



THEIR VIEW

MINT CURATOR

Global covid trends suggest the pandemic may be petering out

Mortality numbers offer us some cause for guarded relief but three issues of significant urgency await policy-level attention



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Declining mortality

The number of officially recorded covid deaths has fallen around the world lately, pointing potentially to a waning of the pandemic



An analysis of six-weekly (official) covid deaths since the pandemic began around March 2020 indicates that mortality is declining, albeit at a varying pace, almost across the board after having peaked in April-June 2021. The inference is that the pandemic is either petering out, or the expected third wave is still to materialize. The third wave hypothesis has its origins in the pattern of the Spanish Flu a century ago that could have broadly tracked. It is possible that a third wave might be averted, or at least moderated, on account of the global vaccination drive, the spread of the virus's Delta variant notwithstanding. This is the big picture, based on aggregated data from 32 major countries in Europe, the Americas and Asia that together account for about 70% of the global population and 87% of covid deaths (see table). Regional patterns differ, and some countries have bucked the regional trend.

The six-weekly data ending 21 July 2021 shows that the decline is more marked in Europe (Russia and Ukraine excepted) and North America than in South America and Asia. The second wave also peaked earlier in Europe (between October 2020 and February 2021).

South America by and large continues to show high and rising mortality. In Asia, Indonesia and Bangladesh have bucked the regional trend of falling mortality.

These differences possibly lie in the highly skewed coverage of covid vaccinations. While about half the population in most high-income countries has been fully vaccinated, low coverage in the more populous poorer countries of the world, including India (below 7%), has kept the global average under 15%.

The official global death count now exceeds 4 million. The Americas and Europe, which account for just 22% of the global population, have had 73% of all covid deaths so far. The Asian trend (Central and West Asia is aggregated with Europe on account of both proximity and similarity in trends) is dominated by India, which accounts for about three-quarters of all covid deaths in the region. At over 400,000, the third highest after the US and Brazil, it is the only country in Asia and Africa with more than 100,000 deaths. The other 10 countries are in Europe (four) and the Americas (six).

Deaths per million in India (304) are significantly lower than the global average (536), and much lower than both Europe (0,388) and the Americas (2,178). However, if India's covid deaths in the six-week period between 21 April and 6 June 2021 are taken at around 10 times higher than the recorded figure, as a number of studies suggest, the death toll rises to around 2 million. Covid mortality, in terms of deaths per million, would then be comparable to

Europe, although lower than the Americas. There may be similar undercounting in other countries with poor governance systems.

Going forward, the covid pandemic has underscored three critical issues requiring the attention of policymakers, as similar epidemics will occur in the future as well. The first issue arises out of the North-South divide. Richer countries cannot escape the negative externalities arising from poorer countries' inability to access vaccines. A fully funded mechanism needs to be put in place that makes vaccines available globally in an equitable and timely manner. Also, do we need differentiated strategies for poorer countries with weaker public health infrastructure and finances? If so, what might these be? The efficacy of stringent lockdowns in such countries, which cannot afford adequate fiscal support to protect livelihoods and where shutdowns often result in more overcrowding than less, needs to be revisited.

The second issue has to do with the aetiology of viral pandemics. Viruses are optimized for transmission and mutate rapidly. Therefore, they are extremely difficult to target through vaccines. Viruses that are highly infectious are usually not very deadly, and those that are deadly, not highly infectious. But every now and then, there will be the perfect storm of a deadly highly infectious virus, like a century ago and presently. Handling such a viral pandemic has proven to be a major challenge even in rich countries with advanced public health systems. Modern science still has some way to go in learning how to deal with such viral epidemics.

The third issue has to do with mobility and

pandemics. Until very recently, we humans were relatively immobile, with most people spending their entire life without venturing beyond a few kilometres of their homes. Human disease and immune systems also tended to be local phenomena. Epidemics were contained locally. This changed with the maritime and later even more dramatically with the industrial revolution that increasingly gave humans geographic mobility.

The first pandemics, the Justinian plague of the ancient world and Black Death of the medieval period, were spread through ports by ships and then reached the interiors rather slowly, if at all. New diseases carried by Europeans to the New World, against which local populations had no immunity, resulted in high mortality there. And in early industrial Britain, mortality actually rose because of heightened mobility, till public health interventions led to a decline.

The colonial era saw increased human mobility that carried diseases far into interior regions through motorized road and rail transport. The very high mortality of the Spanish Flu was not entirely on account of limitations of extant public health and infrastructure at the time, but also on account of large-scale troop movements arising from the First World War. With the increasing density of air transport across the globe, pathogens can spread globally within days. Governments across the world scrambled to close borders in a disruptive manner that had a devastating impact on economies and livelihoods. What kind of mobility protocols need to be adopted in handling pandemics that will prove least disruptive for the global economy?

Xi's four pillars of regulation will reshape China's Big Tech

His agenda: bank safety, antitrust, data security and social equality



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Some of Xi's moves have a populist if not exactly socialist rationale

From the US to the European Union, governments are clearly uneasy with the pervasive power of Big Tech: The influence of their social media platforms on elections, the security of the vast amount of consumer data they store, and the exploitation of gig economy workers who don't enjoy health insurance or receive overtime pay. In the US, Congressional hearings have been conducted and anti-trust lawsuits filed, but nothing substantial has come about. Judging by the Nasdaq 100 Stock Index, Big Tech in the West is still thriving.

China's political leadership perceives the same set of problems as well. But China is willing to go a lot further to rein in the clout of its tech giants.

What has just happened to after-school tutoring providers should be a warning. In a sweeping overhaul, China is banning companies that teach the K-12 school curriculum from making profits. On Friday, New Oriental Education & Technology Group, a blue-chip, tumbled 54% to close at \$2.93 per share, spelling a market cap of \$5 billion. The company's net cash, adjusted for deferred revenue and refund liabilities, pegs this stock's worth at \$2.30, according to a Goldman Sachs estimate. Essentially, investors appear to be betting that New Oriental will be liquidated. Similarly, TAL Education Group closed down to \$6 per share, lower than the bank's estimated net cash value of \$6.70.

While what happened to Chinese education stocks shocked the outside world, it was not exactly surprising inside China. Since last November, Beijing has been reining in Big Tech's power, and foreign investors are just starting to come to grips with the seriousness of the bureaucracy.

Broadly, Beijing is concerned about four pillars of stability: Banking, anti-trust regulation, data security and social equality. All of Beijing's major interventions reflect these concerns: the last-minute scuttling of fintech giant Ant Group's \$34 billion initial public offer (IPO) last November because of its potential disruption of banking; Alibaba Group Holding's record \$2.8 billion fine for monopolistic business in April; and cybersecurity watchdog's investigation of DIDI Global immediately after its \$4.4 billion IPO this month.

Social equality is at the heart of the ban of for-profit after-school tutors. Confronted with blanket advertising and fear mongering, anxious middle-class parents feel compelled to send their kids to mind-numbing cram schools, in some cases even before kindergarten. No one wants her kids to be left behind just because her neighbours

have invested more money into education. Gig economy workers' rights are also at the heart of the government's push for social equality. Earlier this week, the government posted notices that online food platforms must respect the rights of delivery staff and ensure that those workers earn at least the local minimum income. Food delivery giant Meituan dived 14%, its worst on record, which wiped out about \$30 billion of its market cap. Didi, which depends on gig drivers, is also likely to take a hit.

President Xi Jinping doesn't care if stock investors, many of them foreigners, lose billions of dollars. He knows that China's middle class will have his back. They like these regulatory crackdowns. The ministry of education's for-profit tutoring ban is a crowd pleaser. In Chinese society, a family's wealth alone already gives its offspring a natural edge, but the middle class does not enjoy seeing that edge amplified through an army of tutors. Meanwhile, big cities' consumers are sympathetic to gig economy workers, often migrants from rural areas, calling them endearingly "delivery little brothers". And, by regulating Ant like a bank, consumers are less likely to be sold risky financial products too.

Going forward, investors need to realize the four pillars are part of Xi Jinping's vision to ensure another hundred years for the ruling Communist Party, which just celebrated its centenary. In the past, Big Tech companies were evaluated in terms of sales, their total addressable market, or even monthly active users. Now investors need to factor in Big Tech's host.

For instance, DIDI doesn't do much more than host a taxi-hailing app. That's a service a smart city's government can also provide. Or why should Ant Group be allowed to cross-sell its investments, insurance and consumer loan products, while banks are being asked to spin off their wealth management arms?

In the future, China's big tech will be less exciting and able to exploit consumer data to make more money. They might — gasp — just be turned into state-owned big banks, or big utilities. When that happens, China's technology companies might have to be valued in terms of book or net cash. Liquidation risk is real in Xi's China. He wants a more equal society, and any obstacles will be swept away. **BY LOOMBERG**

MY VIEW BEHAVIOUR BY BRAIN

Sports could hold crucial lessons on decision making

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One of the very best places to study human decision-making processes is in the sports field. Decisions in such arenas are very complex. Every player has to take into consideration multiple dynamic factors before taking a quick decision. On-field calls in competitive sport are taken under conditions of extremely high physical and emotional stress. The consequences of those decisions are large. Years of preparation could get undone within a matter of a few seconds.

John McCrone's book, *Going Inside: A Tour Round a Single Moment of Consciousness*, has captured the decision-making process in the brain of a sports person. The book details a study done by Dr. Peter McLeod, a researcher at the Applied Psychology Unit in Cambridge University. Dr. McLeod studied what happens in the brain of a cricket batsman as he plays a shot. When a fast bowler sends down a delivery at 145 kilometres per hour, the ball reaches the batsman in 440 milliseconds. After the

image of the ball leaving the bowler's hand has fallen on the batsman's retina, the brain takes a minimum of 200 milliseconds to predict the trajectory and other factors of the delivery. After that, even the best of batsmen will take a minimum of 150 to 200 milliseconds to swing their bat and achieve contact with the ball at the centre of fit. This means that the time available for a batsman to take the crucial decision of what shot is ideal to play is in the range of thousandths of a second.

This in-depth analysis of playing a cricket shot reminds us about another significant feature of the human decision-making process. As the brain takes 200 milliseconds to process the image of a ball in the bowler's hand, the ball would have travelled half way across the pitch by then. So what the batsman's brain is actually processing on the basis of that image of a ball in the bowler's hand, together with various other playing factors, is a predictive distribution of the various possible ways in which the ball will pitch and behave.

The brain assigns probabilities to each of those possibilities. So the batsman begins with a broad hierarchy of likelihoods, but finally predicts a particular delivery and then decides the best shot to deal with it.

McCrone describes this as the "dynamically varying core of anticipations" mechanism of the brain. The human mind takes most decisions by anticipating the future.

As compared to games involving fast-moving balls, sprinters have some of the easier decisions to make in competitive sports. Their goal is singular and there are no variables they need to take into consideration. As soon as they hear the starting shot, they only need to get off the blocks and run at the fastest possible speed. The sprint race provides us an understanding of the minimum time our brain takes to take a straight-forward, conscious decision.

For a human brain to sense or register an audio stimulus and respond to it at a conscious level, it needs a minimum of 120 milliseconds.

So, in international competitions, pressure sensors embedded in foot blocks measure every movement under 120 milliseconds of a track of a starter's pistol to notify a false start. This is a reminder that

snap decisions like those involved in playing a cricket shot take within thousandths of a second happen at thresholds below the conscious levels of the brain.

When the coach of a basketball team that's trailing by two points calls for a time-out with just two seconds of play left, he knows very well that a lot can be done in those two seconds. He scripts out every millisecond of the remaining play time. What move must each of the five players make in those two seconds? Who will get the ball to attempt a match-winning three-point shot? If he is not able to receive the ball, which alternative player should take that all-important shot at the basket? What should be done to counter the defence strategies of the opponent team?

The field of sports has broken down every micro-moment of the action and captured every decision taken within split seconds. This information is used to develop game-winning strategies. The disciplines of big data analytics and neuroscience have

contributed immensely to these new developments. Even the world of business and policymaking could gain a lot by developing an in-depth understanding of the final few moments of some decisions.

What happens in the consumer's mind, for example, as she walks down the aisle of a supermarket? Are these the same processes that occur in her brain while she is buying something on an e-commerce platform seated in the comfort of her home? Answer these and other questions about the final seconds before a purchase will surely strengthen a marketer's hands. The understanding that in the final seconds of trespassing across a railway track, the human brain tends to underestimate the incoming speed of a large object by 40% gave us a special grasp of the trespassing problem. The knowledge that the anticipatory faculties of the brain can be used to design more effective road signage helped us reduce accidents in Indian roads.

Human behaviour is perhaps the most complex phenomenon in the universe. To unravel this complexity, it makes lot of sense to take learnings from multiple fields of knowledge. Let's include the sports field to that list.

Knowledge of how the mind works in the sports arena could guide business and policy decisions

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