

Data Resources in the COVID Era

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A Crisis with Data Like No Other

- COVID-19 is the first global shock in the Big Data era
- The past six months have seen a rapid expansion in the kinds of data that economists and policymakers use in their work
- This includes innovation in intentionally collected data, e.g. surveys
- Increasing use of happenstance data, e.g. mobility, financial transactions, energy consumption.
- Potentially powerful resources, but normalizing data access remains a major challenge that governments can help with.
- My views are shaped by working with a major Spanish bank BBVA during the crisis¹ and with DELVE at the Royal Society²

What Kinds of Analysis?

- Nowcasting
- Distributional impact of macro shocks on households and firms
- Assess impact of policy interventions in real time
- Input into national statistics (important especially in lower-income countries?)

Data Challenges

- Main constraint isn't technical expertise in cloud computing, statistics, and machine learning
- Many low-level processes to turn happenstance data into a product that external policymakers can use:
 - Common language and vocabulary of data properties
 - Systems in place to collate data in a consistent and replicable way
 - Rigorous anonymization protocols
- These are time-consuming issues to resolve that are poorly incentivized for academics and (some) companies

Success Stories During COVID

- In large companies, sharing often facilitated by research group:
 - BBVA Research
 - JP Morgan Institute
- For small companies, more upside through brand recognition:
 - <https://tracktherecovery.org/>
 - <https://c19impact.com/superset/dashboard/7/>
- INE mobility data in Spain
 - <https://www.ine.es/covid/tabla.htm?L=1>
 - Inspired by Telefonica-Mexico collaboration during H1N1 pandemic
 - https://www.youtube.com/watch?v=H5_FeuuS-zs&ab_channel=WIREDUK

Policy Recommendations

- Strong rationale for government action given public good arguments
- Using happenstance data for policy requires serious engagement over long period between relevant players to resolve numerous issues
- This form of capacity building as important as hiring data scientists
- Time to make these investments is BEFORE the next crisis