

## Euro Area Business Cycle Network Training School

### **Business Cycle Measurement and Facts** by

**James Morley (University of Sydney)**

#### **Online Workshop**

13-17 September 2021: Lecture and practice sessions

**Deadline: 6pm (UK time), Sunday 15 August 2021**

#### **General Description**

We are pleased to announce details of the latest EABCN Training School, a course entitled "Business Cycle Measurement and Facts". Professor James Morley (University of Sydney) 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).

#### **Course outline**

This course will introduce participants to some useful methods for trend-cycle decomposition of macroeconomic variables, along with major empirical findings regarding the behavior of output gaps, trend inflation, the natural rate of interest, and household consumption. Nonlinear models and asymmetries will also be considered in order to examine implications for the nature of business cycles and the effectiveness of stabilization policies.

The course is divided into three lecture sessions, each followed by a practice session.

#### **Day 1 – Monday, Sep 13, 2021**

Topic: "Basic univariate approaches to trend-cycle decomposition"

Morning lecture session from 09:00 AM - 12:00 NOON (CEST)

Afternoon practice session from 01:30PM - 3:30PM (CEST)

Overview of univariate approaches to trend-cycle decomposition, with a focus on unobserved components models, the Beveridge-Nelson filter, and when to consider structural breaks versus stochastic trends

We will look at links between permanent and transitory shocks to the macroeconomy, how to avoid spurious cycles, imposing smoothness on stochastic trends, and testing for structural breaks over time."

#### **Day 2 – Wednesday, Sep 15, 2021**

Topic: "Multivariate methods of trend-cycle decomposition and applications"

Morning lecture session from 09:00 AM - 12:00 NOON (CEST)  
Afternoon practice session from 01:30PM - 3:30PM (CEST)

Further analysis of trends and cycles based on multivariate unobserved components models and the multivariate Beveridge-Nelson decomposition, with consideration of mixed-frequency systems and robustness to model misspecification

We will look at multivariate estimates of the output gap, trend inflation, the natural rate of interest, and consumption behavior, as well as the reliability of nowcasts of the output gap based on mixed-frequency data.

### **Day 3 – Friday, Sep 17, 2021**

Topic: “Nonlinear dynamics and business cycle asymmetries”  
Morning lecture session from 09:00 AM - 12:00 NOON (CEST)  
Afternoon practice session from 01:30PM - 3:30PM (CEST)

Estimation allowing for nonlinearities, with consideration of different types of business cycle asymmetries and implications for trend-cycle decomposition

We will look at the evidence for nonlinear dynamics in macroeconomic variables and what these nonlinearities suggest about the nature of business cycles and the effectiveness of stabilization policies.

The practice sessions each day will focus on providing hands-on expertise with the methods most relevant to central bankers using EViews, Matlab and/or R.

### **Administrative Information:**

The course will take place online. More information about logistics will be circulated closer to the date.

Candidates who have a CEPR profile should apply by submitting their CV online at <https://portal.cepr.org/EABCN-TS-June-2021> by 6pm (UK Time +1 GMT), **Sunday 15 August 2021**. If you do not currently have a CEPR profile, please create a new one [here](#) and then click on the registration link.

**We ask that you send a current version of your CV. PhD students should 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.

### **About the Instructors:**

**James Morley** is a Professor of Macroeconomics at the University of Sydney. He is a Fellow of the International Association for Applied Econometrics and has been a visiting scholar at various policy institutions worldwide, including the Bank of Canada, the Bank for International Settlements, and the Reserve Bank of New Zealand. He is a former President of the Society for Nonlinear Dynamics and Econometrics and is currently Co-Editor of The Economic Record. His research focuses on the empirical analysis of business cycles, stabilization policies, and sources of persistent changes in macroeconomic and financial conditions.