Session Information on

KAEA Macro Session at the 2020 ASSA Meetings

Yoosoon Chang, 20 December 2019

- Session title: From Micro Data To Macro Policy
- JEL codes: E21, E23, E31, E32, E52, F44
- Date/time: 4 January 2020 / 12:30-2:15pm
- Venue: Manchester Grand Hyatt San Diego, Harbor C
- KWEN Mentee (Discussant) - Presenter (Mentor) Pairs
    1. KWEN Mentee: Hie Joo Ahn (Federal Reserve Board of Governors)
       Mentor Presenter: Regis Barnichon (Federal Reserve Bank of San Francisco)
    2. KWEN Mentee: Hyunju Lee (Ryerson University)
       Mentor Presenter: Laura Veldkamp (Columbia University)
    3. KWEN Mentee: Eunhee Lee (University of Maryland)
       Mentor Presenter: Stephen J. Redding (Princeton University)
    4. KWEN Mentee: Yoosoon Chang (Indiana University)
       Mentor Presenter: Olivier Coibion (University of Texas-Austin)

1. Presenter: Regis Barnichon, Federal Reserve Bank of San Francisco and CEPR;
                    email: regis.barnichon@sf.frb.org;
   Title of paper: "Identifying modern macro equations with old shocks," coauthored with Geert
                    Mesters (Universitat Pompeu Fabra, Barcelona GSE and VU Amsterdam; email:
                    geert.mesters@upf.edu)
   Abstract: Despite decades of research, the consistent estimation of structural forward
                    looking macroeconomic equations remains a formidable empirical challenge
                    because of pervasive endogeneity issues. Prominent cases —the estimation of
                    Phillips curves, of Euler equations for consumption or output, or of monetary
                    policy rules— have typically relied on using pre-determined variables as
                    instruments, with mixed success. In this work, we propose a new approach that
                    consists in using sequences of independently identified structural shocks as
                    instrumental variables. Our approach is robust to weak instruments and is valid
                    regardless of the shocks' variance contribution. We estimate a Phillips curve
                    using monetary shocks as instruments and find that conventional methods (i)
                    substantially under-estimate the slope of the Phillips curve and (ii) over-estimate
                    the role of forward-looking inflation expectations.
   Summary: This paper proposes a new approach based on the sequences of independently
                    identified structural shocks as instrumental variables to consistently estimate
                    structural forward looking macroeconomic equations and find that conventional
                    methods substantially under-estimate the slope of the Phillips curve and over-
                    estimate the role of forward-looking inflation expectations.
   Discussant: Hie Joo Ahn (Federal Reserve Board of Governors); email:
                    HieJoo.Ahn@frb.gov;

2. Presenter: Laura Veldkamp, Columbia University; email: lv2405@columbia.edu
   Title of paper: "A Growth Model of the Data Economy," coauthored with Maryam Farboodi
                    (MIT Sloan School of Business, email: farboodi@mit.edu)

Abstract: The rise of information technology and big data analytics has given rise to ``the new economy." But are its economics new? This article constructs a classic growth model with data accumulation. Data has three key features: 1) Data is a by-product of economic activity. 2) Data enhances firm productivity; and 3) data is information used for forecasting. The model can explain why data-intensive goods or services, like apps, are given away for free, why firm size is diverging, and why many big data firms are unprofitable for a long time. While these transition dynamics differ from those of traditional models, the long run features diminishing returns. Just like capital accumulation, data accumulation alone cannot sustain growth. Without true improvements in productivity, data-driven growth will grind to a halt.

Summary: The paper explores the transition dynamics and long run of a growth model with data accumulation.

Discussant: Hyunju Lee (Ryerson University); email: hyunju.lee@ryerson.ca;

3. Presenter: Stephen J. Redding, Princeton University, email: reddings@princeton.edu;
   Title of paper: "The Making of the Modern Metropolis: Evidence from London," coauthored with Stephan Heblich (University of Bristol, email: stephan.heblich@bristol.ac.uk), and Daniel M. Sturm (London School of Economics, email: d.m.sturm@lse.ac.uk)

Abstract: Modern metropolitan areas involve large concentrations of economic activity and the transport of millions of people each day between their residence and workplace. We use the revolution in transport technology from the invention of steam railways, newly-constructed spatially disaggregated data for London from 1801-1921, and a quantitative urban model to provide evidence on the role of these commuting flows in supporting such concentrations of economic activity. Steam railways dramatically reduced travel times and permitted the first large-scale separation of workplace and residence. We show that our model is able to account for the observed changes in the organization of economic activity, both qualitatively and quantitatively. In counterfactuals, we find that removing the entire railway network reduces the population and the value of land and buildings in Greater London by 20 percent or more, and brings down commuting into the City of London from more than 370,000 to less than 60,000 workers.

Summary: This paper studies the effect of the revolution in transport technology on the organization of economic activities with a new quantitative urban model and newly constructed spatial data for London from 1801-1921.

Discussant: Eunhee Lee (University of Maryland); email: lee@econ.umd.edu

4. Presenter: Olivier Coibion, University of Texas-Austin, email: ocoibion@gmail.com;
   Title of paper: "No Firm Is An Island? How Industry Conditions Shape Firms' Aggregate Expectations," co-authored with Philippe Andrade (Federal Reserve Bank of Boston, email: Philippe.Andrade@bos.frb.org), Erwan Gautier (Banque de France, email: erwan.gautier@banque-france.fr) and Yuriy Gorodnichenko (University of California Berkeley, email: ygorodni@econ.berkeley.edu)

Abstract: We study the relationship between the macroeconomic expectations of firms in France and their economic decisions using a long-running and large scale survey of firms. We find that higher inflation expectations on the part of managers are associated with higher prices and wages, as well as higher employment and investment. Similar results hold when managers expect higher aggregate wage growth and faster aggregate economic activity. We study how these results differ along a variety of characteristics of firms.

Summary: The paper studies the relationship between the macroeconomic expectations of firms in France and their economic decisions using a long-running and large scale survey of firms.
Discussant: Yoosoon Chang, Indiana University; email: yoosoon@indiana.edu

- Chair information: Yoosoon Chang, Indiana University; email: yoosoon@indiana.edu