures could be extended to ensure that small scale entrepreneurs can withstand future economic shocks. Smaller firms in particular need fiscal and monetary policy assistance, such as wage subsidy support, subsidized loans and tax reduction credits, along with skills development, to sustain the economic activities and livelihoods in the current situation.

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The Generational Shift That Will Change Business Behaviors

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WEF founder Klaus Schwab has said that "COVID-19 is a litmus test for stakeholder capitalism" — and indeed, young people in particular are watching closely.

In times of crisis, younger generations expect greater corporate responsibility. A recent survey by JUST Capital and The Harris Poll found that 58% of young people believe companies need to better support the health, safety and security of their workforce in light of COVID-19, which is 10% higher than the response of people 35 and older.

But even before COVID-19, there were clear signs that younger generations place greater importance on environmental and social concerns than their predecessors do. For example, the Global Risks Report 2020 finds that in a comparison of concern for environmental and societal risks, young people attribute greater impact to these risks than business and societal leaders do (Exhibits 1 and 2).

Mounting concern among young people was also abundantly evident in 2019, when the second global school children's strike in September was estimated to have mobilized 4 million people from 163 countries.

To understand the implications of these generational patterns, there are three consequences that business leaders would do well to consider.

Exhibit 1: Generational Differences in Perceived Impact of Environmental Risks
Source: ESG As a Workforce Strategy based on data from Global Risks Report 2020

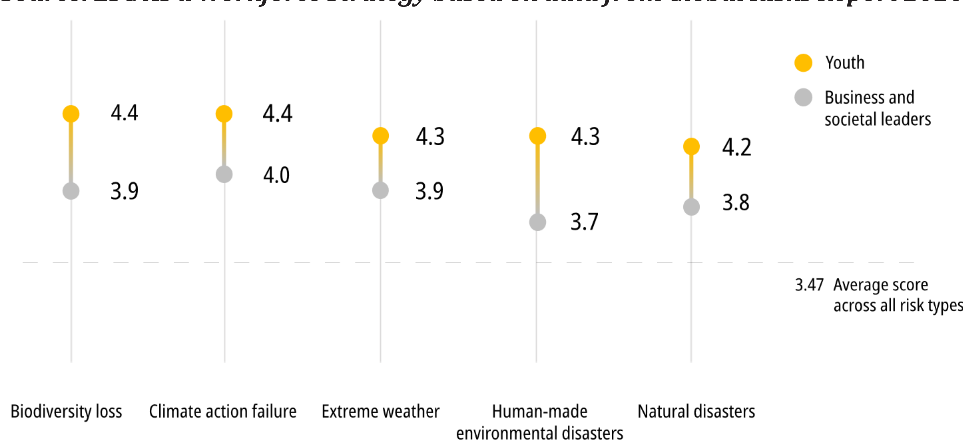
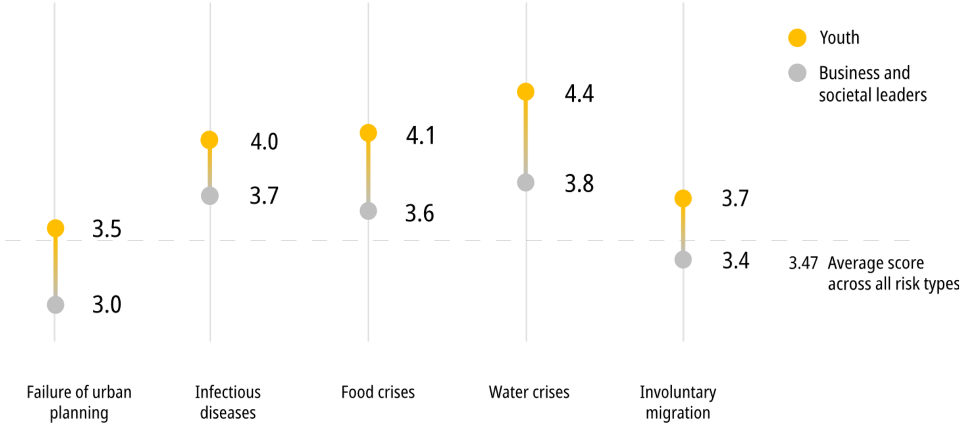


Exhibit 2: Generational Differences in Perceived Impact of Societal Risks Source: ESG As a Workforce Strategy based on data from Global Risks Report 2020



Concerned Children Will Soon Be Concerned Workers

The children who marched in September last year will start to enter the workforce in a few years' time. Recent analysis of ILOSTAT data shows that millennials and members of Gen Z will make up 72% of the global workforce in the next 10 years. They will want jobs that are compatible with their deep concern for environmental and social issues.

Nearly half of millennials have been vocal in supporting or criticizing their employer's actions regarding a societal issue, and nearly 40% have accepted one job offer over another because that company was seen as more environmentally sustainable. Their younger successors in Gen Z are likely to have similar views.

The recent rise in employee activism provides a clue as to potential future trends. Some leading companies have already been able to benefit from the link between environmental, social and governance (ESG) performance and workforce sentiment.

Our research shows that companies with better ESG performance are likely to have both better employee engagement and greater attractiveness to prospective talent — two of the most important indicators in human capital management.

This means that businesses need to integrate climate action into their workforce strategies. In recent years, corporations have begun to incorporate climate change into enterprise risk management and corporate planning, informing decisions about supply chain resilience, resource security and new product development. These processes should now inform strategies for recruitment, engagement and development of talent.

These Children Will Soon Be Consumers

Just as the coming generations are likely to expect more from their employers, they are also likely to expect more from the companies and brands they buy from.

When they are earners, these children may vote with their wallets in a way that previous generations have not. Their immediate predecessors, the millennials, already leverage their purchasing power as a top way of taking action on social issues.

Existing consumer trends among millennials — such as increasing interest in hybrid/electric vehicles and vegan, vegetarian and flexitarian dietary choices — will likely grow stronger with the next generation. As time goes on and these young consumers become more affluent and consequential in the market, businesses will increasingly need to demonstrate that their products and services are consistent with a conscientious, low-carbon lifestyle. Indeed, Mercer finds that 87% of companies consider rising customer expectations a primary business disruptor.

These Children Will Soon Be Voters

Most of the youth climate strikers will reach voting age within one electoral cycle. Indeed, many were demanding that voting ages be lowered. Their millennial predecessors currently use voting as the most common method of supporting a cause, and Gen Z can be expected to continue this trend. In the U.S., a majority of millennials and nearly three-quarters of Gen Z say the government should do more to solve societal problems — a significant departure from older generations.

There is evidence from multiple countries that millennial voters are more concerned about climate change than earlier generations, while 80% of younger millennials and Gen Z in the U.S. say that climate change is a major threat to human life on Earth as we know it.

Climate change has already entered mainstream political discourse, and its political salience is likely to only increase as politicians seek to attract young voters with stronger pledges on climate change.

Businesses should therefore plan for governments to deepen and broaden climate policies — turning the dial harder in target sectors such as energy and implementing new policies in hitherto overlooked sectors such as agriculture. The Paris Agreement obliges governments to submit new national emissions targets in 2025, and it seems likely that the next generation of voters will be demanding more from politicians than has been the case in the past.

Looking Ahead

COVID-19 lockdowns mean no school children's climate marches for the time being, but Generation Z's concerns about climate change have not abated. Their activism has moved online in response, and it will long outlive the pandemic. On the other side of the coronavirus crisis, three mutually reinforcing tipping points await, as the current generation of schoolchildren becomes the next generation of workers, consumers and voters. This demographic shift will bring increased expectations for the role business should play in fighting climate change — and positively contributing to society more broadly.

Forward-looking companies are already integrating environmental and social commitments into their core business, thus positioning themselves for these impending generational shifts. But it remains to be seen whether most companies will step up to the plate, or merely wait until they are forced to react.

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What Travelers Want to Hear from the Tourist Industry

Richard Levick
Chairman and CEO of LEVICK

No business sector has been disrupted by COVID-19 more than travel and tourism. According to the World Travel and Tourism Council, 75 million to 100 million travel and hospitality jobs have been lost or affected worldwide since the pandemic hit. Given the industry's multiplier effect across the globe, the economic and human toll is almost incalculable. The industry's initial public pronouncements on COVID-19 were unfocused. In the span of about 10 days in mid-March, the public statements from too many of its leaders went from "Everything's fine," to "Well, maybe some precautions are in order," to "We're shutting everything down." These inconsistent statements undermined the industry's credibility, which is always the key element in any communications campaign.

Legal Jeopardy

Since that bumpy start, the messaging has been sharper, but the industry's short-term prospects remain daunting. Its legal liability exposure amid the crisis remains pronounced, despite encouraging developments in California. Two recent rulings dismissed lawsuits initiated by passengers who allegedly contracted COVID-19 while on cruise ships. These decisions suggest that it may be difficult for the plaintiffs' bar to prove causation on COVID-19 cases. But that doesn't mean industry businesses can relax — far from it. They remain a target.

Indeed, the industry's outlook is not likely to improve in the foreseeable future, not with pandemic legal fears, omnipresent social distancing requirements, ship and airline travel bans, corporate travel cutbacks and huge events being postponed and canceled.

Desperate for More Government Help

"It is critical that leaders in Washington resume talks and move forward on much-needed coronavirus-related economic relief," U.S. Travel Association executive vice president of Public Affairs and Policy Tori Emerson Barnes said. "The travel and tourism industry accounts for 38% of all U.S. jobs lost so far, and travel companies — 83% of which are small businesses — remain particularly vulnerable to the economic impact of the health crisis. The Paycheck Protection Program needs to be extended immediately, and its eligibility expanded, or else millions of travel jobs are likely to disappear permanently, and a U.S. recovery will be severely weakened before it even starts."

An Industry That Thrives on Intimacy

It's incumbent on industry leaders not to be consumed by the pandemonium, but to begin the arduous process of planning for recovery. The longer the pandemic remains, the greater the pent-up demand will be for travel and tourism services, even amid challenging economic circumstances. Now is the time for leaders to reimagine the industry's future — and take communications steps to assuage the fears of customers, stakeholders, partners, suppliers and vendors.

It's a big job. How can an industry that has thrived on intimacy convince wary travelers that it's taking social distancing, personal hygiene, mask-wearing and all the rest to heart and keeping customer health and safety uppermost in mind?

Step #1 is to recognize how the world has changed. Like it or not, we're all going to become experts on public health and cleanliness. Post-pandemic travelers will demand that the industry embrace state-of-the-art health and safety standards. Everything else — including cost, comfort and amenities — will be secondary. Consumers will want every assurance that their planes, trains, rental cars, hotel rooms and tours meet exacting sanitation measures. Such initiatives will become a huge competitive differentiator. If your competitor has stronger health and safety standards than your services or properties, you're going to lose market share.

Every organization in the industry should consider emulating Hertz, which has taken its commitment to cleanliness so seriously that it has instituted a seal each time it scrubs and fumigates a rental vehicle. Only the next customer can break the seal, which is exactly the kind of tangible "proof" that consumers need in today's climate.

Some industry trend watchers believe that, for the near term, consumers will be more comfortable staying at hotels, as opposed to bed and breakfasts, because traditional lodging — especially the chains — can afford to invest in better cleaning resources and technology. Once the pandemic finally leaves us, it will be fascinating to see if consumers are willing to continue paying additional money to stay in (purportedly) "safer" hotels — or if they return to less expensive, but perhaps less "safe," accommodations.

Step #2 is to continually conduct qualitative and quantitative research. Consumer and stakeholder fears and expectations will continually change as the COVID-19 crisis ebbs and flows and, prayerfully, peters out.

The industry cannot guess what their key constituencies are thinking and feeling. They need to know for sure. That means constant surveying and focus-grouping. Different ideas and techniques to promote health and safety need to be vigorously tested. So does the willingness of your customers to pay extra for state-of-the-art health and safety standards and practice. Once you find a proactive idea that resonates, make it your signature, tell everybody about it and expand on it.

Step #3 is to implement an organization-wide commitment to transparency and contingency planning. You can't do health and safety halfway — you've got to be all-in. It's not enough to say you're adopting a certain health and safety initiative. You must show your constituencies how and why the initiative works through carefully produced videos and written and pictorial content posted on your website and amplified through social media.

Institute a strategic optimization campaign so that your messages and videos move to the top of Google searches. Crisis preparation is a marathon — not a miracle. Preparing ahead of time is the only way to enhance your prospect of winning. Obtain public approval from prominent safety experts, medical professionals and other third parties. They need to attest to the efficacy of your health and safety regimen and to your management team's devotion to principle.

Avoid Waxing Nostalgic

Companies need to be careful not to wax nostalgic about the good old pre-pandemic days or get caught up in a rosy post-pandemic scenario. Customers will demand what you're doing with the here and now. There will be no patience for any travel and tourism business that cuts corners on safety or takes customers on a trip down memory lane or a fantasia about the future.

Michael Brown, the CEO of Wyndham Destinations, the world's largest vacation ownership company, has pursued an aggressive communications strategy with his major stakeholders. "You cannot over communicate in times like these with customers, associates and industry colleagues," he advises. "Everyone is going through something that has never been gone through before. Even when times are good, the stock market doesn't like uncertainty. And customers and associates just want honest answers."

Smart and disciplined travel and tourism companies can position themselves to come roaring back post-pandemic. But while COVID-19 is still raging, you need restraint — and a signature health and safety initiative you can call your own.

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Richard Levick is chairman and CEO of LEVICK, a global advisory firm providing a full range of strategic communications consulting services to companies and nations involved in critical high-stakes issues.

Digital Tools Can Help Reopen Workplaces Safely, If Businesses Mitigate Risks

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While COVID-19 remains a threat worldwide, societies and businesses are weighing how best to restart economies and return to work safely without causing a resurgence of infection. Some governments are rolling out digital tools in attempts to control the spread of the disease, and businesses may find it desirable to pursue similar solutions lest their financials and market positioning weaken further.

According to a recent survey by Mercer, more than half of the 300 organizations polled in the U.S. have or plan to implement a contact-tracing program for employees returning to the workplace, indicating growing business interest in these solutions to boost staff safety and confidence in returning to workplaces and to mitigate the risk of stop-start operations.

Digital Contact Tracing and Other Opportunities

Digital tools to track employees' health offer many opportunities. Smartphones and wearable devices can assess employees' exposure and transmission risk, facilitate contact tracing and rapidly isolate new cases and close contacts. Augmented-reality tools can help employees maintain safe distancing in high-traffic areas, including manufacturing shop floors and distribution warehouses. For example, Siemens' flexible working mobile app provides touchless access to offices and information on occupancy levels to facilitate safe distancing and ensure efficient cleaning and disinfecting.

Professional sports leagues such as the National Football League and the National Basketball Association in the U.S. present another example. Beyond mandating a strictly controlled "bubble" environment, the NFL and NBA are using wearable devices that track proximity to monitor interactions and issue alerts when users — players, staff, visitors and journalists — break social distancing rules. Billions of dollars are at stake for high-contact sports if infection clusters force the leagues to cancel the season.

01

What data to collect

- Collect only the minimum data necessary for a specified purpose
- Set limits upfront on how, and for how long, to store and use data
- Broader data sets enable employers to do more, but also risk cyber attacks, data exploitation, employee distrust

02

From whom and how

- Business needs and situations to guide coverage of onsite/offsite employees, customers, visitors
- Accommodate staff with low digital literacy or device access
- Voluntary (versus mandated or coerced) use risks lower levels of adoption, but also lowers reputational and liability risks

03

Where to store and process data

- Centralized models upload data on remote server to aggregate for efficiency
- Decentralized models store data locally on individual devices to protect privacy
- Trade-offs between control, capabilities, trust, and risks are associated with each option

The Pros and Cons of Design Choices
Source: Oliver Wyman

While employers have long used technology to track employees' productivity, health surveillance can seem an Orwellian overreach. To mitigate risks regarding technology and trust, businesses need to balance workforce health and individual liberties and determine what might be appropriate and viable in the context of their communities, circumstances and culture. A recent report from Marsh & McLennan Companies explores how employers can get this balance right to strengthen their results and competitiveness, reduce liability exposure and foster enduring employee trust and loyalty.

What Technology Can and Can't Do

Digital tools by themselves are insufficient to control the spread of COVID-19, but they can complement proven public health interventions, mitigate the severity of outbreaks and facilitate a safe return to the workplace. To develop digital health surveillance tools that are appropriate and fit-for-purpose, businesses must first understand what they need to accomplish versus what would be nice to have. For instance, a primary purpose might be preventing clusters from forming at the workplace to minimize further disruption to business operation. Other potential objectives include avoiding infecting customers, managing employee health and providing support services.

Depending on its specific needs and priorities, each business ought to evaluate foundational choices — and their benefits, risks and trade-offs — with respect to data to be collected, coverage of the tool and data to be managed.

Imperatives for Success

Even the most carefully designed digital tool will not be a silver bullet. To gather reliable data and deliver expected results, tools need high levels of adoption and compliance from users — this is hard to achieve, as shown by government-led tools whose uptake remains below the necessary 60% of the population. Technical limitations can stand in the way, along with behavioral and regulatory challenges.

Technical Limitations

Digital tools can generate false signals and prompt harmful responses — for example, proximity-tracking applications could underestimate or overestimate exposure by failing to detect poorly ventilated enclosed spaces or transmission barriers such as walls, respectively. False negatives could entice users to let their guard down and neglect proven measures such as hygiene and social distancing. Repeated false alarms may cause alert fatigue or erode users' confidence and compliance.

User convenience and security present another challenge. By default, mobile operating systems allow apps to run Bluetooth scans — the most common enabler for digital proximity tracking — infrequently and for short periods of time. Apps that override this feature, for example, by keeping phones unlocked and the app active, may drain the device battery and expose users to security risks, such as identity theft if the phone is stolen.

Employee Responses

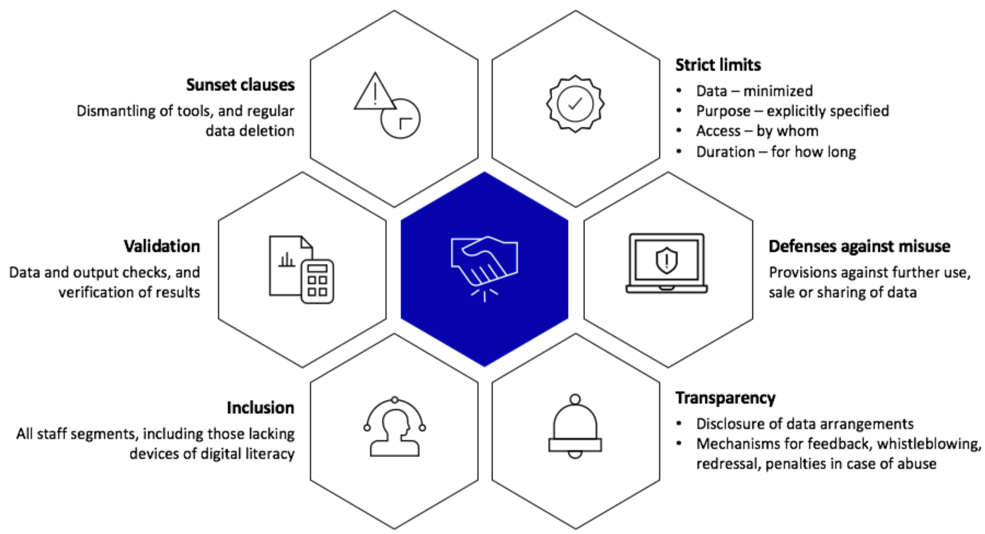
To build trust in digital tools, businesses must make a compelling and transparent case for them, explaining why they are necessary, what the tools and data will be used for, how they will help the business and employees and what protections are in place against potential pitfalls.

Employers can frame benefits in reciprocal terms. For example, effective digital tools can facilitate a safe return to the workplace with reduced risk of getting infected or transmitting the virus to family and close friends. Such positive behaviors can help employers keep workplaces open, sustain jobs and incomes, and simultaneously strengthen trust and loyalty while increasing productivity and performance for the benefit of employers.

If employees perceive non-reciprocal compulsion, they may disengage and push back, which can result in less reliable data and a less effective digital tool. Businesses that fail to secure buy-in from employees risk financial, operational and reputational costs of localized virus outbreaks, office closures, workplace liabilities and talent attrition.

Changing Rules and Norms

Digital tools for health surveillance will need to adhere to local laws and adapt to rapidly changing regulations. Even in less-regulated jurisdictions, businesses should go beyond minimum standards to mitigate risks and ensure the efficacy of digital tools. Scenario modeling can help businesses plan contingencies for a range of potential changes — to data privacy and security laws, employer liabilities, employee expectations, and so on — and build secure, compliant and adaptable digital tools.



Sample Safeguards (Source: Oliver Wyman)

Effective Governance

To mitigate the risks and challenges above and to ensure digital tools work as intended, businesses should ensure good governance: adequate safeguards, oversight and communication. Businesses should establish precautions and safeguards against errors and abuse across design, deployment and decommissioning phases of digital tools. A task force of key stakeholders, representing business and employee needs for scrutiny, should exercise oversight and enforce safeguards throughout the life cycles of various tools. Consistently honest and transparent communication — of good news as well as setbacks, trade-offs and uncertainties — will help build employee trust and willingness to use digital tools.

In navigating the remainder of the pandemic as well as future crises, it's vital that businesses protect employees' physical, mental and financial health — and ensure high levels of engagement and productivity. Should firms choose to move ahead with digital health surveillance as a solution to return to work safely, employers would do well to remember: Employees should be monitored not with an iron fist, but with open arms.

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Is Indoor Agriculture the Future of Farming?

Sarah Golden
Senior Energy Analyst & VERGE Energy Chair at GreenBiz Group

Plant factories may be the technology we need to feed a growing and warming planet.

The factories, which have no access to natural sunlight and grow plants in vertical rows, are designed to be incredibly efficient. They require 95% less water and 99% less land than conventional farms, while growing leafy greens with scientific precision and without pesticides. Because of their small physical footprint, vertical farms can also produce food close to the urban areas where it will be consumed, reducing the need for transportation and logistics.

The tradeoff: Indoor agriculture demands a staggering amount of energy. Lights run 16 hours a day, and facilities require impressive HVAC equipment, reaching an energy intensity per square foot that surpasses data centers. The energy load varies greatly depending on the size and type of operations, but it could be between 500 kilowatts and 15 megawatts — more than a retail box store and less than a data farm.

An Opportunity for Electricity Providers

The international service provider Schneider Electric has identified indoor agriculture as one of the four major drivers that will increase electricity consumption in the next decade (the others being the electrification of heat, electric vehicles and data centers).

In partnership with Scale Microgrid Solutions, Schneider is extending its energy-as-a-service model to indoor agriculture companies. Under the arrangement, Scale finances, builds and maintains an onsite microgrid and sells the energy to the offtaker — in this case, indoor farming startups.

In the last year and a half, Schneider has announced deals with Fifth Season and Bowery Farming, two vertical farming startups.

Microgrids can serve the energy demands of indoor farming in the following ways.

Microgrids can help growing operations get online faster. Many facilities aren't equipped to meet the electricity demands of an indoor agriculture operation. Upgrading the facility could take anywhere between six months and a year and a half and could cost millions of dollars, according to Mark Feasel, president of Smart Grid at Schneider.

"These are not trivial loads," Feasel said in a phone conversation. "There may or may not be the capacity on the grid to handle these loads, especially as you move toward metropolitan areas where electrical distribution can be constrained."

Not only can the upgrade take a lot of time, it can be really expensive. Depending on the utility, there may need to be ecosystem studies and a grid feasibility assessment, along with a slew of technical and environmental regulations that can slow the timeline and increase costs.

It's on-brand. On-site electricity generation is kind of like harvesting your own energy to grow your own plants. It's a technological intermediary between the sun and photosynthesis. Because microgrids can run in island mode, this adds resilience to operations.

Microgrids can also provide lower-carbon energy. Running an operation off of dirty energy would take a bite out of the startup's sustainability proposition. After all, it seems silly to burn fossil fuels to create artificial sunlight.

Schneider and Scale's microgrids use a combination of solar and natural gas, which the company says is cleaner than the grid electricity. They are exploring ways to have completely clean microgrids, but there are space constraints for the number of solar panels needed for the energy intensity of plant farms, Feasel said. One farm likely would need many multiples of surface area to meet the demand inside the building, which may be difficult in urban areas.

Energy-as-a-service offers price certainty. Energy represents a major line item for indoor agriculture, accounting for 30% to 50% of the operational expenses at a plant factory. That's according to unpublished research conducted by Centrica Ventures' Logan Ashcraft, XENDEE's Zachary Pecenak, Energy Impact Partner's Shayle Kann and Kale Harbick from the U.S. Department of Agriculture.

With Schneider and Scale's energy-as-a-service model, the startup will know the cost of energy in the future, making it easier to create a business plan and attract investors.

"If we can provide a fixed energy price over a long period of time, this could be 10, 15, 20 years, they can optimize their balance sheet," Feasel said. "It provides energy certainty and less risk around the cost of energy."

The cost per kilowatt-hour (kWh) varies from service territory and project, but Feasel said it's in the range of 10 cents to 15 cents per kWh, competitive with average industrial energy rates, depending on the region.

However, it's unclear if this price for electricity will work for indoor farm operations in the long run. Ashcroft's analysis shows that a farm would need a price of between 7 cents to 9 cents per kWh to break even. Matt Barnard, CEO of the vertical farming startup Plenty, pegged the desired cost even lower, saying the company would need 3 cents to 5 cents per kWh to succeed.

"This question gets to the heart of whether this industry will be able to succeed and scale. It's a discussion of unit economics," Ashcroft said. "These are growing commodities. And they're forced to compete with commodity prices at the grocery store. I have not seen any evidence that consumers are willing to pay any multiple of any price for produce."

Investment Is Growing

Still, the market is young, and capital is flowing to technological innovations. The Union Bank of Switzerland predicts food innovation will be a $700 billion market by 2030 — a fivefold increase from 2018, meaning financial markets are investing in rethinking food production. Fifth Season has raised $35 million in finance, Bowery has raised $172.5 million and Plenty has raised $260 million, thanks to Jeff Bezos and SoftBank, so the startups may have wiggle room to work on efficiencies and economies.

Indoor Agriculture's Unique Opportunities and Challenges

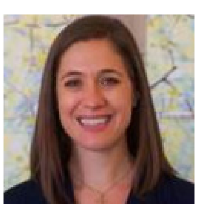
Plant factories have a unique energy load profile. They're incredibly energy-intense for three-quarters of the day and then shed most of their loads when the lights turn off and the plants get tucked into their vertical bunks for their night.

Plants don't care when "night" comes, meaning operators have the opportunity to respond to utility price signals. This flexibility is different from more finicky power loads, such as data centers, which must have constant electricity to function.

For example, if the grid has excess solar capacity in the middle of the day, plant farms could absorb it. Then, when peak rates hit, the plants could start their "night" cycle. If done well, and if located in a service territory with a friendly utility and regulator, indoor agriculture operations could achieve lower rates while benefiting the grid.

While the energy demand of indoor agriculture is tremendous, it is, potentially, a panacea for numerous global issues. Indoor agriculture could be a significant response to industrial agricultural pollution, food insecurity and hunger, and the limited space in urban areas for traditional agricultural operations — if, indeed, it can succeed at scale.

About the Author



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Driven by the urgency of the climate challenge, Sarah Golden follows trends and innovations that are accelerating the clean energy transition. She brings more than a decade of experience in climate, clean energy and politics.

How Governments Can Help Businesses Reach a Zero-Carbon Future

Stephen Howard
Co-Chair of We Mean Business

Sustainability is rising up the agenda of both businesses and governments. Hundreds of businesses now have ambitious emissions reduction plans, while several countries are declaring climate emergencies.

The key to getting to a zero-emissions future has to be a collaboration of business and government action, with bold government policies accelerating business progress toward emissions reduction goals. Getting those policies in place now will mean a scaling up of business innovation and investment in zero-carbon solutions.

10 Years Left

We have between seven and 10 years left at current levels of greenhouse gas emissions before we will have used up the remaining carbon budget to ensure global temperature rise does not exceed 1.5 degrees Celsius. In other words, this is the decade when we must turn the tide on climate change.

The good news is that there is growing momentum in business. What we need to drive that forward is greater government ambition. Here are five signals of change that governments must get behind.

Set Bold Targets

Business is setting bold, science-based targets aligned with limiting global warming to 1.5 degrees Celsius, such as switching to 100% clean power and committing to 100% electric vehicle fleets.

A few years ago at IKEA, we used 100% targets widely, from sourcing 100% of our wood from Forest Stewardship Council (FSC)-certified forests to using 100% renewable energy and 100% LEDs for our lighting business. These targets created certainty about what success looks like.

Don’t leave people confused about whether you’re defending the status quo or backing the future. We need more governments to step up and align their policy ambition with climate science. This will give even more businesses the clarity and confidence they need to set ambitious enough targets and invest in the right ways to achieve them.

Business Can See Where the Future Lies

The future needs to — and will — look different from the past. It will be renewably powered with electric mobility, and we will be eating a more plant-based diet and living in smarter cities.

Businesses are innovating and investing in these growth areas, and the ones that scale innovation fastest will play a key part in creating this future. Governments should focus on stimulating the outcomes required to win the fight against climate change with clear, long-term and legal frameworks. Many large businesses can and will transition their businesses by embracing new technologies, but there are also many businesses and sectors that are simply too carbon- or resource-intensive to transition.

We cannot afford to defend legacy businesses through perverse subsidies and incentives; alongside clear long-term policies on climate, we need transition plans that support those workers and communities that will be affected.

Put a Price on Pollution

Most businesses welcome some form of carbon-pricing; many have voluntarily implemented their own internal carbon price to help drive their focus toward low-carbon solutions.

National carbon prices would help give a clear economic signal about the direction of travel and help shift investment flows in that direction.

Procurement Policies Drive Emissions Reduction

A growing number of businesses are using their procurement practices to drive emissions reductions and make their businesses more resilient to the impacts of climate change. More than 200 companies have committed to 100% renewable electricity through RE100. They are generating demand equivalent to the 21st largest electricity consumer in the world and using more power than South Africa.

Businesses are also supporting hundreds of millions of hectares of sustainably certified forestry through the FSC or are driving fair and living wages through their supply chains. Certification has become widespread, from the Marine and Aquaculture Stewardship Councils for fish to the Better Cotton Initiative.

The Sustainable Trade Initiative (IDH) has launched collaborative approaches to bring retailers and others together to improve wages in agricultural sectors. There is significant scope for more, and governments can lead by example by implementing procurement policies that favor low-carbon products and services.

Sustainable, Disruptive Businesses Are the Job Creators of the Future

Large incumbent businesses have significant power. Many use that to good effect (witness Google and Apple's commitments to renewable energy); however, throughout history, when threatened, businesses can fight hard to resist change. Tobacco is just one obvious example.

Governments need to find ways to back the sustainable innovators, as these will become the job creators of the future. We still have time to make the progress that is needed this decade. With bold and clear policymaking from governments coupled with growing action from business, we can accelerate the wholesale transformation of the economy. There's no time to lose.

About the Author

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Stephen Howard is the co-chair of the We Mean Business board and former chief sustainability officer at IKEA. Prior to IKEA, Steve was founder and CEO of The Climate Group, a global NGO that has built networks of cities, states, regions, and businesses committed to a net-zero carbon world.