### **Topics** Course

#### New Approaches in Structural Macroeconometrics

#### -Syllabus-

This course is aimed at graduate students and advanced Master students with a special research interest in empirical macroeconomics and macroeconometrics. It covers ongoing research on structural identification of macroeconomic shocks. Students are expected to take an active role in this course, specifically by presenting one or several of the paper listed below. Grading will be based on the presentation(s) (40%) and a term paper (60%). Note that the course requires a good background in econometrics. Some prior knowledge of structural VARs and multivariate time series in general would be especially helpful.

## Topics

### 1 Introduction

- Valery A. Ramey (2016). "Macroeconomic shocks and their propagation". *Handbook of macroeconomics*. Ed. by John B. Taylor and Harald Uhlig. Vol. 2. Elsevier, 71–162
- Emi Nakamura and Jón Steinsson (2017). "Identification in macroeconomics". Mimeo. Columbia University

## 2 External instruments/Proxy SVARs

- James H. Stock and Mark W. Watson (2012). "Disentangling the channels of the 2007-09 recession". Brookings Papers on Economic Activity Spring, 81–156
- Karel Mertens and Morten O. Ravn (2013). "The dynamic effects of personal and corporate income tax changes in the United States". American Economic Review 103 (4), 1212–47. DOI: 10.1257/aer.103.
  4.1212
- Sydney C. Ludvigson, Sai Ma, and Serena Ng (2015). "Uncertainty and business cycles: exogenous impulse or endogenous response?" NBER Working Paper 21803
- Dario Caldara and Edward Herbst (2016). "Monetary policy, real activity, and credit spreads: evidence from Bayesian proxy SVARs". Mimeo. Federal Reserve Board

### 3 High-frequency identification

- Refet S. Gürkaynak, Brian Sack, and Eric Swanson (2005). "The sensitivity of long-term interest rates to economic news: evidence and implications for macroeconomic models". *American Economic Review* 95 (1), 425–436. DOI: 10.1257/0002828053828446
- Mark Gertler and Peter Karadi (2015). "Monetary policy surprises, credit costs, and economic activity". American Economic Journal: Macroeconomics 7 (1), 44–76
- Emi Nakamura and Jón Steinsson (forthcoming). "High frequency identification of monetary nonneutrality: the information effect". *Quarterly Journal of Economics*
- Samuel G. Hanson and Jeremy C. Stein (2015). "Monetary policy and long-term real rates". Journal of Financial Economics 115 (3), 429–448. DOI: 10.1016/j.jfineco.2014.11.001

## 4 Propensity score matching

- Joshua D. Angrist, Òscar Jordà, and Guido M. Kuersteiner (2016). "Semiparametric estimates of monetary policy effects: string theory revisited". Journal of Business & Economic Statistics, 1–17. DOI: 10.1080/07350015.2016.1204919
- Òscar Jordà and Alan M. Taylor (2016). "The time for austerity: estimating the average treatment effect of fiscal policy". *Economic Journal 126* (590), 219–255. DOI: 10.1111/ecoj.12332

# 5 Synthetic control method

- Alberto Abadie, Alexis Diamond, and Jens Hainmueller (2010). "Synthetic control methods for comparative case studies: estimating the effect of California's tobacco control program". Journal of the American Statistical Association 105 (490), 493–505
- Alberto Abadie, Alexis Diamond, and Jens Hainmueller (2015). "Comparative politics and the synthetic control method". *American Journal of Political Science 59* (2), 495–510. DOI: 10.1111/ajps.12116

### 6 Asymmetric impulse responses

- Morten O. Ravn and Martin Sola (2004). "Asymmetric effects of monetary policy in the United States". Federal Reserve Bank of St. Louis Review 86 (5), 41–60
- Silvana Tenreyro and Gregory Thwaites (2016). "Pushing on a string: US monetary policy is less powerful in recessions". *American Economic Journal: Macroeconomics* 8 (4), 43–74. DOI: 10.1257/mac.20150016
- Regis Barnichon and Christian Matthes (2017). "Functional approximations of impulse responses (FAIR): new insights into the asymmetric effects of monetary policy". Mimeo. San Francisco Fed

## 7 Sign restrictions

- Harald Uhlig (2005). "What are the effects of monetary policy on output? results from an agnostic identification procedure". Journal of Monetary Economics 52 (2), 381–419
- Christiane Baumeister and James D. Hamilton (2015). "Sign restrictions, structural vector autoregressions, and useful prior information". *Econometrica 83* (5), 1963–1999. DOI: 10.3982/ECTA12356
- Christiane Baumeister and James D. Hamilton (2017). "Inference in structural vector autoregressions when the identifying assumptions are not fully believed: re-evaluating the role of monetary policy in economic fluctuations". Mimeo. University of Notre Dame