LIMITED DISTRIBUTION • PART 13 • WEEK OF MAY 18, 2020

THE VIRAL ECONOMY[™]

PERSONAL AND FINANCIAL HEALTH DURING COVID-19

EMERGING MARKETS, EMERGING CRISIS

A STRATEGIC NEWS SERVICE ° EXCLUSIVE PUBLICATION



Week of May 18, 2020 Part 13

SECTIONS

- 1. Overview: Emerging Markets, Emerging Crisis
- 2. Severity
- 3. Most-Affected Regions
- 4. Market Effects
- 5. Appendix: SNS Virus Tracker for Major Economies

OVERVIEW: EMERGING MARKETS, EMERGING CRISIS

By Evan Anderson

Author's Note: Readers engaged with the "Market Effects" section will notice that some of the indicator assets originally chosen have recovered value significantly in the latest market rise (exceptionally, NVIDIA has performed with flying colors throughout the crisis). Next week, we will retire these initial assets and take a look at a new cross-section that will be most relevant going forward. Stay tuned.

While the delayed effects of reopening in

some regions has yet to play out, this week we've begun to see the leading edge of an unfortunate dynamic that was not hard to predict.

While developed-nation underperformers like the US, the UK, and Canada continue to struggle on, and many developed nations see active cases rapidly clearing up for this phase, emerging nations are beginning to stumble as the virus takes a deeper hold in areas with the most vulnerable populations on the globe. The consequences of Russia's reopening will not be identifiable in data for some weeks to come (indeed, if new reports from China's latest outbreak prove accurate, the lag time between behavior and consequences may prove

"[Brazil] lost its second health minister in a month last week. Nelson Teich stepped down after clashing with Bolsonaro [...] over the use of malaria druas to treat the virus and social isolation measures. Despite the political crisis the populist leader continues to tout chloroquine – like his US counterpart Trump – even though it is an unproven treatment for Covid-19. Bolsonaro tweeted on Wednesday that there will be new guidelines to expand the use of chloroquine." - CNN

even longer than previously thought). Regardless, Russia is now the second most infected nation. Brazil, a focus last week. given the disorganization of the response there and the growing concern it caused, has begun to reap the results of its failure to respond (though in resource-poor settings the wisdom of a full lockdown is the least compelling: partial measures can and should be deployed). With an explosion of cases across the country, it now stands as the third most actively infected nation. Latin American nations such as Mexico, Chile, Ecuador, Colombia, and Peru all face concerning rises in new cases, while populations in countries with less reporting, from Venezuela to Bolivia, are likely experiencing silent outbreaks unseen by global medical infrastructure.

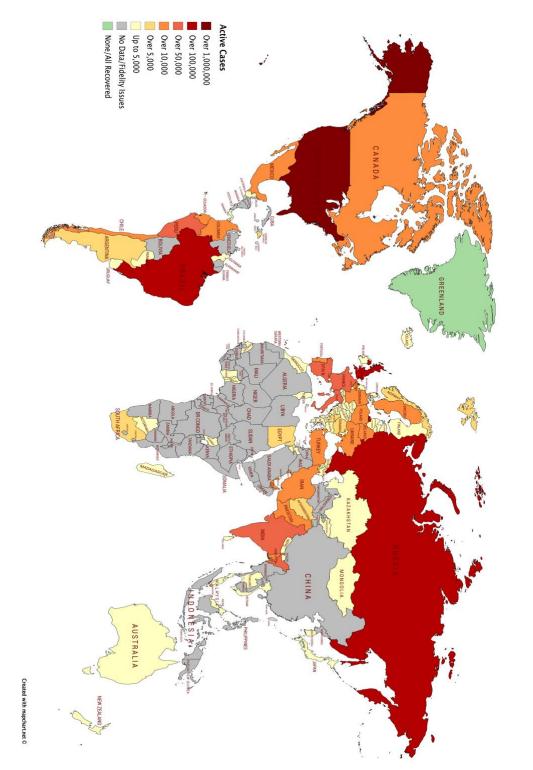
The Looming Disaster in India

Another country with a dire emerging coronavirus situation is India. The subcontinent is now fourth in the world for total cases, with a high density and struggling infrastructure. The perfect storm brewing there (and in neighboring Bangladesh) today faces the additional crisis of an actual storm. Cyclone Amphan, at one point the strongest storm ever recorded in the Bay of Bengal, made landfall in India and Bangladesh today, affecting millions already facing the viral outbreak. According to CNN:

Cyclone Amphan is a disaster bigger than Covid-19, said Mamata Banerjee, chief minister of the east Indian state of West Bengal. "The whole of the southern part of the state has been affected. We are shocked. It will take three to four days to assess the damage," the chief minister said Wednesday at a news conference. "The cyclone has affected the electricity supply and destroyed many houses, bridges, and embankments," she added.

With emerging nations just beginning to face off against the virus, global numbers of new cases are skyrocketing. Conspicuously missing in this dynamic so far are the population-dense regions of sub-Saharan Africa, though it remains to be seen whether this is a victory or simply a delay.





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

Severity will be measured using four key indicators. Since there is drastically insufficient testing, particularly in the United States, we will not be estimating cases until mass testing is ramped up and a realistic sense of spread can be regained.

1. Apparent R_o, or "R-Naught"

The number of new individuals each case will infect, based on Los Alamos' most recent study. An R₀ below 1 means the disease is being contained.

2. Case Fatality Rate, or CFR

The number of deaths as a percentage of total resolved cases (percentage of deaths vs. individuals cured).

3. Total Confirmed Cases

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

4. Total Estimated Cases

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

May 20, 2020

Apparent *R*₀ = 6 - The European/East Coast Strain

CFR = **?**

Total Confirmed Cases: 5,042,133

Total Estimated Cases: Estimates of CFR and Cases are not useful without sufficient testing.

Official Death Count:

Most-Affected Regions

Countries/regions experiencing the highest deaths per million

San Marino (1,209)	Sint Maarten (350)	Luxembourg (174)
Belgium (790)	Netherlands (336)	Ecuador (161)
Andorra (660)	Ireland (317)	Canada (158)
Spain (594)	USA (284)	Bermuda (144)
Italy (532)	Isle of Man (282)	Portugal (124)
UK (521)	Channel Islands (253)	Monaco (102)
France (429)	Switzerland (219)	Germany (98)
Sweden (380)	Montserrat (200)	Denmark (96)

Market Effects

Percentage Change Since Outbreak, Select Viral Economy Metrics

Financial Markets

Commodities with High China Demand

Shanghai Composite -7.12 WTI Crude -53,14 Shenzhen Composite +1.71 Hang Seng -13.84 Nikkei -12.64 DJI -14.42 S&P 500 -8.5 FTSE 100 -19.91 Bovespa -30.30 Nasdag +3.24

Brent Crude -49.47 Copper -13.90 Steel Rebar -5.87 Nickel -11.18 Iron Ore +2.13 Aluminum -17.25 Cotton -11.25



US Case Map as of May 20, 2020 (Courtesy Johns Hopkins)

Economies and Companies with Significant Exposure Selected by "The Viral Economy" in February

National ETFs

US Equities

iShares MSCI China -3.25	Skyworks Solutions -0.10
iShares MSCI India -23.6	Wynn Resorts Ltd38.02
iShares MSCI Australia -21.90	Qorvo <mark>-8.86</mark>
iShares MSCI Japan -10.40	Qualcomm - <mark>6.66</mark>
iShares MSCI South Korea -13.28	Micron -13.74
iShares MSCI Russia -21.59	Broadcom -10.68
iShares MSCI Philippines -28.47	NVIDIA +51.86
iShares MSCI New Zealand -11.28	Texas Instruments -7.25
IShares MSCI Malaysia -14.52	IPG Photonics +12.42
iShares MSCI Singapore -22.93	KLA-Tencor +0.51
iShares MSCI Thailand -20.25	
VanEck Vectors Vietnam -14.40	

While the world waits for the effects of the gradual reopening of Europe and the United States, hotspots have been emerging around the globe in regions where the virus will likely prove extremely difficult to stamp out. From the favelas of Rio de Janeiro to the refugee camps of Bangladesh, sufficient PPE, staff, and infrastructure is sorely lacking. These areas are almost sure to see horrific death tolls, underreporting, and a long and difficult battle as the virus circulates in underprivileged populations for some time to come.

Economically, emerging markets will also struggle to perform as more and more workers are stricken and backand-forth shutdown measures sow confusion and wither in the face of endemic poverty. Populations without sufficient nutrition or savings will not be able to stay home. The implications of outbreaks in the world's more populous, under-resourced regions are grave.

The United States and Europe continue to see bullish market rises while unemployment statistics and revenue projections are dire. Monday's hearings with Mnuchin and Powell offered hope for little more than continued money printing. A better strategy is needed.

RECOMMENDATIONS:

- 1. Stay home if possible; the virus can cause long-term health issues.
- 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 earnings are reported.
- 5. Wash your hands frequently.
- 6. Practice social distancing, avoid crowds, and stay 10 feet away from others.
- 7. The virus appears to be more airborne than previously known. Wear a mask if possible when in shared spaces.



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: Severity Tracker for Major Economies

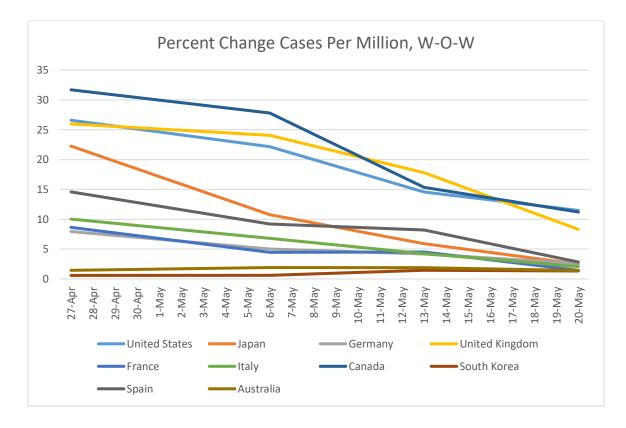
The SNS Virus Severity Tracker© for major economies measures the trajectory of SARS-CoV-2 and its effect on the economy of each of the largest countries (by nominal GDP) whose data can be trusted. Notable exceptions in the top global economies are China, India, and Brazil, whose virus data cannot be 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.

	Expected Crisis Zones (Hardest-hit regions with data fidelity issues, by current total case count)	
Overall Severity Index© Scores (0=Unaffected, 1=Extremely Severe)		
South Korea (0.05)	Russia (308,705)	Ecuador (34,151)
Japan (0.05)	Brazil (275,382)	Belarus (32,426)
Germany (0.11)	Turkey (152,587)	Bangladesh (26,738)
Australia (0.13)	Iran (126,949)	Indonesia (19,189)
France (0.25)	India (111,750)	Philippines (13,221)
Italy (0.26)	Peru (99,483)	Malaysia (7,009)
Canada (0.27)	China (82,965)	Afghanistan (8,145)
United Kingdom (0.33)	Mexico (54,346)	Kazakhstan (6,969)
Spain (0.35)	Chile (53,617)	Nigeria (6,401)
United States (0.40)	Pakistan (45,898)	Ghana (6,096)

Note: While shifts this week were minimal and positive on the whole, the United States is the only country in the index whose situation has worsened since last week. This is largely due to a slower relative rate of disease containment and, particularly, to worsening economic prospects outside of markets.

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



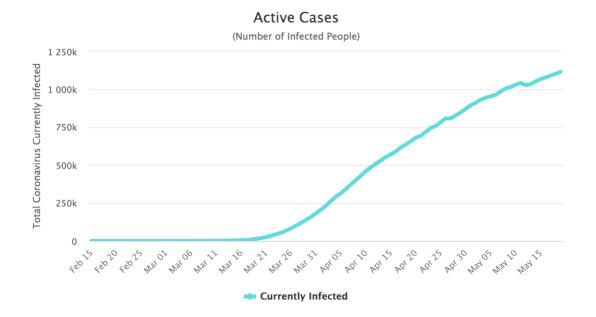
SNS Viral Severity Tracker: The United States

National outlook based on virus severity and economic indicators

Total Score: 0.40

SNS Viral Severity Index Score: 0.22 SNS Economic Severity Index Score: 0.58

Active Cases in the United States



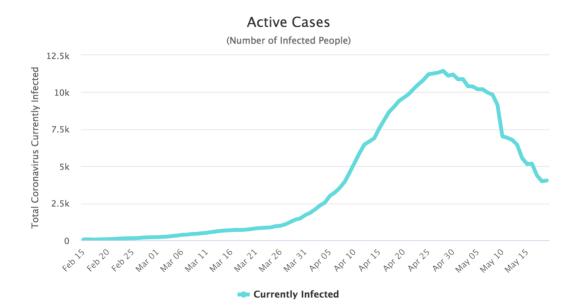
All graphs by Worldometers

SNS Virus Severity Tracker: Japan

National outlook based on virus severity and economic indicators

Total Score: 0.05 SNS Viral Severity Index Score: 0.03 SNS Economic Severity Index Score: 0.06

Active Cases in Japan

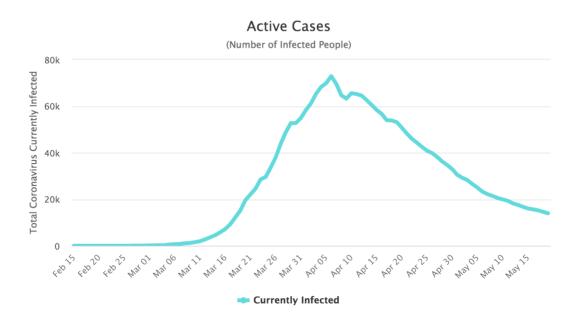


SNS Virus Severity Tracker: Germany

National outlook based on virus severity and economic indicators

Total Score: 0.11 SNS Viral Severity Index Score: 0.03 SNS Economic Severity Index Score: 0.18

Active Cases in Germany



SNS Virus Severity Tracker: United Kingdom

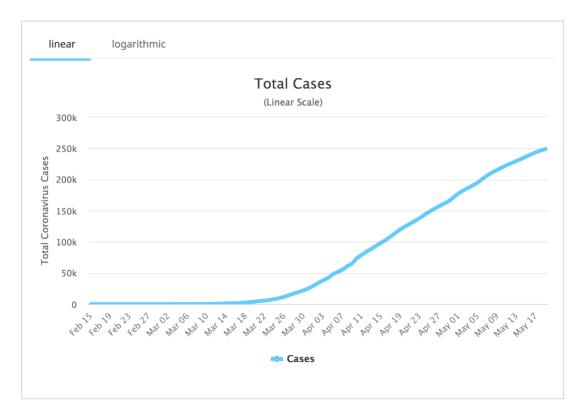
National outlook based on virus severity and economic indicators

Total Score: 0.33

SNS Viral Severity Index Score: 0.46 SNS Economic Severity Index Score: 0.20

Note: The United Kingdom appears to be having issues with its active-case reporting. While there is no longer a set of reported active cases, this chart shows total cases, of which roughly 36,800 have been resolved (ending in death or recovery), so the figure seems to be roughly 213,000 this week.

Total Coronavirus Cases in the United Kingdom



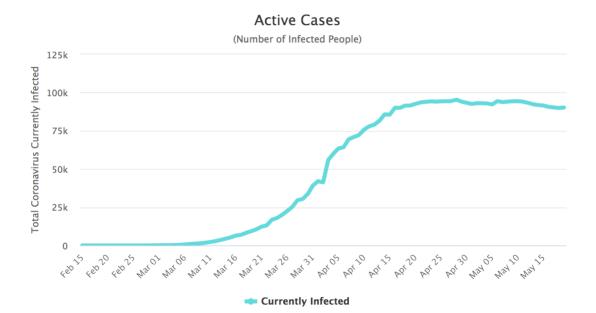
SNS Virus Severity Tracker: France

National outlook based on virus severity and economic indicators

Total Score: 0.25

SNS Viral Severity Index Score: 0.15 SNS Economic Severity Index Score: 0.34

Active Cases in France

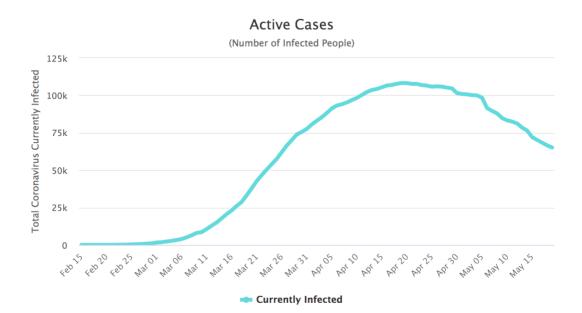


SNS Virus Severity Tracker: Italy

National outlook based on virus severity and economic indicators

Total Score: 0.26 SNS Viral Severity Index Score: 0.11 SNS Economic Severity Index Score: 0.42

Active Cases in Italy



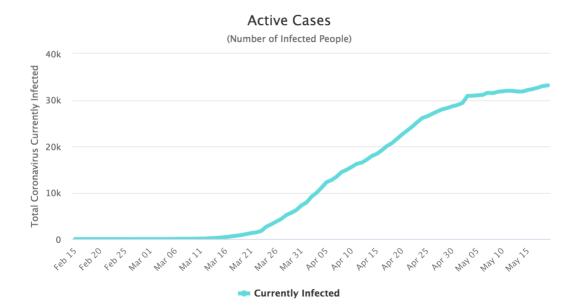
SNS Virus Severity Tracker: Canada

National outlook based on virus severity and economic indicators

Total Score: 0.27

SNS Viral Severity Index Score: 0.11 SNS Economic Severity Index Score: 0.44

Active Cases in Canada

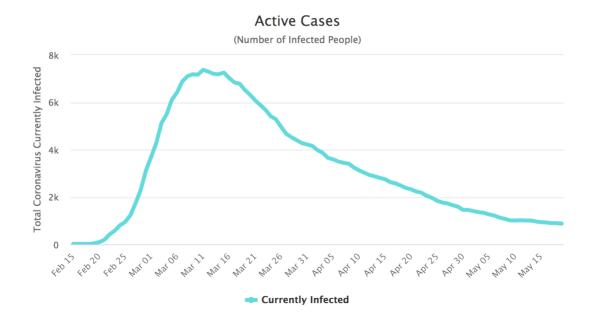


SNS Virus Severity Tracker: South Korea

National outlook based on virus severity and economic indicators

Total Score: 0.05 SNS Viral Severity Index Score: 0.01 SNS Economic Severity Index Score: 0.08

Active Cases in South Korea



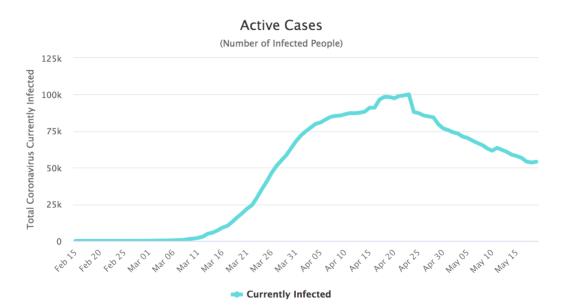
SNS Virus Severity Tracker: Spain

National outlook based on virus severity and economic indicators

Total Score: 0.35

SNS Viral Severity Index Score: 0.09 SNS Economic Severity Index Score: 0.61

Active Cases in Spain

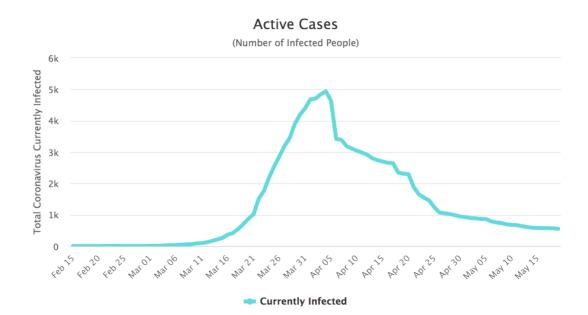


SNS Virus Severity Tracker: Australia

National outlook based on virus severity and economic indicators

Total Score: 0.13 SNS Viral Severity Index Score: 0.01 SNS Economic Severity Index Score: 0.25

Active Cases in Australia



Share SNS with a Friend

To arrange for a speech or consultation by Mark Anderson on subjects in technology and economics, or to schedule *a strategic review* of your company, email mark@stratnews.com.

For inquiries about **Partnership or Sponsorship Opportunities** and/or SNS Events, please contact Berit Anderson, SNS Programs Director, at <u>berit@stratnews.com</u>.

MAY 21 | 2:30 PT / 5:30 PM ET

COVID-19: THE WAY OUT

How long will this pandemic last? What should I be doing to prepare my company for the next six months? Science-backed strategies for restarting the economy and plotting a safe route forward from Larry Brilliant, whose work with the WHO helped eradicate smallpox; and INVNT/IP CEO Evan Anderson, author of the SNS Viral Economy series.

COVID-19: The Way Out

A Virtual Intelligence Session with Epidemiologist Larry Brilliant

and Kai Kaiser, Senior Economist, World Bank

Thursday, May 21, 2020 2:30-4:30pm PT • 5:30-7:30pm ET

As countries and regions struggle to contain the spread of coronavirus and find their economic footing, we're learning new lessons about how to combat this novel pathogen. What strategies are most effective in containing the virus? How can we safely reenter a productive society? What does a successful route to a desirable "new normal" look like, and what can we do, as individuals and organizations, to speed it along?

Join Strategic News Service for a FiReSide evening of advanced insight about the road ahead to inform your personal and professional decision making.

Larry Brilliant | Epidemiologist



RELITERS/Carlos Battle

Best-known for his work with WHO to eradicate smallpox, epidemiologist Dr. Larry Brilliant has worked for decades fighting disease in the most difficult of environments. Brilliant was the inaugural executive director of Google.org and the first CEO of Skoll Global Threats Fund, established in 2009 to address climate change, pandemics, water security, nuclear proliferation, and conflict in the Middle East. Today he serves as the chair of Ending Pandemics, is on the boards of the Skoll Foundation, Salesforce.org, The Seva Foundation, and Dharma Platform, and is a regular guest expert on CNN on the coronavirus.

Kai Kaiser | Senior Economist, World Bank



Kai Kaiser has been Senior Economist with the World Bank in Hanoi, Vietnam since early 2016, where his engagement has focused primarily on issues of public finance and public sector governance reform. He has also been based in the Philippines and Indonesia. Previously he was Senior Economist at the (global) Public Sector and Governance Group, Poverty Reduction and Economic Management (PREM), in Washington, DC, with a focus on issues of public finance, inter-governmental relations, natural resource led development, and applied political economy/institutional reform issues.

Moderator Evan Anderson | INVNT/IP CEO & Author, "The Viral Economy"



Evan Anderson is the CEO of INVNT/IP, a Strategic News Service (SNS) initiative. INVNT/IP is a private consortium of global companies actively fighting nation-sponsored intellectual property theft through a combination of political advocacy, private briefings, and public education. Evan is the author of the seminal cabinet-level INVNT/IP briefing book "Theft Nation," featured on *60 Minutes* in 2016 in its best-watched investigative segment ever.

Host Berit Anderson | Strategic New Service Director of Programs

Pick Up Your Tickets!

OUR PARTNERS

Global Platinum and FiReFilms Partner



2019 Global Silver Partners







Silver Academic Partner

UC San Diego

Global Bronze Partner

Deloitte

Focus Channel Partners





Strategic News Service[™] LLC

www.stratnews.com

Copyright © 2020

Exhibitor



FiRe Academic Partner



FiRe Event Sponsor



And Honored FiReStarter 2019 Companies



Copyright © 2020 Strategic News Service LLC

"Strategic News Service," "SNS," "Future in Review," "FiRe," "INVNT/IP," and "The Viral Economy" are all registered service marks of Strategic News Service LLC.

ISSN 1093-8494