Comments on:

"The Cost of Privacy:
Welfare Effects of the Disclosure of COVID-19 Cases"

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Highlights

Key conclusions

- **Public disclosure can be an important tool to combat the spread of the virus**
  - Show that change in commuting flows observed in mobile location data predicts neighborhood heterogeneity in spread of the virus
  - Public disclosure lowers the projected number of patients over two years
  - Closer to "optimal" communing patterns when people can self-select based on perceived risks and costs (vs. indiscriminate interruption under lockdowns)

Key dynamics

  - Information about infections increases commuting costs and lowers welfare – but also reduces the transmission of the virus across neighborhoods
  - Responsiveness of weekend flows to a given change in commuting costs will be larger than that of weekday flows / Age differences

Some questions

- Equations are estimated from data on communing flows in Nov’19 vs. Jan-May’20. While Nov’19 is pre-pandemic, given that Jan-May’19 data were available, may it make sense to use this latter period as the benchmark?

- Would it be possible to test different parameters in the SIR model other than the transmission rate and the daily detection rate (last section). As examples, rate per day of recovery or death [authors use an estimate of duration of illness of 18 days], or amount of time quarantined people are isolated [authors use 8.5 for young and 10.2 for old], or fatality rates [authors use 0.21% for young, and 2.73% for old]?

- Intuitively, information dissemination can only be as good as the underlying information, but the authors assume 90% of cases are undetected, and that these cases follow the predicted commuting patterns of the model. What if they followed other patterns?

- Perceptions around infection probability may differ across demographic groups. How to account for this in the model?

- Authors estimate that at the peak of the pandemic, “economic welfare declines by 0.3%.” This seems small? How to interpret it?

Some questions (cont'd)

- In the comparison to the "lockdown policy," the authors assume that these are applied to randomly selected 25% of the population, who are forced to stay in the home sector all days of the week (to match the number of cases observed over two years as in their full information disclosure case) over two years. Is this a reasonable comparison?

Table 2: Comparison of Full Disclosure with No Disclosure and Lockdown

	No Disclosure	Partial Disclosure	Full Disclosure (Korea case)	25% Lockdown Days 280 to 380
Total # of Cases	968,482	871,070	770,691	768,598
Total # of Death	26,083	22,082	18,360	20,136
age 20-59	7,520	6,879	6,184	6,013
age 60+	18,563	15,203	12,176	14,123
Welfare loss per day (%)	-	0.04	0.15	0.57
age 20-59	-	0.04	0.14	0.73
age 60+	-	0.05	0.17	0.07

Notes: The table reports the total number of detected cases, the total number of death, and the welfare losses over two years in the city of Seoul under no disclosure, partial disclosure, information disclosure (Korea case), and 25% lockdown from day 280 to 380. The economic welfare losses, compared to the no disclosure case, are shown in percent.

Some questions (end)

- Authors side-step the question of welfare losses due to privacy issues, stigmatization, etc. They also assumed no vaccine becomes available within the horizon of exercises (two years). That's a fair (and acknowledged) narrowing of the scope of the paper. But with the benefit of hindsight, it would be interesting to hear the authors' perspectives on observed outcomes, especially cross-country comparisons.