



The coronavirus pandemic has led to disruptions worldwide, with businesses shut and people working from home among the many changes. Coming out of Covid-19, terms such as social awareness and solidarity will no longer be just intellectual or political ideas, but will be things that ordinary people can see and feel vitally, says the writer. PHOTO: EPA-EFE

## Coronavirus: The Great Disruption

# Could it be time to swop fast car for slower, sturdier one?

More so than past financial crises, the pandemic is a spur to societies to focus on the really big trade-offs in life

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For The Straits Times

During the Great Plague of London of 1665, as a social distancing measure, Cambridge University temporarily sent everyone home. One of the students, Isaac Newton, took literally the idea of work from home. During the lockdown, sitting in his family's Lincolnshire house, the 23-year-old invented calculus, and discovered the laws of optics and light, and of universal gravitation.

None of these research advances had anything to do with the bubonic plague then ravaging England. However, by the time Cambridge reopened in 1667, the world had come to understand itself better, and would soon be primed for a scientific and industrial revolution unprecedented in scale and scope.

In the year 2020, how should the world change post Covid-19? Will we all just go back to business as usual? What lessons do we need to learn from this pandemic? After all, a crisis is a terrible thing to waste.

What makes this episode different from, say, the 2008 global financial crisis or the 1997 Asian financial crisis, that it might be realistic to expect change of a far greater magnitude as a result of what we're now going through?

### UPFRONT AND PERSONAL

The key feature of the Covid-19 outbreak is how it engages individuals in global society at a real, personal level. In this pandemic, ordinary people see palpable risk exposure for themselves: They know they will die or become gravely ill, unless they behave a certain way. Each individual is empowered to take actions that can forestall his personal sickness and mortality.

People can, of course, choose to act otherwise, but retribution – whether it's legal sanction, debilitating illness or death from disease – is both swift and likely. With Covid-19, individual mechanisms of cause and effect are made transparent and immediate.

Sure, it is the social behaviour of millions of ordinary people that will determine how the pandemic unfolds. But everybody counts.

For Singapore and Hong Kong and other parts of East Asia, the 2003 Sars outbreak shared these features: Political and social

systems changed as a result. In the rest of the world, Sars ended too quickly so its policy lessons were muted, and change was not deep. Something about living through a pandemic changes people and political systems.

Other kinds of crises are different. Certainly, the 2008 global financial crisis (GFC) had a substantial impact on individuals. But individual empowerment and responsibility in a financial crisis have levels that are diminished or delayed in time. In terms of responsibility, individuals might see a link from a reckless investment decision years ago. But the causal mechanism is shrouded in financial collateralisation or other obscure innovation, or misalignment of expectations.

And financial crisis is ultimately not the individual's fault, but that of something big: big banks, big corporations, big institutions. Reform coming out of a global financial crisis is needed but individuals hand that responsibility over to someone else, and often without genuine change taking place. Big banks remain, post-2008 GFC, and many institutions engage in behaviour not profoundly different from before. Asking for the system to change without deep individual engagement does not produce the same kind of real reform that a pandemic engenders.

With Covid-19, too, there will be institutional accounting. But given the personal nature of pandemics its impact will be far greater. Coming out of Covid-19, terms such as social awareness and solidarity will no longer be just intellectual or political ideas, but will be things that ordinary people can see and feel vitally.

Abstract trade-offs such as privacy and individual rights versus authoritarian control will no longer be just what academics and ideologues debate. Instead, they will become concrete choices that people, post-Covid-19, routinely face in trading off increased bio-surveillance in return for elevated health security.

Based on observing Singapore's coronavirus responses, my guess is that economic life, among many other things, will need to change. On economics then, here are my conjectures for the world post-Covid-19.

### ECONOMIC LIFE: THE TRADE-OFFS

Post-Covid-19, societies will realise why it is important to focus on the really big trade-offs in life, and not

sweat the small stuff. In Singapore, there has long been a narrative on how simply getting richer should no longer be the goal of that population that is already middle class. Here is the opportunity to act on that.

Think of economic life as a high-performance car, navigating a speed trial. There are two ways to do this. One is, you fine-tune every part of the car to within a nanometre of optimality. You cut excess baggage and trim all edges to perfection. You have a gleaming machine of global optimality that speeds along the smooth runway.

The high-tech pieces receive the greatest attention, the large heavy pieces less so: Inequality in care is high because that's how you make the parts fit together. The car's handling is wondrous, light as a bird. However, if that car hits a bump in the road that shouldn't be there, the whole thing falls apart: The pieces that have been fine-tuned in expectation of only smooth running suddenly misfire, and the entire machine grinds to a halt.

Alternatively, you put together a heavier, sturdier vehicle, not as fast as the other car. This one takes bumps in its stride – because it has not been so optimised for maximum speed on a perfectly smooth track – but then again it's not as quick when the runway is without blemish. Every part of the car matters – you provide more equal care across components – because it is the weakest link that needs to be strong.

The first car wins every time when everything runs as it should, because it is a machine of global optimality. Every component in the car knows its place and gets appropriately rewarded. The second car, however, will not blow up when things don't go so well. This car is heavily laden down with all kinds of back-up systems that most of the time, apparently, do nothing but just make the system less efficient. This second car's leading, high-tech parts don't always get the greatest attention, because it's the old-school, greasy stuff that will blow up if the road gets bumpy, and so those get better care too.

Think now back to the economy as if it were one of these cars. An economic strategy is not short-term, efficient and profit-maximising if it provides spare long-run excess capacity – in hospital beds and emergency wards, in food supply lines, agricultural production or Internet connections and storage capacity. The rich are not going to become richer through installing spare back-up systems that aren't optimised to whisker-thin margins

for dealing with the normal ebb and flow of business.

But if society is no longer about obsessively and incessantly raising material living standards, then it can certainly tolerate spare and idle capacity with built-in redundancies.

Healthcare and health security systems have long been known to be rife with problems of adverse selection and incomplete information, and cannot be driven to maximum economic efficiency. Building a health system that is robust with spare capacity is expensive, but not conceptually hard. It's when that system seeks to optimise out every single feature that adverse selection and other informational challenges become paramount.

Societies should, instead, seek to develop good health systems that seem idle with lots of spare capacity most of the time but are really gleaming, long-run models of complete responsiveness for those urgent crises that periodically but randomly hit society.

Extreme optimisation is how the well-off continue to increase wealth. But extreme optimisation comes by concentrating risk down to razor-thin shells. So, instead, post-Covid-19, make it a social imperative to emphasise redundancy and robustness in production systems. Ameliorate “economics of superstars” inequalities by eschewing global efficiency in favour of local resilience. This flattens the income distribution at the same time that it builds long-run social robustness.

This trade-off between global efficiency and local robustness is everywhere, once you start looking.

### THE WEIGHTLESS ECONOMY

Across the world, cities and other urban agglomerations are dense with humanity and value creation; cities light up the night-time sky when you view our planet from

outer space. The greater the concentration, the higher are population and economic densities, and thus the higher is efficiency in producing material wealth. That higher efficiency from concentration makes for inequality across space, regions, geographies. But that higher concentration also makes for speed in transmitting viral infection.

Post-Covid-19, social and economic systems will learn not to be maximally efficient in producing material wealth through urban concentration, when doing so only makes your society ever more susceptible to epidemic transmission.

If efficiency through concentration is no longer what economies seek, commercial real estate will lose its historical sparkle. So, too, the need for mass transport systems will wither.

Decades ago, when the Internet was first being used for commercial purposes, writers noted that the so-called weightless economy entailed a shift in economic activity away from moving physical molecules to flipping 0-1 bits of logic. Telecommuting during Covid-19 over the Internet infrastructure has driven home to workers and businesses how such a weightless economy is not just feasible but actually life-saving.

In protecting that new way of work and life, societies might have to build an entire second mirroring Internet to run parallel and be back-up to the first. But that is still a lot cheaper and less wasteful than building an entire second mass transit system to operate alongside the first.

### HEDGING ANCHORS

Maximal global efficiency in production calls for a move towards cross-country specialisation. Post-Covid-19, societies need to balance global efficiency against local resilience. As a proposition in logic alone, not every nation can be

the best in the world at producing medication, personal protective equipment, rice and instant noodles, eggs or toilet rolls. A lesson from Covid-19 is that societies will want to have some production capacity in all these.

But nations need not refer to these industries as strategic – suggesting something geopolitically sinister – but instead simply as hedging anchors. Every nation should foster its own hedging anchors: It is OK to tolerate a bit of global inefficiency if doing so raises local resilience. A cross-nation network of semi-independent hedging anchors is no longer a supply chain and is not globally efficient, but will make the entire world more resilient.

### THE STATE AND MARKET SHORTCOMINGS

Finally, Covid-19 has made clear how economic externalities are more widespread than previously thought. The key implication from this is that public policy needs to look out for and repair market shortcomings.

Two cases illustrate this. First, in a world of externalities, you help yourself by helping others, because spillovers are rife. In Singapore, many foreign workers live in crowded dormitories because they are poor. The confirmed Covid-19 cases in these clusters have accounted for over 70 per cent of all cases in the past 14 days. A national health system is strained the same way from an additional patient – whether rich patriarch or poor construction worker – taking up a hospital bed and receiving intensive care on a ventilator.

Isolating Covid-19 cases in vulnerable, concentrated groups before the infection spreads further in clusters will go a long way towards helping the entire nation in its fight against the coronavirus. We help ourselves by helping others, through alleviating crowded, unhealthy accommodations and lifting the vulnerable – whether they are foreign workers or poor, self-employed people with little job security.

Second, profit-seeking pharmaceutical companies hardly ever find it worth their while to engage sufficiently in vaccine-making, with or without their acquiring monopoly intellectual property rights. Producing vaccines entails large fixed costs; intensive testing on human subjects typically takes up to 18 months. While that is happening, company stockholders are wondering why no returns are manifest from all the science and research. So in normal business life, vaccine discovery and production are not high-priority items. And although a pandemic means vaccine demand will be widespread and high, the outbreak's sudden vanishing also means profit opportunities can quickly and unexpectedly disappear. Private, profit-driven companies stay away from such markets.

Instead, for society to be safe, government stockpiles and public production of vaccines will almost always be needed. The state legitimately provides the science and research and development when externalities mean the private sector will never do so sufficiently.

### THE BOTTOM LINE

What will the post-Covid-19 world look like? I have focused on just economic life in this article, but even just here, there are already clear fault lines that need repair. I have told a story about a fast car and a sturdy car: You can guide your economy to become the speedy, finely-tuned machine that on a clear road comes in first every time. Or, you can ask that your economy be sturdier, able to take unexpected knocks, doesn't have to top league tables in normal times but still crosses the finish line.

The critical trade-off is between driving an economic system to maximal efficiency and building in redundancies and resilience through spare back-up capacity. Government intervention is needed to repair the problems created by externalities in health systems.

Post-Covid-19, the new focus will concentrate more sharply on individual well-being and individual responsibility. Old political dogmas about individual rights and state surveillance and control need to be recalibrated. In a world of spillovers, individual rights are immediately social ones too.

Covid-19 has shown how our economic world is rife with externalities, where we ourselves rise by lifting others around us.

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