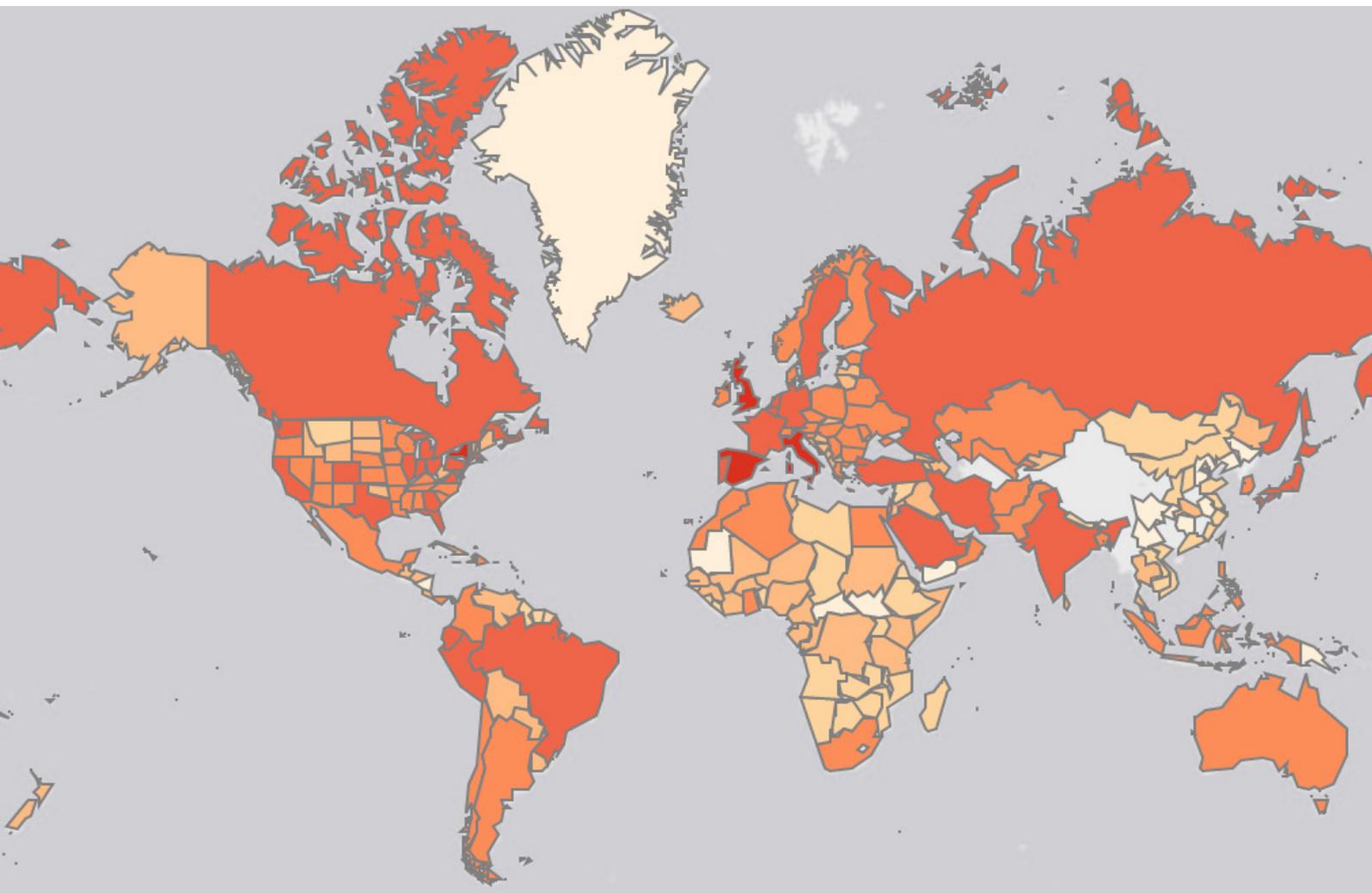


Geoeconomix

The intersecting economics of global markets, technology, and geopolitics

ANALYSIS AND OUTLOOK

Geopolitical shifts from Covid-19



April 26, 2020

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Today's global economy is not only multipolar, it revolves through the interplay of diverse forces, particularly in the arenas of markets, technology, and geopolitics.

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Preface

“In the current stage of the pandemic, the driving forces of markets and, to a certain degree, technology have ceded their typical positions of predominant economic influence to global political forces.

“... how can a state live up to its constituents' basic expectation to preserve life without killing its economy?

Outbreaks of Coronavirus disease 2019 (Covid-19) are upending life around the world. As of the writing of this report, [official data](#) registers some three million confirmed infected and over 200,000 killed. Barring a cure or wide-scale implementation of better mitigation policies, unfortunately those numbers are set to leap higher, massively straining healthcare systems, markets, and societies. The first pandemic [ever caused](#) by a coronavirus, much (though thankfully, not all) the world has been caught off guard and unprepared.

In the current stage of the pandemic, the driving forces of markets and, to a certain degree, technology have ceded their typical positions of predominant economic influence to global political forces. Officials around the world are ordering mass quarantines, prohibiting regular marketplace and social activities, plunging already unprecedentedly low interest rates to greater depths, and doling out trillions and trillions of dollars worth of national wealth in frantic attempts to close gaping economic holes. In the United States, where its neo-libertarian moorings make the notion of Big Government widely reviled, federal and local governments are (albeit unevenly) requesting or requiring that businesses shut and workers stay at home. Science ultimately will resolve the crisis. But governments are filling in until technology catches up and markets return to behaviors more familiar. The companies and their investors that contribute solutions to the crisis will profit handsomely, however unseemly that might sound in the midst of human suffering and death. In the meantime, a new, until recently unthinkable question for modern life persists: *how can a state live up to its constituents' basic expectation to preserve life without killing its economy?*

The unprecedented nature and exponentially global spread of Covid-19 makes a thorough accounting of its geopolitical implications impossible at this time. Forecasting, moreover, is a hazardous sport, even under optimal conditions. Yet we can—and should—try to make sense of how events are developing, the way governments are responding, the direction those responses are taking us, and what that means for the world at large. *Geopolitical shifts from*

Covid-19 is such an attempt. Rather than aim for definitive analysis, it seeks to draw out basic but still useful views on underlying causes and effects and project out from there. Perspectives are cursory. Yet they hopefully prove helpful for stimulating productive discussion and generating actionable insights.

Sunzi famously advises: “in chaos, seize opportunity.”* The implications need not be exploitative, though obviously good and bad actors alike are finding ways to take advantage of disruptions occurring under Covid. The people, organizations, and communities that will do best in dealing with the pandemic will be those who address its ramifications proactively, creatively, constructively, and with a view towards improving the unavoidable global interconnectedness that the spread of this disease brutally demonstrates.

Los Angeles
April 2020

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*Intended meanings in classical Chinese can be ambiguous. The thinking of Sunzi (aka “Sun Tzu”, active 5th century BCE) with this passage is open to interpretation. The English phrasing here follows modern Chinese [interpretations](#) of the *Art of War*, such as by People’s Liberation Army officer and classics scholar, Zhou Hengxiang.

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Executive summary

- Disruptions surrounding the Covid-19 global pandemic are shaping global geopolitics in ways both large and subtle.
- Medical experts indicate the case fatality rate of Covid may be surprisingly low. This makes drawing lessons from the health crisis especially important given the possibility of more lethal disease pandemics in the future.
- Repeated failures to interpret and respond to Covid-19 herald a reckoning to come and heightened expectations for leadership performance.
- The tremendous heights reached by markets leading up to the global pandemic have accentuated the geopolitical shocks that followed.
- Existing government institutions have been let down by their leaders but can be repaired through creative responses and forward-thinking policies.
- For China, once its national leadership understood the nature of the coronavirus, it cracked down hard on the original outbreak, mitigating social and economic damage and thereby enhancing its geopolitical positioning.
- Signs point to China's favorable geopolitical positioning being temporary, however. China's global leadership is clearly slipping with its claims to serve as a model of governance and responsibility in handling the original coronavirus outbreak and its clumsy and shrill arguments against detractors.
- China still can leverage its economic size and growth. That presents opportunities to grow investments abroad and leverage domestic market power. The latter requires further opening of China's economy.
- Judged by the anti-globalization objectives of US President Donald Trump, America's lack of global coordination and slipping geopolitical influence with Covid is not necessarily a negative outcome based on his chosen positioning.

- Yet the disease is unforgiving to governments that ignore epidemiological warnings and fail to adopt evidence-based solutions. America's economy and executive authority are suffering as a result.
- The best opportunities for improved US geopolitical positioning is in its world-leading information and medical technologies.
- South Korea stands out for its minimally disruptive yet highly effective means of infection containment that tests, isolates, treats, and contact traces. The broad applicability of this model boosts the nation's geopolitical capital.
- Covid-19 has upstaged the US' and China's respective powers and Sino-American relations, exposing weakness in both countries and suggesting they adopt new, more constructive approaches to engagement.
- The doctrine of mutually assured destruction (MAD) prevented nuclear war. Covid has demonstrated the danger of "mutually assured epidemic destruction" (MAED) that demands better political economic collaboration.
- Covid also presents a unique opportunity to redress deteriorated relations across Greater China with positive implications for the mainland, Taiwan, and Hong Kong if authorities work to resolve escalating tensions.
- Covid-induced economic shutdowns add urgency to the move towards machine automation and Artificial Intelligence.
- Such technological shifts also will intensify technology-based geopolitical dynamics between major digital economic powers.
- Evidence shows the novel coronavirus that causes Covid to be of natural origin, but the pandemic has stimulated discussion of bioweaponry. This calls for increased government transparency and global coordination.

Introduction

The power of 0.1%

The fatality rate of Coronavirus disease 2019 (Covid-19) can seem deceptively small. Dr. Anthony Fauci, the unassuming, straight-talking director of the US National Institute of Allergy and Infectious Diseases who shot to prominence during America's coronavirus crisis, [originally estimated](#) that the disease mortality rate should be about one percent. That was in testimony to Congress on March 11, a little over two months after Chinese health officials first alerted the United Nation's World Health Organization (WHO) about a mysterious pneumonia outbreak in the city of Wuhan. It was also the same day the WHO finally got around to officially declaring a global pandemic. Able to draw from larger amounts of data and increased understanding of the disease, the Centre for Evidence-Based Medicine at the University of Oxford [calculated](#) that a more precise measure of deaths per actual infections (the infection fatality rate or IFR) would put Covid's lethality as low as 0.1%.

For 0.1%, they are turning off the lights on the global economy?

The law, and power, of small numbers explains why. The original statistical sense of the term relates to how even rare events in a large enough population can produce the sort of curve that health officials now obsess over.* Moreover, the new coronavirus confronting us is particularly virulent, both in severity and infectiousness. A typical coronavirus produces the common cold. What causes Covid-19 is a new version of the virus that can induce Severe Acute Respiratory Syndrome (SARS), and so styled as SARS-Coronavirus-2 ("[SARS-CoV-2](#)"). Evidence suggests that a single infected person will go on to infect another [2-2.5 people](#) in turn. That level of exponential communicability of a pneumonia-type disease devastates societies lacking adequate testing and well-prepared healthcare systems. Evidence also shows that fatality rates vary among population groups and locations. It will be impossible to know the real lethality of the disease until it has run its course. Meanwhile, we are left to contemplate a wide range of probabilities.

The scenes the disease is visiting on people and societies are proof enough of its disruptive powers: a sickened [family](#) hauled, kicking and shouting, from

“For 0.1%, they are turning off the lights on the global economy?”

*Ladislaus von Bortkiewicz (1868 – 1931) popularized the concept in a 1898 treatise, *The Law of Small Numbers (Das Gesetz der kleinen Zahlen)*. Von Bortkiewicz's famous proof of the power of small numbers (i.e., "rare events") derived from the statistical pattern of fatalities in the Prussian cavalry corps due to death by horse-kicks.

“ However mind-numbing Covid’s piecemeal deconstruction of modern life might be, conditions could be far more dire.

their apartment by Chinese authorities in hazmat suits, a Covid-stricken Iranian deputy health [minister](#) furiously mopping his feverish brow while trying to reassure an anxious citizenry, an Italian army [convoy](#) transporting an overflow of coffins out of Bergamo, suffering patients sprawled along the halls of an overcrowded Madrid [hospital](#), and the US Navy deploying tanker-sized hospital [ships](#) to harbors in New York and Los Angeles for augmenting the intensive care capacity of local hospitals.

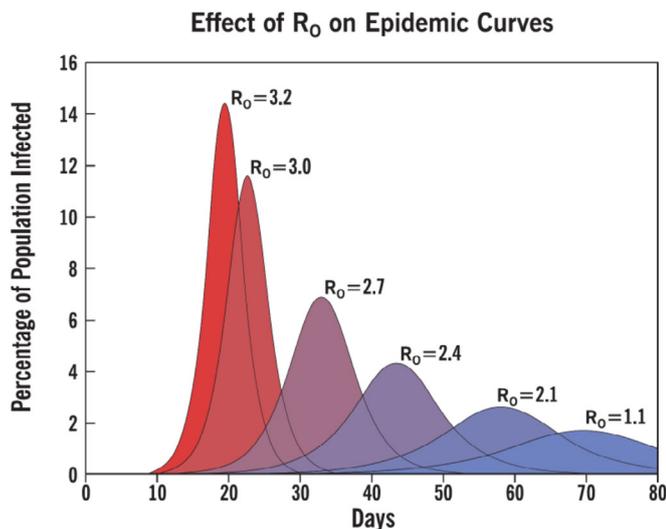
As sobering as the fallout from this health crisis is, incredibly, matters could be much, *much* worse. According to a comparative [overview](#) by the Royal Australian College of General Practitioners, the lethality of Covid as measured by its case fatality rate (CFR) is minor compared to that of the original SARS (whose CFR is 14-15%), Middle East Respiratory Syndrome (34.4%), and the particularly gruesome, organ-disintegrating Ebola (50%). However mind-numbing Covid’s piecemeal deconstruction of modern life might be, conditions could be far more dire.

Assumptions overturned

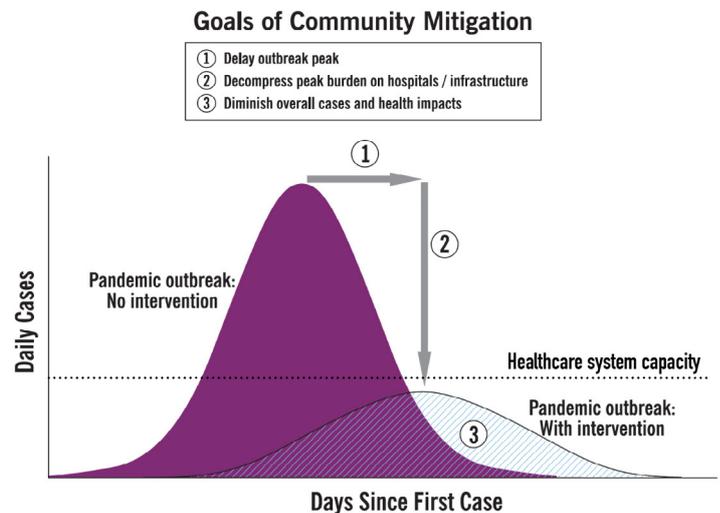
Regarding the timing and nature of the pandemic, the world can be considered

Covid-19 Infectiousness and mitigation goals

R_0 (viral reproduction number) of Covid-19 estimated at 2–2.5



Source: US CDC, *Nature*



Geopolitical shifts from Covid-19

“lucky” in at least two respects: 1. this strange new coronavirus is not as lethal as some other well-known pathogens; and 2. it struck at a time of relative peace and prosperity, when societies are better able to adapt and respond. Cold comfort, to be sure, but learning from the epidemic to improve preparedness for future eventualities will be key for individuals and organizations to thrive in whatever reality lies ahead.

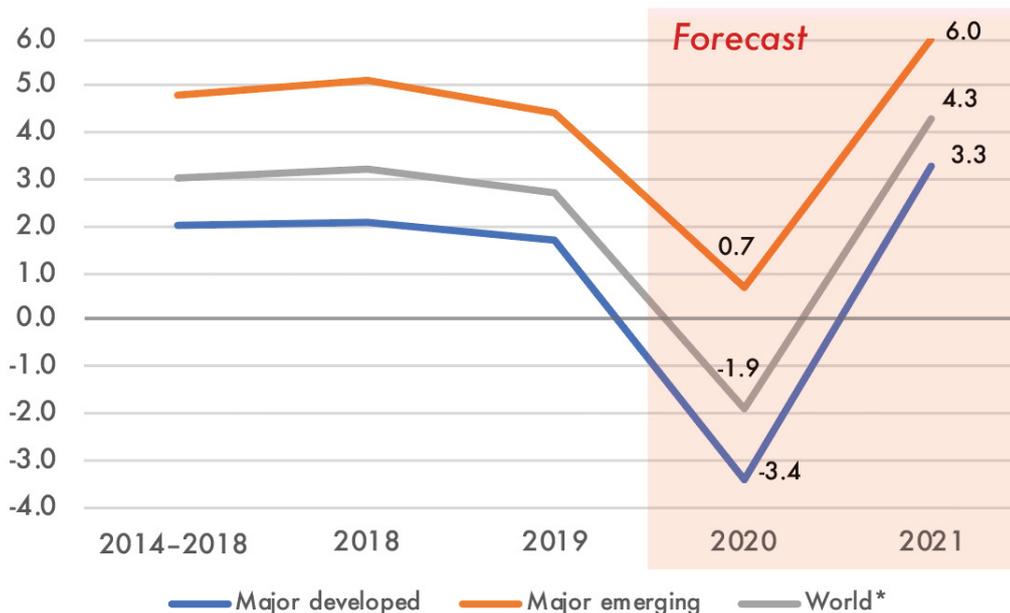
Covid-19 produced an exogenous shock that exposed a host of endogenous frailties. The viral impact of this microscopic virus is proving extraordinarily macro and at the same time insidiously subtle. The epidemiology of the Covid-19 pandemic cruelly brings these points home. Along with the human suffering and economic destruction, less obviously (but potentially longer lasting) consequences include a range of conceptual adjustments.

We have grown used to—in fact, enamored of—contagion as a tool in

“The viral impact of this microscopic virus is proving extraordinarily macro and at the same time insidiously subtle.”

GDP growth, major market categories and world averages

Annual average %, 2014 - 2021



Source: Fitch Ratings, Goeconomix

*“World” consists of the Fitch 20 countries weighted by nominal GDP in US dollars at market exchange rates (3 year average). Major developed economies are US, Japan, France, Germany, Italy, Spain, UK, Canada, Australia, and Switzerland. Major emerging economies are Brazil, Russia, India, China, South Africa, South Korea, Mexico, Indonesia, Poland, and Turkey.

“The global pandemic has boosted appreciation for the power of viral effects, both figuratively and literally, in the public consciousness.

“An untold part of Covid’s destructive toll is that old assumptions about power, influence, and authority are dying.

communications and marketing. In the present phase of the Information Age, “going viral” is an explicit goal of digital media. The psychological effects of Covid-19 will not be so great as to deter us from still desiring the infectious memes and other viral phenomenon of the digital age. Quite the contrary, as organizations have switched to virtual operations and people decamped *en masse* to work and interact online from home, all signs point towards digital connectivity and virality increasing. The global pandemic has boosted appreciation for the power of viral effects, both figuratively and literally, in the public consciousness.

While setting off torrents of viral information flows, Covid-19 has propelled demand for information accuracy, something in short supply as so much about the virus and its effects still escapes our understanding. Coping with ambiguity and uncertainty—mental states further heightened by unpromising economic news—is another new mindset featuring in this new normal.

The most profound adjustment underway concerns expectations for leadership. Repeated failures by a majority of governments, industries, and businesses to interpret, communicate, and prepare for the significance of Covid-2019 herald a reckoning to come.

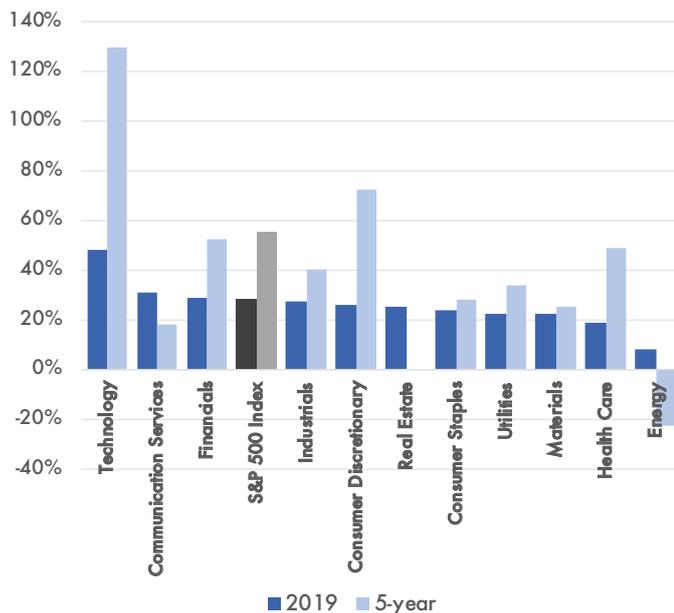
The greatest reckoning will be for governments, which are explicitly charged with looking after public health and welfare, and have generally disappointed in the discharge of their duties. Officials muddling their way through, guilty of spreading misinformation and disinformation, or simply ignoring the science of containment can expect severe shakeups. Those that have performed well and demonstrated real leadership during the crisis will stand out, earning appreciation from their populations and attempted emulation from others. This is what lies at the crux of the geopolitical shifts taking place. An untold part of Covid’s destructive toll is that old assumptions about power, influence, and authority are dying. New ones are arising in their place.

Markets tumble, geopolitics shift

Towering heights before the quake and its aftershocks

On December 31, 2019, Chinese authorities [alerted](#) the World Health Organization about cases of “pneumonia unknown etiology [cause]” in a cluster of 27 people connected to a seafood and animal market in the city of Wuhan. Reverberations from that single, tentative, perfunctory communique would gradually build into a rising seismic wave to roil global markets and political-

S&P 500 index and component performance 2019 and five-year cumulative, price-based returns



Source: Fidelity, Goeconomix

economic systems. remarkably promising. The MSCI World Index, which reflects performance of large- and mid-cap stocks in developed markets, had leapt by nearly 24% in 2019, its [best showing](#) since the end of the global financial crisis. Charged by the surging fortunes of Big Tech, eurozone recovery, and anticipation for an

economic systems.

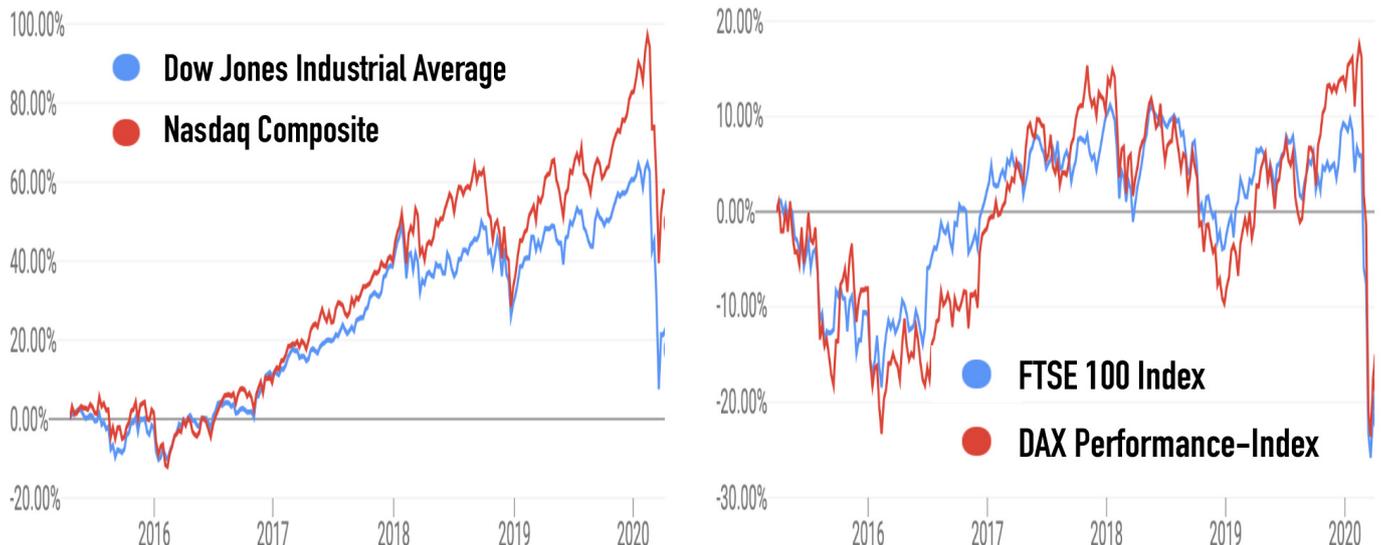
What in its initial stages of its disease spread became popularly known—over stringent [protestations](#) from Chinese officials for its political connotations—as the “Wuhan coronavirus” was, even according to the WHO’s politically deferential [phrasing](#), “exported” from Wuhan to other parts of the world at a juncture when prospects for the global economy looked

“In less than two months of the US-China trade detente, governments and businesses around the world suddenly found themselves confronting a frustratingly mysterious and scientifically unyielding disease necessitating exceedingly painful, sequential shutdowns of societies.

end to escalating trade frictions, leading global market barometers had almost universally posted double-digit percentage gains, many above 20%. Deutsche Bank [estimated](#) that global bourses had gained US\$17 trillion for the year. Oil, a basic measure of industrial activity and trade in physical goods, although below levels from the first half of the decade, was trending upward.

Major stock market indexes: US, Europe, Asia

April 1, 2016 – March 31, 2020



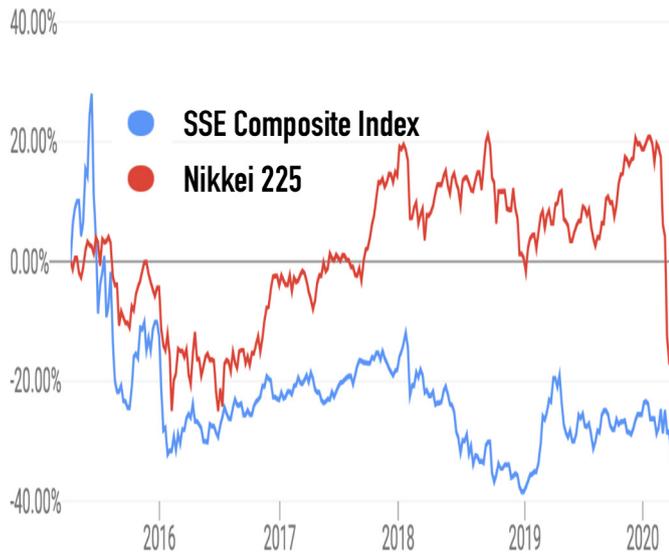
Source: Google Finance

Fifteen days following notification of Wuhan’s pneumonia cluster, the US and China signed a phase-one agreement to end a bruising trade war between the world’s two largest economies. That offered the still greater promise of ending major impediments and uncertainty in world trade. A reflection of the swelling business confidence, stock markets continued booming through the first two months of 2020. The world’s largest and most consequential equity markets, the New York Stock Exchange and Nasdaq, were hitting new records.

That exuberance, rational or not, began evaporating as news circulated of the novel coronavirus spreading outside of China. Less than two months following a US-China trade detente, governments and businesses around the world suddenly found themselves confronting a frustratingly mysterious and scientifically unyielding disease that necessitated exceedingly painful, sequential shutdowns

Major stock market indexes: Asia

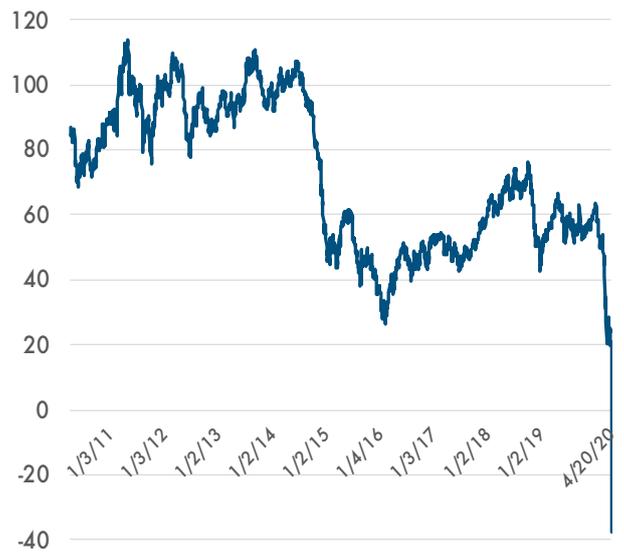
April 1, 2016 – March 31, 2020



Source: Google Finance

WTI crude oil, daily price chart

US\$, April 5, 2010 – April 20, 2020



Source: macrotrends.net, Goeconomix

of societies.

The Dow Jones Industrial Average plummeted more than 3,500 points the last week of February, [registering](#) its largest weekly point drop in history. Stock markets around the world plunged into solidly bear-market territory. Longitudinal [research](#) by the Kellogg School at Northwestern University, showed that news of the coronavirus unleashed record-levels of stock market volatility that were orders of magnitude greater than all previously reported infectious-disease outbreaks. On April 20, the May contract for the benchmark oil price of West Texas Intermediate (WTI) plummeted to -\$37 per barrel, defying the laws of market mechanics—sellers had to pay buyers to take the contracts—and dragging the marketplace negative for the first time [ever](#). Businesses shut. Unemployment soared. Economies fell into recession. The rapid and precipitous drop in economic activity generated unprecedentedly strong shocks to the global economy. These reverberations translate into geopolitical shifts that enhance or harm the positioning of nation-states and other political entities.

Even for individuals and organizations now simply preoccupied with getting by day to day, the changed and changing operating landscapes being churned

“The Dow Jones Industrial Average plummeted more than 3,500 points the last week of February, registering its largest weekly point drop in history.”

“... assessing how the political-economic terra firma is shifting in the wake of Covid-19 has become a new priority.

“The reality is the world will never be the same after the coronavirus.

Henry Kissinger

“Rather than putting the world on a significantly different trajectory, [the coronavirus] is likely to intensify and entrench already-existing trends.

Dani Rodrik

up by the seismic hits are important. An opposite corollary to Covid-19’s power of small numbers—that the vast majority of people fortunately *will survive* the epidemic—serves to remind of the need to prepare for what awaits beyond the current challenges. Especially for multinational companies and investors, assessing how the political-economic *terra firma* is shifting in the wake of Covid-19 has become a new priority.

Unconventional thinking

Consider a snapshot of two opposing views on what to make of the post-Covid world that lies ahead.

- **Henry Kissinger**, geopolitical theorist-practitioner extraordinaire, expresses a rather alarmist view in his [article](#), “The Coronavirus Pandemic Will Forever Alter the World Order.” Herr Doktor’s prognosis: “When the Covid-19 pandemic is over, many countries’ institutions will be perceived as having failed. Whether this judgment is objectively fair is irrelevant. The reality is the world will never be the same after the coronavirus.”
- **Dani Rodrik** of Harvard’s Kennedy School of Government questions that very thesis in his [piece](#), “Will COVID-19 Remake the World?” He argues: “The crisis seems to have thrown the dominant characteristics of each country’s politics into sharper relief. Countries have in effect become exaggerated versions of themselves... Rather than putting the world on a significantly different trajectory, it is likely to intensify and entrench already-existing trends.”

The conclusions of this report fall in between the extremes of these two arguments. Neither perspective, though persuasive in its own way, holds up well under close scrutiny if pushed towards ultimate implications. True, à la the Kissingerian critique, institutions have failed. Yet for the most part, the failure derives less from institutions themselves than the how they are operated. Bad policy and poor leadership has been more consequential in the crisis than problems with existing systems. Many hard-hit economies in Europe and the US have adequate healthcare infrastructure and expertly staffed public health institutions, such as the US Centers for Disease Control and Prevention (CDC). Even evidence of crucial institutional failures in China would be more accurately described as failures of leadership and execution. If the group

Geopolitical shifts from Covid-19

of Chinese doctors who initially alerted their superiors to the dangers of a mysterious pneumonia outbreak in Wuhan had been listened to instead of reprimanded by their administrators and detained by police, things could have turned out very differently. The application of institutional power, not institutions by themselves, is where the problems lay.

There also seems to be little impetus, let alone willingness from overstretched and underfunded institutions like hospitals and healthcare bureaucracies, to construct a “post-coronavirus order” with something radically new. Better instead to try to repair and build upon existing institutions, including multilateral agreements, rather than focus on completely new organizing constructs. The difference might seem subtle, but it is significant.

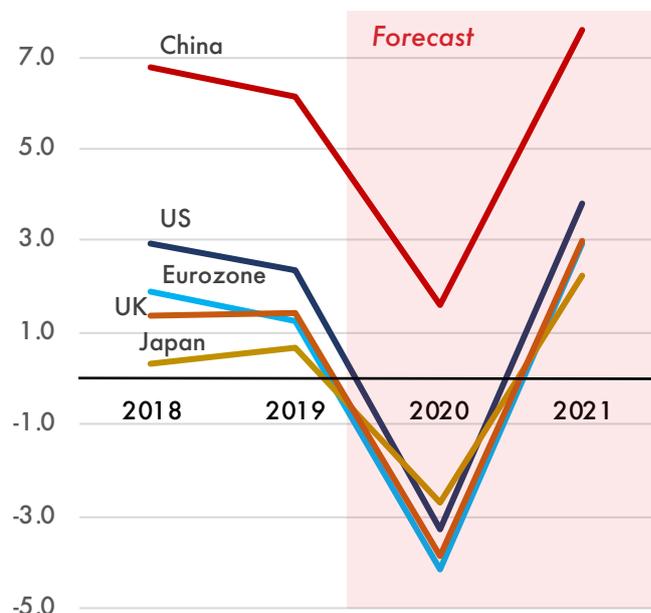
The biggest issue brought to light by the novel coronavirus has been with politicians and politicized government bodies: politicians blinded by ideology or simply incompetent in their actions; politicized organizations staffed by technocrats but subject to political pressures or operating with so few resources or so much political interference as to be rendered ineffective.

More often than not, top-down policy directives have ignored on-the-ground realities. This has been readily apparent with populist led governments in the US, Italy, the UK, and Brazil. It especially applies to China, which though proving effective in some aspects of how it dealt with the initial Covid-19 outbreak in Wuhan, has disserved its own people and the world in trying so desperately to spin narratives about the rectitude of the nation’s handling of the epidemic rather than focus on learning from mistakes. In all these cases, societies and their economies were failed by leaders and politically motivated actions. This too is a far cry from institutional failure *per se*. It furthermore shows the unsustainability of currently dominant characteristics in many countries’ politics.

Populist leaders around the world—notably the US’ Donald Trump, Britain’s Boris Johnson, and Brazil’s Jair Bolsonaro—while in their own various ways refusing to accept the recommendations of health experts and trend lines epidemiological models, have as a result seen their political authority drop along with the

“The application of institutional power, not institutions by themselves, is where the problems lay.

GDP growth, select major economies
%, 2018–2021



Source: Fitch Ratings, Goeconomix

“Where the shifting momentum is taking us, what that means, and how it can be guided provide key questions to be answered.

fortunes of their economies. For the UK prime minister, ignoring the science of Covid-19 nearly cost him his life. As a one-party state, the Chinese Communist Party may be structurally secure in its rule for the foreseeable future, but its domestic moral authority and global influence faces the greatest reckoning of all. In a post-Covid world, populism and authoritarianism will still have their figureheads and following. Yet as prevailing political movements, both are already showing signs of being among the first casualties of the pandemic.

So far, socio-economic shocks have jarred the world to move in different directions between the two extremes of “Covid changes everything” and “Covid reinforces everything.” Where the shifting momentum is taking us, what that means, and how it can be guided provide key questions to be answered.



China

Facing complex geopolitical disruptions on multiple levels

Enhanced geopolitical positioning

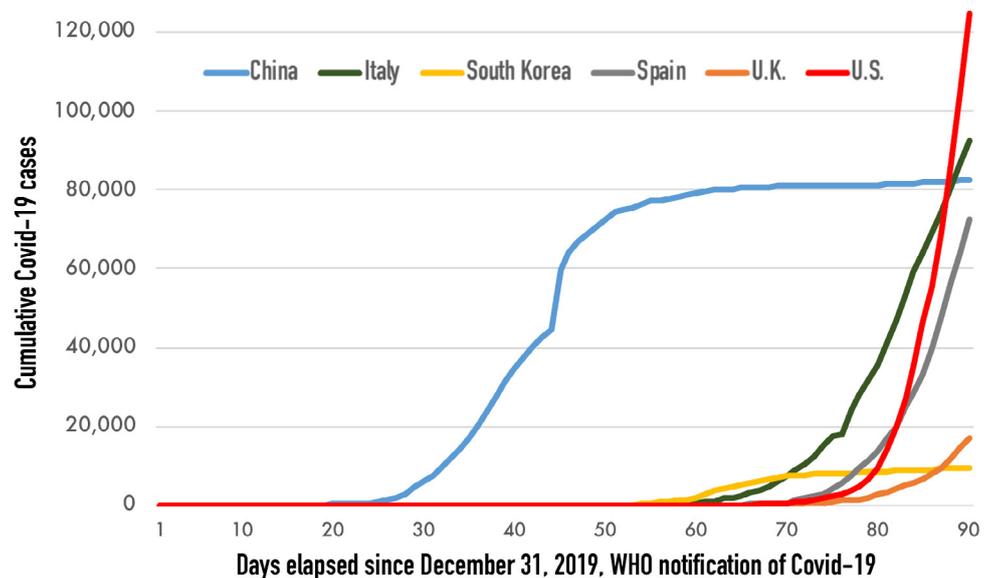
Once China's national leadership recognized the epidemiological implications of the coronavirus outbreak in Wuhan, authorities marshaled a society-wide response that proved highly effective. Although official data on infections and deaths is liable to skepticism, the PRC successfully flattened its Covid-19 infections curve and hastened the time when its population could return to a more normal life and businesses get back to work. Such success ranks China as a model for emulation, the kind of global leadership position that Beijing targets as a geopolitical priority. The persuasiveness of China's claims to have "unique institutional advantages" is rapidly dissipating, however. In the short-term, China can leverage its global supply chain dominance but mid- and long-term, the country's main competitive advantage on the global stage will be its economic size and robust growth relative to other economies. China will need to open its markets further to capitalize on this advantage geopolitically.

Deteriorated geopolitical positioning

There are major risks to China's coveted role-model positioning. Attempts to claim victory over the disease and promote China's superiority over other government systems has been backfiring. The government has also intensified crackdowns on independent media and Chinese whistleblowers while devoting energy to promote conspiracy theories to deflect criticism. The nation's role in global supply chains faces strong headwinds. With its industrially dominant position as the workshop to the world, China's chokehold leverage is being more exposed during the Covid crisis. This motivates post-industrial nations, starting with the US, to no longer accept China's deciding role in manufacturing supply systems. The process will not be immediate, but supply chain diversification, including reshoring of strategically important manufacturing, is inevitable. China is clearly moving towards a more disadvantaged position than it had occupied before the global health crisis.

Covid-19 infections, select countries

December 31, 2019–March 29, 2020



Source: ECDC, Goeconomix

“China’s bold approach to contain the rapid spread of this new respiratory pathogen has changed the course of a rapidly escalating and deadly epidemic.”

UN World Health Organization

Snatching victory

China first received wide-scale criticism on the international stage for how it handled the epidemic’s original, geographically isolated pneumonia outbreak. This focused on government silencing of concerned doctors, censorship of critical media reports and commentary, and the heavy-handedness of forced quarantines. Global opinion later shifted to conceding the benefits of a crackdown approach to virus containment. In its review of China’s handling of the coronavirus outbreak, the WHO (which Chinese authorities have heavily relied on to endorse the nation’s coronavirus policies) issued a [report](#) on February 28 where a key conclusion declared: “China’s bold approach to contain the rapid spread of this new respiratory pathogen has changed the course of a rapidly escalating and deadly epidemic.”

At the time of the report’s publication, the UN body was already facing mounting criticism for accepting China’s official line about the virus at face value and issuing misleading statements. On January 9, the WHO [lauded](#) “China’s increased capacity to manage new outbreaks.” Five days later, its

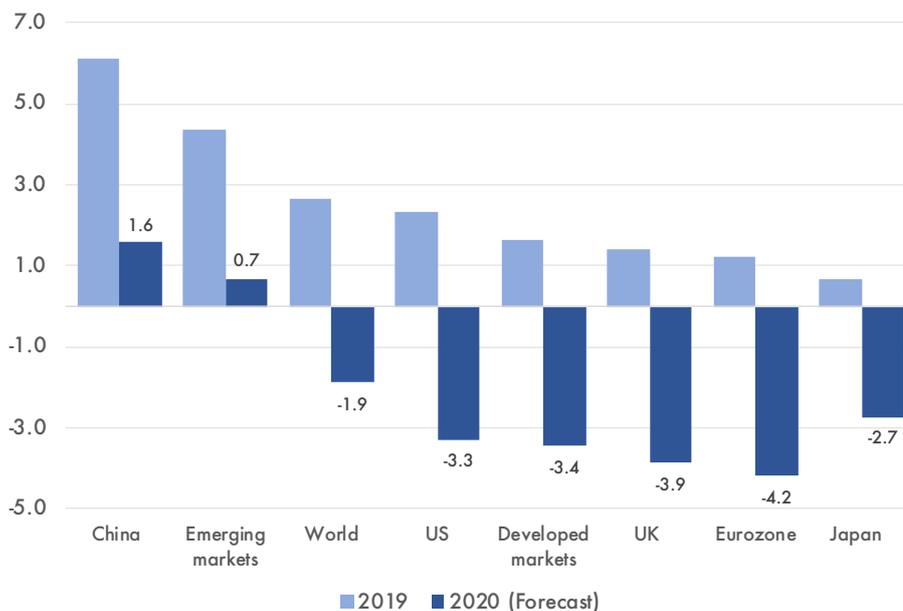
official account cheerily [Tweeted](#) out: “Preliminary investigations conducted by the Chinese authorities have found no clear evidence of human-to-human transmission of the novel coronavirus.” The world body continued using questionable logic in its steadfast refusal to label the highly transmissible and obviously internationally expanding epidemic a global pandemic. Its conclusion in late February about containment was narrowly correct regarding China’s success with short-term, local curtailment. Yet that was never really the point of a UN agency charged with guarding against the sort of global devastation that followed.

Irrespective of the controversies that have embroiled China and its perceived influence over the WHO, the nation proved itself, however inelegantly, successful in prevailing over the original, large-scale outbreak of Covid-19 within its own borders. Various global health and policy experts, including those not directly associated with the WHO, point to China’s response to the coronavirus as worthy of emulation. Infectious disease doctor and immediate past president of the World Bank, Jim Yong Kim, co-authored a *New York Times* opinion

“Irrespective of the controversies that have embroiled China and its perceived influence over the WHO, the nation proved itself ... successful in prevailing over the original, large-scale outbreak of Covid-19 within its own borders.

GDP growth, leading major economies and economic areas

%, 2019–2020



Source: Fitch Ratings, Goeconomix

“... the first leading economy to enter and exit the pandemic, China also is reaping the benefits of its considerable first-mover advantage in global markets

“Far more than the leaderships of most other global powers, in China’s fused party/state apparatus, the CCP obsesses on how its political authority projects at home and abroad.

[piece](#) that held out China as a model of “humane quarantine processes” and highlighted the value of epidemiological [data](#) from Wuhan. More to the bottom line, as the first leading economy to enter and exit the pandemic, China also is reaping the benefits of its considerable first-mover advantage in global markets, re-opening its factories and businesses weeks and months ahead of other countries who are still riding out Covid’s impact.

Mixed messaging

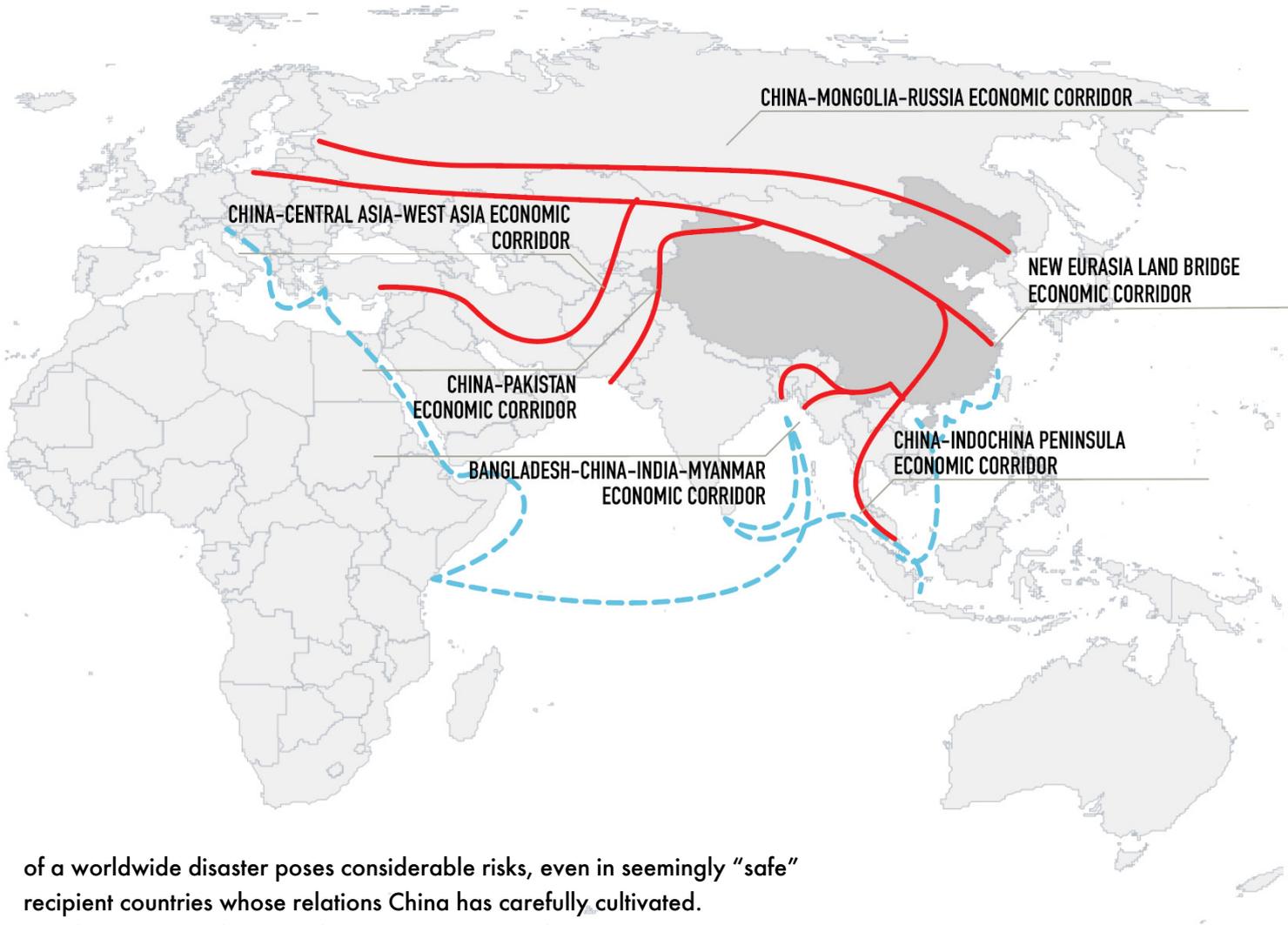
Alongside managing the epidemiological and economic dimensions of Covid-19, the ruling Chinese Communist Party (CCP) has made tremendous efforts to exploit the disease’s values as a tool of propaganda. [In](#) “For China, the ‘USA Virus’ Is a Geopolitical Ploy,” Renée DiResta of the Stanford Internet Observatory details how the nation specifically works to sway global opinion against its major rival. Other evidence from the Stanford research center traces how China has pushed narratives such as the core arguments contained in an [editorial](#) that appeared on February 20 in the party’s English-language mouthpiece, *China Daily*. This concluded with the penultimate line: “Were it not for the unique institutional advantages of the Chinese system, the world might be battling a devastating pandemic.” A key accompanying message to this concept was to label those “pointing accusatory fingers at the WHO’s objective acknowledgment of China’s efforts” as “China-bashers” who are “enemies of the world.” As a reflection of official thinking, the reasoning exhibits a remarkably defensive and presumptive—not to mention with its timing, extraordinarily premature—view on the global political dimensions of China’s Covid response measures.

Far more than the leaderships of most other global powers, in China’s fused party/state apparatus, the CCP obsesses over how its political authority projects at home and abroad. Along with content messaging, the party has been eager to show China as a generous, benevolent superpower. Using the nation’s unrivaled power as the world’s manufacturing base, this has enabled it to deliver desperate needed medical supplies across the globe at a time when the US and EU lacked enough even for their own domestic needs. [Reporting](#) by the *Wall Street Journal* found that over a two-week period in March, Chinese companies, government entities, and charities donated over 26 million face masks, 2.3 million testing kits, and other supplies to 89 countries. The government later confirmed donations to as many as 120 countries.

Opportunistic use of “mask diplomacy” to score political points in the midst

China's Belt-Road Initiative

Major overland economic corridors and seaborne trade routes



of a worldwide disaster poses considerable risks, even in seemingly “safe” recipient countries whose relations China has carefully cultivated.

Take, for example, Iran. The nation serves as a key constituent in a constellation of countries participating in China’s multi-trillion US dollar foreign economic [package](#), the Silk Road Economic Belt and 21st Century Maritime Silk Road (the “Belt and Road Initiative”, or BRI). In Iran, China has a country shunned by the international community, pummeled by the US, a principal actor in the world’s hottest geopolitical hot spot, awash in oil, receptive to Chinese terms for infrastructure investment, and willing to join any undertaking that contravenes American influence: an obvious “win” for Chinese engagement on

“Reported Covid infections in Iran have far outstripped those in China and other Asian economies.

multiple fronts. For Iran, owing to the nation’s pariah status, China represents a desperately needed source of advanced technology, foreign investment, and international trade.

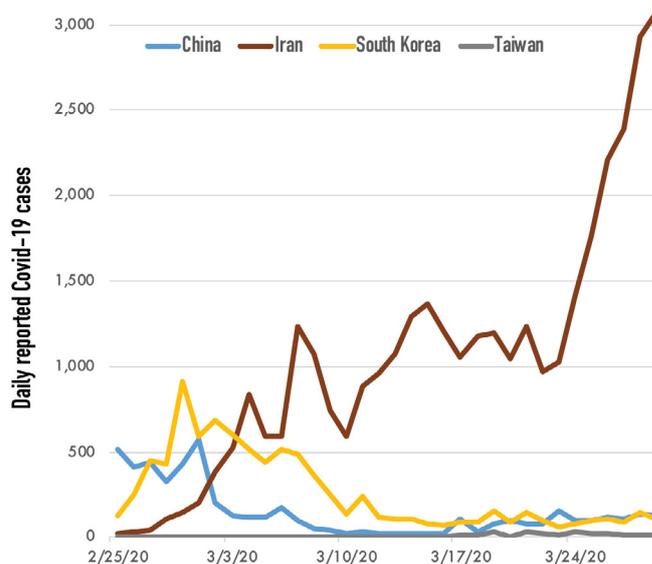
Yet after years of intensely developing Sino-Iranian relations, Iran’s especially difficult struggles with its own Covid-19 outbreak have disrupted what would otherwise be one of China’s most secure geopolitical anchor points. For a resource rich but socially underfunded country, Iran has disproportionately felt the tragic effects of the pandemic, with reported infections far outstripping those in China and other Asian economies. Iran’s health ministry spokesman joined a chorus of growing world skepticism about China’s own reporting on the virus, relating his countries difficulties to Chinese [misinformation](#): “It seems statistics from China [were] a bitter joke, because many in the world thought this is just like influenza, with fewer deaths ... based on reports from China.”

Adding to the Islamic Republic’s aggravations, the epicenter of the coronavirus is the holy city of Qom—highly symbolic for its significance to the ruling theocracy as well as for its high-profile Chinese infrastructure projects. A [litany](#) of senior Iranian officials deeply involved in managing Chinese trade

Covid-19 daily infections, select economies

Asia, Central Asia:

February 25–March 29, 2020



Source: ECDC, Goeconomix

relations have succumbed to the virus as well. A [video](#) that went viral showed Iran’s deputy health minister and leader of the country’s coronavirus response effort, Iraj Harirchi, looking as if he were trying to wipe away from his sweating forehead his own Covid infection while futilely attempting to assuage public angst. The clip visually summarizes the country’s political fallout from the pandemic. This all serves to undermine government authority in the eyes of Iran’s long-suffering population while accentuating misgivings about the country’s overtly close ties to China.

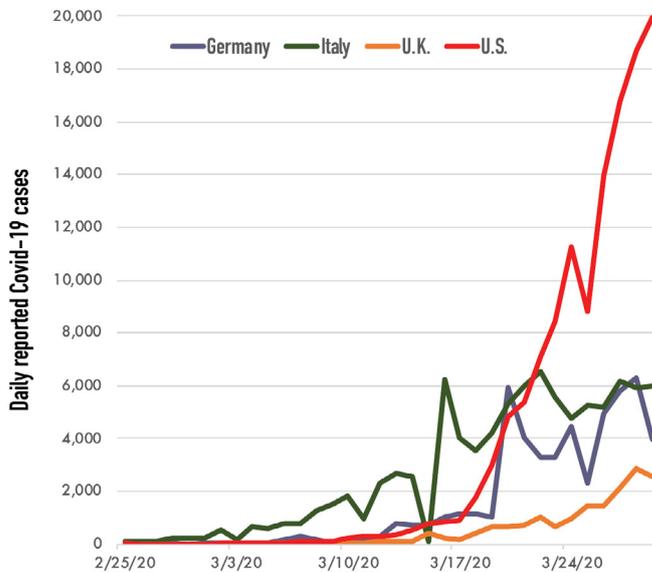
China’s desired image as more savior from than instigator of the Covid-19 pandemic has fared better with Belt-Road countries in Europe, notably the Central European states of Croatia, Hungary, and Serbia. Serbia’s President Aleksandar Vučić played directly to Chinese ambitions and EU fears when [announcing](#) that only China “can help Serbia” and dismissing European unity as “a fairy tale.” His declaration of switched allegiance took place after a highly choreographed on-the-tarmac televised ceremony for receiving Chinese medical supplies—memorable if only for this European head of state’s show of [kissing](#) the Chinese flag.

“Serbia’s President Aleksandar Vučić played directly to Chinese ambitions and EU fears when announcing that only China ‘can help Serbia’

Covid-19 daily infections, select economies

Europe, North America

February 25–March 29, 2020



Source: ECDC, Goeconomix

Geopolitics and China's Covid aid

Hubei Television, March 23, 2020



Chinese television screenshot showing Serbian President Aleksandar Vučić at a news conference after receiving medical supplies from China. His remarks, as translated into Chinese, read: “You can tell that there is no such great international solidarity [within the EU].”

Source: YouTube/Hubei Media Group

“China is aggressively pushing the message that, unlike the US, it is a responsible and reliable partner ... a geopolitical component including a struggle for influence through spinning and the “politics of generosity”.’

Josep Borrell

Taking the political theater to heart, the European Commission’s head of foreign affairs and security, Josep Borrell, responded in a publicly posted [essay](#) that “China is aggressively pushing the message that, unlike the US, it is a responsible and reliable partner.” He further asserted that Europe must defend itself and be alert to “a geopolitical component including a struggle for influence through spinning and the ‘politics of generosity’.” Apart from intensifying official distrust for Chinese intentions in the EU (China’s [biggest](#) trading partner), the move has had negative consequences for China’s foremost strategic commercial interest, Chinese telecommunications giant, Huawei. Immediately following the EU’s retort, Huawei elected to halt its donation program to Europe, [explaining](#): “This isn’t the type of narrative we want ourselves to be associated with.”

More shoes are waiting to drop. Whether in Europe or elsewhere, publicly announced expressions of gratitude for Beijing’s largesse—played up *ad nauseam* across official Chinese media—could easily turn to sloganeering of another type as countries begin to take stock of the pandemic’s true origins and its toll. The grim [figures](#) for Covid-19’s lethality are still being counted. Considering only the numbers so far for deaths in Italy, above 26,000 at the

time of this writing, is sobering. Early into the global spread of the disease, Italy's death toll far exceeded official numbers for China's despite Italy's population of 61 million being equivalent to a mere 4.4% of the world's most populous nation.

Although Italy has [professed](#) appreciation for Chinese assistance during the crisis, the country has also found itself caught up in one of China's more bizarre attempts at counter-narratives, [purporting](#) that the origins for the SARS coronavirus are in Northern Italy. This emerged from comments by an Italian doctor who had seen suspected Covid cases as far back as November 2019. Chinese media [pounced on](#) this story, supposing it somehow was exculpatory. Such remarks actually are *bad news* for China. The doctor's observation—backed by his [assertion](#) that genetic tests confirmed “beyond a shadow of a doubt” that the virus originated in China—simply indicates that China had taken far longer to report on a globally spreading infectious disease than previously thought.

China faces other reputational risks on the global stage that go beyond fallout from the novel coronavirus. After a bold start following Chairman/President Xi Jinping's ascent to senior-most positions of power, his administration has promoted a broad set of policies aimed at reasserting national pride and influence abroad. Before the strains brought on by the Covid-19 pandemic, regime prestige had been weakened by a host of factors: a debilitating trade war with the US, unrelenting political turmoil in Hong Kong, deteriorating relations with Taiwan, global outcries over ethnic policies in Xinjiang (adding to preexisting global criticism over Chinese policies in Tibet), rising tensions with key Asian neighbors, and increasing pushback from debtor nations participating in Belt-Road projects.

On their own, none of these present seriously destabilizing threats. Yet overlaid with a secularly declining GDP and simmering resentment over mismanagement in dealing with the epidemic, Chinese government authority at home and abroad is far more constrained than superficial signs might indicate. The combination of seismic shocks emitting from Covid-19 outbreaks around the world has moved China into precariously situated geopolitical positions.

Disinformation quagmire

A number of senior, external-facing Chinese officials, notably China's outspoken former ambassador to South Africa, [Lin Songtian](#), and Foreign Ministry spokesperson [Zhao Lijian](#) (cheered on by his boss, [Hua Chunying](#)), have taken

“China faces other reputational risks on the global stage that go beyond fallout from the novel coronavirus.

“A number of senior, external-facing Chinese officials ... have taken attempts at China power projection and image management to new extremes.

“... if senior members of China’s diplomatic corps are to be believed, somehow the CCP has not responded in defense of China’s own national interests; passively accepting a biological weapons assault on Chinese soil.

attempts at China power projection and image management to new extremes. They practice a new form of Chinese foreign relations known as “wolf-warrior diplomacy” (战狼外交), named after a patriotically themed action film. Defending this style of swagger in international affairs, Chinese government tabloid, *Global Times*, [reasons](#) that “As China rises and walks close to center stage of the world,” this “requires it to safeguard its national interests in an unequivocal way.” Abrasive diplomacy, we are told, is a natural byproduct of the “changing strengths of China and the West.”

China’s counter-rumor mill

March 12, 2020



Chinese Foreign Ministry spokesman, Lijian Zhao, [tweeting](#) on a clip alleging a “smoking gun”. The video in question simply shows that Covid arrived in US from China earlier than thought and the US had been unprepared with coronavirus test kits. Yet Zhao’s comments go on to reference a fringe conspiracy theory that the US Army unleashed the Covid virus on Wuhan. Beyond the extraordinary implications of designated Chinese government spokespeople endorsing such a claim, in this instance Zhao’s demands for transparency, data, and an explanation from the US are particularly ironic considering China’s own issues in these areas.

Source: Twitter

Especially revealing in this regard are efforts to deflect criticism of China through promotion of an unsubstantiated fringe conspiracy theory that accuses the US Army of unleashing the coronavirus at ground zero in the Chinese city of Wuhan. On its own, this is a stunning suggestion—not only for its outlandishness but because it effectively alleges that the United States has conducted biowarfare against the People’s Republic of China. A perplexing subtext to such official communications is that, if senior members of China’s diplomatic corps are to be believed, somehow the CCP has not responded in defense of China’s own national interests; passively accepting a biological weapons assault on Chinese soil. While pandering to a peculiar sense of nationalistic victimhood as well as serving the general goal of any government-backed conspiracy theory (obfuscate an issue and redirect criticism), on the global stage such pronouncements make China look weak and desperate.

Another element to such claims that Chinese officials seem to have not fully considered is that support of unsubstantiated accusations serves to reinforce suspicions that China itself continues to mislead about the origins and nature of Covid-19 while opposing transparency. China’s conspiracy theory campaigns muddle the country’s own preferred narrative, miring China in a quagmire of disinformation that poses some of the highest risk for geopolitical blowback.

Curiously, biowarfare allegations against the American military trace back at least partially in the opposite direction to a conspiracy theory directed against China’s People’s Liberation Army (PLA). At the beginning of the Chinese public’s dawning awareness of the outbreak, when citizens were outraged over local government cover-ups and delays by officials in responding, [rumors](#) circulated over social media that the virus had been unintentionally released from a secret biological weapons project at the Wuhan Institute of Virology.

This earlier PLA conspiracy theory was picked up by outside observers and amplified by conservative American media and commentators. An [article](#) posted on January 26 by the *Washington Times* quoted an Israeli biological warfare specialist as confirming covert military-use research taking place at the Wuhan institute, and that “Coronaviruses [particularly SARS] have been studied ... outward virus infiltration might take place either as leakage or as an indoor unnoticed infection.” From there, the notion of a Chinese military-designed pathogen slipping past its confines gained traction with China critics in America, eventually including the US president himself. The likes of Arkansas Senator Tom Cotton, talk-radio host, Rush Limbaugh, and—in an especially colorful [opinion piece](#)—long-time CCP antagonist, Steven Moshier, all piled in with explicit

“... China’s conspiracy theory campaigns muddle the country’s own preferred narrative, miring China in a quagmire of disinformation that poses some of the highest risk of geopolitical blowback.

“Evidence-based analysis provided by recognized international scientific sources ... has so far refuted any hypothesis that the virus was man-made.

accusations that China's military had inadvertently unleashed a modern plague.

China's efforts at disinformation can thereby be seen as a tactic to counter a negative rumor with another, ostensibly more favorable one. In the geopolitical gamesmanship over convincing narratives that allow the US or China to claim moral high ground to accuse the other side of misuse of viral disease technology, however, China is playing the weaker hand.

Evidence-based analysis provided by recognized international scientific sources—principally [Nature](#) and [The Lancet](#), among others—has so far refuted any hypothesis that the virus was man-made. It was, in fact, a team of Chinese researchers that initially published [findings](#) identifying the probable origin of SARS-CoV-2 in bats. No less than Chairman of the US Joint Chiefs of Staff, General Mark Milley, had to [admit](#) that “the weight of the evidence” indicates the virus' origins as “natural.” This admission came, moreover, at a time of exaggerated efforts from America's commander-in-chief to pin blame on Chinese machinations for the US' own problems in dealing with Covid-19.

By the time the Pentagon issued these statements in response to the PLA bioweapon theory in mid April, China's leadership might have been content to see either version of the conspiracy theory die there and move on. Like the virus itself, however, Covid's origin story has proven resistant to easy control. What could represent the beginning of a serious unraveling for China's assiduously managed global image occurred with the posting of an April 14th [op-ed](#) by *Washington Post* columnist Josh Rogin, claiming that US State Department cables going back to January 2018 raised alarms over insufficient safety protocols and management oversight at the Wuhan Institute of Virology and another, less secure facility operated by the Wuhan Center for Disease Control and Prevention. This posed possibilities of a more credible alternative to unsubstantiated conspiracy stories: acknowledging the virus' natural origins (refuting that it resulted from military research or was otherwise bio-engineered) but alleging that as a naturally occurring microbe, the coronavirus was still unleashed due to poor laboratory controls. In other words, a circumstantially plausible explanation that points to Chinese government culpability.

This new version of Covid's origins awaits further scrutiny and verification. Available evidence is consistent with the gist of the argument nonetheless. A November 2013 [article](#) appearing in *Nature* published by a team of scientists associated with the Wuhan Institute of Virology described research done on “a bat SARS-like coronavirus that uses the ACE2 receptor” ([ACE2](#) is the human receptor for SARS). Later commentary in the same scientific journal in [2015](#)

“Like the virus itself, however, Covid's origin story has proven resistant to easy control.

“... a circumstantially plausible explanation of the global pandemic unleashed due to Chinese government negligence and mismanagement.

ominously forewarned about the dangers of tinkering with such viruses, even if for medically justifiable purposes to better combat them.

From the *Washington Post* (whose editorial views mainly run contrary to the positions of President Trump) to Fox News (his administration's greatest cheerleader and itself often operating as a misinformation factory), the story is resonating across a gamut of American media voices. The day following Rogin's piece, Fox ran a slightly modified version of the story in a [report](#) suggesting that the Covid-19 outbreak "originated in a Wuhan laboratory, though not as a bioweapon but as part of China's attempt to demonstrate that its efforts to identify and combat viruses are equal to or greater than the capabilities of the United States." This version of events introduces an intriguing twist. If accurate, it would show that the CCP's obsession with geopolitical power projection and its very craving to "show up" the US has created one of the greatest risks to China's international standing.

“This version of events ... would show that the CCP's obsession with geopolitical power projection and its very craving to 'show up' the US has created one of the greatest risks to China's international standing.

LETTER

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Isolation and characterization of a bat SARS-like coronavirus that uses the ACE2 receptor

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The 2002–3 pandemic caused by severe acute respiratory syndrome coronavirus (SARS-CoV) was one of the most significant public health events in recent history¹. An ongoing outbreak of Middle East respiratory syndrome coronavirus² suggests that this group of viruses remains a key threat and that their distribution is wider than previously recognized. Although bats have been suggested to be the natural reservoirs of both viruses^{3–5}, attempts to isolate the progenitor virus of SARS-CoV from bats have been unsuccessful. Diverse SARS-like coronaviruses (SL-CoVs) have now been reported from bats in China, Europe and Africa^{6–8}, but none is considered a direct progenitor of SARS-CoV because of their phylogenetic disparity from this virus and the inability of their spike proteins to use the SARS-CoV cellular receptor molecule, the human angiotensin converting enzyme II (ACE2)^{9,10}. Here we report whole-genome sequences of two novel bat coronaviruses from Chinese horseshoe bats (family Rhinolophidae) in Yunnan, China: RnSHC014 and Rn3367. These viruses are far more closely related to SARS-CoV than any previously identified bat coronaviruses, particularly in the receptor binding domains of the spike protein. Most importantly, we report the first recorded isolation of a live SL-CoV (bat SL-CoV WY11) from bat faecal samples in Vero E6 cells, which has typical coronavirus morphology, 99.9% sequence identity to Rn3367 and uses ACE2 from humans, civets and Chinese horseshoe bats for cell entry. Preliminary *in vitro* testing indicates that WY11 also has a broad species tropism. Our results provide the strongest evidence to date that Chinese horseshoe bats are natural reservoirs of SARS-CoV, and that intermediate hosts may not be necessary for direct human infection by some bat SL-CoVs. They also highlight the importance of pathogen-discovery programs targeting high-risk wildlife groups in emerging disease hotspots as a strategy for pandemic preparedness.

The 2002–3 pandemic of SARS and the ongoing emergence of the Middle East respiratory syndrome coronavirus (MERS-CoV)² demonstrate that CoVs are a significant public health threat. SARS-CoV was shown to use the human ACE2 molecule as its entry receptor, and this is considered a hallmark of its cross-species transmissibility¹⁰. The receptor binding domain (RBD) located in the amino-terminal region (amino acids 318–510) of the SARS-CoV spike protein is directly involved in binding to ACE2 (ref. 12). However, despite phylogenetic evidence that SARS-CoV evolved from bat SL-CoVs, all previously identified SL-CoVs have major sequence differences from SARS-CoV in the RBD of their spike proteins, including one or two deletions^{6–8}. Replacing the RBD of one SL-CoV's protein with SARS-CoV's conferred the ability to use human ACE2 and replicate efficiently in mice¹¹. However, to date, no SL-CoVs have been isolated from bats, and no wild-type SL-CoV of bat origin has been shown to use ACE2.

We conducted a 12-month longitudinal survey (April 2011–September 2012) of SL-CoV in an colony of *Rhinolophus hirsutus* at a single location

in Kunming, Yunnan Province, China (Extended Data Table 1). A total of 117 anal swabs or faecal samples were collected from individual bats using a previously published method¹². A one-step reverse transcription (RT)-nested PCR was conducted to amplify the RNA-dependent RNA polymerase (RdRp) motifs A and C, which are conserved among alphacoronaviruses and betacoronaviruses¹³.

Twenty-seven of the 117 samples (23%) were classed as positive by PCR and subsequently confirmed by sequencing. The species origin of all positive samples was confirmed to be *R. hirsutus* by cytochrome b sequence analysis, as described previously¹⁴. A higher prevalence was observed in samples collected in October (50% in 2011 and 48.7% in 2012) than those in April (7.1% in 2011) or May (7.9% in 2012) (Extended Data Table 1). Analysis of the S protein RBD sequences indicated the presence of seven different strains of SL-CoVs (Fig. 1a and Extended Data Figs 1 and 2). In addition to RBD sequences which closely matched previously described SL-CoVs (Rn672, R1 and HKU2)^{6,7,15}, two novel strains (designated SL-CoV RnSHC014 and Rn3367) were discovered. Their full-length genome sequences were determined, and both were found to be 29,787 base pairs in size (excluding the poly(A) tail). The overall nucleotide sequence identity of these two genomes with human SARS-CoV (Tor2 strain) is 95%, higher than that observed previously for bat SL-CoVs in China (88–92%)^{6,7,15} or Europe (70%)¹⁶ (Extended Data Table 2 and Extended Data Figs 3 and 4). Higher sequence identities were observed at the protein level between these new SL-CoVs and SARS-CoVs (Extended Data Tables 3 and 4). To understand the evolutionary origin of these two novel SL-CoV strains, we conducted recombination analysis with the Recombination Detection Program 4.0 package¹⁷ using available genome sequences of bat SL-CoV strains (R1, Rn3, Rn672, Rn1, HKU2 and BM48-31) and human and civet representative SARS-CoV strains (B01, S23, Tor2 and G202). Three breakpoints were detected with strong *P*-values (<10⁻⁷) and supported by similarity plot and bootscan analysis (Extended Data Fig. 5a, b). Breakpoints were located at nucleotides 20,827, 26,553 and 28,685 in the Rn3367 (and RnSHC014) genome, and generated recombination fragments covering nucleotides 20,827–26,533 (5,727 nucleotides) (including partial open reading frame (ORF) 1b, full-length S, ORF3, E and partial M gene) and nucleotides 26,534–28,685 (2,153 nucleotides) (including partial ORF M, full-length ORF6, ORF7, ORF8 and partial N gene). Phylogenetic analysis using the major and minor parental regions suggested that Rn3367 and RnSHC014 is the descendent of a recombination of lineages that ultimately lead to SARS-CoV and SL-CoV Rn672 (Fig. 1b).

The most notable sequence differences between these two new SL-CoVs and previously identified SL-CoVs is in the RBD regions of their spike proteins. First, they have higher amino acid sequence identity to SARS-CoV (85% and 96% for RnSHC014 and Rn3367, respectively). Second, there are no deletions and they have perfect sequence alignment with the SARS-CoV RBD region (Extended Data Figs 1 and 2). Structural

Not man-made, but clearly researched in Wuhan
November 12, 2015

Published research on “characterization of a bat SARS-like coronavirus” principally involving a team at the Center for Emerging Infectious Diseases, State Key Laboratory of Virology, Wuhan Institute of Virology.

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Source: nature.com

“... from a geopolitical perspective, the drive towards evidence gathering and transparency does not favor Chinese government positions that ‘the world should thank China’

“Money talks and China can build upon its economic positioning to continue exerting global influence.

Verifying the origins of the most destructive global event of this generation requires additional fact-finding. But from a geopolitical perspective, the drive towards evidence gathering and transparency does not favor Chinese government [positions](#) that “the world should thank China” for its handling of the coronavirus outbreak and its [boasts](#) about “the unique institutional advantages of the Chinese system.”

China’s rulers can expect the need for further damage control. It is already known that during the coronavirus crisis, Chinese authorities “[disappeared](#)” two popular citizen journalists for independently reporting on conditions in Wuhan, [revoked](#) the press credential of a large number of journalists from leading American news organizations, had Hong Kong officials [reprimand](#) the city’s public broadcaster for a reporter’s questioning of the WHO’s top doctor about health policies towards Taiwan, and [punished](#) and then [detained](#) the Director of the Wuhan Central Hospital Emergency Care Department, Dr. Ai Fen. On December 30, Dr. Ai was the first to raise the alarm about Wuhan’s Covid outbreak. In a better functioning system, she would now be part of the response effort.

An economic swell in choppy waters

Irrespective of whatever hits China has been and will continue taking to its international image, the country enjoys a tangible, bottom-line advantage. It stands out as the only among the world’s ten largest economies entering recovery. Despite a pronouncedly negative first quarter, forecast data indicates China will register positive GDP growth for the year. Money talks and China can build upon its economic positioning to continue exerting global influence.

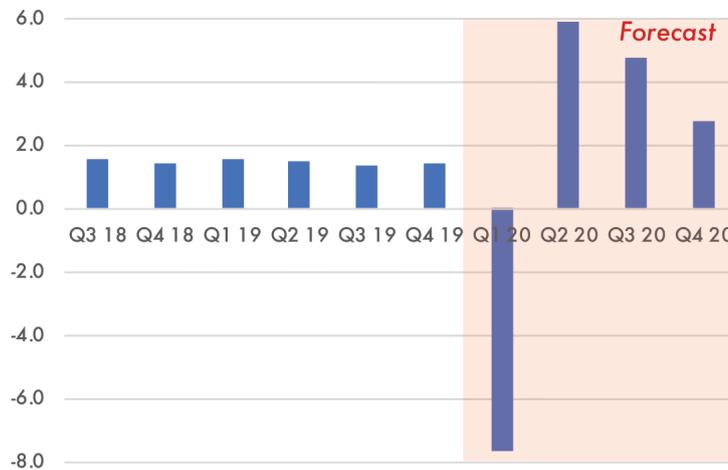
The ravages of Covid-19 have left behind a international landscape of economic scorched earth, however. The foreign markets that China invests in and sells to are enduring rare, simultaneous supply-and-demand shocks. Chinese foreign direct investmet, in countres willing to accept China’s terms, currently present some of the better near- and mid-term opportunities.

Export markets will be more challenging. Depending on how bad and long-lasting Covid’s damage is to developing economies, Chinese exports probably will need to wait out their recovery. For developed markets, old trade tensions have yet to be fully resolved. Covid moreover has brought about a new set of trade complexities.

The US obviously has taken the most hard-line approach to address trade imbalances with China. Although the US-China trade conflict halted in principle

China quarterly GDP growth

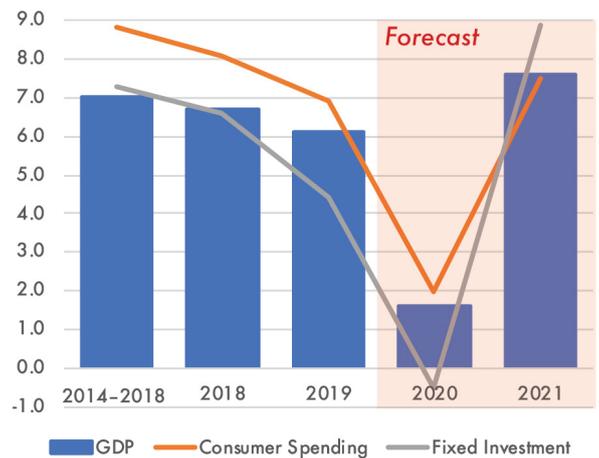
%, quarter on quarter, Q3 2018–Q4 2020



Source: Fitch Ratings, Goeconomix

China annual GDP growth

%, 2014–2020



from January, China has yet to deliver on its obligations under the newly concluded trade deal. America is also far from alone in its trade frustrations. Since 2019, the European Commission has officially [designated](#) China a “systemic rival”, pointedly criticizing BRI strategies towards Europe and China’s politicization of trade relations. Japan, China’s [biggest](#) trading partner in Asia, has echoed the exasperation of many others in lambasting the WHO for hewing so closely to China’s official line on Covid. Stinging from the pandemic’s one-year delay of the 2020 Tokyo Summer Olympics, Japanese Deputy Prime Minister and Finance Minister Taro Aso bitterly [suggested](#) that the UN body change its official name to the “Chinese Health Organization.”

Prior to Covid-19, there was already a trend towards rebalancing supply chains, including consideration by firms to “reduce their risk of exposure to fallout from geopolitical intrigue” according to a 2019 [study](#) by BCG. As the pandemic spreads, risks specific to reliance on Chinese manufacturing sources have become increasingly recognized. An April 16th [report](#) by the *Wall Street Journal* detailed how new Chinese quality regulations, otherwise a positive development to address issues of substandard quality in Chinese medical supplies, have held up American companies shipping their own products from operations in China back to the US. This was despite a superseding global medical emergency

“Prior to Covid-19, there was already a trend towards rebalancing supply chains, including consideration by firms to ‘reduce their risk of exposure to fallout from geopolitical intrigue’

“‘The epidemic brings a heaven-sent chance for China’s supply reforms to result in high-quality development and modernization of national governance.’

Wei Jianguo

“... numbers describe the sheer economic power that will keep China highly desired as a market whatever the geopolitical intricacies.

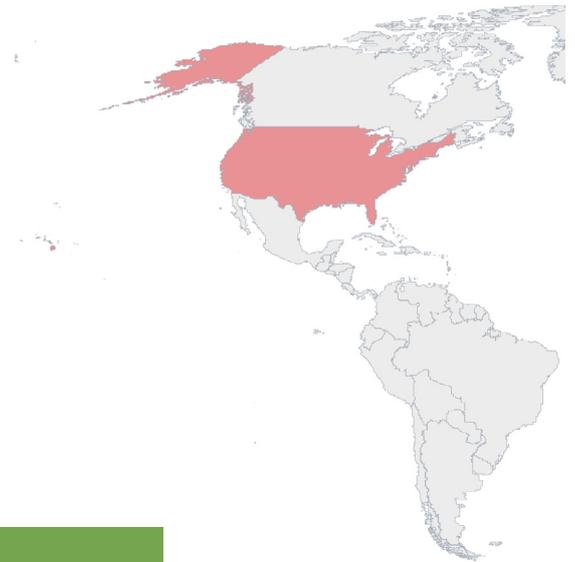
and the items being approved by the US Food and Drug Administration. Goods included 1.4 million Covid-19 test kits, 2.4 million masks, 40,000 isolation gowns, coronavirus antibody tests, and printed circuit boards for ventilators.

There are more encouraging signs, not the least of which is China’s new Foreign Investment Law. The law went into effect on January 1 and could provide a fresh restart for foreign brands in China just as market disruptions from Covid-19 there are dying down. Designed to treat foreign investors and companies the same as Chinese interests, foreign commercial organizations like the European Union Chamber of Commerce in China have [spoken](#) positively about the law’s potential.

The announced regulatory changes, though purely coincidental with the disease outbreak, come at an ideal time. China’s former Vice Minister of Commerce, Wei Jianguo, goes so far as to view Covid to be a positive shock for China. He ambitiously [hopes](#) that in the aftermath of the disease, China will embrace much needed structural reforms. “The epidemic brings a heaven-sent chance for China’s supply reforms to result in high-quality development and modernization of national governance.”

Overall, China can expect still to wield power with a national asset whose value has risen in contrast to depressed economies elsewhere: relative growth in its massive marketplace. Reliable forecasts estimate at least modestly positive GDP growth in 2020 for China of 1–2%. A plummet from the over 6% rate of economic expansion attained in 2019, the figure nevertheless qualifies as outstanding growth in a time of severe global economic downturn. Compared to other major economies and market groupings, China remains the world’s stand-out performer, boasting an unmatched combination of size (its \$14.1 trillion GDP) and momentum.

China already provided a taste of what it can offer with its consumption power in mid April, when most Western economies were still in a collective talspin. At the post-Covid reopening of its flagship store in Guangzhou, French luxury goods maker, Hermès, generated sales of some 19 million renminbi (US\$2.7 million) in a single day of [sales](#). American electric vehicle maker Tesla saw [registrations](#) for its cars in China jump 450% in March (month on month) as its Shanghai plant went back online. In mid April, the automaker also opened a flagship digital store on [Tmall](#), the consumer ecommerce platform operated by Chinese Internet giant, Alibaba, thereby gaining access to China’s 800 million online users. These sorts of numbers describe the sheer economic might that will keep China highly desired as a market whatever the geopolitical difficulties.



US

Caught severely off guard but with resources to recover

Enhanced geopolitical positioning

Under the banner of Make America Great Again (MAGA), an organizing principle for US foreign policy during the presidency of Donald Trump has been to disengage from the multilateralism that every previous administration has promoted in some form since after World War II. Held strictly to that standard, Covid-19 has provided opportunities to legitimize banning foreign citizens from entering the US (long a preferred policy of this administration) and demonstrated the strategic benefits of repatriated manufacturing capacity for essential products. Contrasting with such isolationist tendencies, globally engaged US states and leading American industries, notably those supplying digital technologies for Covid's new work-from-home paradigm and the nation's advanced medical research capabilities, are projecting aspects of American global leadership during the crisis.

Deteriorated geopolitical positioning

Covid has exposed shocking levels of unpreparedness and poorly coordinated response mechanisms in the world's largest economy. After ignoring the warnings of experiences with Covid from other countries and failing to prepare the country for the pandemic's arrival, the anti-science, anti-technocratic biases of America's president have been glaringly exposed. Allies feel abandoned while the US has missed repeated opportunities to engage with other countries, particularly those in Asia and Europe, to develop the coordinated mitigation solutions that a global pandemic naturally implies. Elements enhancing America's geopolitical positioning (multinational firms, world-leading technology) offset some aspects of these forces working against the country's global standing. America previously showed itself capable of radical transformation and rejection of isolationism with the outbreak of World War II. Something similar might also occur with Covid-19 if it precipitates a change in presidential leadership via the November general elections.

“US President Donald Trump has long demonstrated a transactional attitude towards world affairs, one guided by personal instincts and a visceral distrust of America’s scientific, intelligence, bureaucratic, and news media institutions.”

MAGA missteps

Whereas elements of China’s leadership performed poorly in withholding early-stage information and mismanaging aspects of the outbreak in Wuhan, the US—with its greater wealth, more transparent and accountable system of government, and advanced medical infrastructure—performed dismally in being caught so unprepared in the face an exploding global health crisis. The leadership vacuum laid bare is profound but not too surprising. US President Donald Trump has long demonstrated a transactional attitude towards world affairs, one guided by personal instincts and a visceral distrust of America’s scientific, intelligence, bureaucratic, and news media institutions. The persistent dismissiveness of Covid-19’s threat to America by its commander-in-chief lasted up until facts on the ground made the crisis impossible to ignore.

The president’s repeated denials of the epidemic’s threat (before an abrupt about-face) and overconfidence in US preparedness shows in a [timeline](#) of his on-the-record comments:

- **January 22:** “We have it totally under control... It’s going to be just fine.”
- **January 30:** “We think we have it very well under control... we think it’s going to have a very good ending for us.”
- **February 23:** “We have it very much under control in this country.”
- **February 27:** “It’s going to disappear. One day—like a miracle—it will disappear.”
- **March 7:** “No, I’m not concerned at all. No, we’ve done a great job”
- **March 10:** “And we’re prepared, and we’re doing a great job with it. And it will go away.”
- **March 17:** “This is a pandemic. I felt it was a pandemic long before it was called a pandemic.”

President Trump’s downplaying of the imminent threat posed by Covid-19 eerily echoes other thinking and actions by him that exhibit a decidedly anti-science bias. Noteworthy in this regard are his trademark repeated rejections of evidence for climate change and exceedingly short-sighted annual [attempts](#) to slash funding for the US Centers for Disease Control. Prior to the coronavirus crisis, the president even made [overtures](#) for government collaboration with the anti-vaccination movement. In fairness to the president and other world leaders

Geopolitical shifts from Covid-19

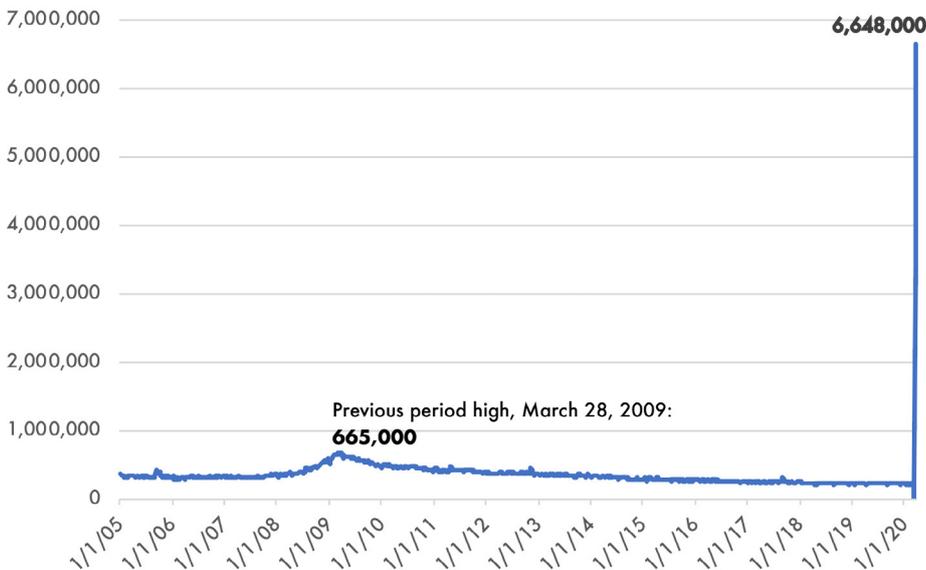
caught off guard, the epidemiological power of Covid-19 is unprecedented. Be that as it may, the sheer lack of basic preparedness in spite of forewarnings of wholesale social disruption from the experience of China and subsequently other areas where the epidemic had spread is stunning. America essentially has been set back to the situation it found itself in at the outbreak of the 1918 Spanish flu. There too, lacking a vaccine and therapeutics to tackle the greatest pandemic of that century, mitigation [measures](#) were limited to the kind of solutions adopted today: isolation, quarantine, practicing good hygiene, frequently disinfecting surfaces, and limiting public gatherings.

As a consequence of its unpreparedness, the world’s largest economy now finds itself scrambling to ramp up production of basic items for epidemic response such as test kits and face masks while hastily devising new means—deploying Navy hospital ships, commandeering hotels, and building field hospitals—to add healthcare capacity. American industry and its workforce has entered into stay-at-home isolation on a mass scale. Especially hard hit are small businesses, which in the US [account](#) for 44 percent of economic activity and generate two-thirds of net new jobs. Lacking the financial resources or alternative means of operation (such as switching over to online platforms) that

“As a consequence of its unpreparedness, the world’s largest economy now finds itself scrambling to ramp up production of basic items for epidemic response

US unemployment insurance weekly claims, seasonally adjusted

January 1, 2005 – March 28, 2020



Source: US Department of Labor, Goeconomix

“... public statements from the US president and senior members of his cabinet often conflict with advisories issued by the White House’s own team of medical experts.

“America’s default position of global dominance, tenuous as it is, mainly owes to lack of viable candidates to substitute for the expected but unfulfilled role of the US as a genuine superpower.

large corporations can revert to, many small businesses face collapse.

Exacerbating an already grievous situation, public statements from the US president and senior members of his cabinet often conflict with advisories issued by the White House’s own team of medical experts. Less forgivably, at times communications have been patently false. “Anybody that wants a test [for the coronavirus] can get a test,” President Trump [quipped](#) to an assembled phalanx of reporters on March 6. If true, that would have been one the best opportunities to spare the nation from the enormous human suffering and economic damage that was to come. This misstatement is particularly galling as it reflects the kind of basic preparedness that the public expected and government should have been ready to deliver.

Domestic vs. geopolitical

The US president intentionally cultivates a divisive political persona and, whether by design or accident, oversees executive teams that function chaotically. For his many detractors, it can be tempting, though not entirely correct, to interpret these Trumpian methods—starkly brought out by the Covid crisis—as automatically creating a leadership vacuum in the global arena that easily can be filled.

Domestically, sub-par crisis mismanagement by the Trump administration has created gaps in federal stewardship that might well result in the president and his Republican Party suffering a sweeping defeat in this year’s November general elections. At an international level, however, the implications are not as catastrophic.

America’s default position of global dominance, tenuous as it is, mainly owes to lack of viable candidates to substitute for the expected but unfulfilled role of the US as a genuine superpower. As previously detailed, China’s attempted claims for the mantle of global leadership during the Covid crisis is already generating blowback, seriously jeopardizing the nation’s global standing.

With only a few but notable exceptions such as [Germany](#), [Australia](#), and [New Zealand](#), most Western economies generally have demonstrated their own lack of epidemic preparedness and response. The European Union, the only other Western entity with superpower qualifications, is in any case in no position to claim broad success with the crisis. Russia is a non-starter. Russian President Vladimir Putin was in near lock step with his US counterpart, [declaring](#) in March that his government had the virus “under control” before having to [admit](#) in April that the situation was clearly deteriorating. Added to this lapse in leadership,

Russia has become best known during the global pandemic for its frenetic [race](#) to the bottom of oil markets with Saudi Arabia, plunging prices to historic depths at a time of worldwide economic panic. Putin's much sought-after global respect for his brand of shirtless muscular authority has sunk below already low pre-Covid levels.

On a grand scale, the greatest political fallout related to the US from the pandemic concerns the tide of populism that originally put Donald Trump in the Oval Office and swept numerous other governments to power. Like the US president, leading populists of today disdain big government, reject the value of science as a guide for public policy, and dismiss the credibility of experts in general. Signals emanating from the US now resonating with other countries are images of televised press conferences where the leader of the populist world is clearly eclipsed by dedicated, plain-talking, and highly credible technocrats.

In these national briefings, those most demonstrating the characteristics of leadership are the White House Coronavirus Response Coordinator, Dr. Deborah Birx, the highly popular (nearly adulated) Director of the National Institute of Allergy and Infectious Diseases, Dr. Anthony Fauci, and the Surgeon General, Vice Admiral Jerome Adams, who happens to hold degrees as an MD and a Master of Public Health. Highly trained experts, not populists, are proving most adept at guiding the nation through its dark days of the crisis. Such is the political dynamic with the greatest likelihood for the United States to continue projecting abroad.

Missteps by European populists leaders increase the likelihood that other Western societies will follow in this direction in a post-Covid world. Shortly before SARS-CoV-2 savaged Italy, Foreign Minister Luigi Di Maio deflected criticism of his government as a conspiracy by the press to ferment an "[infodemic](#)" of media coverage worse than any viral epidemic could be. Promoting dubious public health policy and unproven science, British Prime Minister Boris Johnson at first advocated a frontline strategy to achieve "[herd immunity](#)" against the virus by holding back government intervention and ignoring calls for social distancing. Appeals from mainstream medical experts and images healthcare system meltdowns in continental Europe spurred Whitehall to reverse course. Regrettably not in time, though, for Britain's prime minister to become the world's first major leader to contract the virus and nearly lose his life.

The high probability of even greater devastation for much of the developing world poses still greater risks for populist governments and the economies they

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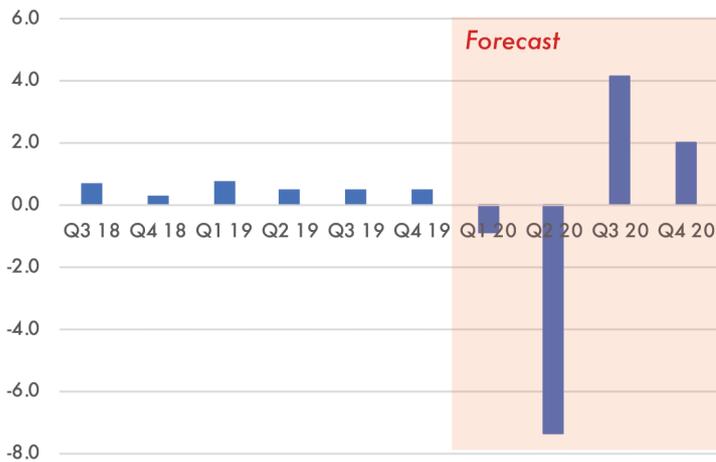
“The longer the pandemic lasts, the more ... the populist movement will be seen as insensitive and out-of-touch as the once vilified ‘globalist elites’ of previous election cycles were.

oversee. Mimicking the phrasing and holding to the earlier pronouncements of Donald Trump, President Jair Bolsonaro of Brazil has [dismissed](#) the coronavirus as “a little cold” and remained opposed to social distancing and other preventative measures advocated by his health minister (whom he later [fired](#)), most of his cabinet, and the nation’s congress. Promoting the [slogan](#) “Brazil can’t stop” (#OBrazilNaoPodeParar) and blaming the press and his opponents for exaggerating the dangers of the epidemic, the Brazilian head of state has become politically isolated while rejecting social isolation for his country. The unfolding global recession will hit an export-dependent, debt-burdened Brazilian economy, further imperiling the re-election of a leader who came to power with the explicit mandate to revive economic growth.

The longer the pandemic lasts, the more the anti-establishment, scientifically hostile, minimalist government approaches of the populist movement will be seen

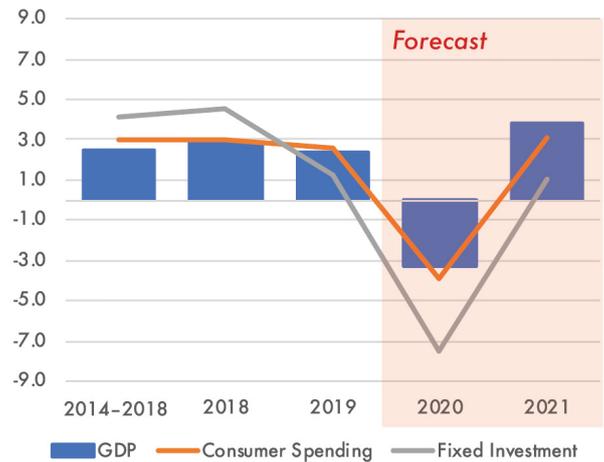
US quarterly GDP growth

%, quarter on quarter, Q3 2018–Q4 2020



US annual GDP growth

%, 2014–2020



Source: Fitch Ratings, Gloeconomix

as insensitive and out-of-touch as the once vilified “globalist elites” of previous election cycles were.

Leadership from below and within

In tandem with America setting the stage for a pivot away from populism in a

post-Covid world, developments with crisis remedies at local government levels and with American digital and healthcare technologies show potential for enhancing US geopolitical positioning by increasing American global linkages and influence.

For example, the US state of California supports a large population working in a broad range of sectors, many advanced, that generate [\\$3.2 trillion](#) annually in GDP. If it were its own country, California would be the world's fifth largest economy and rank above [India](#). California's governor, Gavin Newsom, was far ahead of the White House in declaring a State of Emergency in early March. He followed up with a stay-at-home order for the state's 40 million people two weeks later. A Pacific Rim territory, California shares strong trade ties with Asia and has a large population of immigrants that provide it with reinforcing international linkages. The state's government and its businesses base have not embraced the unilateralist stance of the present US administration. If state leaders so choose, leveraging California's geopolitical advantages can facilitate coordination with foreign governments on near- and long-term epidemic policies.

Another standout is New York state. After taking a cautious, measured approach before his state tragically became the epicenter of the virus in the US, Governor Andrew Cuomo directly addressed the outbreak with a lockdown edict for New York's 20 million residents and emerged as the nation's *de facto* voice for political action and crisis communication. In sharp contrast to the White House's defensive, rambling, and factually confusing press briefings, Governor Cuomo's blunt and data-focused presentations have taken pains to avoid spin and clearly explain what a rapidly evolving situation means for citizens. Unusual for a politician anywhere, the governor's televised broadcasts tangibly de-emphasize the man and highlight the contents of his message. An additional sign of federal powers ceding ground to state leadership in instances of crisis management, White House daily briefings moved from morning to afternoon to allow Governor Cuomo to speak before the president: a highly revealing development on its own and not an insignificant concession for an Oval Office holder who instinctively craves the spotlight.

As with California, New York has a culturally diverse population and globalized industrial base, most prominently in finance and advanced services, that likewise offer catalysts for internationally attenuated state health policies going forward. Washington state, another tech power in the US, is also a Pacific Rim jurisdiction that achieved early success in reducing virus contagion. It too has been positioning itself to emerge in the post-Covid era as one of several

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“ ... opportunities to lead in telemedicine—the mingling of information, automation, and medical science—bode well for the US in the post-Covid world.

globally engaged domestic US economic powers that protect human and economic development with forward-thinking health policy.

Covid's boost to technological prowess

Another globally consequential force within the American political system comes from capabilities in digital technology and medical research. These represent the core of immediate and sustainable long-term technical solutions to the ravages of SARS-CoV-2 and yet unseen pathogen-based assaults of the future.

American digital platforms such as Facebook, Amazon, Apple, Netflix, and Google (the “FAANG” powerhouse) and longer standing Big Tech names like Microsoft and Intel were thriving before Covid-19. Demand for their offerings have taken off in a crisis situation requiring populations to sequester at home and organizations to engage with employees and customers virtually. Covid has also proven a windfall to a new generation of American-bred remote-working platforms—notably Zoom, Cisco Webex, Slack, RingCentral, Bluescape, and Citrix—that have shot to prominence in spite of grim national economic news.

China, of course, itself boasts world-class digital platform companies offering sophisticated technologies that have thrived during Covid lockdowns. Alibaba, JD.com, Tencent, Huawei, and TikTok are among the more internationally recognizable names. Yet with the exception of Huawei and TikTok, the presence of these platforms mainly is limited to China and scattered developing markets. They by and large do not represent globally dominant brands. Significantly, Alibaba, JD.com, and Tencent all list their company shares in the US and Hong Kong, not mainland China, because of deficiencies in the mainland's capital markets. Under US pressure, Huawei is confronting a whole host of issues with its further global expansion, making its goal to provide 5G infrastructure in major developed markets uncertain. Huawei has already suffered collateral damage from the divisive nature of China's Covid aid strategy. TikTok [reportedly](#) is looking to base its international headquarters outside of China specifically because of a perceived need to “shake off its Chinese image.”

Towards developing a Covid vaccine and therapeutics, which companies from which countries will accomplish the most in the race to scientifically defeat the new coronavirus remains to be seen. In any case, the [estimated](#) nearly \$200 billion that America spends on medical and health research serve it well for this purpose. Combined with strengths in digital platform technologies, opportunities to lead in telemedicine—the mingling of information, automation, and medical science—bode well for the US in the post-Covid world.



South Korea

A smaller economy exemplifying Covid-era success

Enhanced geopolitical positioning

South Korea has received attention for its phenomenally effective ability to contain the spread of Covid-19 without resorting to mass quarantines and severe economic disruption. It accomplished this despite geographic proximity to China—the Korean Peninsula in fact attaches to the Chinese mainland—and facing a challenging macro environment prior to the virus outbreak. As more and more countries turn to South Korea as an model for how a democratic, industrially diverse, socially dynamic economy can successfully control Covid-19, its reputation will continue to rise. The nation moreover has been riding a wave of global soft-power influence with its increasingly prominent culture and entertainment industries. South Korea is now in a unique position to build upon “soft” strengths with demonstrated “hard” capabilities in what has become the most sought-after policy objective in the world: defeating Covid-19 with limited economic sacrifice.

Deteriorated geopolitical positioning

Owing to its unusual success in dealing with Covid-19, South Korea has not registered notable deterioration with its geopolitical standing in the context of this crisis. Yet it still confronts serious risks, chief of which come from its belligerent sibling to the north. North Korea fired a fusillade of [six](#) missile launches throughout March. The totalitarian state denies having any cases of Covid-19, though such claims are doubtful. The weapons tests might be motivated by a desire shore up public support at a time of spiking fear over its own unacknowledged coronavirus outbreak. There are not yet indications that if an outbreak spread it would push the north towards military action, but the potential for regime destabilization and extreme responses by Pyongyang cannot be dismissed either. From mid April, reports emerged that North Korean dictator Kim Jung-un might be gravely [ill](#) or possibly [dead](#), raising the specter of severe destabilization north of the 38th parallel.

Health policy's Korean Wave

While senior leaders in China and America have busied themselves trading insults and competing for bragging rights over their respective handling of the coronavirus pandemic, the leadership of more pragmatic minded Asian economies like Hong Kong, Taiwan, South Korea, and (if its numbers are to be believed) Vietnam have proven remarkably adept at achieving relative control over the virus while avoiding serious economic fallout.

South Korea especially deserves study. Its economy is larger and more diverse than that of other Asian pragmatists. Its economic characteristics fall in between those of a typical developed and developing economy and so are more broadly relatable. It has a vibrant, if not rambunctious, democratic system that means lessons from its handling of the Covid-19 crisis are more relevant to other democracies. The country's first confirmed infection was on January 20, just one day before the US confirmed its patient zero. Korea's prospects also looked rather bleak when about one month later, it earned the unenviable distinction of being the [first country](#) to confirm more cases in a single day than China. Yet the government managed an impressive change of fortune, and did so with less than stellar political and economic conditions to work with. According to the OECD, South Korea also has a shockingly high ratio, [43.8%](#), of seniors living in poverty, making its population disproportionately vulnerable to Covid-19.

Despite these challenges, South Korea has been exceptionally successful in that oft-repeated goal of public health officials: flattening the curve of coronavirus transmission and death. It accomplished this, moreover, while avoiding the sort of geographic-wide lockdowns that societies find so annoying and economies so damaging.

Delivering (test) results

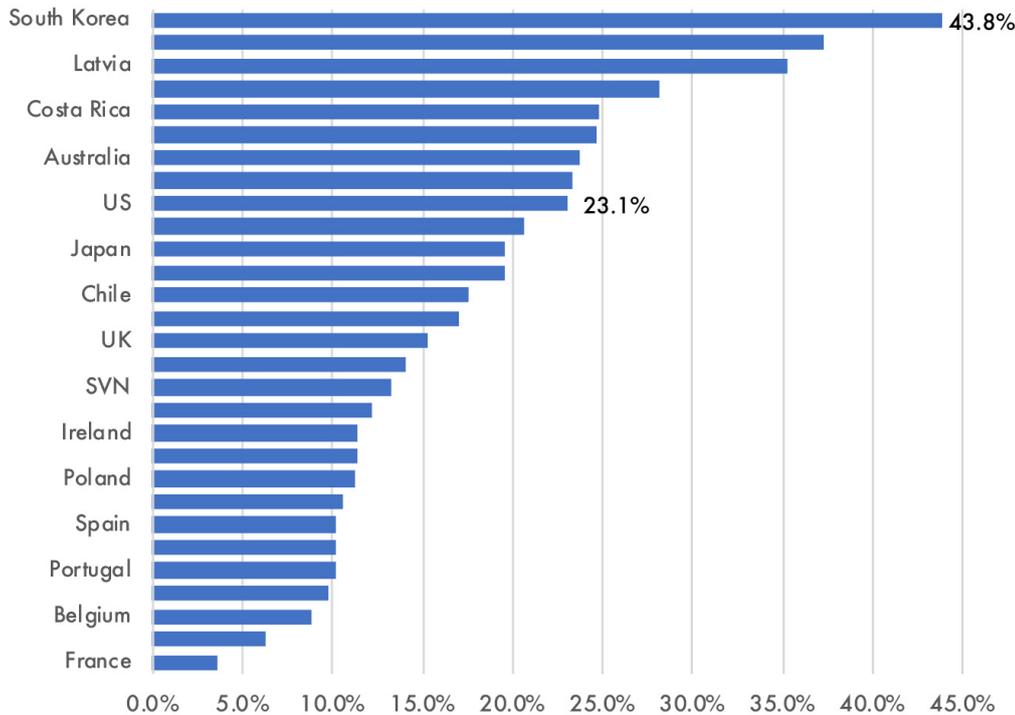
The Korean approach involved opening some 600 testing centers, including 50 drive-through stations. Testing takes about 10 minutes with results available within a few hours. Korea opted—at considerable risk—not to isolate large swaths of its population and kept its borders open. It managed the latter without threatening public health by thoroughly screening foreign arrivals and requiring them to download a smartphone app that provides guidance on how to check for symptoms. Unlike other countries that quarantine all foreign arrivals, in Korea only those who test positive are sequestered. The movements of anyone who contracted the virus are contact traced to identify those with whom the

“South Korea has been exceptionally successful in that oft-repeated goal of public health officials: flattening the curve of coronavirus transmission and death.

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Elderly population poverty rate, select countries

Those 66 years old and above, 2019 or latest available data



Source: OECD, Goeconomix

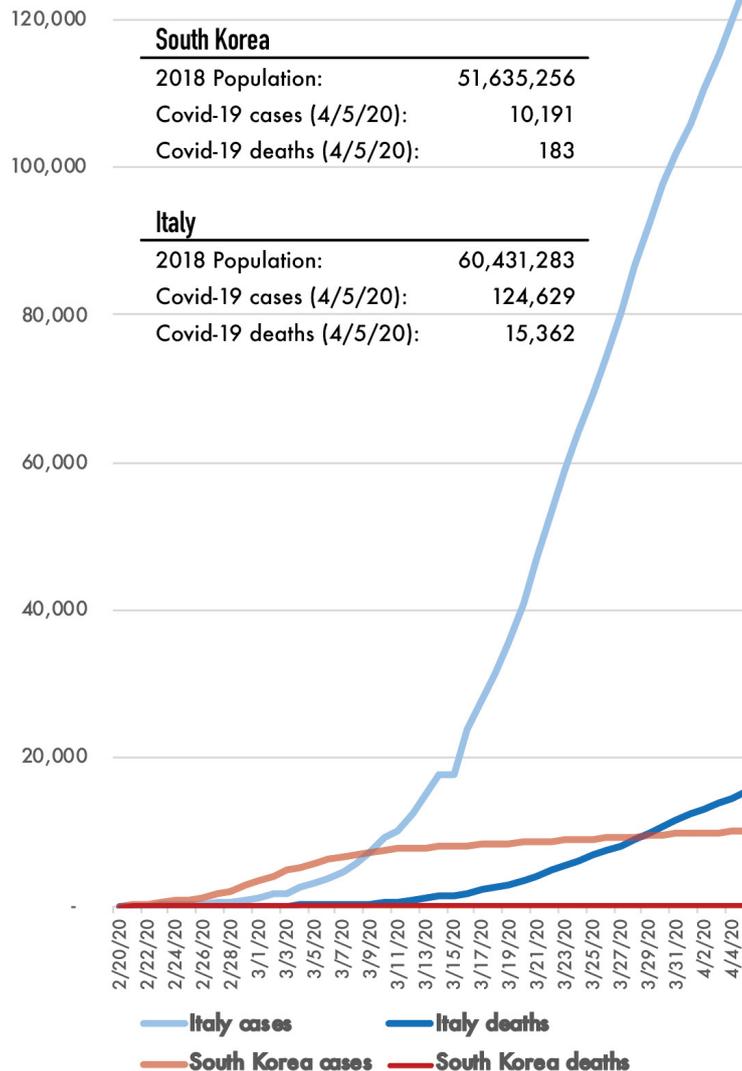
person interacted. Most [businesses](#) stay open. Assessing the effectiveness of this approach, a detailed report in the *New York Times* [observed](#): “This allows health workers to identify networks of possible transmission early, carving the virus out of society like a surgeon removing a cancer.”

“The linchpin of South Korea’s response has been a testing program that has screened more people per capita for the virus than any other country by far,” noted another March 14th [report](#) by the *South China Morning Post*. By carrying out up to 15,000 tests per day, health officials have been able to screen some 250,000 people—about one in every 200 Koreans. Accompanying this high rate of testing is widespread public adherence to social distancing, proper hygiene, and two-way communication between citizens and health authorities. Those with mild confirmed cases go to special centers, leaving hospitals with capacity to treat the severely afflicted. The combination of frequent testing, selective

“Accompanying this high rate of testing is widespread public adherence to social distancing, proper hygiene, and two-way communication between citizens and health authorities.”

South Korea, Italy: Covid-19 cases and deaths

February 20–April 5, 2020



Source: ECDC, World Bank, Goeconomix

quarantine, continual monitoring, and segmented care has decidedly flattened South Korea’s curve of infections and stringently capped the country’s mortality rate to barely register statistically. As of this writing, South Korea has witnessed less than 250 [people](#) killed by Covid-19, under 0.0005% of its total population. South Korea’s approach to test, isolate, treat, and contact trace has been widely [praised](#) and has emerged as a new global [standard](#). Anthony Fauci of the US National Institutes of Health highlighted that such an approach provides a practical way for containment to prevent wide-spread contagion. Most governments have been pursuing reactive efforts for mitigation after an outbreak. The US, Director Fauci [concedes](#), is “in mitigation right now.”

Kamsahamnida!

South Korea’s practical, well executed approach shows what can be accomplished with fewer economic resources but better planning. The country’s experience also offers a reminder that expectations should not only be placed on government actions but on civic duty (without, thankfully, demanding draconian sacrifices of personal freedoms).

Geopolitical shifts from Covid-19

It further underscores the centrality of robust communications, thorough data gathering, and accurate information sharing in dealing with public emergencies.

Critical to the longstanding debate about whether a future world order will skew more towards American or Chinese dictates, South Korea shows the potential of a “third way” in terms of public healthcare policies. A further strike against populist or authoritarian methods, South Korea (again) proves the superiority of evidence-based solutions over those based on wishful thinking or headline ideology.

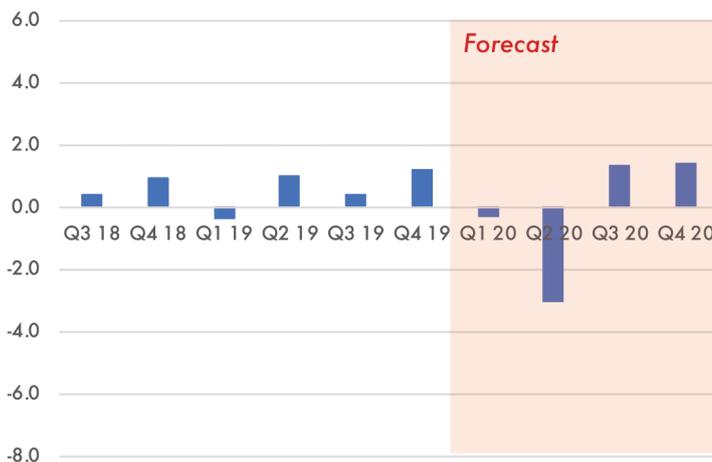
South Korea’s recipe for virus containment succeeds remarkably well in achieving positive public health outcomes while maintaining fundamental socio-economic activity. If current projections hold, the nation should weather the global economic turmoil released by Covid-19 with relatively limited declines in GDP growth and even slightly positive growth in annual consumer spending.

With only a three-hour flight time separating Seoul from Wuhan and the nation’s security framework molded by invasions and wars of the past century, South Korea would not appear the most likely of candidates to emerge from the Covid-19 pandemic as a role model. Notable too, South Korea headed into 2020 rattled by collateral economic damage from the US-China trade war, a predictably erratic nuclear-armed neighbor, a less predictably erratic military

“Critical to the longstanding debate about whether a future world order will skew more towards American or Chinese dictates, South Korea shows the potential of a ‘third way’ in terms of public healthcare policies.

South Korea quarterly GDP growth

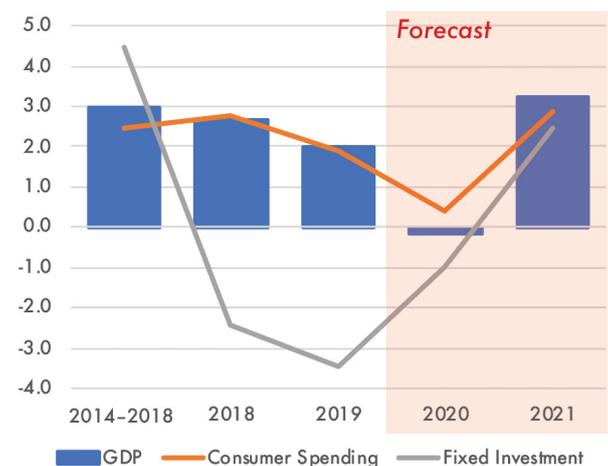
%, quarter on quarter, Q3 2018–Q4 2020



Source: Fitch Ratings, Goeconomix

South Korea annual GDP growth

%, 2014–2020



“ If South Korea manages to maintain its successful track record, its geopolitical capital will only increase.

ally in Washington, occasional punitive economic measures from China, and its own mini-trade war with its most important high-tech materials provider, Japan. Assiduous preparation and rapid responsiveness to the outbreak spared the nation from harsher fates suffered by far richer and better geopolitically situated countries.

South Korea had invaluable direct experience with recent viral epidemics, from SARS in 2003 to Middle East Respiratory Syndrome in 2015. This provided government officials and health system administrators with critical insights that they have been able to apply to their handling of Covid-19. The full extent of the crisis has yet to play out. In the short time span of the pandemic to date, South Korea already has been forced to contend with second-wave infections and the possibility that the virus might [reactivate](#) in or even reinfect recovered patients. The Korean model continues to hold up phenomenally well nonetheless. If South Korea manages to maintain its successful track record, its geopolitical capital will only increase.

Thematic shifts

Disruptions that transcend countries and sectors

Beyond Thucydides and the G2

Hands have nervously wrung over the possibility of the world's two largest economic powers, the US and China, falling into a "[Thucydides Trap](#)." Named for the 5th century BCE Athenian general who wrote the *History of the Peloponnesian War*, it relates to a central [observation](#) from the ancient text: "The growth of the power of Athens, and the alarm which this inspired in Lacedaemon [Sparta], made war inevitable." Associating the quote in the context of contemporary Sino-American relations would cast the US as the older great power, Sparta, and China (with some irony in light of that nation's non-democratic political structure) as the rising great power of Athens. The presumed implication of the trap is the high probability of an unthinking repeat of history, with the US and China oblivious to the underlying forces at play, failing to avoid the dynamics pushing them towards war and the entire world towards disaster.

Before Thucydides cautionary tale gained currency, an opposite narrative had been considered more the norm. This described a grand alliance between the US and China, a "G2" club for the world's only remaining economic superpowers. Former US National Security Advisor Zbigniew Brzezinski [outlined](#) the simple logic for a "Group of Two" partnership, reasoning that the US-China "relationship cannot be static; it will either expand or narrow. The world will benefit, and so will our countries, if it expands."

Neither the US nor China ever formally signed up to the G2 concept. Nevertheless, China's accession to the World Trade Organization (WTO) in 2001 was seen, at least by Washington, as tacit acknowledgment of a special arrangement of some kind as China's WTO membership was only possible with the endorsement of the US. Since then, America and much of the world—though critically, not necessarily China itself—essentially operated under the assumption that some kind of alliance (even if a weak, frenemy-based one) would hold. In 2005, the two sides [established](#) a US-China Senior Dialogue, which the US [reportedly](#) viewed as "sort of like the G2." The Senior Dialogue was [upgraded](#) to a Strategic and Economic Dialogue which remained in place until January

“Hands have nervously wrung over the possibility of the world's two largest economic powers, the US and China, falling into a 'Thucydides Trap'.

“Before Thucydides cautionary tale gained currency, an opposite narrative ... described a grand alliance between the US and China

“The turning point came with a changed American trade strategy that took issue with China’s selective compliance with its WTO obligations, rejecting the rationale for continued normal relations on that basis.”

“In a global system, great powers (and great-power conflicts) are not singular, they require coalitions.”

2017, after which time any visions of a G2-inspired alliance vanished in the midst of a flaring trade war.

The turning point came with a changed American trade strategy that took issue with China’s selective compliance with its WTO obligations, rejecting the rationale for continued normal relations on that basis. The Trump administration laid out the core of this reassessment in a January 2018 [report](#) to Congress: “the United States erred in supporting China’s entry into the WTO on terms that have proven to be ineffective in securing China’s embrace of an open, market-oriented trade regime.” A protracted [period](#) of tit-for-tat trade hostilities followed, injecting waves of uncertainty into global markets up until the two sides reached a trade truce on January 15, 2020—barely two weeks after China first acknowledged a pneumonia outbreak in Wuhan. The coronavirus destroyed the first opportunity in years to move back towards a G2-type framework.

Relating to the Thucydides Trap, China has been taking advantage of the worldwide distraction created by Covid to [reinforce](#) territorial [claims](#) in the South China Sea. Although successfully building up its geographic presence, with these moves Beijing is mainly serving to ratchet up frictions with neighboring nations and giving further impetus to a widening circle of nations to oppose China’s aspirations for global leadership. As with other great conflagrations, the epoch-making Peloponnesian War was fought because of and through alliances, the Spartan-led Peloponnesian League and the Athenian-led Delian League. In a global system, great powers (and great-power conflicts) are not singular, they require coalitions.

Even under its current populist leader who prefers bilateral deal-making as a basis for foreign policy, the US remains fundamentally multilateral in its engagements. NATO and a host of other genuine military alliances and implied military obligations for the US have stayed intact—if anything, proven their resilience considering President Trump’s volubly expressed [dissatisfaction](#) with America’s disproportionate financial contributions to these alliances. Despite this, the US president has gone so far as to [propose](#) increasing NATO’s reach, recommending “that NATO should be expanded, and we should include the Middle East.” One of the president’s greatest bêtes noires, the North American Free Trade Agreement (NAFTA), similarly survived the Trump administration’s vetting and was reborn—formally [ratified](#) during the Covid pandemic on March 13, no less—as the United States-Mexico-Canada Agreement (USMCA).

China, on the other hand, is far more isolated and growing increasingly so with its divisive geopolitical and military moves during the Covid crisis. Apart

from a highly imbalanced alliance with North Korea, the nation is bereft of formal security pacts. Russia is, at best, an opportunistic ally but by no means a dependable partner. China's approach to foreign engagement is fundamentally bilateral, not multilateral. This applies as well to its centerpiece Belt and Road Initiative. Although China has tried using aspects of BRI as a basis for coalition building, such as the "[17+1](#)" mechanism for Central and Eastern European countries, ultimately the initiative represents a series of bilateral, debt-financed infrastructure deals with China as the creditor and recipient countries as debtors.

Excepting minor countries like Serbia, China's actions during the Covid crisis overall have served more to erode constructive foreign relations—not only with the US, but other major economic powers such as the EU and Japan. China's recent activities in the South China Sea, which include sinking a [Vietnamese](#) fishing boat and causing Indonesia to [deploy](#) its naval and air forces, alienate every member of ASEAN except its minor client states, Cambodia and Lao. The allegiance of these Indochinese states, moreover, is contingent upon ongoing Chinese financial support. Questionable if its modern rise ever truly exhibited patterns reminiscent of great-power behaviors of history (even the nation's own dynastic past), China's activities during Covid moves it further away from historical analogies like Thucydides Trap.

And so, among its many geopolitical significances, a more nuanced but strategically consequential implication of SARS-CoV-2 is how it has nullified standard frameworks for US-China relations. Each nation, and the nature of their foreign relations and geostrategies, has been upstaged by a microbe. Both have separate opportunities to turn aspects of the Covid-19 crisis to their respective advantage. The boldest move would be for them to come together to constructively repair the global economy's most important, however dysfunctional, relationship. That itself offers the best means for either to noticeably bolster their respective geopolitical positions.

Unfortunately, heightened tensions and heated exchanges of conspiratorial accusations brought on by the pandemic do not favor chances for such a breakthrough. At the same time, to thoroughly address the current pandemic and maximize health security for any society requires better, not worse, communications and cooperation between political entities. Perhaps survival instincts will motivate more strategic behavior. Even if narrowly focused on building up communications around epidemic response, that would—just like the impact of the US-China trade detente—not only better serve each country's interests but in the process boost global confidence.

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“... a more nuanced but strategically consequential implication of SARS-CoV-2 is how it has nullified standard frameworks for US-China relations.

“ Sino-American relations have shifted towards a state less aspirational than the G2 but fortunately ... still beyond the scope of Thucydides’ cautionary tale.

For now, trade rather than inspired diplomacy will remain the key determinant and tool of US-China relations. Recent developments like China’s Foreign Investment Law (whose importance has grown during the crisis) and a possible Covid-inspired adjustment in the general tone of Washington’s foreign policies, more likely than not from November (through either a change in the White House or a change in tactics from the current administration), could provide additional openings. Until then, Sino-American relations have shifted towards a state less aspirational than the G2 but fortunately, although still infused with military risk, beyond the scope of Thucydides’ cautionary tale.

Updating MAD to “MAED”

Changed political atmospherics, marked by the rise of science-based policy combined with the demise of populist mandates, opens up new possibilities for rationalist alliances internationally.

Rational choice models have, with good reason, been eclipsed in economic thinking by behavioral models. This came from a dawning realization that, frankly, people do not usually function in the coldly calculating way that traditional economic models assumed them to. How a particular person feels she might “profit” from a situation is highly subjective. People expect more of their leaders, however, as the governing classes are entrusted to serve in the best generally understood interests of a population.

In the current Covid and coming post-Covid world, governments will want to turn to practical but strategically grounded guiding principles for developing their international policies. Proactive collaboration among governments will be necessary, even if only for purely self-serving interests. Thucydides, the West’s original *Realpolitik* realist, is also famous for the line: “right, as the world goes, is only in question between equals in power, while the strong do what they can and the weak suffer what they must.” But in a world beset by viral pathogens rather than marauding armies, classical ideas of power do not mean much. Smaller but smarter societies can exhibit more power than larger, economically mightier ones. Thucydides proves less valuable a guide here. Might does not make right; the intelligent application of governing authority does.

Beyond implications for positively adjusting US-China relations, a [rationalist](#)—as opposed to a “realist” or “globalist”—approach to global collaboration (i.e., one driven by strategic choice) can set the stage for other relationship improvements; the kind that result in more productive and mutually rewarding

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engagements than seemed probable before the global pandemic.

In a previous era, one of less global interconnection and greater ideological division, when US and Soviet nuclear arsenals posed the most imminent threat to humanity, the doctrine of mutually assured destruction (MAD) wrought by nuclear war was seen as the only thing preventing catastrophe. Preserving something of that fittingly memorable acronym, today we might think of a rationalist-premised doctrine of “mutually assured epidemic destruction” (MAED). Whereas MAD restrained two military superpowers, MAED encourages two fractious economic superpowers and other concerned members of the world community to come together. According to MAED, states do not ally against common political or military threats, but against naturally occurring viral diseases. The goal might seem noble, perhaps idealistic. Yet the reasoning is entirely rational.

Whatever the label, the logic of the doctrine offers one of the bigger potential geopolitical dividends to the current health crisis and for inevitable future epidemiological outbreaks. Significantly, the concept does not require cooperation between (or needs to include) any of the giants of the global order. It is not dependent on endorsement from the US nor China nor the blessing of supranational organizations like the WHO, though such powers abiding by the principles of MAED obviously would reinforce its benefits. The successful Covid-suppressing East Asian economies of Hong Kong, South Korea, and Taiwan have long shared geographic and commercial ties. Their individual responses to Covid-19 show they share similar approaches to epidemics too. They could build further upon these commonalities using MAED principles to strengthen existing relations. MAED could provide a non-politicized basis to expand upon such an East Asia alliance to include participants from any geography as well.

Additional proof of the salience for such alignments, an analogue at the subregional level occurred in mid April in the US. Individual states—frustrated at the lack of federal coordination and at great consternation for the US president—formed pacts to address Covid’s core issue of how to manage reopening their economies without risking the health of their citizens. California, whose governor has taken to [referring](#) to his jurisdiction as a “nation-state”, now serves the largest constituent in a West Coast alliance that includes Oregon and Washington. Likewise New York stands atop a Multi-State Council that encompasses seven contiguous states in the US Northeast. The joint [statement](#) announcing the West Coast’s “regional pact to recovery” used reasoning that took further swipes against populist policies, explaining “Health outcomes and

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“ ... the West Coast’s ‘regional pact to recovery’ used reasoning that took further swipes against populist policies, explaining ‘Health outcomes and science—not politics—will guide these decisions’

“The value of MAED-based coalitions for political self-preservation in the face of newly recognized realities in the wake of Covid is clearly on the rise.

“Covid-19 has added extra layers of complexity to an already highly complex state of affairs across what is the most strategically important territory of Asia.

science—not politics—will guide these decisions,” adding for good measure: “This effort will be guided by data.”

State-based regional pacts in the US can also serve as platforms for their constituents to engage globally, potentially going so far as to form arrangements for assistance and information-sharing with other foreign countries or groupings like a MAED-based alliance for East Asia. Maryland’s first lady, South Korean-born Yumi Hogan, drew upon her native roots to coordinate with the South Korean government shipment of half-a-million desperately needed coronavirus test kits. Maryland Governor Larry Hogan, a Republican, [justifies](#) his state’s foreign relations as consistent with US federal policy: “The administration made it clear over and over again they want the states to take the lead, and we have to go out and do it ourselves, and that’s exactly what we did.”

Regardless of how far political entities at any level decide to coordinate around epidemiological policies and economic activity, Covid-19 has made basic recognition of the borderless transmissibility of infectious diseases unavoidable. The value of MAED-based coalitions for political self-preservation in the face of new realities in the wake of Covid is clearly on the rise.

Making Greater China great again

The concept of improved foreign relations for Taiwan (an historically Chinese territory that has been self-administered since communist forces toppled the government of the Republic of China in 1949) and the notion of any foreign relations status for Hong Kong (a restive former British colony ruled by China as a Special Administrative Region since 1997) are fraught with political sensitivities. Throughout much of 2019 and into 2020, political protests that began over a proposed extradition law in Hong Kong and the heavy-handed response adopted by Beijing and its appointed local leadership fundamentally changed the political calculus for all three entities, collectively known as Greater China. Covid-19 has added extra layers of complexity to an already highly challenged state of affairs across what is the most strategically vital territory of Asia.

The government response to protests in Hong Kong, apart from alienating a majority of the city’s citizens and plunging a once thriving economy into recession, mainly demonstrated the effects of intransigence without efforts at

political remedies. The political drama that has played out has grabbed global headlines. Nevertheless, Hong Kong is a non-issue in the context of Chinese sovereignty, the foremost consideration in all matters relating to Greater China. In terms of China's territorial integrity, regardless of how much the streets of Hong Kong erupt in protest, the city has no viable means to break away.

Taiwan presents a different situation. The island enjoys *de facto* independence from the mainland, a state of affairs that has been tolerated so far by Chinese authorities whose restraint is premised on Taiwan not formally declaring independence. Recent turmoil in Hong Kong has reversed a previously warming trend in relations across the Taiwan Strait, which had not only been improving but doing so in the mainland's favor. Crackdowns on Hong Kong protesters breathed new life into Taiwan's anti-China Democratic Progressive Party (DPP), before then suffering electoral defeats and on track to be removed from power. On January 11 (another pivotal date falling within days of China's notification to the WHO of the Wuhan outbreak), presidential incumbent and DPP standard-bearer, Tsai Ing-wen, won a stunning [re-election](#), earning more votes than any candidate since Taiwan began holding direct elections. Her political victory offered a referendum on popular will regarding mainland ties. Following her electoral win she [stated](#) matter of factly "We don't have a need to declare ourselves an independent state ... We are an independent country already."

Despite ratcheting tensions within Greater China, it is not too far a stretch to consider possibilities for improved, even transformed, relations among its constituents. Not that long ago, all three entities interacted largely according to that ultimate of Chinese sociopolitical virtues: *hexie* (和諧) or "harmony". The region is by no means intrinsically infused with animosity.

Prior to the extradition bill debacle in Hong Kong, the pro-China Kuomintang (KMT, mainland China's ruling party before the communist revolution), had roundly defeated the DPP in Taiwan's 2018 midterm elections. As recently as 2015, then President Ma Ying-jeou of Taiwan and President Xi Jinping of China met on neutral ground in Singapore under the politically acceptable capacities of the "leaders of Taiwan and China" for [historic talks](#) held to deepen ties. In Hong Kong, after post-colonial political reintegration with the mainland in 1997, rule by China initially was seen as more blessing than burden. Less than a year before the eruption of anti-extradition protests, Chinese identity in the territory was on the [rise](#).

Lessons from Covid-19 could serve to rebuild strained ties across Greater China. Applying once again rationalist principles of government relations

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“Despite ratcheting tensions within Greater China, it is not too far a stretch to consider possibilities improved, even transformed, relations among its constituents.

“From another angle, Beijing faces a *fait accompli* with Taiwan’s dramatically increased geopolitical clout in the wake of its successful containment of Covid-19.

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to focus on nothing grander than better coordination on epidemiological response, health security and interconnectivity would increase for all. As with the broader benefits of such an approach to US-China relations, epidemiological collaborations would encourage trust-building. That could ultimately result in better engagement across a wide spectrum of political issues that have been eluding attempts at resolution.

From another angle, Beijing faces a *fait accompli* with Taiwan’s dramatically increased geopolitical clout in the wake of its successful containment of Covid-19. This entails considerable political [irony](#), not only regarding China’s overall attempts to isolate an island that it views as a renegade province, but from the ways China has assiduously kept Taiwan out of the WHO as part of a program to deny the island any form of international political recognition. Lacking guidance from the WHO and doubtful of Chinese [claims](#) that there was no proof of human transmission with Covid-19, Taiwan immediately started testing people arriving from Wuhan at the first opportunity, starting the night of December 31. It later launched its own on-the-ground investigation of the outbreak, [confirming](#) the observations of local doctors about human transmission that mainland authorities had been stifling. Excluding Taiwan from the WHO forced Taiwan authorities to take matters into their own hands, turning this ostracism to Taiwan’s advantage. Now it is Taiwan, rather than mainland China, that can legitimately lay claim to the superiority of its Covid response.

Chinese central authorities were able to reverse course on missteps made at the beginning of the Covid outbreak. They would better serve their own interests by similarly recognizing past errors with Taiwan and Hong Kong to pursue inclusive, non-politicized, health security-based cooperation. Abandoning policies of isolation and heavy-handed assertions of authority would help draw together all the components of Greater China to the betterment of what the territory really represents: the geographic heart of Chinese civilization.

Rise of the robots

The havoc wrecked by the global microbial attack of SARS-Cov-2 threw into stark relief the sheer frailty of a much larger organism, human beings. Human physical limitations appeared especially at the most critical line of viral defense, among insufficiently protected and overworked healthcare providers.

The situation adds urgency to the move towards machine automation and the thinking mechanics behind Artificial Intelligence (AI). Wearable devices

and video conferencing technology that digitally transmit vital statistics and facilitate remote human-to-human interaction between patients and healthcare professionals (the latter at a safely remote distance and potentially further aided by AI-based diagnostic tools) describes some of the fundamental developments already underway in telehealth.

Technology of this sort provides better care for patients through higher accessibility, improved accuracy, and more rapid feedback. For a healthcare system, telemedicine reduces accidental exposure to infectious diseases for medical workers and other patients. At some point, a full range of healthcare services, from diagnostics to complex surgeries, conceivably could be carried out using robotics and AI. Whether adopting a weak or strong form of healthcare automation, a world violently awoken to the wholesale destructive power of viral pandemics and wanting to avoid the near collapse of a society's hospital infrastructure during later waves of Covid or future outbreaks of some other pathogen will naturally gravitate towards such technology-enabled solutions.

Noteworthy too: the efficacy of virus containment based on testing, diagnosis, contact tracing, isolation, and monitoring of anyone infected actually relies more on data collection and analysis than medicine *per se*. Big Data will feature prominently in this Brave New World as will means to ensure data privacy. In this regard, we can expect intensified debates (at least in societies that tolerate such discussions) about how best to balance the public interest with individual rights.

Extending out the automation already occurring in the industrial functions of production, logistics, and transportation; manufactured goods conceivably could be delivered with no human intermediation whatsoever up until the point of consumption. Fully automated, vertically integrated omnichannel systems pose no chance of human disease transmission along a supply chain. Not practical in the near term, perhaps few if any societies will ever want to adopt complete automation of industry. Yet some degree of increased supply chain automation is inevitable based on current trends.

On a historical note, online trends that have accelerated during Covid-19 provide a kind of verification for the originally conceived geostrategic benefits of the Internet, which began life as a hardened communications system designed by the Pentagon's Defense Advanced Research Projects Agency (DARPA). "[DARPAnet](#)", as the system was initially called, was intended to provide indestructible communications capabilities between American nuclear

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missile launch sites in the event that standard communications were destroyed in a nuclear attack. Even as a much lighter, publicly available, and extensively commercialized version of the communications infrastructure, the Internet in the time of Covid-19 has proven the foresight of DARPA-net’s architects.

Covid-19 has radically altered basic concepts for human interaction. The way by which companies moved towards digital work-from-home solutions and education systems to online instruction platforms has irrefutably showed, despite entrenched resistance from many circles, that the Internet of Things can help keep societies afloat in times of crisis. Combined with the powers of telemedicine, this is all geopolitically significant. The more a society is “wired” (or, more accurately at the present state of IT evolution, “wireless”), the better enabled it will be to weather massive global shocks.

Intensified techno-geopolitics

Shifts in AI, robotics, and advanced communications will intensify the technology-based geopolitical dynamics between economies that are home to leading IT providers or markets, principally the US, EU, China, Japan, and South Korea.

The US has devoted considerable efforts to target Chinese tech firms it deems in violation of trade sanctions and intellectual property laws and for, allegedly, posing security risks. China’s tech giants Huawei and ZTE have borne the brunt of American actions but the pertaining issues are systemic. American targets and the frequency of frictions will grow. For the EU, its regulators have mainly taken aim at American Big Tech firms over transgressions involving data privacy, tax avoidance, and anti-trust regulations. On February 19, the European Commission announced a much broader set of [initiatives](#) addressing “everything from cybersecurity to critical infrastructures, digital education to skills, democracy to media” and promoting “technological sovereignty” for Europe. Although formulation of these initiatives predates the pandemic, the aftershocks of Covid-19 will increase the impetus for their implementation.

With the Commission’s new announcement repeatedly emphasizing democratic values and “human-centric” AI, the EU has manifestly expanded its strategic prerogative to include China. The enlarged scope invariably will sweep up the other Asian platform technology powers of Japan and South Korea as well. “The Great Firewall of China” blocks content, social media, and search algorithms not pre-approved by Chinese authorities. Adding to the contentious policy mixture, China’s cybersecurity regulations directly contradict US, EU, and

many other national laws protecting media freedoms and personal data. This puts China directly at odds with the cyberspheres of its biggest counterparties for trade and investment. Japan and South Korea have been [politicizing](#) their technology supply chains against one another as an extenuation of unresolved grievances dating to Japan's occupation of the Korean Peninsula during the first half of the 20th century.

A new rift in techno-geopolitics was laid bare in the midst of the coronavirus epidemic when the *Financial Times* in late March broke a [story](#) on how China—through Huawei, state-owned telecom providers China Unicom and China Telecom, and China's Ministry of Industry & Information Technology—has proposed a New Standard for Network Technology (known as "New IP") to the UN's International Telecommunication Union. Supported by Russia and possibly Saudi Arabia, China's proposal is opposed by the US, UK, and Sweden. A NATO commissioned study on the proposal determined that China's New IP framework "will lead to more centralized top-down control of the Internet and potentially even its users, with implications for security and rights of man."

Geopolitics was already featuring more prominently in global technology markets before Covid-19. The very fabric of the Internet itself is now caught up global power plays. Meanwhile, the importance for uninterpreted, accurate communications are proving vital to operating within and eventually resolving the current crisis. Advanced communications will be critical to guard against future epidemic outbreaks. The convergence of technology and geopolitics is deepening. Technology has taken on new dimensions of urgency and importance as a priority for statecraft. If these converging forces are not prudently guided, techno-geopolitics could increase divisions at a time demanding greater technical collaboration.

The real threat of imagined viral arms

Allegations that Covid-19 was created as part of a biological weapons program lack proof, a point ignored by a surprisingly wide array of senior political figures hailing from a large number of countries. Those already on record include leaders from China, India, Iran, Pakistan, Russia, and the US. [Commenting](#) for the *Bulletin of the Atomic Scientists*, biological threats expert Filippa Lentzos stresses that other than sow confusion, this top-down disinformation flow has more insidious ramifications, giving the appearance that "states have bioweapons and are getting away with it, or even that states

“A new rift in techno-geopolitics was laid bare in the midst of the coronavirus epidemic

“Technology has taken on new dimensions of urgency and importance as a priority for statecraft.

“It matters little that the characteristics of coronavirus make it a poor choice for a bioweapon.

“The real question is not if or even when this will pose a tangible threat, but how politics can best ready themselves against a broadening array of new tools with the potential for massive loss of life and economic devastation.

would want to pursue these sorts of weapons. It significantly degrades the taboo against biological weapons.”

Considered as a whole-of-society risk, the situation goes beyond the dangers of destigmatizing bioweapons. The tremendously destructive power of germ agents has entered the public consciousness. Images portraying large loss of life, social upheaval, political destabilization, diversion of military resources, and the generally paralyzing effects of SARS-Cov-2 have streamed across digital screens of every kind, throughout the entire planet, every day of the crisis. The words written here are but a minuscule part of an enormous, continually accumulating repository of coverage and analysis produced at the time of the Covid-19 pandemic—an amorphous body of thought that will continue expanding well beyond the publication of this paper. This is normal; necessary, in fact, if we are to better understand the impact of the coronavirus and prepare against future epidemiological disasters.

The saturation of information has a negative flipside, however, providing all variety of potential inspiration to those with ill intent. It matters little that the characteristics of coronavirus make it a poor choice for a bioweapon. Doomsday cults, mentally unstable individuals, and revenge-minded terrorist cells do not typically conduct standard cost-benefit analysis before acting out plans to achieve apocalyptic visions.

CRISPR (clustered regularly interspaced short palindromic repeats) represents the sort of advanced biotechnology tool—genetic engineering, in this case—now available off-the-shelf. [Called](#) the “Taylor Swift of science”, CRISPR has become popularly [recognized](#), widely accessible, and shown subject to abuse. A team of Chinese scientists demonstrated this in 2018 when announcing that they had helped two women give birth to the world’s first gene-edited babies. This was not sanctioned by the Chinese government and the team was later [punished](#). Yet as with the world’s first gene-edited humans, the greater significance with Covid-19 is not so much the event itself, but what it demonstrates is possible.

The economics of technology tell us that with time, tools with extreme biological consequences will become more prevalent, more affordable, and easier to manipulate. The real question is not *if* or even *when* this will pose a tangible threat, but *how* politics can best ready themselves against a broadening array of new tools with the potential for massive loss of life and economic devastation.

This warrants an exceptionally multinational and multi-dimensional approach to address root causes. Strengthening multilateral agreements, such as the

[Biological Weapons Convention](#), to provide greater transparency about bioweapons development would help dispel myths and build confidence in international compliance. But preventing lone-wolf terrorists, mentally disturbed random actors, and under-the-radar cults and militant organizations means going much further than the basic multilateral government reporting requirements of such protocols. To truly deal with these types of diffuse, asymmetric threats demands far more surveillance, communications, and coordination within and across societies at levels that are unprecedented. The time and effort required will be tremendous. Yet none of this is too implausible if societies and their leaders sufficiently recognize this aspect of the far-reaching implications of the Covid-19 global pandemic.

“To truly deal with these types of diffuse, asymmetric threats demands far more surveillance, communications, and coordination within and across societies at levels that are unprecedented.”

About the author

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An internationally active commentator, writer, and media producer, Rob founded [Goeconomix](#) following years of global experience in analysis and thought leadership in the fields of economics, finance, business strategy, and public policy. In addition to his work at Goeconomix, he serves on the Advisory Board for the Hong Kong-based fintech company, [FinFabrik](#), the Advisory Council of the [Center on AI Technology for Humankind](#) (AITH) at National University of Singapore, and is a lecturer at the [College of Business](#) at California State University, Long Beach.

Prior to establishing Goeconomix, Rob served as Director and the chief economist of the Corporate Network in Hong Kong for The Economist Group, parent company of the weekly publication, [The Economist](#). He has previously authored two full-length books, [Betting on China: Chinese Stocks, American Stock Markets, and the Wagers on a New Dynamic in Global Capitalism](#) and [Clusters of Creativity: Enduring Lessons on Innovation and Entrepreneurship from Silicon Valley and Europe's Silicon Fen](#).

Rob has written a wide range of in-depth reports covering such topics as disruptive technologies, digital economics, Big Data, China's sports industry, the Belt-Road Initiative, Asian business trends, and comparative government technology industrial policies. He frequently appears on television and at public forums discussing trends in economics, geopolitics, media, and business.

A graduate of [Pomona College](#) (where he was a Truman Scholar and Watson Fellow) with a degree in Asian Studies, Rob earned an MBA from the [University of Cambridge](#).

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