## School of Economics, University of Surrey April 22nd - April 25th, 2025

## Online Easter School on Fiscal Policy and Sovereign Debt Markets



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### 1 Introduction

The Centre for International Macroeconomic Studies (CIMS) in the School of Economics, University of Surrey, will run a 4-day Course on Fiscal Policy and Sovereign Debt Markets, 2-5 April, 2025.

The Course is aimed at MSc, MRes and PhD students, early researchers, and research staff from central banks, ministries and the private sector, all with some prior experience of macroeconomic modelling. Its contents differ from the CIMS summer school's, which is usually held in September. The Easter school is focused on a shorter list of themes, some of which not commonly found in summer schools offered by most Economics departments.

This year the Easter school will cover optimal fiscal policy and computational methods (taught by R. Oikonomou V. Valaitis), topics in sovereign debt and default (taught by H. Joo, K. Shakhnov and T. Asonuma), and Secondary Markets for Sovereign Debt: Repo and CDS Markets, procyclical and countercyclical margins (taught by M. Pascoa). Profiles for the instructors and details of the Courses are as follows.

### 2 Instructors

Tamon Asonuma is an Economist in the Strategy Policy and Review Department of the IMF. Since joining the IMF in September 2010, he has spent most of times in Research Department and Strategy Policy and Review Department. During his time in the Strategy Review and Policy Department, he has contributed to series of the IMF Policy Papers on sovereign debt restructurings and IMF lending and involving in many debt restructuring cases as an expert. In Research Department, he has worked on research papers on costs of sovereign debt restructurings, fiscal policy, sovereign debt overhang and maturity and haircut structure of sovereign debt. He was a visiting researcher at Federal Reserve Bank of Chicago, Minneapolis, and Richmond, Boston University, and University of Munich. He holds a PhD in Economics from Boston University and his research interests are in macroeconomics, international finance, and public finance. He is particularly interested in sovereign debt and financial crises, and exchange rate regime. He has published in several academic journals including the Journal of the European Economic Association and Journal of International Economics. For further details of publications see https://sites.google.com/site/tamonasonuma/

Hyungseok Joo is a Lecturer in the School of Economics at the University of Surrey. He graduated from the Yonsei University (Seoul, South Korea). He then completed masters degree in Economics at University of Wisconsin, then he worked as a research analyst in tax and public finance area in a research institution in Korea. In 2015, he completed his PhD in Economics at Boston University, USA. He taught at the Wayne State University, USA, before being appointed as a Lecturer at the University of Surrey in 2019. His research fields are macroeconomics, international macro/finance, fiscal policy, and money and banking. For further details of publications see https://sites.google.com/site/hsjoo214

**Ricardo Nunes** is a professor and co-Director of the Centre of International Macroeconomic Studies at the University of Surrey. He obtained a PhD from Universitat Pompeu Fabra in 2007. He joined the Board of Governors of the Federal Reserve System in 2007, where he worked as an economist and senior economist. In 2014 he moved to the Federal Reserve Bank of Boston working as a senior economist and policy advisor. He was also a visiting researcher at the Bank of Portugal and the IMF. In 2018 and 2019 he worked at the Council of Economic Advisers to the Chancellor of the Exchequer. His main research is on monetary and fiscal policy. He has published in these areas in journals such as the Quarterly Journal of Economic Theory, Journal of Political Economy, Journal of Monetary Economics, Journal of Economic Theory, Journal of European Economic Association, among others. For further details of publications see https://sites.google.com/view/ricardonunes/home

**Rigas Oikonomou** is professor of economics at the University of Louvain and faculty member at the University of Surrey. He completed his PhD at the London School of Economics in 2010. Prior to joining Louvain and Surrey he worked at the London Business School, the HEC Montreal and the Universitat Autonoma Barcelona. Rigas works on various topics in theoretical and applied Macroeconomics. His research has been published in journals such as the Review of Economic Studies, the Economic Journal and the Journal of Economic Dynamics and Control. For further details see: https://sites.google.com/site/rigasoikonomou/research

Mario Pascoa got his Ph.D. from UCLA in 1986, was assistant professor at the University of Pennsylvania from 1986 to 1992 and was at Universidade Nova de Lisboa prior to coming

to Surrey as professor of Economics in 2012. Having worked on monopolistic competition, large games and demand theory, his research over the last twenty five years has focused on collateral, repo markets and security pricing, both in finite horizon models and in economies with infinite lived agents. His published work includes contributions to Ponzi schemes and collateral (Econometrica 2002), lack of impatience and bubbles (JET 2011), re-hypothecation in repo (JET 2012), endogenous discounting and bubbles (JET 2019) and recourse loans (ET 2019). Has supervised ten doctoral students, placed in the U.S. (at Wisconsin-Madison), in Spain (at ESCP), in Brazil (at several business schools and economics departments) and in Portugal (at Nova)

**Kirill Shakhnov** is a Senior Lecturer in the School of Economics at the University of Surrey. In 2015, he completed his Ph.D. in Economics at European University Institute, Italy. He then held the Foscolo Europe Fellowship position at the Einaudi Institute for Economics and Finance and taught at LUISS University, before being appointed as a Lecturer at the University of Surrey in 2019. Kirill's primary research interests lie in the fields of international macroeconomics with a focus on sovereign bond markets and cryptocurrencies. The research is organized around three related topics: asset pricing of internationally traded assets, public finance, and the sources of macroeconomic fluctuations. For further details, please see https://sites.google.com/site/kshakhnov

Vytautas Valaitis is a macroeconomist with a research focus on labour markets and optimal fiscal policy. His work on the intersection of macro and labor economics studies how household labour market outcomes and their labour supply choices affect the macroeconomic dynamics and change the implications for government policies. His work on optimal fiscal policy studies the optimal mix of fiscal and monetary policies when government can borrow in multiple types of debt instruments. Vytautas holds a Ph.D. from Duke University and prior to that he studied at the Central European University in Budapest and the ISM University of Management and Economics in Vilnius. He was a Max Weber Fellow at the European University Institute before joining the University of Surrey as a lecturer in the Fall 2022

## 3 Course Timetable (GMT)

#### Day 1 (Tuesday 22nd April) – Optimal fiscal policy and computational methods I

09.30 am - 11.00 am: Session 1

- $11.00~\mathrm{am}$   $11.30~\mathrm{am}$ : Break
- $11.30~\mathrm{am}$   $01.00~\mathrm{pm}$ : Session 2
- 01.00 pm 02.15 pm: Lunch
- 02.15 pm 03.45 pm: Session 3
- 03.45 pm 04.15 pm: Break
- 04.15 pm 05.45pm : Session 4

## Day 2 (Wednesday 23rd April) – Optimal fiscal policy and computational methods II

- 09.30 am 11.00 am: Session 1
- $11.00~\mathrm{am}$   $11.30~\mathrm{am}$ : Break
- 11.30 am 01.00 pm: Session 2
- 01.00 pm 02.15 pm: Lunch
- 02.15 pm 03.45 pm: Session 3
- 03.45 pm 04.15 pm: Break
- 04.15 pm 05.45pm : Session 4

#### Day 3 (Thursday 24th April) – Topics in Sovereign Debt and Default

10.00 am - 12.00 pm: Session 1 12.00 pm - 01.15 pm: Lunch

- 01.15 pm 03.15 pm: Session 2
- 03.15 pm 03.45 pm: Break
- 03.45 pm 05.45 pm : Session 3

# Day 4 (Friday 25th April) – Secondary Markets for Sovereign Debt: Repo and CDS Markets, procyclical and countercyclical margins

 $09.30~\mathrm{am}$  -  $11.00~\mathrm{am}$ : Session 1

 $11.00~\mathrm{am}$  -  $11.30~\mathrm{am}$ : Break

11.30 am - 01.00 pm: Session 2
01.00 pm - 02.15 pm: Lunch
02.15 pm - 03.45 pm: Session 3
03.45 pm - 04.15 pm: Break
04.15 pm - 05.45pm : Session 4

## 4 Course Contents

The contents of lectures given by the instructors over the four days are as follows and a basic prior knowledge of Matlab will help.

# • Day 1 and 2 (22nd and 23rd April): Optimal fiscal policy and computational methods

Instructor: Rigas Oikonomou, Ricardo Nunes, and Vytautas Valaitis

- Optimal fiscal policy under complete financial markets and solution algorithms
- Numerical Methods for optimal fiscal policy under complete financial markets
- Optimal fiscal policy under incomplete financial markets
- Numerical Methods for optimal fiscal policy under incomplete financial markets
- Optimal Government Portfolios
- Numerical Methods for optimal government portfolio

#### • Day 3 (24th April): Topics in Sovereign Debt and Default

Instructor: Hyungseok Joo, Kirill Shakhnov, and Tamon Asonuma

- Traditional sovereign debt model
- An introduction to quantitative sovereign default model
- Long term duration bond model
- Self-fulfilling debt model
- Quantitative properties of sovereign default models
- Sovereign debt restructurings

– Sovereign debt and fiscal policy

## • Day 4 (25th April): Secondary Markets for Sovereign Debt: Repo and CDS Markets, procyclical and countercyclical margins

Instructor: Mario Pascoa

- Recourse and non-recourse loans; credit secured by durable goods
- Short term loans backed by securities; over-the-counter versus centrally cleared repo markets; leverage and short-sales; repo specialness
- Impact of margins on the price of the collateral; the case where the collateral is not reused (mortgages) versus the case where it is reused (repo); evidence from the European sovereign debt crisis; CDS margins and impact on the price of the underlying security
- The cross-currency-basis and repo: deviations from covered interest rate parity, secured funding frictions and policy interventions in FX