

PhD Studentships for Academic Year 2026-27

Centre for Macroeconomic Policy (CEMAP)

About the Research Centre

The following research topics are proposed:

- 1) Macprudential Policies and Financial Stability (Monetary Economics and Banking)
- 2) Macroeconomics of Emerging Economies in a Post-COVID Economy (DSGE modelling), Macro-development and Macro-finance
- 3) COVID-19, Lockdowns, and their Macroeconomic Implications
- 4) Optimal Fiscal Policy (Macroeconomic Theory)
- 5) Population Aging and Macroeconomic Policies
- 6) The Rise and the Demise of Reserve Currencies in the International Monetary System (International Macroeconomics)
- 7) Time Series Econometrics Theory
- 8) Causes and Consequences of Group Segregation
- 9) Culture, Diversity, and Long-run Development
- 10) Religion, Local Politics, and Development
- 11) Gender Norms, Violence, and Inclusive Development

Find out more at: [Centre for Macroeconomic Policy - Durham University Business School](#)

Topic 1

Title of Proposed Research Topic:

Macprudential Policies and Financial Stability (Monetary Economics and Banking)

Potential Supervisors:

[Professor Tatiana Damjanovic](#)

Description of Possible Research Topic:

After 2008 financial crisis, macroprudential policy and financial stability issues became one of the most important research topics among academic and

policymaker alike. As any other policy, macroprudential regulations have their costs and benefits. On the one hand, they aim to improve financial stability and reduce the probability and the costs of future financial crises. On the other hand, they may reduce the supply of credit and lead to fall in investment and economic contraction. Some macroprudential policies pursue financial stability (i.e. ring fencing, capital requirement) while the others stimulate credit expansion (i.e. QE and funding for lending scheme). It is vital to find the right balance in this crucial trade-off. The PhD student will investigate in this area and specifically he/she will contribute on the debate on the optimal design of macroprudential policies.

Requirement: MSC in Economics with excellent mark in Macroeconomics. Ability to solve constraint optimisation problems, basic knowledge of numerical methods and coding, preferably in MatLab and Dynare. In the research proposal please specify the model which you would like to use as a starting point of your research and which policy you would like to examine. Please try to read the following papers as examples of the macro models with banking sector.

Key References:

Gertler, M., & Kiyotaki, N. (2010). Financial Intermediation and Credit Policy in Business Cycle Analysis. *Handbook of Monetary Economics*, 3, 547-599. <https://doi.org/10.1016/B978-0-444-53238-1.00011-9>

Bernanke, B. S., Gertler, M., & Gilchrist, S. (1999). The Financial Accelerator in a Quantitative Business Cycle Framework. *Handbook of Macroeconomics*, 1, 1341-1393. [https://doi.org/10.1016/S1574-0048\(99\)10034-X](https://doi.org/10.1016/S1574-0048(99)10034-X)

Topic 2

Title of Proposed Research Topic:

Macroeconomics of Emerging Economies in a Post-COVID Economy (DSGE modelling), Macro-development and Macro-finance

Potential Supervisors:

[Professor Parantap Basu](#)

Description of Possible Research Topic:

Following the Great Recession, there is a wave of literature integrating the banking sector in dynamic stochastic general equilibrium (DSGE) models. These models introduce lender's and borrower's moral hazard in the mainstream macroeconomic

analysis (Bernanke, Gertler and Gilchrist, 1999; Gertler and Karadi, 2013). Covid-19 has brought additional complications due to massive nonperforming loans, which is likely to worsen in emerging economies due to poor financial market architecture. With the rising risk of default, banks have shifted their loan portfolio from commercial loans to mortgage loans and held a massive reserve. How would the macro-financial variables react to such changing landscape of the banking sector? This question can be addressed in the project using a canonical DSGE model. Besides, the study could investigate the policy questions such as designing appropriate monetary and fiscal packages, macro-prudential norms and regulatory disciplines. The project could evolve from my previous works on DSGE models (Banerjee et al. 2020) developed for an emerging economy like India. The underlying framework could be extended to examine the new set of research problems. I am happy to supervise students who are interested in this line of research.

Key References:

Banerjee, S., Basu, P., & Ghate, C. (2020). A Monetary Business Cycle Model for India. *Economic Inquiry*, 58(3), 1362-1386. <https://doi.org/10.1111/ecin.12855>

Bernanke, B. S., Gertler, M., & Gilchrist, S. (1999). The Financial Accelerator in a Quantitative Business Cycle Framework. *Handbook of Macroeconomics*, 1, 1341-1393. <https://doi.org/10.3386/w6455>

Gertler, M., & Karadi, P. (2011). A Model of Unconventional Monetary Policy. *Journal of Monetary Economics*, 58(1), 17-34. <https://doi.org/10.1016/j.jmoneco.2010.10.004>

Topic 3

Title of Proposed Research Topic:

COVID-19, Lockdowns, and their Macroeconomic Implications

Potential Supervisors:

[Dr Mauro Bambi](#)

Description of Possible Research Topic:

Several contributions have investigated the effects of a (prolonged) lockdown on the economy. Two are the perspectives followed by the literature.

The first asks the question how to set optimally the duration of the lockdown to reduce the economic costs of a pandemic. The trade-off here is between the cost of a too long lockdown as parts of the economy become inactive and the cost of having a too short lockdown with the associated increase in the infected and deceased and

its implied economic and human cost (e.g., Giannitsarou et al. 2021, Alvarez et al. 2021, and Acemoglu et al. 2022). In these contributions the effects of the pandemic are explicitly considered by modelling the epidemic dynamics. One of the main issues with this literature is that the value of a life is country-specific and therefore the main results of these models are hardly robust to an open economy framework. Researching on this area could be a good starting point for a PhD dissertation.

The second perspective keeps aside the first order effects of the pandemic (no epidemic dynamics), and the focus is on the short and long run effects of a lockdown on the economy. One of the key questions is whether a lockdown may have permanently affected the consumers demand in a multi-sector economy and unveil the mechanisms behind these effects (e.g., Guerrieri et al. 2021, Bambi et al. 2022). The long run effect may include, among others, the permanent shut down of sectors of the economy, a surge in demand of the good/services unavailable during the lockdown, a price surge of these goods. Another question not fully investigated in the literature is the effects of a prolonged lockdown on the labour participation and labour composition, two variables whose dynamics seem significantly changed after the pandemic (Beraja and Wolf 2021). Researching on this area could be a good starting point for a PhD dissertation.

Key References:

[CEMAP Publications](#)

Topic 4

Title of Proposed Research Topic:

Optimal Fiscal Policy (Macroeconomic Theory)

Potential Supervisors:

[Dr Leslie Reinhorn](#)

[Dr Xiaoshan Chen](#)

Description of Possible Research Topic:

Taxes on income, consumption, and other economic activities are distortionary. An active research agenda studies the optimal mix of tax rates when the government has a social welfare objective and faces a budget constraint. These problems are particularly interesting when consumers are heterogeneous, in which case the redistributive consequences of policies affect social welfare. Many of the papers on this topic combine careful theoretical modelling with computationally intensive

numerical exercises (e.g., Dyrda and Pedroni, *Review of Economic Studies*, 2023; Golosov, Troshkin, and Tsyvinski, *American Economic Review*, 2016; Farhi and Werning, *Review of Economic Studies*, 2013; Albanesi and Sleet, *Review of Economic Studies*, 2006). A PhD student would be expected to learn the theoretical and computational techniques and use them to help deepen our understanding of which policies are optimal, and why.

Key References:

[CEMAP Publications](#)

Topic 5

Title of Proposed Research Topic:

Population Aging and Macroeconomic Policies

Potential Supervisors:

[Dr Xiaoshan Chen](#)

Description of Possible Research Topic:

Due to steady declines in fertility rates and rising life expectancy, many countries are facing rapid aging of their population. Population aging causes deteriorating fiscal balances, changes in patterns of savings and investment, and a shortage in labour supply which in turn lead to a decline in productivity and economic growth. Recent literature (e.g., Basso and Rachedi, 2019; Honda and Miyamoto, 2020; Wong, 2021) examines the implications of population aging on the transmission of monetary policy and fiscal multipliers. A PhD student would be expected to learn the theoretical and computational techniques of new Keynesian dynamic stochastic general equilibrium (DSGE) and OLG models with heterogeneous households to further analyses the effectiveness of monetary and fiscal policies, debt consolidation and optimal monetary and fiscal policy under these frameworks.

Key References:

[CEMAP Publications](#)

Topic 6

Title of Proposed Research Topic:

The Rise and the Demise of Reserve Currencies in the International Monetary System (International Macroeconomics)

Potential Supervisors:

[Dr Sara Eugeni](#)

Description of Possible Research Topic:

A lot of recent research has investigated the causes and the implications of the hegemonic role of the dollar in the international monetary system (for a review, Gourinchas, Rey and Sauzet, 2019). However, the dollar has not always been in the centre of the international monetary system. Before World War II, the British pound was the dominant currency (e.g., Eichengreen, 2005). Many commentators and policy makers often raise the question of whether the euro or the renminbi could eventually replace the dollar, or we are rather heading towards a multi-polar world. However, there is little research that explores the conditions under which a dominant currency could be replaced by another one or how we could transit from a dollar-centric world to a multi-currency scenario (e.g., Chahrour and Valchev, 2021; Farhi and Maggiori, 2018). Prospective PhD students would develop a theoretical model to investigate these issues. In this context, one of the key unanswered questions that students would also address is whether a multi-currency world is welfare-superior to a world dominated by only one currency.

Key References:

[CEMAP Publications](#)

Topic 7

Title of Proposed Research Topic:

Time Series Econometrics Theory

Potential Supervisors:

[Dr Majid Al Sadoon](#)

Description of Possible Research Topic:

The project could include any of the following elements:

Cointegration; Unit roots; Forecasting; DSGE methodology; SVAR methodology; High-dimensional statistics

Key References:

Al-Sadoon, M. M. (2014). Geometric and Long Run Aspects of Granger Causality. *Journal of Econometrics*, 178(3), 558-568.

<https://doi.org/10.1016/j.jeconom.2013.08.019>

Al-Sadoon, M. M. (2017). A Unifying Theory of Tests of Rank. *Journal of Econometrics*, 199(1), 49-62. <https://doi.org/10.1016/j.jeconom.2017.03.002>

Al-Sadoon, M. M. (2018). The Linear Systems Approach to Linear Rational Expectations Models. *Econometric Theory*, 34(3), 628-658.

<https://doi.org/10.1017/S0266466617000160>

Al-Sadoon, M. M. (2019). Testing Subspace Granger Causality. *Econometrics and Statistics*, 9, 42-61. <https://doi.org/10.1016/j.ecosta.2017.08.003>

Al-Sadoon, M. M. (2024). The Spectral Approach to Linear Rational Expectations Models. *Econometric Theory*, 1-57. <https://doi.org/10.1017/S026646662400029X>

Al-Sadoon, M. M., Zwiernik, P. (2019). The Identification Problem for Linear Rational Expectations Models. <https://doi.org/10.48550/arXiv.1908.09617>

Al-Sadoon, M. M. (2020). Regularized Solutions to Linear Rational Expectations Models. <https://doi.org/10.48550/arXiv.2009.05875>

Topic 8

Title of Proposed Research Topic:

Causes and Consequences of Group Segregation

Potential Supervisors:

[Dr Eren Arbatli](#)

Description of Possible Research Topic:

This research topic is broad enough to encompass a wide-ranging analysis of social group segregation—whether by income, ethnicity, or race—as well as social mobility. We aim to investigate both the factors that shape segregation and its implications on various outcomes of interest. Key causes to be examined empirically include the availability of public spaces that facilitate inter-group interactions and random encounters. Potential consequences under analysis include changes in inter-group attitudes, levels of trust, and preferences for redistribution. Additionally, this framework allows for the exploration of other causes and effects that may emerge

from the study of group segregation. Among the potential countries one can study are the US and United Kingdom.

Key References:

[CEMAP Publications](#)

Topic 9

Title of Proposed Research Topic:

Culture, Diversity, and Long-run Development

Potential Supervisors:

[Dr Eren Arbatli](#)

Description of Possible Research Topic:

I am keen to supervise projects that explore how cultural diversity and historical legacies shape economic and political outcomes today. This area is well suited to students who enjoy combining economic history with modern applied microeconometrics. Possible projects include studying how historical patterns of ethnic or religious settlement affect contemporary income, education, trust, conflict, or political polarisation; or examining when diversity becomes an asset rather than a source of tension. You would typically work with spatially detailed historical data (e.g. on ethnic or religious groups, migration, colonial or imperial institutions) linked to modern census, survey, or administrative data. There is scope to focus on different world regions depending on your interests, including (but not limited to) Turkey, the Middle East, Africa or Eastern Europe.

Key References:

[CEMAP Publications](#)

Topic 10

Title of Proposed Research Topic:

Religion, Local Politics, and Development

Potential Supervisors:

[Dr Eren Arbatli](#)

Description of Possible Research Topic:

Another area where I welcome PhD proposals is the role of religion and religious organisations in shaping local political behaviour and development outcomes. Here, projects might look at how religious associations, mosques, churches, or faith-based charities influence voting, clientelism, public goods provision, or local state capacity in low- and middle-income countries. A typical project would combine detailed political data (elections, parties, politicians) with information on religious institutions and community-level socio-economic conditions. Students with an interest in political economy, comparative development, or the interaction between formal and informal institutions will find many possible angles here, ranging from historical legacies of religious infrastructure to contemporary faith-based networks and aid.

Key References:

[CEMAP Publications](#)

Topic 11

Title of Proposed Research Topic:

Gender Norms, Violence, and Inclusive Development

Potential Supervisors:

[Dr Eren Arbatli](#)

Description of Possible Research Topic:

I also supervise PhD projects on gender norms, violence, and their implications for development. This area focuses on how cultural attitudes to intimate partner violence, gender roles, or sexual minorities are formed and how they affect labour markets, human capital, and political preferences. Potential projects might study how exposure to conflict, displacement, economic shocks, or legal reforms changes gender norms and acceptance of violence, or examine why harmful norms persist in some places but not others. Students would typically work with large-scale survey data (for example, Demographic and Health Surveys or regional barometer surveys) and possibly combine these with conflict, policy, or media data. This area is suitable for candidates interested in the intersection of development economics, gender, and political economy, and who wish to work on questions with clear policy relevance.

Key References:

[CEMAP Publications](#)

