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Traveling Actuary: The Edge of Reason

By Dirk Nieder and Jing Lang

Earlier this year, Dirk spent three weeks during the initial outbreak of coronavirus visiting his team in Japan, South Korea and Taiwan. His return back to Germany on Feb. 15 coincided with the peak of the carnival season in Cologne, his hometown. This is his diary.

The highlight of the Cologne carnival is the parade on Rose Monday, which happened to be a week after my return to Germany. This year, the parade had 12,000 participants in 89 groups in creative, colorful and beautiful costumes, and attracted more than one million visitors globally. At the same time, ski resorts in Germany, Austria and Switzerland welcomed thousands of enthusiasts and tourists at après-ski.

As of late February, 76 percent of German citizens did not have significant fear of contracting the coronavirus, 66 percent of citizens felt that the German authorities are in control of the situation, and 54 percent of citizens did not cancel business or vacation trips or forego participating in a mass event.¹ I decided to proceed with my planned business trip to Asia.

MARCH 8—BACK TO TAIPEI

106,000 Confirmed Infections, 3,600 Deaths

As usual, I rushed out of the airplane to arrive quickly at immigration to avoid the long queues. I was welcomed by a spooky scene: a literally empty immigration hall. In the past, I typically had to wait 30 to 40 minutes in queue, but this time it was only me. I was asked about visits to Italy in the last 14 days. Even the taxi driver asked me where I was arriving from. Later on, I was told that a taxi driver may refuse to let me in his cab if I arrived from the “wrong” place. What a different world compared to Germany!

The day before my arrival, the Taiwan CDC raised its travel alert to Level 2 for France, Germany and Spain, due to the rapid increases in the COVID-19 cases in those countries. Travelers



My flight from Taipei to Tokyo; I have hardly seen any flights with so few passengers on the airplane.

entering Taiwan from these countries are subject to a 14-day period of self-health management, which requires, among other things, recording of your temperature and daily activities twice a day and wearing a surgical mask when going outside. So, as I am now sitting in our office in Taipei, I have to wear a mask the entire day in the office.

MARCH 13—DETERRED FROM SINGAPORE

133,000 Confirmed Infections, 5,000 Deaths

The second destination of my business trip is Singapore. My flight is scheduled for March 17, but the Singapore government had just this morning (March 13) introduced new border restrictions: nobody is allowed to enter Singapore who has been in Germany in the last 14 days. Since I am five days short of meeting the 14-day requirement for entry, I need to change my travel plans. Back to Germany, or on to Japan? I decide to continue to Japan.

In the meantime, things in Italy were getting dire. On March 8, the Italian government locked down the northern region of Lombardy to slow the spread of the coronavirus. The lockdown affected 10 million people. Two days later, the ban was extended to cover the whole country. That ban affected more than 60 million people by keeping them from nonessential travel. In Vatican City, Pope Francis spoke to the faithful in St. Peter’s Square in Rome on Sunday only via livestream. Dying people were not allowed to see their relatives; instead they had to say their last good-bye over phone or Skype.

On March 13, a study² on COVID-19's impact on Italy was published: 12,462 confirmed cases and 827 deaths—at that point only China has recorded more deaths. The Italian study painted a picture of those who are most vulnerable to the disease, which was consistent with the picture from the Chinese data as of Feb. 11.

- Age: the mean age of those who died in Italy was 81 years.
- Sex: The male-female ratio of those who died in Italy is 80 percent to 20 percent.
- Underlying conditions: more than two-thirds of these patients had pre-existing conditions. It's important to note many developed acute respiratory distress syndrome (ARDS) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pneumonia and needed respiratory support and would not have died otherwise.

MARCH 17—TOKYO ARRIVAL

179,000 Confirmed Infections, 7,400 Deaths; Two Days Later, Italy's Death Toll Overtook China's.

Our Tokyo office is using staggered worktime. However, I am staying in my apartment until the following Monday to ensure 14 days have passed since leaving Germany to not put our Tokyo staff at risk. Tokyo looks like business as usual: wearing masks has been common practice in Japan already before the emergence of the COVID-19.

China has reported no new infections for three days in a row. The biggest problem now is reverse-imported cases, a significant percentage of which are students studying abroad returning home. In China, effective March 16, all overseas travelers to China are required to go through a 14-day enforced quarantine. Flights from overseas are not allowed to land in Beijing or Shanghai and must go to airports in nearby cities.

By now, many countries have put in strong measures in order to slow down infection rates, largely as a preventative measure to mitigate too many people needing hospital care at the same time. Measures such as placing hard limits on the size of crowds and gatherings—we've seen this come down from 1,000 to 100 to 10 to five and then two. Other social distancing and restrictions, such as self-quarantine, working from home, closing schools and institutions (distance learning for the remainder of the school year) are also enforced.

On March 24, the International Olympic Committee announced the 2020 Olympics—originally scheduled from July 24 to Aug. 9 in Tokyo—will be postponed to 2021. This not unexpected decision is a financial blow to the host country in 2020 in terms of money already spent, and inbound and domestic revenue; we also expect to see this in the insurance industry in terms of event cancellation; overall estimated cancellation loss for the industry is \$3.7bn to \$6.3bn³ COVID-19.

MARCH 28—ON THE WAY HOME

572,000 Confirmed Infections, 26,500 Deaths

I was originally scheduled to stay in Tokyo until April 4. But the Japanese government had reinforced its border control in the meantime: quarantine requirements for people entering Japan were strengthened and foreign nationals, who previously stayed in areas heavily affected by the spread of COVID-19, were banned from entering Japan. Other governments had barred any transfer passengers from passing through their airports.

Airlines responded by suspending flights on a large scale. My return flight to Germany was canceled, and even an alternative flight I had booked was canceled. I hence felt lucky to catch a return flight to Germany on March 28. When boarding the flight, I could not help but feeling like the protagonist of a disaster movie who barely managed to escape before the disaster strikes. The COVID-19 pandemic had turned into a global problem by that time. The number of infections in the U.S. and Italy had risen to 85,000 and 86,000, respectively; both exceeded the number of infections observed in China (82,000) despite a much later onset of the spread. Globally, 572,000 infections have been confirmed and 26,500 deaths due to COVID-19 had been registered.

LESSONS LEARNED FROM SARS

In contrast to the exponential growth everywhere else, Taiwan, a country in close proximity to the original epicenter of the outbreak, seemed to have everything under control. Only 283 infections and two deaths due to COVID-19 were reported as of March 28. When leaving Japan behind me, I was wondering how Taiwan managed this pandemic so well.

On Jan. 12, 2020, soon after China notified the WHO that several cases of an unknown pneumonia had been observed, the Taiwan government sent two of its experts to China. As a result of this fact-finding mission, the Taiwan CDC declared the “severe pneumonia” a notifiable communicable disease on Jan. 15. It activated the Central Epidemic Command Center on Jan. 20 to roll out a series of epidemic control measures, including: Tightened border control, suspension of institutions from universities to kindergartens, preparation for off-site office arrangements, postponement or suspension of nonessential, crowd-intensive events. Temperature monitoring was introduced at office buildings, public buildings and restaurants.

From March 19, travelers returning to Taiwan from areas affected by the spread of COVID-19 were put under mandatory 14-day home quarantine. Mobile phones were tracked to ensure that people stayed at home. Information from the immigration and customs database was merged into the National Health Insurance database. Medical doctors would hence be alerted to the recent travel history of a person who seeks medical attention after returning home.

The Taiwan government also undertook great efforts to ensure the availability of medical supplies. This included a ban on exporting face masks, implementing a rationing system and controlling the price of face masks, boosting the daily production capacity of face masks from 4 million to 13 million, and introducing an app that provides information using Google Maps to show the locations of pharmacies and the availability of facial masks.

Certainly, Taiwan benefited from the SARS crisis in 2002 and 2003, which allowed them to be better prepared for this pandemic.

APRIL 5–TODAY

1,133,758 Confirmed Infections, 62,784 Deaths

So, where do we go from here? Here are the things I can hope for:

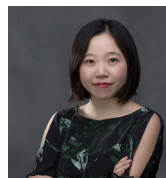
- The impact of social restrictions starts to kick in.
- The peaking of cases happens as soon as possible.
- Once peaked, the daily new cases stay level then start to go down.
- There will be a lag between cases peaking and death peaking, but the sooner the cases peak, the sooner the other can follow. The daily new cases for Italy have been decreasing in the last few days, which is a very welcome development.

COVID-19 is an extreme stress test to emergency response and health care systems around the world. I hope we come out better, stronger and faster on the other side of this global pandemic.

For additional resources, please see [here](#) for the weekly updated SOA Research Brief on Impact of COVID-19 and podcasts. ■



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ENDNOTES

- 1 ARD-DeutschlandTrend vom 05. März 2020
- 2 "COVID-19 and Italy: what next?" *The Lancet* [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)30627-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30627-9/fulltext), retrieved April 1, 2020
- 3 Figure from [insuranceinsider.com](https://www.insuranceinsider.com)