THE VIRAL ECONOMY ™

PERSONAL AND FINANCIAL HEALTH DURING COVID-19

ON TESTING AND TREAMENTS

A STRATEGIC NEWS SERVICE °

EXCLUSIVE PUBLICATION





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OVERVIEW: ON TESTING AND TREATMENTS

By Evan Anderson

Publisher's Note: Since February, we have provided you with these weekly updates free of charge. We hope that they've helped you to navigate these very difficult times. When we started, it was not yet clear how the coronavirus pandemic would progress. Given the global missteps in response and ongoing complications, the world will clearly be dealing with the ongoing spread of COVID-19 for some years to come. To

date, you have received 16 free issues of The Viral Economy. However, adding a permanent publication to our workload requires resources. Starting with Issue 19, in two weeks, we will begin charging for this series.

Current readers and Standard SNS members can sign up before that date for \$14.99 / month, a 40% discount from the public price of \$24.99 / month. Premium SNS Members will continue to receive The Viral Economy free of charge.

We want to thank you all for reading, and for helping us to continue covering this critical issue.

You have 2 free issues left. Click here to continue receiving *The Viral Economy*.

The Point of a Lockdown

Lockdowns, stay-at-home orders, and other extreme measures intended to stem rising tides of COVID-19 infection have been the subject of intense scrutiny and debate since the beginning of the pandemic. Many argue that they are necessary, and prevent early infections, while others counter that the

"Just 16% of ICU beds are still available statewide, [Dr. Don Williamson, head of the Alabama State Hospital Assoc.] noted. And according to the latest data available, some counties have even more worrisome figures: Tuscaloosa County has just one ICU bed available and Montgomery County has only three....

"In Montgomery County, 'ICUs are full, patients are dying, and some of the staff that are normally working are out ill,' Williamson said.... [J]ust one major outbreak, such as in a nursing home, has the potential to 'overwhelm the system.'" – ABC News

economic damage they do outweighs such benefits. Few public discussions are had, however, about their true purpose.

If we can't stay home forever, what's the point?

The reason that lockdowns, or their ilk, make sense in the first place is trifold. They buy time for the following three things to take place:

- 1. Vaccine development
- 2. Buildouts of testing, tracing, and quarantine programs
- 3. Improvement of medical capacity and knowledge

Testing, Tracing, and Quarantine

VE readers already know that the likelihood of rapidly developed vaccines, while greater than it has ever been in human history, remains slim enough to take vaccine development off the table as

a reliable immediate solution. So, too, do *Viral Economy* veterans likely recall our coverage of testing, tracing, and quarantine buildouts. Some countries have excelled at this process, allowing for a continuous forestalling of major viral outbreaks as the world waits for better options. In the United States, the time before the outbreak and during lockdowns was mostly squandered, and, while testing has improved, contact tracing and quarantine have not. All three remain insufficient for the control necessary to limit the virulence of the pandemic.

Too often left out is the third point of a lockdown: buying time to develop more medical capacity. This boils down to three key factors: infrastructure, knowledge regarding transmission, and treatment options.

Infrastructure

On the infrastructure front, capacity in the US has not increased significantly, but the slowing of COVID-19 cases to date has helped to avoid overwhelming the medical system. (This is now becoming a threat again as new cases rise.) Unsurprisingly, states that struggled to keep citizens at home a month ago are now seeing the potential for runaway outbreaks. Alabama is seeing the most extreme cases now, with the fewest number of ICU beds (see quote above), but also running low are parts of Florida, Texas, Arizona, and other states. A large surge in many places could overwhelm systems quickly. Worryingly, Alabama, the state in the most trouble, actually has the greatest number of ICU beds per capita in the entire country, while currently having the fewest available.

Transmission

Much, meanwhile, has been learned about transmission. We now know that most transmissions occur indoors, in close contact. Roughly 44% are from asymptomatic carriers. And we know that most transmissions occur through droplets, that masks help to greatly reduce infection rates in tight environments, and that large group gatherings are by far the biggest spreading events. (Click here for a very good breakdown by epidemiologist Erin Bromage regarding all this and more.) We know that the R-naughts of COVID-19 are extremely variable based on these super-spreader events. All of this and more helps public health officials set better policy, allowing activities that are safer and benefiting us all, while informing proper interventions to slow the spread.

Treatment

Most important, we are finally learning more about treatment. While many pharmaceutical interventions have been overhyped, often by leadership (Trump

and Bolsonaro, we know, really, really love hydroxychloroquine as a potential treatment, though they definitively should not), there's more promise in newer drug treatments like dexamethasone, which is a readily available steroid that costs little and potentially reduces actual mortality from COVID-19, according to recent clinical trials by Oxford scientists. So, too, has Ivermectin shown promising results on mortality, though pre-peer-review research always must be taken with a large grain of salt. Plasma therapy continues to see strong results, though attendees of our recent online FiReSide event with epidemiologist Larry Brilliant will recall that plasma is hard to get in large volume. We now also know that ventilators should not be used as often as they were at the outset of the pandemic, a surprising fact that could help to reduce mortality.

More research will be needed, but the more time we buy, the better patient outcomes will be, even if a later surge cannot be avoided. This kind of incremental improvement in treatment is worth more than most media outlets or public-health officials seem to state publicly.

Furthermore, we are learning some simpler truths that strongly apply to potential outcomes. While those at higher risk from obesity, diabetes, and/or heart conditions may not be able to adjust those health problems, they are at least aware now of the risk profile. It's also well known already that basic vitamins play a role in immune health, and that vitamins A and D particularly have an effect. Maintaining a healthy lifestyle is always a good idea, and if diet and time in the sun aren't fulfilling daily intakes for vitamins, a simple daily vitamin or a doctor-recommended supplement in higher doses is worth doing. (Most of us who live in the Pacific Northwest are already aware of the benefits of sufficient Vitamin D, and the effects of a lack thereof).

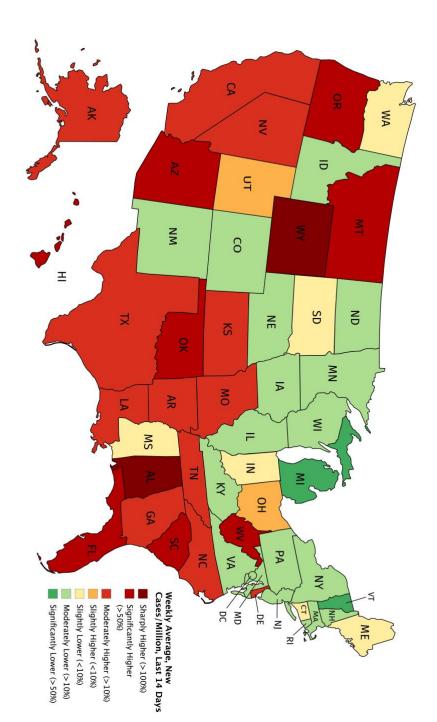
The Why of It All

Stay-at-home orders, or lockdowns (whatever the preferred nomenclature), have significant benefits, but only if they're followed seriously. So far, the United States has struggled with this, but significant hope lies in the possibility of buying enough time to continue to improve outcomes through the basic development of more effective treatment over time.

It is always better to be infected by a known pathogen than a novel one. Knowing SARS-CoV-2 fully will be a long process, but at least the first steps are beginning to fall behind us.

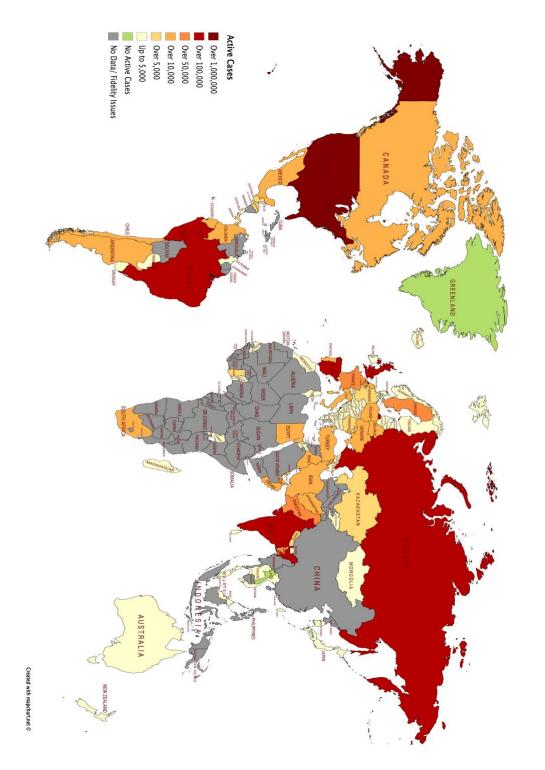
Trending: US States by Percentage Increase in New Cases/Million

(Weekly average, new daily cases/million population, last 14 days)



Reported Active Cases by Country

Institute Human Freedom Index) Excluding those with fewer than 1,000 tests/million or that score lower than 6 on the CATO



Severity

Starting with this week's issue, we are replacing some metrics with more useful ones in the short term. Ro is more useful in the long term and smooths out super-spreader events; it is replaced with percentage change in active global cases. Case fatality rate (CFR) is removed, as without clean, full international data it cannot be calculated accurately.

1. Total Confirmed Cases

The official number of reported confirmed cases, as of press time (per Johns Hopkins).

2. Global Active Cases

The number of people worldwide infected and unrecovered.

3. Global Recoveries

Based on the latest guidance from Imperial College London's COVID-19 Response Team.

June 17, 2020

Total Confirmed Cases: 8,342,902

Global Active Cases: 3,530,487

Global Recoveries: 4,363,891

Official Death Count: 448,524

Most-Affected Regions

Countries / regions experiencing the highest deaths per million

- 1. San Marino (1,238)
- 2. Belgium (834)
- 3. Andorra (673)
- 4. UK (618)
- 5. Spain (580)
- 6. Italy (569)
- 7. Sweden (489)
- 8. France (453)
- 9. USA (360)
- 10. Netherlands (354)

- 11. St. Maarten (350)
- 12. Ireland (346)
- 13. Isle of Man (282)
- 14. Channel Islands (276)
- 15. Switzerland (226)
- 16. Ecuador (225)
- 17. Canada (218)
- 18. Brazil (214)
- 19. Peru (214)
- 20. Montserrat (200)

- 21. Chile (177)
- 22. Luxembourg (176)
- 23. Portugal (149)
- 24. Bermuda (144)
- 25. Mexico (142)
- 26. Iran (109)
- 27. Moldova (107)
- 28. Germany (106)
- 29. Mayotte (106)
- 30. Panama (106)

In Summary

The United States is now entering a stage that some have called a "second wave" of the pandemic. Readers will remember our description of this in "The Re-Rising Tide," perhaps a more accurate phrase in a situation where the "first wave" never abated.

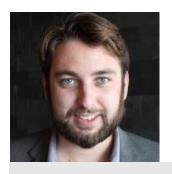
While US nonfarm payroll numbers leaped last week, there are reasons to question whether it will last. One month is not enough to define a trend, and numbers of permanent job losses remain murky as COVID cases continue to rise. Record retail numbers are also cause for some celebration, but many "ifs" remain. Harvard data shows low-income households increasing spending faster than high-income post-stimulus payments. Those payments will run out; without more stimulus, the large increase may soon flag.

According to Fed Chairman Jerome Powell, who testified before Congress on Tuesday:

The levels of output and employment remain far below their pre-pandemic levels, and significant uncertainty remains about the timing and strength of the recovery.... Much of that economic uncertainty comes from uncertainty about the path of the disease and the effects of measures to contain it. Until the public is confident that the disease is contained, a full recovery is unlikely.

RECOMMENDATIONS:

- 1. Stay home if possible; we are headed for new highs in the US.
- 2. Children appear to be susceptible to strange symptoms. Act accordingly.
- 3. Do not visit hospitals unless absolutely necessary.
- 4. Expect the current market bump to lose momentum as lower earnings continue to be reported. Despite the Fed's ongoing, multi-trillion-dollar injections, the virus continues to spread. Fundamentals are hurting.
- 5. Wash your hands frequently.
- 6. Practice social distancing, avoid crowds, and stay 10 feet away from others.
- 7. Wear a mask when in shared spaces, always.



EVAN ANDERSON is the CEO of INVNT/IP and a senior staff writer at SNS. Infectious-disease epidemiology has been a strong interest since his work with tuberculosis in Haiti.

Appendix:

SNS Severity Tracker for Major Economies

The SNS Virus Severity Tracker© for major economies measures the trajectory of SARS-CoV-2 and its effect on the economy of each of the largest countries (by nominal GDP) whose data can be trusted. Notable exceptions in the top global economies are China, India, and Brazil, whose virus data cannot be trusted for varied reasons, running from lack of press freedom (China, Brazil) to evidence of tampering (China) to a simple lack of testing capabilities and robust medical infrastructure (India).

This tracker uses proprietary Viral and Economic indexes to serve as a guide for the global viral and economic outlook of these countries individually and in combination. The countries tracked represent more than 890 million people generating over \$44 trillion in annual GDP.

Overall SNS Severity Index© Scores Expected Crisis Zones

(0=Unaffected, 1=Extremely Severe)

Japan (0.04)

South Korea (0.06)

Germany (0.10)

Australia (0.11)

France (0.19)

Italy (0.19)

Canada (0.28)

United Kingdom (0.32)

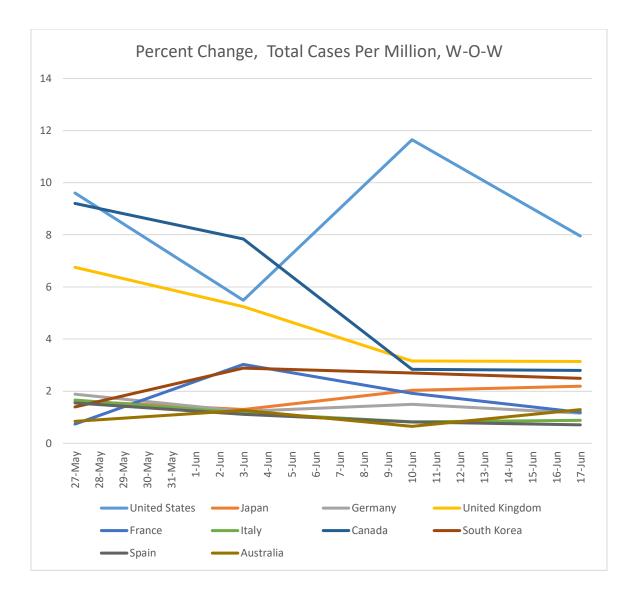
United States (0.36)

Spain (0.37)

(Hardest-hit regions with data fidelity issues, by current total case count)

- 1. Brazil (934,769)
- 2. Russia (553,301)
- 3. India (360,483)
- 4. Peru (237,156)
- 5. Iran (195,051)
- 6. Chile (184,449)
- 7. Turkey (182,727)
- 8. Mexico (154,863)
- 9. Pakistan (154,760)
- 10. China (83,265)
- 11. Bangladesh (74,865)
- 12. Belarus (56,032)
- 13. Ecuador (47,943)
- 14. Indonesia (41,431)
- **15. Philippines (27,238)**
- 16. Afghanistan (26,874)
- 17. Nigeria (17,148)
- 18. Kazakhstan (15,542)

Percent Change, Cases Per Million, Week-Over-Week



SNS Viral Severity Tracker: The United States

National outlook based on virus severity and economic indicators

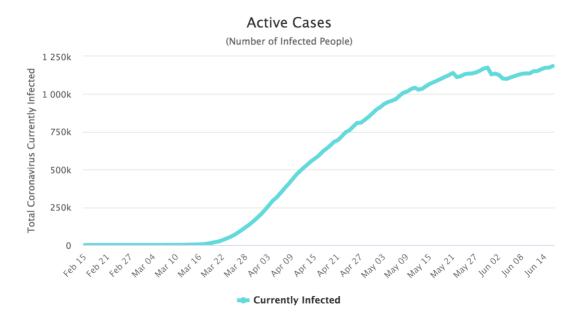
Note: The United States showed a marked economic improvement in large part due to the decrease in unemployment figures last week. These figures have come under question, and it is our expectation that unemployment is understated significantly.

Total Score: 0.36

SNS Viral Severity Index Score: 0.19

SNS Economic Severity Index Score: 0.53

Active Cases in the United States



All graphs by Worldometers

SNS Virus Severity Tracker: Japan

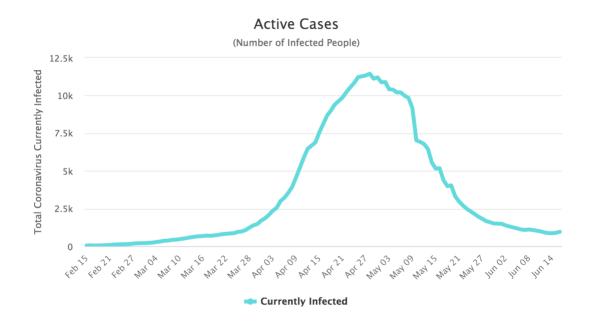
National outlook based on virus severity and economic indicators

Total Score: 0.04

SNS Viral Severity Index Score: 0.03

SNS Economic Severity Index Score: 0.05

Active Cases in Japan



SNS Virus Severity Tracker: Germany

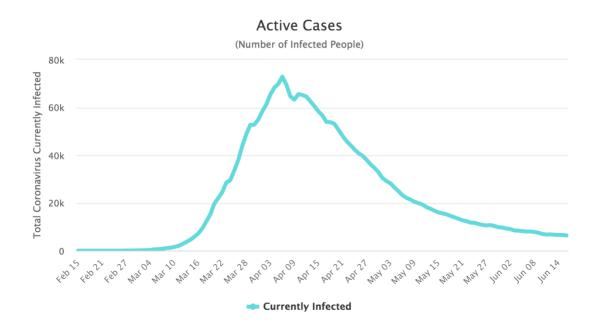
National outlook based on virus severity and economic indicators

Total Score: 0.10

SNS Viral Severity Index Score: 0.02

SNS Economic Severity Index Score: 0.18

Active Cases in Germany



SNS Virus Severity Tracker: United Kingdom

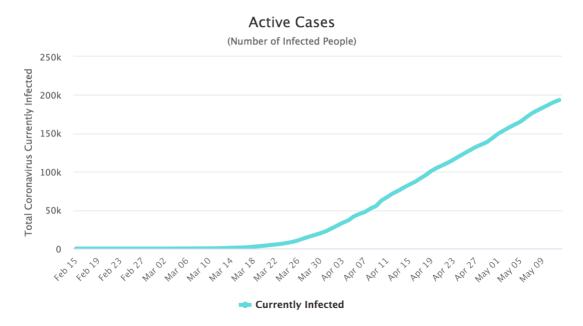
National outlook based on virus severity and economic indicators

Total Score: 0.32

SNS Viral Severity Index Score: 0.46

SNS Economic Severity Index Score: 0.18

Active Cases in the United Kingdom



NOTE: The United Kingdom has ceased to report active cases. Currently the number stands at roughly 256,000, by our count. Steadily rising.

SNS Virus Severity Tracker: France

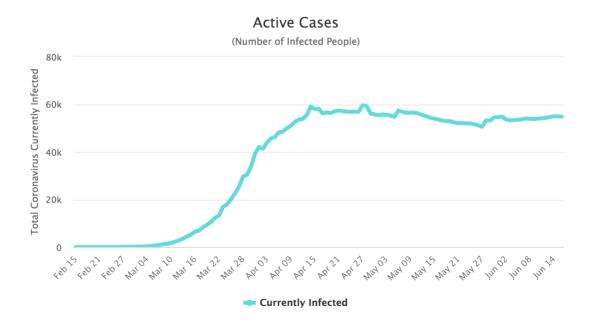
National outlook based on virus severity and economic indicators

Total Score: 0.19

SNS Viral Severity Index Score: 0.13

SNS Economic Severity Index Score: 0.26

Active Cases in France



SNS Virus Severity Tracker: Italy

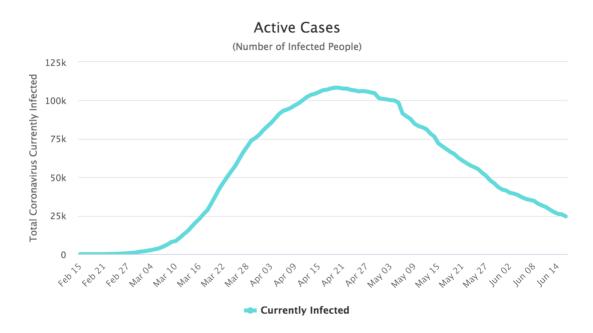
National outlook based on virus severity and economic indicators

Total Score: 0.19

SNS Viral Severity Index Score: 0.07

SNS Economic Severity Index Score: 0.32

Active Cases in Italy



SNS Virus Severity Tracker: Canada

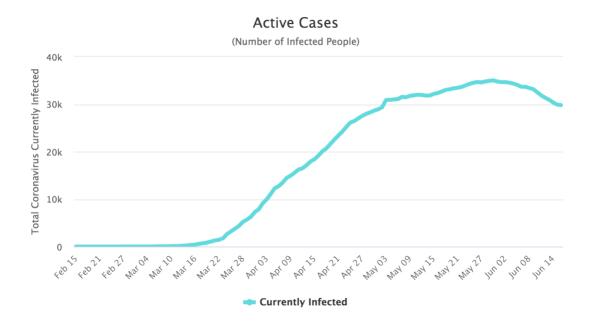
National outlook based on virus severity and economic indicators

Total Score: 0.28

SNS Viral Severity Index Score: 0.07

SNS Economic Severity Index Score: 0.49

Active Cases in Canada



SNS Virus Severity Tracker: South Korea

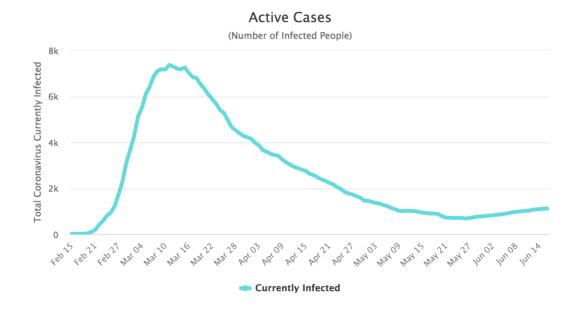
National outlook based on virus severity and economic indicators

Total Score: 0.06

SNS Viral Severity Index Score: 0.02

SNS Economic Severity Index Score: 0.10

Active Cases in South Korea



SNS Virus Severity Tracker: Spain

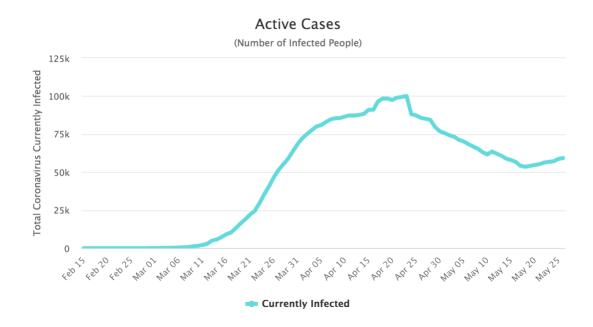
National outlook based on virus severity and economic indicators

Total Score: 0.37

SNS Viral Severity Index Score: 0.13

SNS Economic Severity Index Score: 0.61

Active Cases in Spain



NOTE: Spain has ceased to report active cases. Reported numbers on Worldometers have a large discrepancy with those from Johns Hopkins. Our best estimate now stands at roughly 114,000 (with an assessment that data being reported that informed the above chart was inaccurate). This is a steadily increasing number.

SNS Virus Severity Tracker: Australia

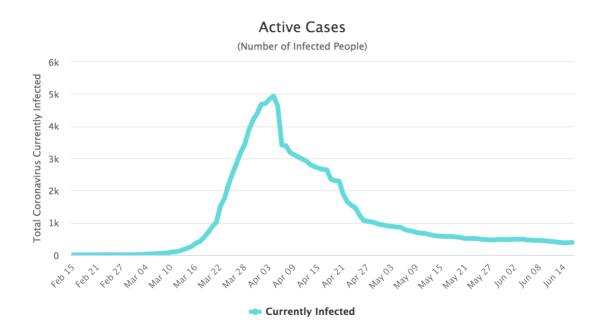
National outlook based on virus severity and economic indicators

Total Score: 0.11

SNS Viral Severity Index Score: 0.01

SNS Economic Severity Index Score: 0.22

Active Cases in Australia



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JUNE 25 | 2:30 PT / 5:30 PM ET

CHINA: THE FUTURE TECH STRUGGLE

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