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A Better Education System Will Lift Millions Out of the Informal Sector

Gabriel Sánchez Zinny,
Director at Blue Star Strategies

The size of the informal sector is a major determinant of how quickly — or slowly — economies can grow and provide economic opportunities for their inhabitants. In Latin America, unregistered work is an important source of employment for millions of people. But many people struggle to make the transition to the formal sector because of a lack of educational opportunity.

Students in a technical education program supported by the World Bank in Antioquia, Colombia. Education in the region must once again become the springboard for social mobility. Photo: Charlotte Kesl /World Bank by CC 2.0

Moving Out of the Informal Sector

Learning and skills development are essential components of any transition to the formal economy, as they improve people's skills and consequently their employability.

Currently, in Latin America, the graduation rate at the secondary level stands at approximately 60%, a tragedy that has been exponential during the pandemic.

The combination of low levels of schooling in some countries, mainly in secondary education, with limited training possibilities, results in a large share of the population only being able to access low-skilled jobs, which are constantly threatened by automation. Nowadays, more than 150 million workers are informal throughout Latin America.

Given this scenario, quality education and employment needs to be high on the public policy agenda in Latin America and elsewhere. My book, No Work: Employment in Latin America in the Context of Poverty, Education, Technology and the Pandemic, explores how to build any education system to provide opportunities to the half of Latin Americans who today lack formal and quality jobs.

We Need a Transformation of Education

As education is currently designed, it is difficult to think of it as a factor contributing to reducing the informal sector. It is for this reason that the need for a transformation of education systems is becoming increasingly evident.

We have to think about — and build — systems that prioritize learning the skills and competences of the future in order to avoid situations such as the large number of young people and adults who, due to lack of training, have lost many job opportunities.

Taking this reality into account, there are a number of recommendations to

address this problem.

Firstly, the implementation of a credit system, as is the case in Canada, which makes it compulsory to complete 18 of the 30 credits required for graduation in core subjects, such as mathematics, language, natural sciences and social sciences, with the possibility of completing the remaining credits in other disciplines linked to different employment paths. This would allow students to have the complementary knowledge and skills necessary to successfully run their own business or to perform more competitively in their chosen economic sector.

Secondly, the inclusion of technology in the classroom from an early age is one of the most effective ways to train not only workers with 21st century skills but also citizens who are already familiar with digital technology.

For example, the digital transformation in the classrooms that I carried out during my tenure as minister of education of the province of Buenos Aires involved the distribution of 3,100 mobile digital classrooms that contained different digital tools, such as tablets, notebooks, portable server, projector, mobile digital screen, speaker and microphone. We also distributed 30,000 robotics kits containing different parts, screws of different lengths, nuts and sensors to build a robot, generating familiarity with new technologies from the earliest years.

Think About Education As Part of the Workplace

Thirdly, re-skilling and training are key to boosting future economic growth, and at this point, the participation of the private sector becomes fundamental because, in addition to its innovative capacity, this sector is essential to cover the needs that the public system does not offer or is unable to provide.

Such is the case of Chile, which, through a public-private partnership, managed to train 16,000 unemployed, low-income and middle-class people to enter the formal labor market.

Fourthly, incorporating professional training and connections to the labor market that enhance human capital and ensure their personal and professional growth. As is the case of Colombia, where a Technical Training Programme was implemented thanks to an alliance between a civil organization (ACDI-VOCA), an international organization (USAID) and the Colombian government, which allowed for labor inclusion and the improvement of the quality of life for the most vulnerable population.

Finally, the implementation of professional internships that guarantee students a basis of professional skills and corresponding knowledge for a better and more effective insertion into the world of work.

A Springboard for Social Mobility

Education in the regions must once again become the springboard for social mobility, and this will only be possible with a major transformation and innovation of education systems. In short, quality education, together with the human capital it generates, benefits individuals and societies.

Today, talking about education should be synonymous with talking about

work. Let us stop thinking about education in isolation from what happens on the labor market.

Faced with the challenge of reducing the informal sector and generating more and better jobs, all actors have a role to play. The state must ensure the conditions so that the private sector, the largest generator of employment, can be successful, and education is the key for this to happen.

Brink News

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The Big Question for Trade in 2022

Stephen Olson
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The idealized world of free trade

The establishment of the modern trade system was predicated on the belief that we could reasonably aspire to some approximation of the idealized world of free trade that has been sketched out in economic textbooks since the days of David Ricardo. According to this vision, reducing barriers to trade and facilitating cross-border commerce would bring higher quality goods, lower prices, increased levels of real wealth, and a higher standard of living. Of course, it was understood that the intensified competition brought by free trade would create "losers" as well as "winners", but the overall gains from free trade would more than offset the losses.

The main imperative was to move towards free trade in a methodical and deliberate manner. The GATT, the WTO, and the myriad of regional and bilateral free trade agreements that began to proliferate in the 1990s were all intended to move us incrementally towards the goal of free trade.

Unfortunately, after a seven-decade pursuit of that ideal, there seems to be an increasing recognition that the real world of trade is simply not operating in the way we hoped. For starters, not all countries are playing the same game by the same set of rules. The two largest economies in the world, the US and China, operate under fundamentally different economic systems. As increased trade has led to deepening economic integration, the incompatibilities between these different systems have become more apparent. How can private US companies compete against state-supported Chinese companies which benefit from compliant banking and regulatory systems, captive domestic customers, a playing field tilted against foreign competitors, and generous (often opaque) subsidies? Unfortunately, neither David Ricardo nor the WTO have been of much help in resolving that question.

We have also learned that trade does not take place in an antiseptic vacuum. It is shaped and frequently distorted by a host of considerations that have nothing to do with trade, including geopolitical rivalries, domestic political imperatives, differing visions of appropriate environmental and labor standards, and clashing definitions of human rights. The economic textbooks made no provision for the intrusion of these unrelated yet profoundly impactful factors.

These messy real-world complications have corrupted the way in which the free trade model was expected to operate, resulting in diminished benefits and unanticipated – and often unwanted – outcomes.

No shortage of complaints

The complaints about the current state of trade vary depending on where one sits. From one perspective, trade is being unfairly manipulated to compel less developed

countries into accepting labor and environmental standards they don't want or are incapable of achieving. To others, trade is being used to foist Western-centric notions of human rights onto different cultures with very different value systems.

For many disenchanted developed-world workers, the pursuit of free trade has been a free pass for large companies to ship their jobs overseas, thereby enriching Wall Street while leaving local communities in tatters. In other cases, trade has been weaponized to punish and coerce countries which have displeased a more powerful trade partner. And from the point of view of an increasing number of geo-strategic thinkers in the West, free trade has empowered the rise of an undemocratic competitor in China.

The bottom line? From many different perspectives, for many different reasons, our current approach to trade is not working for an increasing number of people. That is not sustainable.

Time for "Plan B"?

We should not be surprised therefore to see more countries opting for "Plan B" as it becomes clear that the idealized world of free trade we've been pursuing for decades is neither realistic nor capable of delivering the desired results. Countries are now taking more pragmatic and less ideological approaches to their trade relationships. A "new realism" has begun to emerge in trade. Countries continue to pursue and benefit from free trade where possible but also perceive a growing number of instances in which restricting trade or eschewing trade altogether is the best (or least damaging) option.

This is reflected in an increase in practices that have traditionally been anathema to trade proponents: managed trade arrangements, a preference for local production, an increased emphasis on local demand rather than exports, and a greater willingness (and broader justifications) for putting trade restrictions in place.

Examples abound. The US and the EU have "resolved" their trade dispute over steel and aluminum by reaching a managed trade agreement in which quotas rather than competitiveness will determine how much the EU exports. The US-China Phase One agreement showed even less faith in the ability of free trade to deliver acceptable results. That accord specified precise purchase levels in various product sectors which China committed to fulfil. This agreement could have been initially dismissed as some far-fetched scheme crafted by the highly unconventional Trump administration. But one year into Biden's term, it's clear that his more mainstream administration is perfectly comfortable with maintaining Trump's managed trade approach. More broadly, Biden has made it clear that the interests of US workers, rather than the doctrinaire pursuit of free trade, will be the driving force behind his trade policy.

When it comes to critical supplies, Japan, the EU, the US, and other major trading countries no longer have confidence in free trade to deliver the goods, either literally or figuratively. They are instead actively seeking the repatriation of supply chains through the use of trade distorting subsidies and restrictions on imported

products. Prime Minister Modi of India – a previous advocate of free trade – pulled his country out of the RCEP negotiations and has turned instead toward restrictive trade practices. China has adopted a dual circulation strategy which emphasizes the domestic economy rather than trade as the primary driver of growth. And the EU is considering a new trade tool that would impose trade restrictions in response to economic coercion.

For those of us who have spent careers pursuing free trade, all of this feels like heresy. We seem to be heading in the wrong direction. Yet, the simple fact is that free trade – or the skewed version of free trade that has emerged – is no longer unquestionably trusted to deliver acceptable and beneficial outcomes. Importantly, our trust in the free marketplace has not necessarily faltered. Instead, our trust that we can achieve a free marketplace has faltered.

Trade remains beneficial

None of this is to suggest that the appetite for free trade or its benefits have disappeared entirely. The list of countries lining up to apply for membership in the CPTPP continues to grow, various other free trade groupings are underway or under discussion, and ministers continue to plug away valiantly at the WTO. We continue to see, or at least hope for, the advantages that can be derived from liberalized trade.

Moreover, the substantial downsides of protectionism and managed trade "solutions" are also apparent. The steel and aluminum tariffs, and the subsequent quota system, will produce higher prices in the US at a time of rising inflation, and benefit only a small group of workers at the expense of a larger number of downstream workers. And the attempt to mandate China's purchase of US products under the Phase One agreement failed definitively.

So, we are not seeing a refutation of free trade, nor would that make sense. Despite the drawbacks, virtually every corner of the globe has benefited from trade in ways that can't be denied. However, we are seeing a recognition that we have made a few faulty assumptions along the way. Our overly doctrinaire belief in a simplistic and idealized world of trade that bears little resemblance to the real world was naïve and produced outcomes that can no longer be sustained. We are currently seeing an attempt to course correct.

The risk, however, of an over-correction and a return to flat-out protectionism is very real and needs to be avoided. The illusion of economic self-sufficiency and prosperity through protectionism is just as dangerous as the illusion of over-idealized free trade. As countries experiment with new approaches to trade, the trick will be to avoid throwing out the "free trade baby" with the bathwater.

Reasonable and informed people can disagree over whether the emergence of a "new realism" in trade is something to mourn or something to celebrate. Over time, the results, positive and negative, will speak for themselves. But for better or worse, we are likely to see more of this "new realism" as 2022 unfolds.

Hinrich Foundation

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The Chemicals Industry Outlook for 2022 and Beyond

Iris Herrmann,
Partner at Oliver Wyman;
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The BASF Chemical Factory in Mannheim, Germany. Photo: Flickr via CC BY-ND 2.0

The future has arrived. Is the chemicals industry ready?

Chemicals companies have spent the past two years in "firefighting" mode as COVID-19 tested corporate resilience and the industry struggled with supply-chain disruptions, increased feedstock volatility, changing customer behavior, and higher costs of doing business. Overcoming pandemic-driven disruption preoccupied company agendas, particularly as distorted oil and gas prices complicated feedstock management.

Looking forward, the risks and disruption facing the industry will become increasingly transformative. And while COVID-19 may not be officially done with us yet, it's time for the industry to switch its focus from short-term problem solving to the development of strategic agendas centered on sustainability and the needs of decarbonization.

Time's Up to Act

For the past 100 years, the industry's business model has been to sell ever greater volumes of the energy-intensive, carbon-based products that essentially define it to this day. That business model cannot survive long-term in a world that is struggling to achieve net-zero carbon emissions in the next 30 years.

We've reached a tipping point, and failure to deal with the challenges of climate change and the dramatic overhaul of supply chains and value propositions that it portends may spell a company's doom — maybe not this year or in five, but certainly at some point over the next 10 to 20 years. Proving a company's sustainability will define the decade's winners and losers. At present, few in the industry are fully prepared to embrace that journey toward the reimagined business models that will define the industry's next 100 years.

For an industry that depends so heavily on oil, the pressure to decarbonize will become the overarching disrupter, whether in response to regulation or pressure from activist investors and consumers.

But it's not only about taking out the carbon. There are also increasing calls for the industry to make less-toxic products that are safer for humans and the environment.

Relying on ESG Priorities

Companies must begin evaluating all issues through an environmental, social, and governance (ESG) lens moving forward. With anticipated population growth and the increasing demand for almost everything because of it, players will need to find sustainable ways to serve these customers through alternative technologies, new feedstocks, and portfolio realignments. The bar is being raised on both corporate transparency and responsibility, and companies that fall short are also likely to find it hard to find funding.

That's the cloud that hangs over the industry. Even so, 2022 is likely to be a year of moderate to strong expansion, as the world emerges from COVID. If the industry is forward-thinking, it will use the financial momentum in 2022 to help finance the gradual shift away from fossil fuels and invest in new ways of manufacturing and increased recycling that will define chemicals moving forward. So far, much of the industry has chosen to sit on the sidelines — producing more promises than real progress on cutting carbon emissions and redefining sustainability.

While sustainability has been on the corporate radar for a long time, most companies remain overwhelmed by both the magnitude of the problem and the investment required to address it.

Strategic Levers to Consider

But demands from regulators, investors, and customers are only likely to get louder, and companies that are not seen making progress are apt to get punished in the marketplace. Increasingly, failure to meet sustainability targets represents the single greatest long-term risk to companies, putting even their license to operate in jeopardy. Companies that fail the sustainability test may find themselves locked out of financing, especially as banks and other institutional investors focus on greening portfolios and making ESG priorities core to investment strategies.

The chemicals industry is in a unique position for value creation for itself and other industries through the development of alternative materials and fuels. But it is time to graduate from just talking about opportunities and move toward realizing them.

Here are four strategic levers that can help chemicals companies accelerate that transformation:

Apply a Customer-Centric Lens

Key to identifying ESG-related transformation opportunities is a deep understanding of the changing customer buying behaviors and new priorities that will put various parts of the portfolio at risk.

While chemicals manufacturers allowed an increasingly commoditized marketplace govern their agendas, value for next-generation chemicals will be defined as much by service as by delivery of a product.

Think Circular Economy

Reliance on a circular economy will reshape many value chains—with plastics being the most obvious one. Embracing a circular mindset requires rethinking all activities, from product development to end-use. In other words, you need not only tell customers to recycle; you need to design products with that in mind and then track every phase of product life until they make it back into raw materials.

Recycling can no longer be regarded as good citizenship; instead, it must become good economics. Besides designing with products with recyclability in mind, the industry must invest in the development of efficient, large-scale technologies. All forms of plastic must be made to be recycled and recycled easily to allow municipalities and businesses of all sizes to participate economically.

Participate in New Ecosystems

With the rise of new materials and technologies, alternative energy sources and fuels, and circular-economy business models, new business ecosystems should and will emerge. The waste management industry, for example, will become a full-fledged player in the chemicals industry and will need to become part of every chemicals producer's value chain. Incumbent chemicals players need to understand these emerging marketplace dynamics, so they can form the partnerships and alliances necessary to thrive.

Leverage Technology Across Value Chains

Digitization is an enabler of the coming change. In this new low-carbon environment, companies will have to achieve end-to-end transparency into supply chains, tracking molecules from origin to use. For instance, intelligent transport systems can guide logistics to routes with lower emissions, or data-driven insights can support optimizing energy and resource use in customer processes. But all this presumes much deeper customer integration and interaction than exists today.

As the decade progresses, it will become painfully evident that sustainability and viability will depend on strategic transformation of business models and supply chains. And that necessity is likely to materialize as early as 2022. The industry is embarking on an exciting time full of opportunity, innovation, and hard work, but also with plenty of potential pitfalls along the way — especially for those who think they can coast.

Niklas Steinbach also contributed to this article.

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Can Trade Agreements Narrow the Global Data Divide?

Neha Mishra, Lecturer
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While the narrative of building an independent domestic digital economy sounds appealing, especially in the current geopolitical environment, most, if not all, developing countries would overcome the data divide more effectively by integrating meaningfully into the global digital supply chain through the use of trade agreements.

The Covid-19 pandemic has starkly illustrated the divide between developing and developed countries in the ever more valuable realm of data. The data divide between the developing and developed world is multi-dimensional, extending to economic, social, and political aspects of everyday life. This divide leads to the exclusion of developing countries from digital supply chains and creates excessive dependence on leading digital powers.

Can this global data divide be bridged? In this paper, Neha Mishra of The Australian National University suggests that international trade agreements, particularly electronic commerce/digital trade chapters and new generation agreements such as the Digital Economy Partnership Agreement (DEPA), can play a role in bridging this divide. Promoting data inclusion through inward-looking, protectionist measures are a growing trend in several parts of the world. However, Mishra argues that a far more holistic and meaningful approach would entail using digital trade agreements. The agreements can help to build trust through international regulatory cooperation, reduce barriers to digital trade, and create robust mechanisms for supporting developing countries to build their infrastructure for the data-driven economy.

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Decarbonizing Steel: How the Demand for Greener Steel Will Upend the Supply Chain

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When automaker BMW invested in U.S. clean steel startup Boston Metal and Mercedes Benz bought a stake in Swedish startup H2 Green Steel, the investments represented more than the greening of an industrial portfolio. They marked the first steps in the decarbonization of steel — a process that will require the reinvention of not only how steel is made but essentially a reimagining of the entire steel supply chain.

Although steel is one of the most recycled materials on the planet, its initial production and energy demands make it one of the most carbon-intensive industries on Earth. Photo: Unsplash

Because steel is a basic building block of the global economy, it factors into the production and operations of most industries from auto production to aviation to construction to household appliances. And that means it contributes to all of their carbon footprints. Although steel is one of the most recycled materials on the planet, its initial production and energy demands make it the largest industrial consumer of coal and one of the most carbon-intensive industries on Earth. The sector accounts for 2.6 gigatons of carbon dioxide emissions annually, making up roughly 10% of the global total.

According to the International Energy Association, “to meet global energy and climate goals, emissions from the steel industry must fall by at least 50% by 2050, with continuing declines towards zero emissions thereafter.” To accomplish this, producers need a new energy source for production as well as new raw materials, requirements that will upend a large portion of the mining industry in particular.

Lowering Emissions in the Immediate Future

Steel will have no choice as its largest consumers — companies like Mercedes and BMW — increasingly demand “green steel” in their quest to meet their own climate targets. But steel producers won’t have to do it alone, as upstream and downstream on the supply chain begin to work together.

Any solution will require a spectrum of technology changes and individual

efforts to increase efficiencies to move the industry forward.

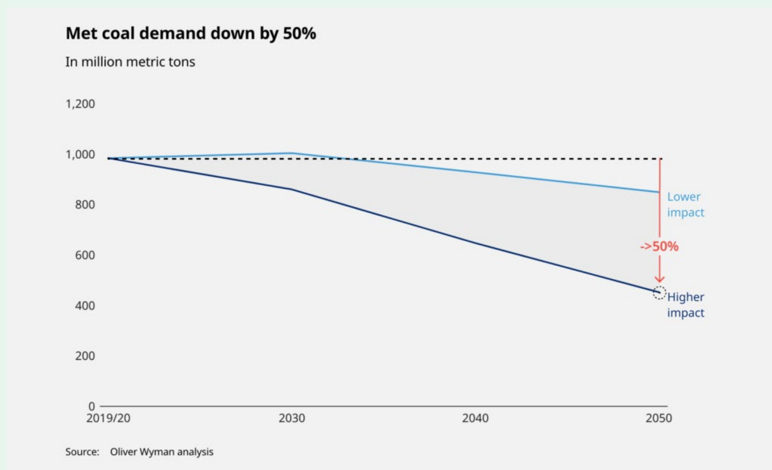
In the immediate future, steel producers can lower emissions by 10% to 30% by applying best available technologies, higher quality iron ores and optimizing fuel mix at blast furnace (BF) and blast oxygen furnace (BOF) operations. Efforts like these are particularly important in places like China and India, where there is preponderance of these older facilities and newer techniques and feedstocks can have a material impact on the entire industry's emissions.

Bigger Investments Are Needed for Sustainable Change

But to realize larger emission reductions will require significant investment in new technology: This might include hydrogen-based reduction to produce DRI/HBI with low/no emissions, carbon capture, storage and use technologies, or even newer alternatives, such as molten electrolysis. Also pivotal to forward progress will be an increased emphasis on the circular economy and the recycling of scrap steel to replace primary steel production.

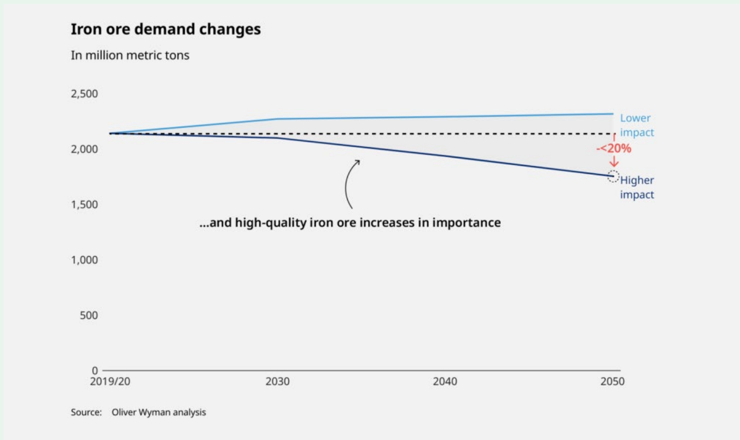
Oliver Wyman modeled a range of global and key steel-producing regional scenarios, assuming ambitious combinations of technologies and emission-abatement measures. We also assumed changing market shares of BF-BOF and EAF-based production. While exact timelines are hard to predict, certain trends emerged for the industry:

Ultimately, this overhaul of steel production will lead to substantially reduced metallurgical coal intake over time. Demand will drop by up to 50% by 2050 from average levels in 2019 and 2020. While the decline will depend on how fast the largest consumers deploy their efficiency measures, we think it is possible to see significant decreases already in this decade.



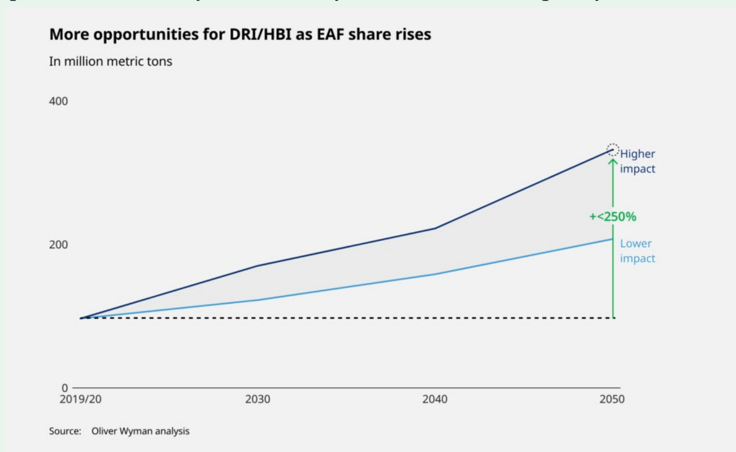
For iron ore, the outlook is more stable, but the composition of what's supplied

will continue to change, as demand for higher-quality ores increases. These higher grades play a key role in the realization of the first 10% to 30% emission reduction in BF-BOF routes, as well as for DRI/HBI production. Already today, they are fetching significant price premiums.



DRI/HBI based steel will play an important role in the new steel industry. Even with supply limits on higher-grade iron ores, we forecast a significant demand increase for DRI/HBI, through 2050 — maybe as much as 200% higher. This would also indicate a marked increase in the trading volume of HBI, suggesting the formation of a new commodity market.

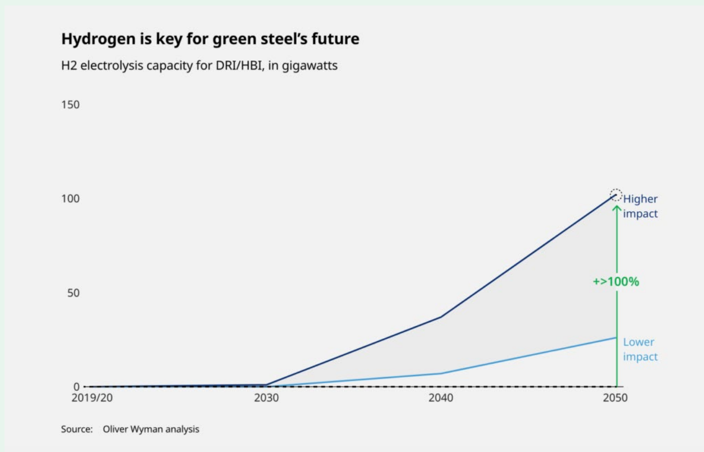
Increased use of DRI/HBI in turn will drive demand for hydrogen, not all of which will be green, especially in the beginning. We expect to see a significant increase in electrolysis capacity beginning in the next decade. By 2050, an additional 100 GW may be required where today there is very little dedicated capacity.



Both, the increasing share of EAF and H2 electrolysis will significantly drive electricity demand, and in particular for renewable energy.

Finally, scrap supply will have to increase significantly. This is especially true for China, where supply would have to double to as much as 400 million metric tons to accommodate a significant increase in EAF-based production. That would envision a jump from 10% of Chinese production being EAF to at least 40% or more.

As a result, the supply chains that today move large amounts of metallurgical coal (the type of coal used for making steel) and iron ore to steel producers will now need to switch to providing equally voluminous amounts of electricity and hydrogen, scrap and DRI/HBI. While eventually the aim will be for these new inputs to be "green," initially there is unlikely to be enough production to achieve that.



What does this mean for various regional economies? Here are some examples:

Australia has several resources it could leverage, including renewable energy and natural gas, to become a leader in hydrogen production. It additionally has vast iron ore deposits that could be used to produce HBI for export or green steel products or semi-finished products.

Sweden already has ambitious plans to build green steel production leveraging its resources, including carbon-free electricity and iron ore to support domestic car production and other activities.

Russia is aiming to use its gas for hydrogen and DRI production.

Chinese steel producers want to start producing high-grade iron ores in places like Africa, in an effort to become more independent from Australian ore producers and make its own steel production more efficient.

Trends to Anticipate

The importance of renewable power, hydrogen and scrap in these new value chains make it vital and inevitable for energy, technology, engineering and recycling players to become active in the transformation of the steel supply chain. That new competition will put pressure on incumbents from mining and steel. Expect some jostling as players try to seize an early advantage in what will be a $1 trillion-plus transition over the next 30 years.

The bevy of newcomers and the dramatically increased need to cooperate across industries to reduce carbon footprints will lead to a re-evaluation of production locations and new contractual arrangements. It will encourage the formation of new partnerships and symbiotic ecosystems that will share the cost of the transition and develop new markets. One example is a memorandum of understanding signed between Rio Tinto and Nippon Steel to jointly explore and develop low-carbon steel value chains. But many others exist.

Examples of how the supply chain will evolve and new steel ecosystems will develop

1. German steel-producing group SHS and engineering firm Paul Wurth are exploring HBI production in Canada, combining Canadian high grade iron ores and renewable electricity from hydro power.
2. BHP is collaborating with Chinese steel producer Baowu to support technology and other methods to reduce emissions. BHP also recently invested in startup Boston Metal, which aims to industrialize the molten electrolysis process.
3. The Mining & Metals Blockchain Initiative is testing whether distributed ledger technology can be used to track embedded greenhouse gas emissions in supply chains. Members of the initiative include Anglo American, Glencore, Klöckner & Co, Tata Steel, and the World Economic Forum, among others.
4. Brazilian Vale is collaborating with Kobe Steel and Mitsui to deliver low CO2 metallics to global markets.
5. Swedish LKAB is collaborating with steel producer SSAB and Swedish energy firm Vattenfall to develop renewables and hydrogen capacity to replace coking coal by investing between $1 billion and $2 billion per year for up to 20 years. The first deliveries of the green steel will be going to car maker Volvo.
6. Kawasaki Heavy Industries, J-Power, and Shell Japan are working with Australia's AGL Energy & international partners to produce, liquify and ship hydrogen to Japan.
7. Australian miner Fortescue plans to build Australia's first green steel pilot plant and also aims to enter the renewable energy business at a large scale. It has announced several partnerships, including one with South Korean steelmaker Posco and South Korea's Hyundai Motor Co, to collaborate on green hydrogen

The eventual greening of steel is inevitable, and it's obvious that the metallurgical coal business looks to be one of the biggest losers, with other technologies and commodities, such as renewable electricity and hydrogen, clear winners. Which will come out on top among regions and corporate players remains far less apparent. But given the amount of investment required and the length of time needed to bring product to market, the advantage will go to those willing to move quickly and take calculated and shared risks through partnerships to help create new industrial ecosystems and position themselves along steel's value chains.

Brink News

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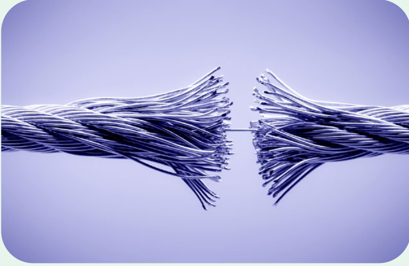
The Global Internet Is Fracturing

Steve Song,
Policy Adviser at Mozilla Corporation



The underlying backbone of this is the global network of undersea fiber optic cables. Source: Getty Images

The concept of a single global internet is breaking down. At the digital level, this is because of efforts by countries like China and Russia to build national firewalls. But there is also a major change happening to the internet's physical backbone, particularly the fiber optic cables that cross international borders.

BRINK sat down with Steve Song, policy adviser with the Mozilla Corporation, for his perspective on how the internet — and its power dynamics — are changing.

SONG: The popular notion of a splintered or balkanized internet first emerged with China's attempts to control information flows in and out of its country and the creation of the Great Firewall of China. That was followed by other countries determined to be able to operate the internet independently of the rest of the world, where we have seen a rise in internet shutdowns and social media shutdowns.

This is surprisingly easy for governments to do because every telecommunications operator is dependent on a license issued by the country they offer services in to continue business. The risk of not complying with a request from a government to stop the internet flow puts their entire country's operation at risk. Internet shutdowns are very, very tricky to deal with.

The internet is composed of layers. And the layers that we're talking about in terms of the Great Firewall are at the digital level. But below the digital level is the infrastructure layer of the internet — the physical cables and wireless technologies that carry internet traffic. The underlying backbone of this is the global network of undersea fiber optic cables.

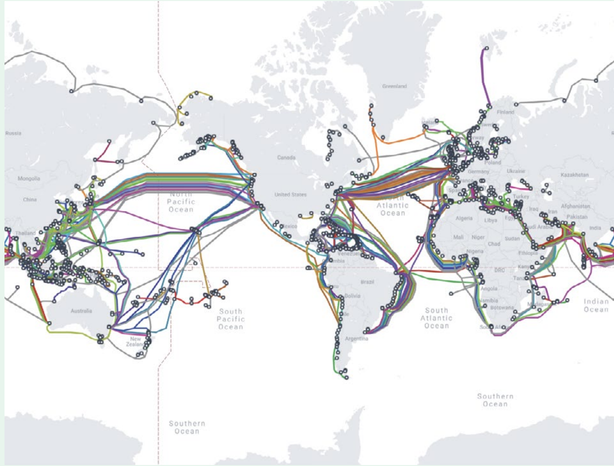
Power Is Shifting On the Sea Bed

Historically, these cables have been owned by telecommunications companies or consortia of telecommunications companies, which has enabled the international growth of the internet in quite a spectacular way.

What's changing now is that Silicon Valley giants have become such large consumers and movers of data, especially between and among their data centers, that they've begun to invest in their own undersea cables.

And that's bringing about a real shift in power, in terms of global internet

infrastructure, because the Silicon Valley giants like Facebook, Google, Microsoft, Amazon and others have comparatively much larger amounts of money to invest compared to traditional telecommunications companies. They can afford to invest in undersea cables at a level that significantly eclipses the resources of telecommunications companies.



Source: https://www.submarinecablemap.com/

At the same time, you've also got undersea fiber optic infrastructure being financed/built by national governments like China that is intended to facilitate its political and economic ambitions, in terms of cementing its connections with other countries around the world.

That affects everything, especially in cybersecurity. Geopolitics is increasingly a factor for countries making strategic choices about which cables should land on their shores. Governments may be more comfortable and confident in infrastructure that they or their allies own or operate, versus infrastructure operated by political or economic competitors.

A Concentration of Power in the Hands of a Few

BRINK: What are the implications of all this?

SONG: The effects, at least initially, are likely to be subtle. If you think about trade in the 16th, 17th century with sailing ships, the direction of trade was affected by the wind and the continental currents. Currents influenced the way that trade evolved. And similar things are happening with the internet's physical infrastructure: If there's a shorter path with faster response times from one particular piece of infrastructure, there's going to be a bias toward using it.

Ultimately, technology is a magnifier. It can magnify economic growth, but

it can also magnify inequality. We are seeing the results of that with the concentration of internet economic power in Silicon Valley. Having a company like Google own the undersea cable and own the higher-level digital infrastructure that services companies creates a level of vertical integration, which is going to make it very difficult to sort out whether internet infrastructure is enabling a level playing field.

Falling Outside Internet Governance

BRINK: Are they just as accountable as telcos to the internet's international bodies and international law, or do they have a different standing?

SONG: That is a very interesting question, if Google, for instance, has a connection from its data center in California over its own undersea cable to its data center in Johannesburg, the data moving between those centers may not be traveling over the internet at all. That means it falls outside of the realm of conventional governance mechanisms in some ways.

Certainly institutions like ICANN and the ITU are aware of this. But from a jurisdiction perspective, it's not clear that either institution has an appropriate mechanism or mandate to deal with it.

I think the most significant opportunity for regulation is actually at the landing points for undersea cables. For any country, if a Facebook or Google seeks to land an undersea cable, then setting the terms on which that cable is allowed to land I think is the biggest opportunity for regulation and for intervention and ensuring fair play. Governments need to ensure that new undersea capacity is going to amplify equitable digital development in their country; that the benefits flow equally in both directions.

BRINK: What is the risk from this to a company that operates internationally?

SONG: Significant concentration of power in digital services makes it difficult for new competition to emerge. If a company was attempting to launch a service in competition with Google, for example, the combination of their ownership of both global infrastructure and services may give them an unbeatable edge.

One of the keys to addressing this potential risk is to ensure that cables that are permitted to land, do so on terms that guarantee "open access," the principle that any licensed terrestrial operator may purchase capacity and on equal terms.

Brink News

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How to Direct the Flow of Green Investments Into ASEAN

Peter Reynolds,
Partner and Head of Greater China at Oliver Wyman

In November 2021, heads of state from nearly 200 countries struck a major deal to intensify climate action at the 2021 United Nations Climate Change Conference (COP26), including a call to wealthy nations to at least double their funding to protect poor nations from the hazards of global warming.

The 73-megawatt Lopburi solar power plant in central Thailand. Photo: Flickr

The ambitious target was set even as the wealthier nations failed to fulfill an earlier promise from 2009, when it agreed to provide $100 billion a year by 2020 to help poorer countries. It also amplified the long-drawn debate on who should pay for climate damages.

Activists and world leaders have argued that parts of the world that contribute the least to global warming, which includes developing countries and regions like Southeast Asia, stand to suffer the most as temperatures climb.

Yet, it is far more challenging for such nations to mitigate against climate change as they need to balance critical development goals with the higher costs of green infrastructure and technology, as well as manage the potential trade-offs of prioritizing either.

The Monetary Authority of Singapore (MAS) estimates that a $200 billion green investment is needed in ASEAN per year through 2030. But investments have so far fallen short. According to a 2017 United Nations Environment Programme report, annual flows of green finance in Southeast Asia were estimated at just $40 billion.

There is clearly a huge need for finance, but not enough is flowing in that direction. What is causing the significant financing gap, one that is growing more critical to bridge as the effects of climate change intensify across the world?

The issue is driven largely by a mismatch between needs and capital flows.

Bringing ASEAN Projects Up to 'Bankable' Standards

There's no shortage of net-zero-aligned capital within global finance. Private investors today are fueled by pressure from stakeholders, regulations, diversification needs and more.

The challenge lies in finding investment-ready or bankable projects in ASEAN

countries. Investors claim that businesses are not coming up with project proposals that are fit to utilize global financing.

But a report by the World Economic Forum, in collaboration with Oliver Wyman, found that there are mechanisms that businesses can put in place to turn the tide on the situation, such as by identifying key performance drivers to better commercialize operations based on breakthrough technologies and reduce the costs of innovation. This involves pinning down the greatest innovation and investment risks, and subsequently coming up with new ways of doing business to improve underlying cash flows.

Businesses can also look to entities like the Green Climate Fund (GCF), which provides financial and technical assistance for the preparation of funding proposals through its Project Preparation Facility.

Private investors want to be assured of the capacity of businesses to plan and manage their projects successfully, and there is no better way to reflect this than through a strong and sharp proposal.

Stimulating Early-Stage Investments

While investors are keen to finance the latest technology that shows potential to have an impact on climate change, the lack of a proof of concept or profitability and an inexperienced team could make newer projects appear too risky. Yet, it is important that such projects get funding early to avoid the “valley of death” and keep the momentum of innovation going.

In such cases, entities like GCF can help by investing in early-stage equity to de-risk the project, and in turn catalyze much larger private sector financing.

There are already case studies, such as in Chile where the GCF made a $60 million anchor equity investment to an innovative energy system that combines solar energy and pumped storage hydroelectricity. The intention with the initial funding is to attract additional private sector debt and equity investors to fund the remaining investment of $1.1 billion.

Ultimately, the goal is to encourage technology transfer from developed to developing countries in a more expeditious manner, helping poorer nations adapt to climate change.

Balancing Developmental and Environmental Needs

Perhaps the toughest issue to resolve is how climate change is lower down the list of priorities for many developing countries. Other basic needs like public health, housing, shelter, food, safety and security take precedence over global warming.

There are, however, still ways for these countries to develop green initiatives for greater sustainability. For instance, skipping coal fire plants and jumping straight to renewable energy now as prices are low.

Countries could also consider ESG projects that have co-benefits — that are not just sustainable for the environment but also addresses other social issues, such as income and gender inequality. The GCF funds such projects.

Another critical issue is for policymakers to encourage the flow of green

finance, not just to climate solutions like renewable energy but also technologies that will solve industrial decarbonization in hard-to-abate sectors. One way to achieve this is to offer predictable, adequate, and long-dated incentives and de-risking measures that could improve the risk-return profile of breakthrough decarbonization projects.

Governments could also steer stakeholders toward sustainable goals by engaging in dialogue with financiers to set expectations, communicate national priorities and give credibility to low-carbon pathways.

But localized, fragmented regulatory activities and public-sector schemes will likely result in limited effectiveness. A coordinated global response across sectors and technologies is required to create a level playing field and ensure that green solutions can compete in the marketplace.

The challenge of helping poorer nations adapt to the effects of climate change is significant but not impossible to overcome. The key lies in channeling funds to where they are needed most. This can be achieved through a combination of innovative financing structures, and policy and cooperation across the stakeholder ecosystem.

Brink News

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Peter Reynolds is a partner and head of Greater China based in Hong Kong. He also leads our sustainability platform for the Asia-Pacific region. He has worked at Oliver Wyman for 15 years, previously being based out of our London and New York offices.

How the Pandemic-Induced Labor Shortage Could Spur Automation

Tushar Narsana,
Partner at Oliver Wyman

When demand returns, the aerospace industry will also face the same labor issues as they're seeing now. How many thousands of flights have been canceled because they don't have the crew? Photo: Unsplash

Oliver Wyman automotive and manufacturing Partner Tushar Narsana spoke with Newton Investment Management's Double Take Podcast on the supply chain challenge.

On the persistent semiconductor shortage in the automotive sector:

"When we talk about chips, broadly we're talking about 200 millimeter and 300 millimeter … and where the shortage right now is the 200 millimeter. The applications that you see in the car displays and power supplies. Demand for it was taking off even before COVID hit, so what happened once COVID hit was a double whammy, which now we're recovering from not just a COVID effect but trying to get it back from an already elevated demand level. Our hypothesis is, [the shortage] is not going away any time soon. It's still going to take a while to get there."

On recruiting and retaining labor:

"[In the] short-term, bonuses as you've seen, companies giving free education incentives, signing bonuses, extra money per hour. Those things are a little helpful. …

You take that to the next level — you have to look at how you optimize your processes. … Can you cross-train people or can you make the process more smooth or can you prioritize your high-velocity products within a certain section of a warehouse. … You have to do some level of process optimization today to reduce your reliance on labor. … And you must consider some type of automation."

On the aerospace industry:

"[When demand returns,] they will also face the same labor issues as you're seeing now. … How many thousands of flights have been canceled … because they don't have the crew? … This labor issue is going to impact them too. Again, I think the whole baggage handling can be automated. … You'll see autonomous vehicles on runways. … That's also coming. That should be the solution. There has to be some level of automation."

About the Author

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Partner at Oliver Wyman

Tushar Narsana is a Detroit-based partner in Oliver Wyman's Manufacturing, Automotive and Aerospace practices. Prior to joining Oliver Wyman, he was the global lead of supply chain services at Accenture where he led and transformed client supply chains within Industrial Products, Automotive, Aerospace, Retail, and Hi-Tech industries.

The Metaverse: A 5-Year Forecast of How It Will Affect Your Business

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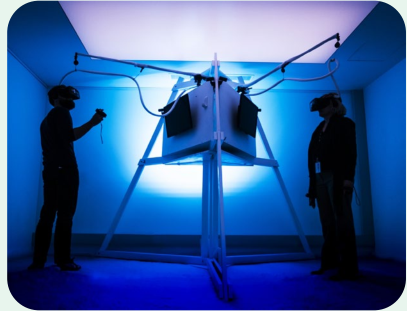
The metaverse is having its moment internationally, accelerated by COVID-19's impact on digital-based economies and disruptions to offline business models. The rise of blockchain, digital assets, and nonfungible tokens (NFTs) further fuels the demand for the metaverse. Defined as a virtual-reality space in which users can interact, the metaverse is evolving into an increasingly vast and rich ecosystem that comprises metaverse gateways, platforms and infrastructures, as well as a variety of service providers to enhance the customer experience with identity, social, gaming and economic services.



In the near future, more brands will break the boundaries between virtual and reality to create more meaningful interactions with consumers. Photo: Unsplash

As we enter 2022 and beyond, here are our reflections on the impact of the metaverse in the real world in the next five years for various sectors, such as financial services, automotive and manufacturing, real estate, education, and retail.

Financial Services

If the metaverse develops like how NFTs have, it could be a massive growth opportunity for financial service players. NFT sales alone hit $2 billion in the first quarter of 2021, more than a 20-time increase from the previous quarter.

Looking out five years from now, we imagine a place where you have entire user-generated ecosystems, with the metaverse giving rise to virtual societies that transact and engage in a decentralized manner. You can expect to see:

- The development of virtual-to-physical redemptions and financial systems that underpin payments and financing in the ecosystem
- NFTs providing users digital ownership and driving the emergence of new access classes for trading
- Augmented reality/virtual reality (AR/VR) sophistication narrowing the

differences between online and offline, driving greater participation and engagement in financial services, and ultimately fueling the convergence of traditional financial services and the new era of innovation

Traditional financial services players are already leaning into the potential of the metaverse. In Asia, banks are creating virtual spaces for branding, education and product development. Universal banks are using the metaverse for training and education for both internal stakeholders and external clients. Payment players are aggressively developing crypto propositions and partnerships to maximize their positioning in the metaverse. The integration of the metaverse and financial services is therefore not a question of "if" but "when."

Automotive and Manufacturing

A shared online space that spans across dimensions, powered by a combination of VR, AR and MR (mixed reality), will enable the automotive and manufacturing industry to be deeply entrenched in the metaverse. Creating an industrial metaverse is possible if it organically integrates cyber-physical systems; digital twins; 5G-powered AR, VR, and AI computer vision; low latency remote control and other applications.

With an industrial metaverse, the future of factories will not only use AR/VR for on-site auxiliary installations or skills training, but also create an immersive and virtual experience of people working together in the virtual world, guided by AI to verify results and correct errors in real-time without needing to be on-site.

In addition, the company's product design, development process, trial production testing, operation management, marketing, and other operations can be simulated and verified within the virtual community before transferring it to the physical world for actual production. Another application would be for decision-making and results to be recorded through the blockchain, as the basis for assessment and auditing in both the virtual and physical world.

In the automotive industry, cars have evolved from a simple getting from point A to B to a mobile space that integrates work, entertainment and other functions. Autonomous driving releases attention and hands for the driver and passengers to do work or enjoy an entertainment experience that is traditionally constrained to the office or home environment.

Put simply, the metaverse will leverage VR and AR in automobiles, layered onto existing technologies such as smart cockpits, voice recognition and AI.

In the next five years, we expect the metaverse and automobiles to develop in tandem. In addition to the virtual drive engine, more perceptive technologies such as touch and taste could be integrated, and possibly even developing a unique transaction method via blockchain in the metaverse for the automotive industry. For example, a virtual car is built in the metaverse and mapped to the real car and vice versa. Whether the driver is using the car in the physical or virtual world, driving behaviors, technology upgrades, modification preferences, and corresponding data generated can be shared between the two dimensions for a seamless experience.

Real Estate

Land and real estate are important assets in the real world, which brings to question its value in the metaverse. We expect the metaverse to mirror and adopt characteristics of the real world, and the concept of supply and demand will affect the value and price of virtual land and real estate.

Like in the real world, location is a key factor affecting the value of land in the metaverse. The two factors that determine the value of the location are the distance from the center of the metaverse and the quality of neighbors. The buying behavior of many international celebrities has sparked heated discussions on the topic of virtual real estate investment.

However, in China, the trend may not pick up to the level of interest as in the West due to differences in understanding and perception around the metaverse. The metaverse attempts to mirror the rationally quantifiable physical world that is rooted in Western ideologies and culture, which does not align with the East. It would still take some time for the East to accept the concept of a rationally quantifiable world. Therefore, investments into virtual land and real estate in China are still speculative and will be accompanied by risks. As the concept gains popularity, it remains to be seen if price fluctuations will stabilize or continue to skyrocket and crash unpredictably.

Education

While the remote education experience has already improved greatly with campus digital twins, we expect the metaverse to naturally drive spatial changes throughout the education industry in the next five years. Pursuing knowledge will no longer be confined to words, images and lectures available on demand, but reimagined to include an immersive experience accompanied by digital records in the metaverse.

Education in the metaverse era is by no means confined to a realistic learning experience. We see the metaverse as the natural experimental playground for the education sector. Through collaboration and the establishment of a standard framework to create a shared digital ecosystem, the metaverse will realize the sharing of high-quality educational resources on a global scale, benefiting a wide range of audiences of all ages and social classes, and making education truly a lifelong endeavor.

Companies that have begun their foray into the metaverse help us imagine unlimited possibilities in the future of learning, illustrating an immersive experience of studying space and history in the metaverse. With many "top players" already declaring their focus on the education sector, unlocking the infinite possibilities of learning in the metaverse is only a matter of time.

Retail and Consumer Brands

In the era of digital consumption, brands continue to evolve their approach to establishing direct communication channels with consumers. From the early days of building a website, to embracing e-commerce, opening social media accounts, and even live broadcasting, the metaverse now offers a new concept for brands to experiment with.

The prevalence and growing importance of virtual characters or avatars have in recent times presents various business opportunities in the retail sector. Many consumers now expect a combination of in-store and digital experiences, and the metaverse offers the ability to engage with brands and products using a personalized avatar. Whether it's trying out clothes, daily necessities, test-driving vehicles, or just elevating the browsing experience in a virtual store, the possibilities are endless.

The well-known simulation game The Sims 4 already gives us an insight into the metaverse. Consumer brands are actively collaborating with game developers to embed their products in all aspects of the game. Since its launch in 2014, consumer brands have launched item expansion packs for gamers to interact with the brands in the virtual world to raise brand awareness and cultivate brand love.

Beyond marketing products, brands have also organized or participated in interactive activities with consumers. The metaverse has become the new playground, especially for luxury fashion brands, with some launching their new collection in the virtual world and others partnering up with developers to create their own bespoke game.

In the near future, we anticipate more brands stepping in to break the boundaries between virtual and reality to create more innovative, meaningful interactions with consumers.

Claudia Wang, Partner, Oliver Wyman, and Ralph Wu, Principal, Oliver Wyman also contributed to this article.

This article was originally published on Oliver Wyman's WeChat account.

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It's Time to Address Loneliness for Older Populations

Michael Weissel,
CEO of SecureSeniorConnections™;
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Health and Life Sciences of Oliver Wyman;
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Loneliness represents an opportunity to create and nurture human connections that ultimately improve people's well-being but also their long-term health. Photo: Getty Images

For the last year, virtually everyone has struggled with quarantine-related feelings of social isolation or loneliness. But senior citizens have struggled with loneliness long before COVID-19 forced us all into isolation. For decades, loneliness among seniors has led to resultant chronic conditions that were more profound than obesity, a lack of physical activity and excessive alcohol consumption.

Its impact is the equivalent of smoking 15 cigarettes every day.

Lonely seniors are less likely to follow their treatment and prescription plans. They are less engaged in their resultant physical well-being and mental-wellness issues. Many are referred into therapy, further taxing an already stretched group of mental-health providers.

Apart from the personal and family impact, the compromised wellness of seniors has major financial implications on the health care industry. By 2030, 20% of the U.S. population will be over 65 years old. It has, therefore, never been more essential to find solutions to help seniors and supportive health care partners find ways to combat the effects of aging.

In 2020, many health care leaders, including Landmark Health, prioritized addressing the impact of loneliness among seniors. "We saw a 190% increase in behavioral-health consults compared to pre-COVID-19," Michael Le, M.D., Landmark's chief medical officer, and Becky Miller, Landmark's director of Strategy and Corporate Development, told Oliver Wyman in July 2020.

To learn more about sustainable wellness options for seniors, our Oliver Wyman Health and Life Sciences team sat down with Mike Weissel, a former Oliver Wyman Partner, now chief executive officer of SecureSeniorConnections™, a digital, community-building platform designed to help seniors make new friends and celebrate engaged, empowered lives with other like-minded people.

OLIVER WYMAN: There are a lot of social drivers of health that plans and providers are trying to focus on. Why is loneliness important to bring to the forefront?

WEISSEL: The "social" part of social drivers seems to often be an overlooked, but critically important, part of someone's overall health and well-being. Last year, Vivek Murty published Together: The Healing Power of Human Connection in a Sometimes Lonely World, a book based on his experience as U.S. surgeon general from 2014 to 2017. The book speaks to the incredible need to address loneliness and social isolation in our population.

One memorable takeaway from this book is that human relationships are just as critical to our greater well-being as the food we eat and the water we drink to nourish our bodies. Feeling hungry or thirsty is a signal from our body that we need to take better care of ourselves. Loneliness, similarly, is a signal telling us it's time to start connecting with other people so we can take care of ourselves.

I expect to see this kind of issue come more to the forefront once he is reappointed, especially in light of the impact the pandemic has had on seniors' ability to connect.

Why Loneliness Gets Left Out of Health Care

Loneliness is an issue that really hasn't been addressed head-on to date. Most health plans or providers don't focus on loneliness as a metric because, while we know it's there, the direct impact is hard to measure. This is not unlike the early days of CareMore or the Camden Health Project, when forward-thinking companies were willing to make small changes to people's home environments — like buying air conditioners to make people physically more comfortable each day, or replacing shag carpets to prevent people from tripping over them and risking injury. Delivering solutions like those might have seemed outside the scope of traditional health care, but they had a strong positive impact on health care costs.

We have found lonely seniors are significantly less compliant with treatment plans, which puts a significant burden on the health care system as well as on families and caregivers. One loneliness study reviewed 148 previous studies covering more than 300,000 individuals and revealed that individuals with strong social connections have a 50% greater likelihood of survival than those without.

In the meantime, many other countries are well ahead of the U.S. in addressing the issue. Consider, for example, that the United Kingdom has a minister of loneliness and a countrywide campaign focused on addressing the issue.

How to Measure Loneliness

OLIVER WYMAN: How does one actually go about measuring the loneliness levels of their population?

WEISSEL: Because loneliness can be a subjective feeling more than a specific

clinical condition, it can sometimes be difficult to reach a consensus on how to measure its impact. But, the UCLA and De Jong Gierveld scales are the most commonly used. Each is a strong academically supported survey that focuses on the social and relational dimensions of loneliness and helps quantify, in relative terms, the depths of a person's loneliness.

If used consistently, each scale can give a plan or provider a good baseline measure of an individual's level of loneliness as a way to measure whether interventions are having an impact. Forward-thinking plans and providers are starting to use these scales to specifically measure this important social driver. Of course, what they do once they have the measure is more complicated, because there is not one straightforward solution today for solving the loneliness issue for seniors.

OLIVER WYMAN: What does the competitive landscape look like? What innovative solutions have you seen in the market? How are buyers reacting?

WEISSEL: It is still early days for many addressing this issue, but we are seeing quite a bit of interest in the market for wanting to help seniors with the issue. A few of my favorites are the Motion Picture and Television Fund, which has set up a volunteer group of seniors making check-in calls on other seniors on a regular basis. It is based on a similar group in England called Silver Line, which is a hotline for seniors to call for companionship and conversation. Silver Line has fielded millions of calls since its inception in 2013.

My company, SecureSeniorConnections™, was created to take it a few steps further because seniors are more tech-savvy today — a trend that shows no sign of slowing down. We've designed a digitally enabled Senior Center that connects seniors both online and in-person. It's been designed with all seniors in mind so we can not only reduce loneliness in those afflicted with it but work to prevent it for others in the future.

With more than 10,000 seniors aging into the Medicare-eligible population each day for the next decade, we want to embrace their comfort with technology and create for them a robust community of seniors. We will provide them with a wide range of activities they can participate in, where they can find new friends to meet and live more healthy, engaged lives. Informing our solution in this way lets us segment our users to create different pathways to success based on loneliness ratings. Ultimately, we see ourselves as a much broader platform that helps seniors overcome loneliness and social isolation to build a network of connected friends enjoying empowered lifestyles.

The Opportunity

There's both an urgency and an opportunity for plans to implement care-management protocols and interventions that lower the cost of care. Not much has been done to date in this space. There's a massive opportunity here.

Loneliness represents an opportunity to create and nurture human connections that ultimately improve people's well-being but also their long-term health. Protocols

and interventions are perhaps the first steps towards widespread progress. At the end of the day. It's time to catch up and help lonely seniors who may feel separated from the world and like they don't have the voice they truly deserve to feel connected to other people.

A version of this article was originally published by Oliver Wyman.

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The Corporate Conundrum on How to Handle Culture Issues

Richard Levick,
Chairman and CEO of LEVICK

For decades, America has debated the merits of the proper size and role of government. But nowadays, the debate is increasingly about the proper role of the private sector. Photo: Unsplash

Are we witnessing the final throes of brand neutrality? Quite possibly. In the United States, the climate has radically changed in the wake of George Floyd's death and the January 6 uprising at the Capitol. Companies may want to resist being pulled into these political maelstroms — but they are getting increasingly tough to avoid.

The Risk of Political Contributions to a Brand

Political contributions have become tantamount to a supply chain albatross. If companies underwrite certain political leaders and causes — even modestly — they now own the consequences. Consumers, shareholders, stakeholders and other constituents now gauge corporate brands, at least in part, by their political affiliations. These days, your brand consists of much more than just the products and services that you sell.

In the spring of 2020, when the federal government struggled in responding to the COVID-19 pandemic, I observed that "crisis abhors a vacuum" and predicted that private entities would step into the breach, and they did, from pharmaceutical companies to professional sports leagues.

For more than a century, power rotated between Wall Street and the nation's capital. When the federal government failed to act, corporations filled the void. And when the government stepped in, corporations reverted to their Coolidge-in roots: the business of business.

What Is the Proper Role of a Corporation?

For decades, America has debated the merits of the proper size and role of government. But nowadays, the debate is increasingly about the proper role of the private sector. That is what generates the heat now.

Milton Friedman argued two generations ago that "a firm's sole responsibility is to its shareholders." If his conviction was ever true, it no longer is — not in an era when a huge percentage of consumers demand their brands to take a stand.

In the United States, corporations' initial business-as-usual reaction toward Georgia's new voter restrictions was telling — and something of a cautionary tale about

the complexity of the new "rules." Some of Georgia's biggest companies weighed in against the bill before it reached the statehouse floor, but then stayed mum as it got closer to enactment. Certain Georgians viewed their relative silence as complicity. Suddenly, corporations were seen as supporting voter suppression, including criminalizing the act of giving water to voters standing in line.

The storm began to rage: In short order, Major League Baseball, not known these days for its pioneering social advocacy, said it would take the 2021 MLB All-Star Game away from Atlanta. MLB was signaling to officials in such states as Arizona, Florida and Texas — not to mention Washington, D.C. — that North Carolina's 2016 experience of hemorrhaging $3.6 billion in business revenue because its legislature passed an anti-LGBT law was no aberration.

So how does a company survive the crosscurrents of today's turbulent political waters? Here are some guidelines.

1. **Perceptions trump reality**. The Georgia law is complex; in some ways, it extends voting hours and access, and in others, it clearly targets traditional Democratic strongholds. If your company is going to weigh in on a highly controversial issue, make sure your team is interdisciplinary. If just your public affairs or legal executives are looking at it, they will miss perception issues the way your brand and communications professionals alone would miss legal issues. Silos are no longer an effective way to make decisions.
2. **Business is more than just profits**. It is no longer sufficient to say that you're in business just to maximize profits — there have to be other rationales. Michelin sells safety, not tires. Starbucks sells a lifestyle. Apple sells creativity. Nike sells the inner athlete. Each company knows precisely why it is in business, which allows them to approach theology and be more than just a brand. When you read something in the Bible that you don't believe, you don't lose faith. You just carve out that one story, that parable. The same is true for brands that are disciplined enough to have an umbilical connection with their customers. Know thyself and to your customers be true.
3. **Track cultural trends like your business life depends on it** — because it does. Too many businesses approach big data like an accountant, instead, analyze it as if you worked at the CIA. A couple of coincidences may portend a trend. Have people who understand business, politics and the cycles of history track the news, including, of course, social activity. Lots of screaming can often be ignored, while sometimes a single high-authority blogger or lawsuit can mean change is afoot.
4. **There is no Las Vegas — nothing "stays here**." What happens in Georgia can happen in Texas. What happens to a competitor can happen to you. Plan for it, and view what happens to others as your laboratory. Activists look for companies domiciled in battleground states. If you are

headquartered there, there is no excuse to be surprised.

5. **Don't fret calls for boycotts**. The reason the 1965-1970 grape boycott led by Cesar Chavez captured the nation's attention and changed buying habits is because of the rarity of the strategy. Today, there is a call for a national boycott nearly every hour, one of the most recent, of course, being against Major League Baseball. Calling for a boycott is a click away; acting on them takes both tremendous organizing and a public willing to be impassioned by the cause more than the inconvenience of new purchasing habits. Over the past few years, boycotts and threats of boycotts by more progressive causes seem to be more effective than those by the right. Nike did exceptionally well after calls for boycotts when it embraced Colin Kaepernick. It was no accident. They planned for it.

Yes, the United States is divided — but perhaps not as much as many believe. The polls suggest that many Americans support the direction that the current administration is taking on such issues as infrastructure, COVID vaccination, environmental stewardship and other issues. Your mission is to carefully find your niche and understand your brand, your audiences and your community. No matter what you do, don't expect smooth sailing. We live in a volatile era that shows little sign of calming down.

Brink News

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Reviving the Economy and Resuming Travel and Tourism in the COVID-19 Era

Commuters use face masks in Shinagawa station in Tokyo on 31 March 2020. Industry experts recommend similar use of face masks for all travelers to minimize the risk of COVID-19 transmission. Photo: ADB.

The coronavirus disease (COVID-19) pandemic triggered an unprecedented collapse of the travel and tourism industry and the recovery is now expected to be slower than first thought. Reviving the sector requires collaboration and coordination across the entire travel and tourism ecosystem.

Globally, the COVID-19 pandemic has generated extraordinary losses around the world—with millions of lives claimed, millions of people unemployed, and hundreds of millions more at risk of unemployment and soaring poverty.

According to ADB's Asian Development Outlook 2020 report, tourism-driven economies—including the Cook Islands, Fiji, Palau, Samoa, and Vanuatu—were the hardest hit by the COVID-19 pandemic. The Asia and Pacific region, alone, was expected to lose almost 70 million jobs and $1.1 trillion in GDP—more than any other region in the world.

But the rising rates of vaccinations are seeing many countries slowly rebooting their international and domestic travel sectors. Precautionary measures against contracting COVID-19 have been put in place to ensure passenger health and safety as the transport industry deals with travel and tourism challenges in this "new normal." The Asian Development Bank (ADB) has released a set of health-focused policy recommendations Reopening Borders to Revive the Economy and Resume Travel in Asia and the Pacific to help members in our region make the best policy decisions for their circumstances. The recommendations came from months of extensive collaboration with key partners, including the International Civil Aviation Organization, the International Air Transport Association, the Pacific Asia Travel Association, and other stakeholders and industry leaders.

"These policy recommendations are the result of widespread consultation with airport, airline, hotel, and government leaders," said ADB's Health Sector Group Chief Dr. Patrick Osewe. "They provide a roadmap for how countries across the Asia and Pacific region can reopen this critical sector in the most careful, responsible, and effective way possible."

The recommendations have been grouped into four categories: (1) strengthening management and planning; (2) introducing transmission barriers; (3) improving sanitation; and (4) promoting health screening. A three-phase approach to each category

also serves as a checklist for advised actions in every perceived phase of COVID-19.

What is the "Phased Approach"?

Phase	Phase Description in relation to COVID-19	Travel permission
Emergency	Disease still in acute phase as determined by local health authorities	Limited travel. Necessary to address urgent needs.
Restart	Downward trajectory of disease transmission as determined by local health authorities.	Countries reopen and travel is gradually re-started. Risk mitigation measures in place.
Recovery	Disease has been sufficiently contained as determined by local health authorities.	Risk mitigation and preparedness measures to be sustainably implemented.

Key stakeholders from across the travel and tourism ecosystem—from government to the private sector—have already taken some of these steps to restart and recover the industry. Ongoing dialogue focusing on multisectoral collaboration and targeted supportive actions should continue as the COVID-19 pandemic unfolds.

"Ultimately, these recommendations are intended to promote health and safety, encourage best practice, reduce incoherence in health protocols, and complement existing efforts," Dr. Osewe said.

ADB Insight Video: Opening Tourism.

ADB is committed to helping governments speed up their COVID-19 response and recovery and is currently working with countries in Asia and the Pacific to implement the recommendations identified in this report. With unprecedented and evolving health and travel-related implications—highlighted by the discovery of the new Omicron strain of the virus—the long-term impact of the COVID-19 pandemic on the industry remains. Travel and tourism will eventually rebound through a collective response that can help build the foundation now for a more sustainable future.

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Combating COVID-19 and Ensuring No One is Left Behind

If the world wants to beat back the COVID-19 pandemic and ensure no one is left behind in the recovery, two issues thrown into sharp relief by the pandemic need attention: digitalization and regional cooperation.

People ride bicycles in New York City during the coronavirus pandemic. Photo: Angela Weiss/AFP via Getty Images

Ensuring the digital transformation reaches all in Asia Pacific is one of the greatest challenges we face

Even before the pandemic, the digital revolution was transforming how people and businesses work. The accelerated adoption of digital technologies during the COVID-19 pandemic has helped governments, education, private enterprise, and people keep activities going amid social distancing, lockdowns, and other containment measures. High-speed internet connectivity and financial technology also hold immense promise for deepening financial inclusion, and keeping local economies alive, even in times of crisis. However, many poor households, women, and vulnerable groups have been unable to afford or access the benefits of digitalization.

Digital divides within and between countries in the region threaten to exacerbate existing gaps in economic and social development. We need more equitable access to digital technologies to drive innovation and create new business models.

Regional cooperation must refocus on the Sustainable Development Goals (SDGs)

Regional cooperation plays a critical role in managing the transition out of the current crisis, and a renewed focus on environmental and social dimensions of cooperation is essential. Cooperation can also help countries achieve digital transformation for all, including through joint efforts to develop and expand digital infrastructure, and legal and regulatory reforms that make these services more accessible.

The pandemic has exposed the inadequacy of the region's health, education, and social protection systems, making life even more difficult for the poorest and socially excluded, and deepening inequalities within communities and countries, particularly for women. The crisis has shown the value of building universal social protection systems for all members of society—from infancy to old age—which can be bolstered to provide additional relief in times of crisis. There have also been huge disparities in the ability of countries to insulate themselves from the pandemic and roll out vaccines. This is widening development gaps. A renewed focus on people, their

well-being and capabilities is needed through regional cooperation.

In recovering from the COVID-19 pandemic, environmental sustainability needs to become much more central to economic, social, and global value chain integration efforts. By building low-carbon economies, including through a new focus on industry and tourism sectors to generate green jobs, we can help create a more resilient region. While governments recognize the potential to pursue more environmentally sustainable development as part of recovery, much more needs to be done if we are to achieve the goals of the Paris Agreement on Climate Change and protect our planet's natural capital and biodiversity.

Meeting the needs of people and planet

These issues, highlighted in a recent joint report by our three organizations, warrant greater emphasis as countries meet to review implementation of the SDGs at the United Nations High Level Political Forum this week. Policymakers have necessarily focused on containing the virus and meeting peoples' immediate needs. Tangible action on the multiple interconnected dimensions of the SDGs poses difficult policy and fiscal choices. Regional collaboration around financing can help countries raise and expand resources to meet the SDGs. Key priorities include cooperation on tax, through common standards, and efforts to address tax havens and avoidance. In addition, countries in the region can work together to design incentives to align private investment with the SDGs and expand the use of sustainability-focused instruments that tap regional and global capital markets.

Another form of international cooperation is worth noting. Governments, multilateral organizations, development banks, philanthropic organizations and the private sector have joined forces in unprecedented efforts to fight the pandemic, such as the COVID-19 Vaccines Global Access (COVAX) initiative. Science, technology, and innovation enabled by such partnerships will continue to drive countries' efforts to recover and build resilience.

Today, what begins as highly local, can soon become a global phenomenon. A reinvigorated multilateralism can and must respond faster to take on new challenges and expand provision of public goods. Together, our organizations will seek to nurture such cooperation to achieve the SDGs.

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The Pandemic has Left Millions in Asia Struggling for Food

Manisha Pradhananga, Matteo Lanzafame, Irfan A. Qureshi

Quick action by governments is needed to keep people fed during the pandemic. Photo: ADB

COVID-19 has resulted in broad impacts on food security in Asia. Policymakers must respond quickly and aggressively to these challenges to avert long-term damage from this emerging crisis.

The pandemic hit Asia's food supply hard, causing a sharp increase in the number of people unable to access enough food to stay healthy and feed their families. Women, children and the poor have suffered most.

COVID-19 has unsettled food supply chains in various ways. In the initial days of the pandemic, uncertainty surrounding imminent lockdowns across the region led to panic buying, temporary shortages, and price spikes. Disruptions to domestic and international food supply chains—which emerged as rising health risks led to major travel restrictions—undermined food availability and accessibility, in particular of perishable goods.

Micro, small, and medium-sized enterprises were battered by lost sales, higher production costs to ensure safe working environments, and difficulty accessing inputs, equipment, and food distribution systems in Asia's low- and middle-income economies.

These disruptions led to a sharp increase in food insecurity- defined as having physical, social, and economic access to food that meets dietary needs and food preferences. According to the UN's Food and Agriculture Organization, the number of people experiencing severe food insecurity globally rose by 148 million in 2020 to 928 million—12% of the global population.

The impact of the pandemic on food security has also been sharp within economies. While the divide is clear across the income strata, new fault lines have emerged as well. For instance, urban centers have been more severely affected because of higher population density, a disproportionately larger share of COVID-19 cases and outbreaks, and stricter restrictions on movement. Among the worst affected have been the urban poor, who largely rely on insecure jobs in the informal sector and spend a substantial portion of their income on food.

The pandemic has also intensified food insecurity for women and vulnerable groups. The share of women affected by moderate or severe food insecurity was 10% higher than that of men in 2020, up from 6% in 2019. Together with a lower availability of nutritious food and disrupted health and nutrition services, income losses associated with the pandemic are projected to expose an additional 9.3 million children worldwide to wasting by 2022, 2.6 million to stunting, and 168,000 to death, and induce 2.1 million

maternal anemia cases.

It is still unclear whether—or to what extent—the economic recovery in 2021 will result in a decline in food insecurity. What we know is that COVID-19 has exacerbated food insecurity in the region, which may have lasting impacts in 2021 and beyond. Policymakers must respond quickly and aggressively to overcome these challenges.

In the short run, it is critical to protect the most vulnerable members of society through food assistance and other social transfers. Many Asian economies are already implementing food assistance programs. In the Philippines, the Department of Social Welfare and Development distributed food packs as part of a program aimed at the poor, people with disabilities, and the elderly living in hard-to-reach areas or far from food retail stores. Many other Asian economies are also implementing food assistance programs, which may require active fiscal adjustments in several regional economies.

The COVID-19 pandemic also highlights the importance of building capacity to face food-security challenges in the medium- to long-term. A proactive response is especially needed in the context of climate change and the expected rise in the frequency and scale of extreme weather events.

Asia is home to 350 million smallholder farmers, who have access to limited resources, particularly in the face of adverse events. Estimates by FAO suggest that between 2008-2018 agriculture absorbed 63% of the damage and loss caused by climate-related disasters across all economic sectors in developing countries.

Alarmingly, between 2003 and 2013, six of the world's 10 climate-related disasters most damaging to agriculture were in Asia. They include floods in agrarian economies such as Pakistan, which caused approximately $5.3 billion in agricultural damage and loss in 2010 and $1.9 billion in 2011.

Policy actions should focus on building resilient food systems and farming livelihoods, by helping farmers prevent, prepare, and adapt to weather shocks more effectively. Investing in early warning systems—based on advanced spatial information technology combined with detailed crop models, machine learning algorithms, ground data on agricultural production and management—can help farmers anticipate extreme weather events and plan accordingly. In 2019, timely information on floods in northern Bangladesh helped communities and the government prepare and secure necessary supplies, massively reducing economic losses.

Finally, food security issues are inexorably tied to agricultural policies. To provide nutritious food that is affordable for all, agriculture policy in the region will need to promote productivity growth while ensuring environmental sustainability.

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Another Casualty of COVID-19—Water Security in Asia and Pacific

Susantono Bambang,
Vice-President for Knowledge Management and Sustainable Development

The coronavirus disease (COVID-19) pandemic not only weakened economies and health systems, and resulted in human loss in the millions, but also widened existing gaps in realizing development targets on water security.

Water sector response has been particularly difficult for urban slums. Communal taps present high transmission risk of COVID-19.

The United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP) Progress Assessment shows that Asia and the Pacific is off track on achieving all of the Sustainable Development Goals (SDGs) by 2030. Among those is SDG-6, which targets the provision of universal access to safely and sustainably managed water and sanitation. Five of the six indicators for SDG6 that have credible estimates have barely reached the mid-point from the 2000 baseline.

The disease may not be water-borne, but proper handwashing is essential in preventing and controlling infection. COVID-19 has therefore also highlighted the importance of safe and adequate water services for hygiene, disinfection as well as for drinking.

Vulnerability in Asia and the Pacific

In Asia and the Pacific, the proportion of people without access to safe drinking water declined from 17.8% in 2000 to 6.3% in 2015. But water contamination and unequal access remain critical issues. During the same period, the proportion of people without access to safely managed sanitation declined from 48% to 35%, representing an additional 580 million people gaining access to safe sanitation. Regional disparities are still apparent with as many as 59% of people in South and South-West Asia still facing poor sanitation.

In a recent report, 22 out of the 49 developing member countries tracked for water security by the Asian Development Bank were found “insecure,” representing 2 billion people or about half of the region’s population.

Urban slums face their own particular water security challenges . For example, in India, an estimated 80% of the 7 million residents of Dharavi, Mumbai—the largest slum in Asia—have no running water. With inadequate distancing measures, long queues at communal taps present high transmission risk of COVID-19. In Pakistan, an estimated 34 million people who live in katchi abadis or urban informal settlements

pay for tankered water at exorbitant prices, which leads households to scrimp on water use including for handwashing. Low-income households in Penjaringan, Jakarta, resort to buying water from their neighbors, which is 40–60 times more expensive than subsidized piped water supply. The financial burden of spending as much as 36% of household budget on water is aggravated by the logistical challenges of sourcing water during a pandemic.

The pandemic's impact on the water sector has had significant gender implications. In many developing countries, women and girls are responsible for fetching water from communal sources or water vendors, potentially increasing their risk of COVID-19 exposure. Shared and poorly maintained sanitation facilities put women and girls at heightened risk of contracting COVID-19 as they manage their menstrual hygiene needs.

Asia and the Pacific is also the most disaster-affected region in the world, home to more than 40% of the globe's calamities and 84% of the people they affect. This adds another dimension to the region's water insecurity since many water utilities and resource managers in the region have been faced with dual challenges of dealing with COVID-19 and disasters, such as super cyclones Amphan and Yaas that hit South Asia in 2020 and 2021.

Uncertainties facing water service providers

Many governments have intervened to ensure the continuity of critical water services during the pandemic, in some cases providing direct financial support to water service providers. In the absence of government relief, the financial losses from the pandemic are borne by water service providers. Revenue decline is the single biggest financial impact to water service providers. This is due to the sharp decrease in commercial and industrial water consumption that may not be fully offset by the increase in household consumption. Even with increased household consumption, some utilities have been unable to collect payments from residential customers in part due to customer relief efforts. Prolonged uncertainty over how service providers will be compensated for losses incurred due to the pandemic—either through government transfers or increased customer tariffs—may lead to reduced capital and maintenance spending, as well as significant changes to operating and maintenance planning, in the future.

As long as the pandemic persists, full financial recovery (i.e., returning to pre-pandemic levels of financial health) for many service providers may not be possible. The resumption of some economic activities has partially increased water demand and revenues for service providers, but many are still operating at a loss.

Post-pandemic era

The post-pandemic recovery of the water sector will require a strong focus on preventing and responding to future health crises, and acceleration of universal access to water and sanitation.

In particular, governments and service providers must provide greater sanitation access. There are 369 million people in Asia and the Pacific without access to basic sanitation services, and the sanitation burden is borne disproportionately by the

poor and vulnerable. Designing safe, inclusive, sustainable, culturally sensitive, and resilient sanitation services present an investment opportunity not only for governments but also for the private sector.

Conventional sewerage implemented by wastewater service providers is not only costly, but also impractical in many instances. Citywide Inclusive Sanitation is an urban sanitation concept that ensures everyone has access to safely managed sanitation by embedding a range of services—both onsite and sewered, centralized, or decentralized—tailored for the realities of the world's burgeoning cities.

The water sector after the pandemic must have a thorough understanding of the vulnerabilities and risks facing all of its stakeholders, systems, and resources. Service providers must identify and assess the risks faced by marginalized and vulnerable groups within their ambit of service, and the risks to their resources – physical and human. This will help them manage their resources and understand the possible ways for extending critical services to presently unserved groups or areas, to prepare for more effective and efficient crisis response and management.

Extension of water supply services to the entire population and sustainable management of water resources entail employing both established and innovative approaches, including decentralization and digitalization. There are technologies that work more efficiently and are cheaper at low-scale applications. This is in contrast to the large economies of scale that water service providers and resources managers are typically configured for; in this way, decentralization offers the potential for equitable service provision, provides redundancy in the systems, and helps speed up the implementation of suitable water supply and sanitation services and localized water resource management.

Achieving resilience

Water services and resource management must be designed for sustainability and long-term resilience. Water is the primary medium through which we will feel the effects of climate change. The pronounced impacts of climate change on the water cycle also alter the operating parameters for many service providers and water resource managers in terms of supply and quality. Legacy systems are already at risk of failing to meet the demands of countries that experience rapid climate change such as Nepal and in the Pacific region. This does not bode well for developing countries that are intensifying investments in inflexible infrastructure, such as large multipurpose dams.

The pandemic also showed the need for water managers to be digitalized. Innovative technologies are available at affordable costs, that increase efficiency and bring resilience to both service providers and communities. Remote monitoring of quantity and quality of water, digitalized billing, and early warning systems to handle disasters, are a few examples. Adoption of technology has been slow in the water sector, despite evidence of its success across a wide range of applications. Demystifying the technology and demonstrating that users can choose the speed at which they implement it is key to its adoption.

Nature-based solutions (NBS) can support long-term sustainability by providing flexibility and adaptability to water service providers and managers. For

example, China’s “sponge city” design approach—a suite of integrated NBS and “green and blue” infrastructures that aim to enhance urban water management in major cities such as Beijing, Tianjin, Wuhan, and Shenzhen—is envisioned to improve water retention (to avoid flooding and increase local water supply) and water quality (for reduced pollution and potential decentralized water sources). As rapid urbanization and population growth sweeps across Asia and the Pacific, service providers must consider NBS and green design as components of healthy, livable, and resilient cities, in the immediate aftermath of the pandemic and beyond.

Toward a new normal for water sector

The postpandemic “new normal” of the water sector will require a strong focus on preventing and responding to future health crises, accelerating universal access to water and sanitation, and adopting digital technologies.

The “new normal” of the water sector must include a thorough understanding of the risks faced by vulnerable groups in society. Service providers must identify and assess the risks faced by marginalized and vulnerable groups. This will help them understand the possible ways for extending critical services to presently unserved groups or areas, as well as prepare for more effective and efficient crisis response and management. Achieving this will not only help prepare for any new pandemic, but will be key to tackling the bigger climate change challenge ahead.

ADB

Securing a Clean Energy Future for Asia and the Pacific

Robert Guild,
Chief Sector Officer, Sustainable Development and Climate Change Department;
Priyantha Wijayatunga,
Chief of the Energy Sector, Sustainable Development and Climate Change Department

Our new energy policy will help to promote an inclusive, equitable Asia and the Pacific while helping nurture and rebuild the fragile, imperiled natural world we share.

The message for the world from the recent COP26 meeting in Glasgow is clear – we must reduce greenhouse gas (GHG) emissions and one of the biggest sources is energy. But how do we balance the growing need for energy across Asia and the Pacific, with the imperative to reduce GHGs?

Recent spikes in energy prices—felt acutely in our region—are the latest reminder that past and current ways of production and consumption are unsustainable. However, despite considerable progress on energy access in recent years, 940 million people in our region still experience frequent interruptions, around 350 million remain without adequate supply while some 150 million have no access to electricity.

Now is the time for bold action and a future powered by diverse, renewable energy sources will be more equitable and prosperous for all. ADB's new policy announced last month, maps five main pathways to help our developing member countries transition to a brighter energy future.

The first, and among the most critical, is to continue electrifying underserved areas throughout the region to meet at least basic energy needs—a key step in eradicating extreme poverty and creating more equitable societies. Cleaner approaches to everyday living—lighting, cooking, heating, and cooling—will add up as their adoption spreads from household to household. ADB will promote a cleaner and more broadly accessible electric grid while also advocating for greater social inclusion and gender equality along the way.

Second, our updated policy reflects the unescapable truth that tackling climate change is the critical issue of our times. Every year our region is hit with extreme weather, with increasingly catastrophic and deadly effects. Agriculture, which many in the region depend on for their livelihoods, is threatened by floods and droughts. If global temperature increases are not constrained, parts of Asia and the Pacific may even become uninhabitable by humans due to extreme heat stress or saltwater inundation caused by sea level rises and storm surges. The culprit is greenhouse gas emissions and many of those come from energy.

To foster change, ADB will help its member countries improve energy efficiency, use more renewable and low-carbon energy, and integrate climate and disaster resilience into their energy sectors.

This means in India for example, we'll continue to scale-up our support to deploy smart meters, distributed solar photovoltaic systems, and e-vehicles, helping to reduce the country's emissions intensity as the economy grows. In the Pacific, we've ramped up preparations under an innovative renewable energy investment facility to deploy climate-adaptive floating solar technology and significantly expand access to sustainable power in 11 small Pacific Island countries.

And in Indonesia and the Philippines, our new energy policy provides a platform to phase out coal on an unprecedented scale. At COP26, we joined with those countries to launch the Southeast Asia Partnership for the Energy Transition Mechanism (ETM), which will incentivize the early retirement of coal-fired power plants and position Indonesia and the Philippines as pioneers in the low-carbon transition. Retiring half the coal fleet in those countries and in Viet Nam could potentially cut 200 million tons of carbon dioxide emissions per year – the equivalent of taking 61 million cars off the road. It would make ETM one of the biggest carbon reduction programs in the world.

In addition to phasing out existing coal facilities, we have also formalized our practice of not financing new coal-fired power and heating plants. While one policy cannot fit all countries, we will remain steadfast in our use of more sustainable energy sources while working to ease the impact of change on affected workers and communities.

Third, smart energy policy also means smart governance. ADB will help create the strong frameworks needed as the sector moves away from a traditional, more centralized environment. That means we'll serve as a knowledge hub to provide country-specific technical support while broadly sharing best emerging practices, innovations, and green technologies. We will also continue to advocate for the good governance of institutions and companies within the sector.

Fourth, just as environmental impacts transcend political boundaries, ADB will work to embrace and promote more regional cooperation and integration in the energy sector too. The impact of innovative ideas and strategies can be greatly magnified when shared from country to country. So can investment strategies that embrace a broader electricity network infrastructure, as well as the building of regional energy markets. This should result in lower costs, reduced greenhouse emissions, and an energy grid made more secure thanks to its diversity.

Finally, we'll continue to invest in green bonds, use a range of financing mechanisms, and align our lending with progressive policies across all aspects of our work, with the overarching goal of a more sustainable future always at the forefront. We'll work hard to make more concessional financing available and stimulate private sector investment to back our members' ambitions.

Our updated policy builds on our demonstrated commitment to the energy sector, with more than $42 billion in financing contributed over the past decade. But neither we nor any one actor can shape a more resilient future alone—and commercial

financing will be critical to success. Recently, we have raised our ambition to deliver $100 billion in total climate financing from our own resources in 2019-2030, up $20 billion from a commitment made just three years ago. And, of ADB's total projects, at least 75% will feature climate adaptation and mitigation initiatives.

Too often in the past, the laudable goal of expanding energy systems came at the expense of our environment. We can and must do more to secure energy access while placing sustainability at the center of our efforts. Our new energy policy will help to promote an inclusive, equitable Asia and the Pacific while helping nurture and rebuild the fragile, imperiled natural world we share.

ADB

The World's Struggling Supply Chains Need Greater Transparency to Speed Recovery

Steven Beck,
Head of ADB's Trade and Supply Chain Finance Program

Greater transparency is required to make global trade and supply chains more reliable and to ensure sustainability and social standards are met. But that is easier said than done.

Current blockages in some supply chains are raising questions about the complexity and importance of these networks.

Supply chain transparency has wide ranging benefits for society, not just consumers.

Is a given supply chain robust enough to keep operating through a crisis, or even through a minor strain in the chain? Are workers throughout the chain treated fairly? Do all companies in a chain maintain proper environmental standards? In too many cases, answers to these and similar questions are often unobtainable at the moment.

We lack the tools and mechanisms to fix supply chains and ensure environmental and social standards are met in global trade and supply chains. Without a clear understanding of supply chains, without the ability to map every component part of the production and distribution process, the public and private sectors cannot identify and address bottlenecks that impede the efficient production and delivery of critical goods. Nor can we verify and monitor if environmental and social standards are being met.

Digitalization is key. To that end, the ADB-backed Digital Standards Initiative is bringing together disparate global efforts to develop and adopt the standards and protocols needed to drive inter-operability and create seamless trade and supply chains, from exporters, shippers, ports, customs, and warehousing to importers and distributors. The initiative is also encouraging governments to adopt UN model laws to recognize electronic documents.

The digitalization of global trade and supply chains underpins our ability fix supply chains and ensure environmental and social standards, but it isn't a solution to those problems itself. It just creates the platform that will allow us to address the issues.

There are various efforts underway to address environmental and social issues in supply chains. While environmental standards are still in a development phase, international labor standards, for example, are relatively well developed and codified in law. But how do we verify and monitor standards throughout the long and complex supply chain?

A 2016 study by McKinsey estimated that meeting the Paris Agreement goals

would mean that consumer goods companies growing at current rates would have to lower their carbon intensity by more than 90% by 2050. It estimated that more than 80% of greenhouse-gas emissions and more than 90% of the impact the operations of those companies had on air, land, water, biodiversity, and geological resources came from their supply chains.

If we don't make global supply chains green, we won't meet the Paris targets. And consumers want no part of products associated with the poor treatment of workers. Transparency, underpinned by digitalization, throughout supply chains will help verify that supply chains are green, and workers treated fairly, but we need more innovation, new mechanisms, and tools to help verify and monitor those standards.

ome efforts have begun to tackle these problems. In agriculture and other outdoor production, satellites can be used to monitor environmental issues. For production that takes place indoors, a company called Halo is experimenting with systems for workers to relay confidential information about their safety and welfare. Another company, Everledger, is encoding goods to help track them through supply chains.

The private sector needs to develop new techniques, tools, and mechanisms to monitor and verify compliance with environmental and social standards.

The use of technology to monitor and verify compliance will become a self-reinforcing benefit to regulators, financial institutions, consumers, and supply chain participants themselves. The data gathered will not only be useful in maintaining proper standards but will also promote efficiencies and improvements in ways we can't even imagine now.

The public and private sector, as well as academia, need to work together to come up with ways to drive the transparency that will make global supply chains more robust and secure, and ensure social and environmental standards. In particular, answers are needed to questions about how supply chains can be better mapped; what tools currently exist, and where are there gaps in our ability to monitor and verify environmental and social standards in global supply chains; and how we can encourage more innovation.

Our team at ADB is publishing a directory of services offered by companies to map and verify key supply chain transparency issues. This will help understand the landscape and where we need to enhance innovation. A virtual meeting is planned for March 2022 to expand on these issues and map out next steps.

Improving supply chains isn't just a matter of clearing up shortages that have been affecting consumers during the pandemic, it is vital to progress on some of the biggest issues we face as a society.

ADB

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Mr. Beck has managed the exponential growth of ADB's Trade Finance Program, and implemented its first supply chain finance business. Prior to joining ADB,

he worked for the Canadian Imperial Bank of Commerce and was an advisor to the Canadian Minister of Finance. Mr. Beck played a key role in the start-up of the Black Sea Trade and Development Bank, and was a consultant for USAID in Southern Africa and for a start-up financial institution in Armenia. Mr. Beck is on the Advisory Board of the International Chamber of Commerce Banking Commission, and a member of the WTO Working Group for Trade Finance.

Enhancing Intraregional Cooperation Could Help Build a More Prosperous, Resilient, and Peaceful Asia

Wilhelmina T. Paz,
Economist, Regional Cooperation Team, Sustainable Development and Climate Change Department, ADB

The Greater Mekong Subregion, which surrounds the Mekong River, is working to expand its regional cooperation efforts. Photo: Ren Pisal

Subregional initiatives in Asia, such as ASEAN, GMS, CAREC and SASEC need to overcome economic and political stumbling blocks to extend cooperation more broadly and not miss opportunities for economic recovery and greater resilience.

Over the last half century, Asia has been one of the most economically vibrant regions in the world. Asian countries have worked together to build strong and resilient economies that have lifted millions out of poverty.

These efforts have included the creation of economic cooperation initiatives within the region. Often called "subregions," these areas brought together neighboring countries bound by close historical, cultural, or ethnic ties to collectively respond to common needs and challenges. These include the Association of Southeast Asian Nations (ASEAN), Greater Mekong Subregion (GMS), Central Asia Regional Economic Cooperation (CAREC), South Asian Association for Regional Cooperation, and the South Asia Subregion Economic Cooperation (SASEC) initiatives.

The proliferation of such initiatives reflects Asia's multi-track, multi-speed approach to cooperation. It also reflects Asia's "bottom-up" approach to integration as opposed to Europe's "top-down" or "institution-led" approach. Given the diversity in the region, these initiatives have proceeded at their own pace and focused on what they consider to be the more important challenges facing their specific groupings.

Over the last two decades. CAREC and SASEC have mobilized almost $40 billion and $14 billion, respectively, in investments for transportation networks, trade facilitation, economic corridor development, and energy trade and security. Since its establishment in 1992, the GMS has mobilized over $20 billion for regional projects in agriculture, energy, environment, health, tourism, and transport and trade facilitation, among others.

Trade between GMS countries has risen from $26 billion in 2000 to $639 billion in 2020. Significant progress has been made in communicable disease control, biodiversity protection, and climate change impact mitigation in the subregion. While

CAREC and SASEC countries are less integrated regionally, constraints such as high trade costs and delays at the borders are being addressed through enhanced customs cooperation, coordination of border crossing clearance procedures, and improved infrastructure for border-crossing points. In these three subregions, energy security and reliability has improved through enhanced cross-border power transmission connectivity.

More recently, countries in the region have made efforts to cooperate with those outside of their own subregions to explore economic opportunities. The Act East Policy of India, the upgraded version of its Look East Policy launched in the early 1990s, aims to develop connectivity and trade links between Southeast Asia and India's North Eastern region, serving as a gateway for tourism, foreign investments, and natural resource exports to Southeast Asia. Efforts are also being made to enhance maritime and digital connectivity between South Asia and Southeast Asia.

Cooperation in transport and energy infrastructure connectivity has been complemented by trade and investment agreements, trade facilitation measures, and sharing of best practices. The Regional Comprehensive Economic Partnership agreement, the world's biggest trade agreement, covering ASEAN plus Australia, the People's Republic of China, Japan, Republic of Korea, and New Zealand is set to take effect in January 2022. The Comprehensive and Progressive Agreement for Trans-Pacific Partnership, signed in 2018, is another mega free trade agreement covering Asian countries and beyond.

By extending cooperation beyond one's own subregion, Asian countries are able to tap more markets especially in times of global recessions when domestic, regional, and inter-regional market demand is crucial for sustained economic growth. More efficient regional value chains are developed through expanded sources of lower priced inputs. Economic corridors which serve as growth points by lowering transport costs are extended across the region.

Trade and investments and labor mobility between subregions could also help reduce inequalities in Asia. And through sharing of experiences and best practices, countries are able to help other parts of the region to fulfill their commitments to global treaties, goals, and standards such as the United Nation's Sustainable Development Goals, WTO's Trade Facilitation Agreement, the World Custom's Organization's Revised Kyoto Convention, the Paris Agreement, and the Conference of the Parties to the UN Framework Convention on Climate Change.

The COVID-19 pandemic has underscored the importance of cooperation beyond one's immediate neighbors to ease movement of food and medical goods (including vaccines), help revive the vibrancy of regional value chains, and hasten tourism revival through increased cooperation in health monitoring and surveillance and harmonizing health protocols, for example.

Cooperation between subregions facilitates more open regionalism that serves the Asian region well and promotes peace and stability which is crucial for sustained regional growth and development.

Countries in the region should explore such extended cooperation, given its potential benefits. Formalizing cooperation between subregions, however, may be

challenging. The hesitation of groups of countries or countries that are non-homogenous to engage formally in such cooperation stems from various economic and political reasons. Participating countries and subregions have to be convinced that extending cooperation could bring net economic gains to all. Trust is crucial.

Notwithstanding these challenges, countries in Asia can initiate efforts to cooperate beyond their own subregions. For starters, members of different subregional programs could get together for dialogues and experience sharing to identify areas where they could benefit most from cooperation. Such areas may include tourism, health, small and medium sized-enterprise trade, digital trade, and migration-areas that need focus to help countries recover from the COVID-19 crisis.

Assessments of the benefits of cooperation between subregions need to be encouraged as they would provide strong justification for pursuing cooperation.

Countries in the region need to be more open and willing to overcome economic and political stumbling blocks to extending cooperation beyond one's own subregion so as not to miss opportunities for economic recovery, greater resilience, and prosperity and peace in Asia in the years to come.

ADB

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Mina has over 30 years of work experience in the Asian Development Bank (ADB), with the last 20 years focused on regional cooperation and integration, and the preceding 10 years on economic research in various areas of Asian economic growth and development. Prior to joining ADB, she was a teaching fellow, lecturer, and research assistant at the University of the Philippines School of Economics.

Five Ways Tech Startups Are Different from Other Small and Medium-Sized Enterprises

Aimee Hampel-Milagrosa,
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Though there are many similarities between tech startups and other small businesses, they need to be treated differently from a policy and regulatory standpoint.

Technology-based startups are the rage. They are the enterprises of the digital age and precursors to some of the largest firms domestically and globally. Google, Amazon, Alibaba, and Gojek are famous examples. Startups are dynamic and innovative. They start small and thus begin life as small and medium-sized enterprises (SMEs). But they are different from traditional SMEs and require a distinct set of supports from government and other players.

Tech startups need incentives and policies tailored for their unique circumstances.

Tech startups are young entrepreneurial ventures that bring new and innovative technology-based products and services to market. They offer solutions to consumers and businesses; often to problems we didn't know existed. The business model is normally scalable, meaning activity can expand rapidly because solutions are offered on the internet and can reach a large customer base. In Schumpeterian terms, startups are creatively disruptive as they shake up the business world through innovative services and new business models.

Revolutionary startups like Tesla and SpaceX aside, startups are heavy on skills and light on physical assets because they don't make physical products. They recruit bright people with valuable skills and create opportunities for them to innovate and add value to the enterprise. Entrepreneurs – founders, as they are called – think big and are determined to see their ideas grow.

Startups make up a very small portion of the SME population. By one estimate, 213 million SMEs operated globally in 2020, of which 1.35 million (less than 1%) were tech startups. However, due to their potential to grow large and the innovation they bring, they garner the attention of policymakers. They are different from traditional SMEs and require a distinct set of policy and program support from government and the wider startup ecosystem.

We believe there are five major differences between startups and SMEs and the implications for policy.

First, most tech startups are digital. They concentrate on internet and platform

technologies and have spawned a range of new sectors – fintech, e-commerce, agritech, greentech, and others. Recently, the COVID-19 pandemic has given a big push to healthtech (telemedicine, wellness), edutech (online learning) and solutions that support business communications (telemeeting and conferencing). For policy, government needs to provide or encourage private players to provide a robust digital infrastructure that is accessible and low-cost and yet protects privacy and intellectual property.

Second, startups need patient capital – not credit. The latter must be serviced through interest and repayments, but early-stage startups have little or no revenue. They are focused on prototyping and development and many – even successful ones – run at a loss for many years. In contrast, SMEs require finance that directly supports production (capital equipment, supplies, inventory) which, in turn, generates revenue. Therefore, equity and grant financing are more suitable for startups. Equity is provided for the longer term and therefore is considered more "patient".

Recognizing this difference, governments can create a clear, supportive, and low-tax regulatory environment for venture capital and angel investors. They can also top up private venture capital for co-investment. In addition, early-stage grant funding can be provided for promising ideas. Many governments do provide grants, although there is debate about whether it is a good approach.

Third, startups need early support services. Silicon Valley, New York, London, Beijing, and Boston are the world's top five startup ecosystems not only because they provide superb digital infrastructure and venture finance, but also because they support easy access to legal, accounting, human resource management, and other services. Startups register businesses on the get go and need these elements settled early so that they can scale up quickly. Legal guidance is also needed to register innovative solutions where no product classification category yet exists.

Fourth, the technology talent of startups need support on business development from incubators and accelerators. A startup begins with an innovative idea from founders who are creative with technology. However, they are often inexperienced in how to run a business. The idea needs to be shaped into a marketable product and a profit-making enterprise. For this, incubators and accelerators are important. They are programs – sometimes also providing workspace – that offer advice, training, networking, and mentoring. Some offer seed funding while others provide links to potential investors. Incubators and accelerators help startups experiment, get feedback on their technology, and rapidly iterate new versions better suited to the market. Governments can establish (or financially support) incubators and accelerators and recognize that they are distinct from the business development services needed by SMEs.

Fifth, tech startups need skilled talent. Owing to their digital nature, startups require staff with expertise in science, technology, engineering, and mathematics (STEM). Talent acquisition is a key challenge for startups, prompting the need for governments to provide educational opportunities to generate a stream of skilled graduates. The constraints are not only on the supply side. Strict immigration rules, stiff competition for talent with large firms, and the high cost of living in tech hubs are issues that also arise. Innovative policies that make it easier for tech startups to attract talent – such as relaxed immigration laws, and favorable tax treatment of employee benefits –

are creative ways to create an enabling startup ecosystem.

Governments should continue to support SMEs for the important contribution they make to the economy. Concurrently, policymakers can build a supportive ecosystem to address the unique challenges faced by tech startups.

ADB

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Aimee is an economist with over a decade of experience in private sector development and agri-food value chains. Prior to joining ADB, where she started working on urban development and water supply and sanitation, Aimee was a Senior Researcher at the German Development Institute and a Senior Researcher at the Center for Development Research at the University of Bonn.

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Paul is fascinated by the process of economic development and how some countries are rich and others remain poor. His specific research interests include industrialization, human capital development, enterprise finance, and the labor market. He taught in the United Kingdom and India before joining ADB in 2010. For two years he was seconded to ADB Institute in Tokyo and later took temporary leave to teach in Thailand. His doctorate is from the School of Oriental and African Studies in London. He supports Liverpool Football Club.

Learning Losses from COVID-19 Could Cost this Generation of Students Close to $17 Trillion in Lifetime Earnings

This generation of students now risks losing $17 trillion in lifetime earnings in present value, or about 14 percent of today's global GDP, as a result of COVID-19 pandemic-related school closures, according to a new report published today by the World Bank, UNESCO, and UNICEF. The new projection reveals that the impact is more severe than previously thought, and far exceeds the $10 trillion estimates released in 2020.

In addition, The State of the Global Education Crisis: A Path to Recovery report shows that in low- and middle-income countries, the share of children living in Learning Poverty – already 53 percent before the pandemic – could potentially reach 70 percent given the long school closures and the ineffectiveness of remote learning to ensure full learning continuity during school closures.

"The COVID-19 crisis brought education systems across the world to a halt," said Jaime Saavedra, World Bank Global Director for Education. "Now, 21 months later, schools remain closed for millions of children, and others may never return to school. The loss of learning that many children are experiencing is morally unacceptable. And the potential increase of Learning Poverty might have a devastating impact on future productivity, earnings, and well-being for this generation of children and youth, their families, and the world's economies."

Simulations estimating that school closures resulted in significant learning losses are now being corroborated by real data. For example, regional evidence from Brazil, Pakistan, rural India, South Africa, and Mexico, among others, show substantial losses in math and reading. Analysis shows that in some countries, on average, learning losses are roughly proportional to the length of the closures. However, there was great heterogeneity across countries and by subject, students' socioeconomic status, gender, and grade level. For example, results from two states in Mexico show significant learning losses in reading and in math for students aged 10-15. The estimated learning losses were greater in math than reading, and affected younger learners, students from low-income backgrounds, as well as girls disproportionately.

Barring a few exceptions, the general trends from emerging evidence around the world align with the findings from Mexico, suggesting that the crisis has exacerbated inequities in education:

- Children from low-income households, children with disabilities, and girls were less likely to access remote learning than their peers. This was often due to lack of accessible technologies and the availability of electricity, connectivity, and devices, as well as discrimination and gender norms.
- Younger students had less access to remote learning and were more affected by learning loss than older students, especially among pre-

school age children in pivotal learning and development stages.

- The detrimental impact on learning has disproportionately affected the most marginalized or vulnerable. Learning losses were greater for students of lower socioeconomic status in countries like Ghana, Mexico, and Pakistan.
- Initial evidence points to larger losses among girls, as they are quickly losing the protection that schools and learning offers to their well-being and life chances.

"The COVID-19 pandemic shut down schools across the world, disrupting education for 1.6 billion students at its peak, and exacerbated the gender divide. In some countries, we're seeing greater learning losses among girls and an increase in their risk of facing child labor, gender-based violence, early marriage, and pregnancy. To stem the scars on this generation, we must reopen schools and keep them open, target outreach to return learners to school, and accelerate learning recovery," said UNICEF Director of Education Robert Jenkins.

The report highlights that, to date, less than 3 percent of governments' stimulus packages have been allocated to education. Much more funding will be needed for immediate learning recovery. The report also notes that while nearly every country in the world offered remote learning opportunities for students, the quality and reach of such initiatives differed – in most cases, they offered, at best, a rather partial substitute for in-person instruction. More than 200 million learners live in low- and lower middle-income countries that are unprepared to deploy remote learning during emergency school closures.

Reopening schools must remain a top and urgent priority globally to stem and reverse learning losses. Countries should put in place Learning Recovery Programs with the objective of assuring that students of this generation attain at least the same competencies of the previous generation. Programs must cover three key lines of action to recover learning: 1) consolidating the curriculum; 2) extending instructional time; and 3) improving the efficiency of learning.

In terms of improving the efficiency of learning, techniques like targeted instruction can help learning recovery, which means that teachers align instruction to the learning level of students, rather than an assumed starting point or curricular expectation. Targeted instruction will require addressing the learning data crisis by assessing students' learning levels. It also necessitates additional support to teachers so that they are well-equipped to teach to the level of where children are, which is crucial to prevent losses from accumulating once children are back in school.

"We are committed to supporting governments more generally with their COVID response through the Mission Recovery plan launched earlier this year," emphasized Stefania Giannini, UNESCO Assistant Director-General for Education. "With government leadership and support from the international community, there is a great deal that can be done to make systems more equitable, efficient, and resilient, capitalizing on lessons learned throughout the pandemic and on increasing investments.

But to do that, we must make children and youth a real priority amidst all the other demands of the pandemic response. Their future – and our collective future – depends on it."

To build more resilient education systems for the long-term, countries should consider:

- Investing in the enabling environment to unlock the potential of digital learning opportunities for all students.
- Reinforcing the role of parents, families, and communities in children's learning.
- Ensuring teachers have support and access to high-quality professional development opportunities.
- Increasing the share of education in the national budget allocation of stimulus packages.

This report was produced as part of the Mission: Recovering Education 2021 by which the World Bank, UNESCO, and UNICEF are focused on three priorities: bringing all children back to schools, recovering learning losses, and preparing and supporting teachers.

For more information, please visit: https://www.worldbank.org/en/topic/education/publication/the-state-of-the-global-education-crisis-a-path-to-recovery

World Bank

What Does Globalization Look Like in a Post-Pandemic World?

Nicolas Lamp,
Associate Professor of Law at Queen's University

Businesses now think about supply chains differently. The key narrative that has emerged in response to the pandemic focuses on the importance of resilience. Photo: Getty Images

The global economy is emerging from the pandemic with global supply chains in disarray and companies struggling to source products from around the world. In his new book with Anthea Roberts, Six Faces of Globalization, professor Nicolas Lamp argues that there is no longer a single narrative to describe globalization, but multiple. BRINK began by asking him how the pandemic has changed the nature of globalization.

LAMP: I don't think the pandemic has changed the fact that we live in a globalized world. We will continue to have global supply chains. But there's no question that we now think about those supply chains differently. The key narrative that has emerged in response to the pandemic focuses on the importance of resilience.

Resilience Is the New Ingredient

I believe that what we are going to see is a more balanced form of globalization, which balances the benefits of efficiency, of just-in-time supply chains and specialization, with the value of resilience.

There will be an awareness that it can't always be the cheapest option, it can't always be the quickest option, that sometimes we have to accept redundancies and make long-term investments, even if they are expensive.

We have to keep in mind that there are many different ways of achieving resilience. As defenders of globalization have pointed out, if you concentrate production at home, that could also be a danger to resilience. What's happening in the United Kingdom right now is a striking illustration of how a lack of openness to the outside world can undermine your resilience.

With a hard Brexit, the United Kingdom has made a big bet on domestic workers and has foreclosed the option of relying on workers from the European Union. Now it's experiencing the consequences. Concentration is a problem for resilience, no matter whether you're dependent on foreign or domestic suppliers.

We need to get away from the idea that resilience can only be achieved through reshoring. Often, it will simply not be practical to reshore the production of most of the goods that we purchase. Maybe the United States and European Union can build their

own semiconductor industries. But you see the sums that are involved: $50 billion in the case of the United States, $20 billion in the case of the European Union, which is probably not going to be enough. For most countries, that is simply not in the cards.

Don't Rely On a Single Narrative

BRINK: The book is about six different perceptions of globalization. So which is on the ascendant and which isn't?

LAMP: It depends very much on the context. We don't have a clearly dominant narrative, but rather different narratives in contestation, and our message to policymakers is that when you're dealing with complex issues such as globalization, trade, climate change, the response to the pandemic, it's dangerous to rely on a single narrative and to design policies on the basis of that narrative.

You need to look at your policy from the angle of all the different narratives and try to attend to the concerns of all the narratives if you want to have a policy that is going to stand the test of time and is not going to go down in flames.

Take President Emmanuel Macron's diesel tax as an example in France. It made perfect sense from a sustainability perspective, and also from the perspective of what we call the establishment narrative, which favors market-based solutions.

But President Macron did not consider how the tax would be perceived by those who subscribe to the populist narratives, who saw the tax as an attack on people living in the countryside that did not impose any burdens on city-dwelling elites. And soon enough, President Macron had the "yellow vest" protests on his hands.

BRINK: Would you say that there is a corporate narrative of globalization?

LAMP: That's a great question. Corporations are using these different narratives when it suits their interests. Perhaps the best example is when Facebook and the tech companies were being subjected to scrutiny because of antitrust and other regulatory concerns. One reaction was to say, "Well, look, the Chinese government is working together with its tech companies and supporting its tech companies. We also need to be team USA in order to be able to confront team China." That argument, of course, doesn't work as well anymore, since China cracked down on its own tech companies. But there was definitely an attempt to deflect attention from the role of corporations by reframing the issue as one of geo-economic competition.

BRINK: You talk about a corporate power narrative. Can you explain what you mean by that?

LAMP: The corporate power narrative is a narrative that identifies corporations as key actors in globalization and juxtaposes them with a transnational working class.

The argument here is that workers in different countries are in the same boat, and it's the corporations who are taking advantage of workers everywhere. This narrative tries to rebut the perspective of former President Trump and other right-wing

populists, who argue, for example, that Mexican and U.S. workers are in competition.

The corporate power narrative that was put forward by American and Canadian trade unions was very different: It said that the real fault is not with Mexican workers, the real fault is with corporations. When the corporations take the jobs to Mexico, they pay the Mexican workers poverty wages, which don't reflect the productivity of those workers. So they're screwing both the workers in Canada and the U.S. who are losing their jobs, as well as the Mexican workers who are not being fairly rewarded for their work.

BRINK: Will this debate ever be resolved, one way or the other?

LAMP: I don't think the contestation between the narratives will ever be resolved. What may change is the focus of the debate. In recent years, the globalized world has been the meta-narrative of our time.

But there is a possibility that other issues become the center of our attention — the pandemic provided an example. When the pandemic started to dominate public life, all the narratives that we were studying suddenly became narratives about the pandemic and what should be done about it.

There are two other topics that might become the center of these debates. One is climate change. We consider the possibility that globalization becomes a sideshow, and the real debates on which these narratives focus is what to do and how to deal with climate change.

And the other potentially all-encompassing meta-narrative could be U.S.-China geopolitical competition, where suddenly everything becomes about the U.S.-China relationship, just as the Cold War dominated public debate in the second half of the 20th century. If that becomes the dominant frame, then the narratives will tell different stories about that issue.

So we don't think the debate is going to be resolved, but our aim is to make the debate based on a better understanding of different types of views and pave the way to develop policies that integrate concerns from the different narratives and obtain a broader base of consensus.

Brink News

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Nicolas Lamp is an associate professor of law at Queen's University in Canada. Prior to joining Queen's, Lamp worked as a dispute settlement lawyer at the Appellate Body Secretariat of the World Trade Organization, where he advised the members of the Appellate Body on legal issues arising in appellate proceedings under the WTO's dispute settlement mechanism. He also co-authored (with Anthea Roberts) the book "Six Faces of Globalization: Who Wins, Who Loses, and Why It Matters."

Conflict-Fueled Surge in Food Prices to Hit Poorer Nations Hardest

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Global food prices are poised to keep climbing even after jumping to a record in February, placing the heaviest burden on vulnerable populations while adding to headwinds for the global economic recovery.

A woman sells strawberries in Mahalla el-Kubra, Egypt. Rising food prices fueled by Russia's invasion of Ukraine—particularly high wheat prices—will hit countries like Egypt the hardest. Photo: Carsten Koall/Getty Images

Food commodity prices rose 23.1% last year, the fastest pace in more than a decade, according to inflation-adjusted figures from the United Nations Food and Agriculture Organization. February's reading was the highest since 1961 for the gauge tracking prices for meat, dairy, cereals, oils, and sugar.

Now, the crisis in Ukraine and sanctions on Russia are upending shipments and possibly production for two of the world's largest agricultural producers. The two countries account for nearly 30% of world wheat exports and 18% of corn, most of which is shipped through Black Sea ports that are now closed. Wheat futures traded in Chicago, the global benchmark, recently rose to a record.

Lower-Income Households Are Impacted Most

The below chart shows how price shocks will have a worldwide impact, especially on poor households for whom food is a higher share of expenses. Food costs account for 17% of consumer spending in advanced economies, but 40% in sub-Saharan Africa. Though this region is highly import-dependent for wheat, the grain constitutes only a minor share of the total caloric needs.

Differences in diet are also significant. In Europe, where bread is deeply embedded in many aspects of its culture, wheat makes up about a quarter of diets. In Southeast Asia, wheat accounts for only 7% versus 42% for rice, for which price increases so far have been relatively contained. Country-level averages, however, mask substantial differences within nations as poor households tend to eat more cereals but less meat, vegetables, and fruits compared with middle-income households.

Will the US and China Intervene?

Eating expenses

Consumers in countries with lower incomes spend more on food and are most affected when those prices rise.

Food's share of consumer price index
(percent)

Food prices index
(Sep 2021=100)

Source: Haver Analytics, Bloomberg LP and IMF staff calculations

IMF

Finally, disruption may be even greater for countries with close trade links to Russia and Ukraine, including in Eastern Europe, the Caucasus, and Central Asia. High wheat prices will weigh even more on economies in the Middle East and North Africa, such as Egypt, which are especially reliant on Russian exports.

Looking forward, reduced fertilizer supplies and higher oil prices will increase costs for harvesting, transporting and processing food. Policymakers must prevent those pressures from fueling food insecurity by avoiding protectionism and increasing social assistance for the poorest.

The world may also call upon the two largest economies if the situation worsens. In the United States, where about 40% of corn production goes to ethanol, policymakers could reassess that use. And China, which holds more than half of global wheat and corn reserves, could consider releasing supplies to lower prices.

A version of this article originally appeared in the IMF Blog.

Brink News

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Christian Bogmans is an economist in the IMF's Research Department (Commodities Unit). His main research interests are in the fields of environmental and energy economics and international trade, with an emphasis on the relationship between trade, natural resources, and the environment. Before joining the IMF, he was a lecturer (assistant professor) at the University of Birmingham in the UK. He holds a PhD in economics from Tilburg University.

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The Last Mile Is Determining E-Commerce's Winners

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An employee chooses the right size box before packing a parcel at the Amazon fulfillment center in Castel San Giovanni, Italy. Photo: Emanuele Cremaschi/Getty Images

Italian parcel delivery is one of the fastest-growing markets in Europe with a compound annual growth rate of 8.5% over the last five years. Behind the steady expansion is an explosion of e-commerce, fostered by the global economy's ongoing digital transformation and an additional push from the COVID-19 pandemic, which prompted consumers to purchase online to avoid in-store shopping. The next five years should see even faster growth, with projections for 11% year-over-year increases per annum.

At the same time, the exponential expansion in volume has brought its share of disruption and unprecedented challenges to traditional shippers and online sellers. In particular, it has changed their relationship with end customers, who now require a higher level of service because they rely on parcel delivery for more and increasingly immediate needs. Being able to meet those demands has become a competitive edge for players looking to increase their share of the market.

What's playing out in the Italian parcel delivery market is being seen around the globe as consumers are looking to online shopping to satisfy an ever bigger percentage of their consumption.

E-Commerce Behind Parcel Market Growth

Digitization, globalization, the COVID-19 pandemic and the growth of online customer segments all came together to fuel the dramatic growth in e-commerce and, ultimately, the pressure on the parcel market. During the COVID-19 pandemic, the volume of business-to-consumer (B2C) e-commerce saw a large jump of more than 25%.

Another big COVID e-commerce surprise was the tremendous spike in so-called C2C, standing for consumer-to-consumer or customer-to-customer. It's the ultimate circular economy in action where consumers sell used goods to each other on internet platforms. This retail segment boomed during the lockdown, as consumers

faced economic uncertainty and more time on their hands to think about recycling things they no longer needed or wanted. New enterprises sprung up around the second-hand market, such as Vinted and Wallapop, and gained momentum across Europe. Their popularity is forcing eBay and other more traditional resale online platforms to up their game.

But none of this expansion would have been possible without the sophisticated parcel delivery and logistics systems that have been developed in recent years to support ever bigger e-commerce volumes. And with this most recent spike, they have been put to the test.

Pulling the Parcel Delivery Lever

Customers have been demanding higher levels of service the more reliant they become on online shopping. In a short amount of time, it became standard for customers in urban areas to expect and get same-day or next-day delivery, user-friendly package tracking and the ability to change delivery locations in real time. Customers wanted what they wanted, when they wanted it and where they wanted it.

E-commerce had to leverage parcel delivery services to meet customer needs and increase perceived quality. That meant parcel delivery became a point of differentiation — those companies that could meet customer needs best and those that couldn't. The heightened service made shopping for almost anything easier and more convenient, and customers who are now used to this time-saving approach to errands are unlikely to go back.

Here's a checklist of what best-in-class European carriers are expected to provide: competitive prices, a tracking system, high-quality customer care support and fast delivery that, if not same-day or next-day, has to be complete within a few days. As a result, carriers must excel in peak management and last-mile operations to cope with increasing volume demand and volatility and optimize capacity, flexibility and delivery speed.

Efficiency and Emissions Reduction

Sustainability and innovation are becoming driving forces for improved courier service process efficiency. As a response to public demand and client and investor concerns, many leading logistics companies and small, new specialized players in Europe are setting ambitious carbon dioxide reduction targets. The ambition for most leading logistics companies is to be fully carbon free by 2040.

That means adopting even more green mobility solutions, space optimization techniques, smart warehouses and last-mile delivery strategies that achieve economies of scale and make a parcel market's supply chain more efficient. Already, there's growing electrification of the parcel delivery fleet with more hybrid and electric vehicles and an increased use of biofuels. While the development of e-commerce, shifts in customer preferences and increasing focus on sustainability may be posing unprecedented challenges, they are also creating potentially lucrative opportunities for carriers that keep up with this fast-changing world. The competition will be intense

from lean e-commerce newcomers, and traditional logistics service providers — not necessarily known for lean operations and flexibility — will need to better capitalize on the advantages they have through not easily matched networks.

At the moment, the new and traditional players need each other, but it will soon become evident that this is an unstable equilibrium. Parcel delivery incumbents should begin diversifying customer portfolios now to reduce their dependence on a few large e-commerce players.

Success will not be achieved by choosing one path or another. The ultimate winners will be those with the flexibility to address demands for both guaranteed fast and traceable delivery and full-scale decarbonization.

Brink News

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To ease ASEAN's import dependency, strengthen intra-ASEAN trade

Stewart Paterson,
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As China's cost base has risen and it looks to move up the value chain, an opportunity will arise for some Southeast Asian economies to replace China – a trend accelerated by the trade war and geopolitical tensions. However, breaking the dependency on China will involve a far higher degree of vertical integration and intra-ASEAN connectivity.

There are few parts of the world that have a stronger interest in protecting and deepening the rules-based multilateral trading system than Southeast Asia. Home to more than 600 million people and boasting a combined GDP of US$ 3 trillion – that's 3.5% of the world economy – ASEAN's ten member states also have among the world's highest trade intensity. The average trade to GDP ratio is approximately 90%, compared to a world average of 45%. Consequently, ASEAN member states account for about 7.8% of global trade.

Two explanations account for the trade intensity. Except for Indonesia, each country is of insufficient size to sustain the full range of industries that support a modern economy. For many nations in the region, productivity improvement through specialization is an effective route to economic growth. Therefore, Thailand has developed into an auto manufacturing center. Singapore is the hub for financial services and trans-shipment. The Philippines has fostered a comparative advantage in business process outsourcing. Malaysia has cultivated its semiconductor industry. And Vietnam has created industrial clusters for textile manufacturing and mobile phone production.

Secondly, ASEAN member states, at the forefront of the early wave of globalization, attracted significant amounts of export-orientated foreign direct investment (FDI). According to the United Nations Conference on Trade and Development (UNCTAD), the stock of inbound FDI in the ASEAN countries has reached US$ 2.9 trillion in 2020 – equivalent to 95% of the combined GDP of the ten member states.

Meanwhile, the economic rise of China looms large. China's rise has impacted the region in two conflicting ways. While China's growth has been a source of demand for ASEAN products, its dominance in manufacturing has also provided stiff competition, both domestically and in third markets. The second of these factors has been more prominent. On balance, China's growth may hinder rather than promote Southeast Asia's economic performance.

Compare, for example, China's GDP in 1994, then equal to the combined GDP of the ASEAN member states, with the current size of China's economy, which is five times larger than ASEAN's. Then compare the growth of manufacturing value-added. China's global market share has risen from just 6% in 2001 – when it joined the World Trade Organization – to 28% in 2020. In contrast, ASEAN's share of manufacturing

value-added in 2020 is only 4.4%. Twenty years earlier, its share was 2.5%.

China has been extremely successful in attracting export orientated FDI that otherwise Southeast Asia may have received. Several factors may have helped. Infrastructure development in China has been rapid and advanced. Access to the domestic market can be a critical incentive. The industrial workforce is comparatively highly skilled. The undervaluing of the currency was maintained while the country's industries attained sufficient scale to be competitive. Lastly, government subsidies help create a competitive environment.

While ASEAN exports to China have grown, the marginal propensity of China to import from ASEAN remains very low. In 2011, ASEAN members exported US$ 140 billion of goods to China, a number that grew to US$ 218 billion in 2020. That amounts to a US$ 78 billion increase. Over the same time frame, China's economy nearly doubled from US$ 7.5 trillion to US$ 14.7 trillion – US$ 7.2 trillion of growth. Hence, every US$ 100 of China's growth only produced US$ 1 of export growth from Southeast Asia.

Conversely, in 2011 ASEAN members imported US$ 155 billion from China. Over the next ten years, this figure grew to US$ 300 billion – that is a 94% growth worth US$ 145 billion. Over that time, the combined GDP of ASEAN member states rose by US$ 700 billion. Hence, every US$ 100 of ASEAN GDP growth was accompanied by US$ 20 of imports from China. The marginal propensity to import from China is twenty times higher than China's marginal propensity to import from ASEAN.

The clear consequence of this asymmetry has been the widening of ASEAN's trade deficit with China, which has grown from US$ 15 billion in 2011 to US$ 82 billion in 2020. Due to the five-fold increase, ASEAN's bilateral deficit with China amounts to 2.7% of GDP.

How does intra-ASEAN trade compare? In contrast, intra-ASEAN trade has fallen, shrinking from US$ 582 billion in 2011 to US$ 567 billion in 2020 – that is a 3% decline. Relative to overall trade, it shrank from 24% to 21% despite economic diplomacy efforts to encourage inter-connectivity of the region. Thus, intra-ASEAN trade is only marginally larger than trade with China, which accounts for 19.4% of total trade.

Furthermore, exports to the United States doubled between 2011 and 2020, expanding by more than US$ 100 billion. This represented both a greater dollar growth and percentage growth than exports to China.

Four conclusions can be drawn from the above analysis. First, the narrative that a fast-growing Chinese economy is a boon for Southeast Asian growth looks increasingly false. The growth in China's domestic market has not resulted in a large increase in exports to China because the marginal propensity of China to import from ASEAN is so low.

Second, despite its geographic distance, the United States rivals China as an export market for ASEAN. Between 2011 and 2020, the share of exports going to the US increased from 8.5% to 15%. These figures are at odds with the popular view that

the United States' importance is waning in the region.

Third, China's economic prowess has impacted trade patterns in ASEAN in terms of import dependency. Between 2011 and 2020, China's share of ASEAN imports rose from 13% to 23%. This largely represents China's exports of capital goods and components that go into assembling products for export out of ASEAN.

Lastly, the import dependency is in part a function of ASEAN's struggles to develop a high level of vertical integration and inter-connectivity within Southeast Asia. China has shed lower value-added industries such as footwear and garment manufacturing to Vietnam, Cambodia, and Myanmar. But there remains a heavy level of import dependency on the inputs and capital goods that are essential to the industries. Combined, ASEAN's economy is large enough to support globally competitive scale in the petrochemicals and other industries required for the inputs. Individually, however, the economies are not.

All this begs the question, how might the Belt and Road Initiative impact future trade patterns? It is in China's interests to maintain its industrial centrality in Asia's manufacturing processes. As China's cost base has risen and it looks to move up the value chain, an opportunity will arise for some Southeast Asian economies to replace China – a trend accelerated by the trade war and geopolitical tensions. However, breaking the dependency on China will involve a far higher degree of vertical integration and intra-ASEAN connectivity. BRI projects may help at the margin but there is an equally strong underlying current that points to greater Sino centrality stemming from regional infrastructure projects.

Consider, for example, the Myanmar oil and gas pipelines. In 2012, Myanmar did not export any minerals fuels to China. As the pipelines came on stream, China's share of Myanmar's mineral fuel exports increased – first to about a quarter and now to about 45%. This trade diversion increases China's importance to Myanmar's ability to earn foreign exchange.

It may be too soon to tell much from the newer BRI projects. However, trade flows over the past decades suggest measures to facilitate trade between China and Southeast Asia have an asymmetric impact. The goods tend to flow south, and earnings flow north. Greater intra-ASEAN trade can alter this dynamic.

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Global Supply Chains Need Upgrading for a Green, Inclusive, Resilient and Socially Responsible Future

increasing the transparency of supply chains is key to improving them. We need to know more about who is involved and what is going on at all points in the process. Photo: ADB

Before the COVID-19 pandemic, few consumers gave much thought to the global manufacturing and delivery system that brought them the goods on store shelves, at gas pumps, or stocked in hospitals and pharmacies. Most of the time, from the consumer perspective, they just worked.

But shortages of key medical goods early in the pandemic, followed by troubles with supply chains that have persisted across a range of items ever since, have left everyone hyper aware of the importance of these global networks. Multiple problems facing people in their daily lives are being explained by "supply chain issues."

Those responsible for the various industries that rely on or operate within global supply chains were already aware of the fragility of the global trading system before the pandemic. Efforts to offset those deficiencies had been ongoing before the first COVID-19 case was recognized.

The spotlight that the pandemic shone on supply chains has now added to the urgency of those efforts. What's more, it has highlighted the opportunity to use trade and supply chains to improve a range of vitally important challenges.

The pandemic is like a line in time, with a clear "before" and "after" the changes it wrought, changes which continue today. Now that we are hopefully emerging on the other side of that line in time, the pandemic can be a marker for the moment we started to get serious about the list of challenges we face.

Supply chains must help fight climate change

Cap: More than 80% of greenhouse-gas emissions and more than 90% of the impact of the operations of consumer goods companies on air, land, water, biodiversity, and geological resources came from their supply chains. Photo: ADB

Many would rank climate change at the top of that list. A 2016 study by McKinsey estimated that more than 80% of greenhouse-gas emissions and more than 90% of the impact of the operations of consumer goods companies on air, land, water, biodiversity, and geological resources came from their supply chains.

It is clear that supply chains need to be a focus for any serious climate change alleviation. But other globally important issues need to be addressed through supply chains too. Better run and more transparent supply chains will also help guarantee that unfair labor practices are weeded out of the global trading system, for example.

One of the first and most important steps in using supply chains to deliver progress on such issues is to learn more about how they work.

No grand scheme led to the creation of global trade. While there are rules and regulations, no one organization controls supply chains and even the multi-national companies at the top of supply chains don't really fully understand them.

A study on environmental and social standards within supply chains by Verónica H. Villena and and Dennis A. Gioia in the Harvard Business Review in 2020 highlighted that need. It pointed out that while large companies at the top of supply chains may have committed to sustainability in their operations, they can find it virtually impossible to extend that commitment to the outer reaches of their supply chains.

Small supply chain companies are often unaware of standards

And the suppliers at the edge of supply chains are also often in the dark too, in part because they don't necessarily have the expertise or resources to adhere to whatever standards are expected by consumers and agencies looking at final products. Many may be in countries where regulations are lax, or even non-existent.

A corporation at the consumer end of a supply chain may have committed to being as green as possible in its operations, to equitable gender policies and proper use of labor, but that commitment is somewhat hollow if it doesn't know what is going on down the length of the chain.

Increasing the transparency of supply chains is key to improving them. We need to know more about who is involved and what is going on at all points in the process.

Improving trade and supply chains was the goal for the Asian Development Bank's Trade and Supply Chain Finance Program before the pandemic arrived. The program is deeply involved in digitalization, in making trade and supply chains greener and more socially responsible, and in using them as a tool for a wide range of issues.

But as it has for many, the pandemic triggered a re-think of the program's priorities.

"It isn't a shifting of gears so much as it is a different way of looking at what we do," said Trade and Supply Chain Finance Program Head Steven Beck. "Until

recently we mostly measured our success in numbers, counting how many transactions we supported and how much they are worth. That is important and that part of our business has expanded rapidly since the pandemic started. Helping to make trade happen in developing Asia means growth for the countries involved. It means more jobs and less poverty."

But Beck said the opportunity to help shape trade and supply chains into tools for progress across a range of issues can't be missed.

Cap: Trade and supply chains can be tools to combat the challenges of the future, but they first need to be made more transparent, robust and resilient. Photo: ADB

Supply chains as a vehicle for change on key issues

"We need to highlight the importance of trade and supply chains as a vehicle for substantive change for the environment, and for inclusive workplaces where social and governance issues are respected. Just counting the number of deals we support isn't enough. That's why we decided to label what we do in reference to the priorities that need to be addressed, whether our efforts help environmental progress, support better labor standards or whatever. As much as possible, we need to broadcast the reasons for what we do and how those moves line up with the longer-term goals we support at ADB."

People tend to think of supply chains as a high-tech modern invention. They think of elements such as just-in-time inventory systems and assume entire chains run like that. But in reality, global trade still reflects the practices instituted when the ships that carried goods were powered by sail. Global trade is still mostly analog.

Trade digitalization needs to happen. Shift trade and supply chains into the digital world, away from the ponderous process of paper documentation that exists now, and you have a system that can be better measured, monitored and regulated.

Digitalization will transform trade and supply chains but it won't be an easy task. All participants in the trade eco-system – exporters, shippers, ports, customs, warehousing/logistics, and importers – need to agree on the standards and protocols to underpin digitalization. The Digital Standards Initiative, created by ADB, Government of Singapore and the International Chamber of Commerce, is working on this now, in

partnership with all stakeholders. Common standards are essential and governments need to adopt laws recognizing digital trade documents before we can move the needle materially on digitalization.

To that end, ADB is also involved with a new advisory board formed as part of the Digital Standards Initiative, the Legal Reform Advisory Board. It is bringing together stakeholders to promote and explain the measures that are needed, such as a model digitalization law designed by the United Nations. An industry advisory board under the Digital Standards Initiative is leading the way with private sector stakeholders.

Replacing paper trails with digital ledgers and QR codes rich in information will transform trade by enabling transparency deep into supply chains to make sure they are resilient and ready to handle future challenges.

"We have a range of initiatives to help bring trade and supply chains into the digital world," said Beck. "We have pilot projects underway helping governments make sure their laws allow for digital documents. Our work with the Digital Standards Initiative is having an impact and we are helping to get environmental and sustainability standards embedded into the entirety of supply chains."

Trade and supply chains can be tools to combat the challenges of the future, but they first need to be made more transparent, robust and resilient.

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