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PAYMENTS DATA FOR NOWCASTING

Some thoughts on the research presented

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Disclaimer

The views expressed are those of the discussant and may differ from official Bank of Canada views

Payments Data for Nowcasting

The interesting research in this session show cases its usefulness

- Timely, usually available on a daily basis (or higher!) frequency
- Can be used to answer many, many research questions since digital payments are linked to:
  - Bank profits and losses (Finance questions),
  - household balance sheets (macro-economic questions), and
  - Are the observed outcome of competition and economic activity on platforms (IO questions)
- No survey sampling issues! But many, *many* sample selection issues!

The Geography of Consumption and Local Shocks: The Case of the Great Recession

A. Dunn and M. Gholizadeh

- The authors use credit card data from a large payment processor to understand the geography of consumption patterns and how local wealth shocks are transmitted between counties
  - Accounting for these cross-border flows corrects for a 26% underestimate of employment and a 17% underestimate of spending
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- The authors conduct a nice exercise leveraging the geographic characteristics of card purchases to link individual decisions to macro quantities of interest
- Some points to consider:
  - How do deal with density? Density of a county is likely (maybe!) related to its size and hence the probability of being a high-exporter or not.
    - Especially for category suppression!
  - Sales taxes? How do sales taxes effect cross-county trade? Is this possible to be answered using this data?

Liquidity in Canada during the Coronavirus Pandemic

K. Huyhn, A. Ho, L. Morin, and H. Paarsch

- The authors use a large and rich dataset from a credit bureau to estimate a Markov model of the high-frequency changes of credit card and HELOC balances
  - They use this model to provide evidence that for *virtually* all levels of debt there is an unexpected (or excess) reduction in balances during COVID
- Great paper that gives us a tool to understand how a variable of interest for policy makers (consumer indebtedness) changes at a high-frequency.
- Two key questions:
  - Model specification: There is an increase in mass at the lowest HELOC level *as well as the highest*. Perhaps the Markov process has changed (folks maxing out their credit lines?). Has the model hit a stationary distribution when the shock hit?
  - Join Distribution: You have a large dataset. Why not estimate the joint Markov process? Perhaps folks are shifting balances systematically between the two products?

Tracking the COVID-19 Crisis with High-Resolution Transaction Data

V. Carvalho, J. Garcia, S. Hansen, A. Ortiz, V, T. Rodrigo, J. Rodriguez More, P. Ruiz

- Using a rich dataset of BBVA cards and payment terminals the authors explore using payments data to answer various macro and policy relevant questions. Specifically,
  - There was a strong consumption reaction to lockdown with a strong recovery
  - There was a large change in the composition of consumption during lockdown which was relatively larger for higher income deciles
  - There was also a large change in mobility patterns
- Interesting exercise that highlights some of the key-features of payments data that can answer many interesting questions (sometime simultaneously)
- Two things to consider:
  - I'd encourage the authors to think carefully about how to measure consumer durables (cars and houses may not be bought using credit cards but DIY supplies, electronics, and home appliances are)
  - How does the number of active BBVA payment terminals change over the period? This would help to control for (presumably significant) increase in digital commerce over other non-observed payment types (i.e. cash)

Policy uncertainty and Daily Consumer Card Payments

G. Ardizzi, S. Emiliozzi, J. Marcucci, and L. Monteforte

- The authors construct various measurements of Italian-language economic uncertainty and economic policy uncertainty.
  - They then use this at a high-frequency to see how changes in uncertainty are related (cause?) changes in aggregate payment amounts
  - They show that increasing uncertainty reduces non-durable consumption and increases the demand for cash.
- The authors do a good job showing how we can use payments data with other non-traditional data (text data) to help get a clearer picture on previously unanswerable questions about high-frequency consumer behaviour
- Some measurement questions:
  - Are credit cards in your sample? If so are they net or gross payments?
  - Payment behaviour may also be cyclical related to uncertainty
    - Changes in uncertainty may be associated to changes in borrowing and hence in payment choice. This could also be saide for durable and non-durable consumption
    - What about on-us changes? These could be systemic at a business cycle frequency (more vacations or other long-distance expenditures) which could be captured in measurement of uncertainty's effect on payments volume changes