

Economics in the Time of Covid-19: The economic impact on Asia

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Mitigation or Suppression? : Interpreting Boris Johnson's changing strategy on COVID-19 from a behavioral economics perspective

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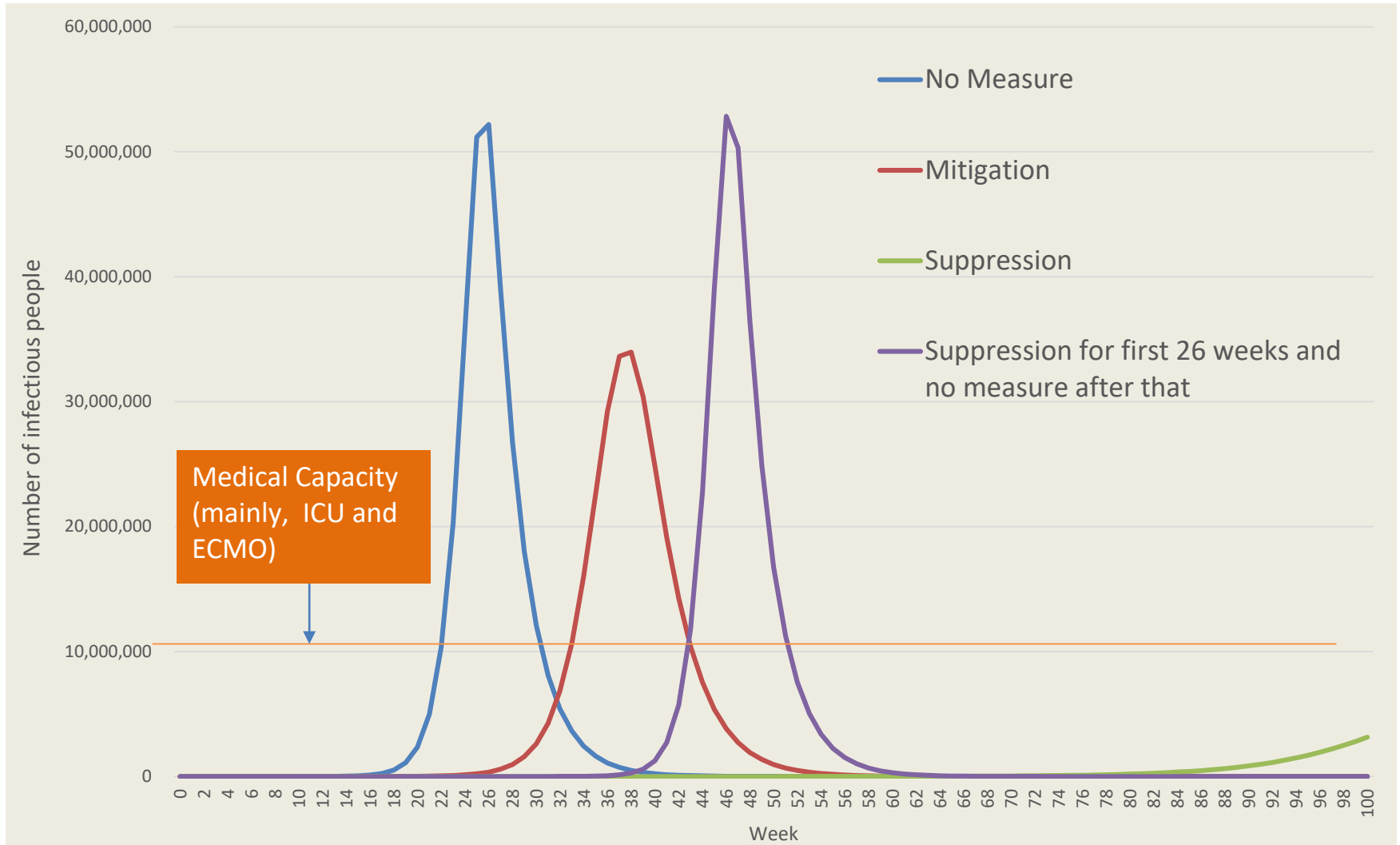
What happened in the UK?

- On March 12, Boris Johnson announced a unique strategy for COVID-19 called “mitigation.”
- Johnson changed the strategy from “mitigation” to “suppression” within a few days.
- According to the report by Imperial College London [1], the UK’s second decision was mainly due to the shortage of medical capacity (in particular ICU and ECMO) which is less than 1/8 of peak medical demand.

Mitigation versus Suppression [1]

- Mitigation aims at delaying the speed of transmission and reducing the peak patient number of COVID-19, thus making it possible to meet the peak medical demand. Mitigation also aims at developing herd immunity among the population, thus making the whole society resistant to future surges of COVID-19.
- Suppression aims at inhibiting the occurrence of COVID-19 and keeping it at a low level. Suppression needs to be continued until vaccination is available (possibly, eighteen months).
- Although both strategies use several restrictive measures such as social distancing to reduce the transmission of COVID-19, mitigation uses short-term and less severe measures than suppression.

Mitigation, Suppression, and Failed Suppression



Possible Loss aversion

According to the prospect theory [2], people care more about losses than gains. People are willing to take risks in order to avoid losses. Some countries may be taking loss aversion strategies, possibly unconsciously.

Losses and Risks of Mitigation

Losses of choosing Mitigation

Many people, particularly elderly people, will die in a short time.

There may be casualties among medical staff due to contagion and exhaustion.

The medical system may collapse for at least a short time.

Risks of choosing suppression instead of mitigation

Many people may die possibly in winter if long term mitigation strategy fails. [1]

“[W]e don’t know how long social distancing measures and lockdowns can be maintained without major consequences to the economy, society, and mental health. Unpredictable evolutions may ensue, including financial crisis, unrest, civil strife, war, and a meltdown of the social fabric.” [3]

Many people may commit suicide (example: 1932 in the U.S., 1998 in Japan).

Education levels among children and students may become insufficient.

Final Remark

- Mitigation is seen as “gambling” in the UK and around the world. But, this is not necessarily so. Rather, it is about accepting short-term, substantial loss. After the substantial loss, the situation would be more manageable.
- Suppression strategies taken by some countries (regions) such as China, Taiwan, and Australia are treated as the safe method, but, this strategy might actually be gambling in the long run.
- One way of changing the perspective is using “framing” or changing “reference points” [2, 4]. If we acknowledge that a loss is already realized, effective measures would be seen as a gain. The following is an example.
 - With no measures, 50 thousand people will die. But effective measures will save 30 thousand (gain framing).
 - 20 thousand will die even with effective measures (loss framing).

References

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2. Kahneman, D. and A. Tversky, *Prospect theory: An analysis of decision under risk*. *Econometrica*, 1979. **47**(2): p. 363-391.
3. Ioannidis, J.P., *A fiasco in the making? As the coronavirus pandemic takes hold, we are making decisions without reliable data*, in *STAT*. March 17, 2020. Available from <https://www.statnews.com/2020/03/17/a-fiasco-in-the-making-as-the-coronavirus-pandemic-takes-hold-we-are-making-decisions-without-reliable-data/>
4. Tversky, A. and D. Kahneman, *The framing of decisions and the psychology of choice*. *Science*, 1981. **211**(4481): p. 453-458.