Macroeconomic Development

Module 2, 2023-23

Dzhamilya Nigmatulina
NES and HEC Lausanne
d.nigmatulina@gmail.com

Course information

Instructor's Office Hours: by appointment

TAs:

Course description

This course seeks to study the development of economy through the lens of macroeconomic models and connect these models to microeconomic data. It includes the topics of measurement of economic development, the movement of the economy across the sectors of agriculture, manufacturing and services as countries grow, distribution and reallocation of resources across sectors and across firms at different stages of the development process. It also studies allocation of resources across space, and frictions that prevent the optimality of such reallocation.

The learning objectives of the course is see how workhorse models help understanding of the development process of countries from the macro perspective. Students will appreciate the interplay of economic theory and its calibration with the micro data, and how economists can use it to formulate macro development policy – taxation and public spending, trade and industrial policy, transportation and other physical infrastructure, financial products and access, education and health. They will gain knowledge of popular workhorse models how they connect to commonly used granular datasets and policy questions in the frontier research today.

Course requirements, grading, and attendance policies

The course prerequisites are the 1st-year Micro sequence. Class attendance and participation are encouraged. The course grade will be based on homework assignments (40% of the grade), class participation (10% of the grade) and a final project (50% of the grade). Homework assignments may include problem sets, questions on some of the assigned papers and coding assignments. The final project will be a referee report on one of the frontier papers on the topic.

Course contents

Lecture 1-2: Development accounting: methods and findings

Lecture 3-4: Key theories - structural transformation
Lecture 5-6: Structural transformation, home production, and labour markets
Lecture 6-7: Firm-level misallocation: benchmark model and early results
Lecture 7-8: Misallocation: Recent applications and advances
Lecture 9-10: Basic trade/spatial model
Lecture 11: Spatial misallocation
Lecture 12: Urbanization and development
Lecture 13-14: Trade, FDI, and development

Sample tasks for course evaluation

1. Derive equation 6 from Hsieh and Klenow (2009) using the assumption from the paper.

$$(6) \qquad P_{si} = \frac{\sigma}{\sigma - 1}\left(\frac{R}{\alpha_s}\right)^{\alpha_s}\left(\frac{w}{1-\alpha_s}\right)^{1-\alpha_s}\frac{(1+\tau_{Ksi})^{\alpha_s}}{A_{si}\,(1-\tau_{Ysi})}.$$

2. If you could have the access to any data in the world, what data would you need to measure distortions in a country of your choice through the lens of Hsieh and Klenow (2009), if you wanted to understand the role played by a specific distortion. How would you proceed? What type of distortion would you choose to measure first and why?

Course materials

Required papers
(the list may be updated and refined before the start of the course)

Restuccia, D., & Rogerson, R. (2017). The causes and costs of misallocation. *Journal of Economic Perspectives*, *31*(3), 151-74.
Hsieh, C. T., & Klenow, P. J. (2009). Misallocation and manufacturing TFP in China and India. *The Quarterly journal of economics*, *124*(4), 1403-1448.
Hsieh, C. T., Hurst, E., Jones, C. I., & Klenow, P. J. (2019). The allocation of talent and us economic growth. *Econometrica*, *87*(5), 1439-1474.
Ngai, L. R., & Pissarides, C. A. (2007). Structural change in a multisector model of growth. *American economic review*, *97*(1), 429-443.
Kongsamut, P., Rebelo, S., & Xie, D. (2001). Beyond balanced growth. *The Review of Economic Studies*, *68*(4), 869-882.
Hsieh, C. T., & Moretti, E. (2019). Housing constraints and spatial misallocation. *American Economic Journal: Macroeconomics*, *11*(2), 1-39.
Moretti, E. (2011). Local Labor Markets. Handbook of Labor Economics.
Donaldson, D. (2015). The Gains from Market Integration. *Annual Review of Economics*, *7*(1), 619-647.
Bryan, G., Glaeser, E., & Tsivanidis, N. (2020). Cities in the developing world. *Annual Review of Economics*, *12*, 273-297.

Academic integrity policy

Cheating, plagiarism, and any other violations of academic ethics at NES are not tolerated.