

Euro Area Business Cycle Network Training School

Finance for Macroeconomists: High Frequency Analysis, News, Surprises and Shocks

by

Refet Gürkaynak (Bilkent University and CEPR)

Online via Zoom

7-9 November 2022

Deadline: 6pm (UK time), Sunday 2nd October 2022

General description

We are pleased to announce details of the latest EABCN Training School; a two-day course entitled “**Finance for Macroeconomists: High Frequency Analysis, News, Surprises and Shocks**”. Professor Refet Gürkaynak will teach the course. It is primarily aimed at participants in the Euro Area Business Cycle Network but applications will also be considered from doctoral students, post-doctoral researchers and economists working in central banks and government institutions outside of the network, as well as commercial organisations (fees are applicable for non-network non-academic organisations).

Tentative course outline

Understanding financial markets is essential to understand the macroeconomy. This course will provide the necessary tools to use asset prices in high frequency to answer macroeconomic questions. This requires a good understanding of asset pricing so that the mapping from market participants’ expectations to observed prices can be reverse engineered and the effects of various news and shocks to expectations can be studied.

Understanding when the changes in expectations based on asset prices and changes in the forecasts of the future state overlap, when these differ, under which circumstances changes in asset prices can be proxies, instruments, or neither for structural shocks is a fine art and will be discussed in detail.

In this period of quantitative tightening, methods to measure surprises in QE/QT and forward guidance stemming from central bank communications, how to employ these in VARs, how to study spill overs, as well as how to study financial market reactions to incoming data, be it news about macroeconomic data or policy, will be a central object of study. Participants should expect to have a firm grasp of the methods, current state of the research and open questions, and the use in policymaking of these techniques at the end of the course.

The following topics will be covered each day:

Day 1 – Monday, November 7, 2022

Topic: “**Asset Pricing: Going from Prices to Beliefs and Expectation, Using Surprises**”

Day 2 – Tuesday, November 8, 2022

Topic: “**News and Asset Prices: When News Are Unobservable**”

Day 3 – Wednesday, November 9, 2022

Topic: “**Shocks and Surprises: Proxy VARs and Central Bank Information Effects**”

For the duration of the course the timetable will be as follows:

- **Morning lecture** session from 09:00 AM - 12:00 NOON (CEST)
- **Afternoon practice** session from 01:30PM - 4:00PM (CEST)

Practice sessions:

The first practice session will have two parts. In the first half standard high frequency data will be provided to participants and basic econometric analysis of this data will be shown, using STATA. The second half will be an initial discussion of participants’ research or policy questions, with feedback.

The second practice session will be devoted to presenting the current state of the art in analyzing changes in asset prices around news releases, when surveys of expectations for the release may completely or partially unavailable, using MATLAB. This session will also show the mechanics of identification using heteroskedasticity.

The third practice session will again have two parts. The first half will present the mechanics of proxy VARS and methods to “cleanse” surprises from information effects. The second half will return to participants’ research and policy questions, where each participant will the data and methodology that should help answer their question and will again receive feedback.

Readings:

Optional:

1. Gürkaynak, R. S., and J. H. Wright. “[Macroeconomics and the term structure](#)” *Journal of Economic Literature* 50 (2), 2012, 331-67
2. Gürkaynak, R. S., and J. H. Wright. “[Identification and Inference Using Event Studies](#).” *Manchester School*, 2013, 48-65.

Required:

3. Gürkaynak, R. S., S. S. Lee, and G. Karasoy-Can. “[Stock Market's Assessment of Monetary Policy Transmission: The Cash Flow Effect](#)” *Journal of Finance*, 77 (4), 2022, 2375-2421.
4. Gürkaynak, R. S., A. Levin, and E. Swanson. “[Does Inflation Targeting Anchor Long-Run Inflation Expectations? Evidence from Long-Term Bond Yields in the U.S., U.K., and Sweden](#).” *Journal of the European Economic Association* 8(6), December 2010, 1208-1242.
5. Altavilla, C., L. Brugnolini, R. S. Gürkaynak, G. Ragusa, and R. Motto. “[Measuring Euro Area Monetary Policy](#).” *Journal of Monetary Economics* 108, December 2019, 162-179.
6. Gürkaynak, R. S., B. Kısacıkoğlu, and J. H. Wright “[Missing Events in Event Studies: Identifying Effects of Partially-Measured News Surprises](#).” *American Economic Review* 110(12), December 2020, 3871-3912.

7. "Gürkaynak, R. S., A. H. Kara, S. S. Lee, and B. Kısacıköğlü "[Monetary Policy Surprises and Exchange Rate Behavior](#)" Journal of International Economics 130, 2021, 103443.

The first two readings provide introductions to bond pricing, yield curve estimation and analysis, and basic machinery of designing event studies. We will cover these fairly quickly. Numbers 3 and 4 provide examples of event studies employed in answering macroeconomic questions, number five is a recent application of these tools to answer questions in the euro area context, including questions about measuring the size and effects of forward guidance and QE surprises, number six introduces the state of the art in event study machinery, and number seven discusses various pitfalls of the empirical work on central bank information effects through the lens of a DSGE model. These papers and the broad literatures they belong to will be discussed in the lectures.

Administrative Information:

The course will take place online. Joining links will be circulated to successful applicants closer to the course start date.

We ask that you send a **current** version of your CV. PhD students **must** also specify in which way the school will be useful for their current research (**max** 300 words).

Participants from non-academic institutions where the employer is not a member of the EABCN network are charged a course fee of EUR1000.

We reserve the right to deny access to the course if payment has not been completed in due time.

How to Apply:

Deadline to Apply 6pm (UK time), Sunday 2nd October 2022

Candidates who are CEPR affiliated or already have a CEPR profile should apply by submitting their CV online:

1. Log in to the CEPR hub online at <https://hub.cepr.org/>
2. Go to <https://hub.cepr.org/event/3681>
3. Click on "Step 1: Apply"
Members of the MEF programme area, click on "Change registration details"
4. Complete requested information and upload **required documentation:**
Applications without required documents will not be considered.
 - a. **All applicants must submit a CV.** PDF or word document preferred but option to provide a link to CV available.
 - b. **PhD Students must include a supporting statement (max 300 words)** specifying how the school will be useful for their current research.
 - i. To do so click 'Would you like to submit additional files?'
 - ii. Upload PDF or Word Document.
 - iii. The Supporting Statement **must be in a document separate from the CV file.**
5. Click "Submit Information".

Candidates who are not CEPR affiliated or do not have a CEPR profile should apply by submitting their CV online:

1. Create an online profile <https://hub.cepr.org/user/register>
2. Log in to the CEPR hub online at <https://hub.cepr.org/>
3. Go to <https://hub.cepr.org/event/3681>
4. Click on "Step 1: Apply"
5. Complete requested information and upload **required documentation:**
Applications without required documents will not be considered.
 - a. **All applicants must submit a CV.** *PDF or word document preferred but option to provide a link to CV available.*
 - b. **PhD Students must include a supporting statement (max 300 words)** specifying how the school will be useful for their current research.
 - i. To do so click '*Would you like to submit additional files?*'.
 - ii. Upload PDF or Word Document.
 - iii. The Supporting Statement **must be in a document separate from the CV file.**
6. Click "Submit Information".

If you have any difficulty in applying please contact, Lydia Williams, CEPR Senior Events Officer at williams@cepr.org for assistance, with the subject line '**EABCN Training School – Refet Gürkaynak (ID3681)**'

About the Instructor:

Refect Gürkaynak is Professor of Economics Bilkent University and the program director of CEPR's Monetary Economics and Fluctuations group. He is also a Research Fellow of the CEPR, CESifo, and Center for Financial Studies. Gürkaynak has a BA from Bilkent and a PhD from Princeton Universities, both in Economics. Prior to his current position he was an Economist at the Monetary Affairs Division of the Federal Reserve Board. He is a frequent consultant to various central banks and was a visiting faculty member at MIT.

Gürkaynak's research interests are monetary economics, financial markets, and international economics. In particular, he has worked on extracting information from asset prices that help answer monetary policy related questions. His research along these lines has been published in journals such as Journal of Monetary Economics, Review of Economics and Statistics, and American Economic Review. Gürkaynak has held editorial positions at the Journal of Business and Economic Statistics, Journal of Monetary Economics, and Economic Policy, is currently an editor of the International Journal of Central Banking, and has been the recipient of awards from the Central Bank of Turkey, the European Central Bank, and the Turkish Academy of Sciences, as well as an ERC Grant.