

ECON792A – Theory Seminar Macro-Distribution (MacroDist) Fall 2019

Syllabus

Course Instructor: Daniele Tavani, Associate Professor, C310 Clark.

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Office Hours: TR 1.30-3pm, or by appointment

Class Meets: MW 2-3.15, Clark A27.

Course Description and Learning Objectives

The goal of the class is to acquire familiarity with recently-published research in alternative macroeconomics with a focus on the distribution of income and wealth, cyclical growth models, and technical change. Additionally, emphasis will be placed on the numerical aspects of this line of research. Building on the *Mathematica* code relevant to the starred papers that I will distribute, students will be required to numerically implement a recent paper featuring dynamic analysis among those listed in Part III.

Texts

There is no text for the course. The class is based exclusively on recent paper as well as lecture notes that will be distributed through Canvas.

Required Work

Every student in the class is expected to carefully work out each paper on his/her own in preparation for class. The course will culminate in an individual paper in which the students will illustrate verbally and mathematically, and numerically implement a dynamic model based on one of the papers in the course.

Contact Hours

Activity	Contact Hours
Attend Class	2.5
Read assigned readings	2.0
Review class notes	2.5
Coding and learning numerical methods	2.0
Work on final project	2.0
Total	11

Software

The Department of Economics has purchased three (3) Mathematica licenses for a year for use in the computer lab. Other programming environments such as R or Python are allowed: but since the instructor is not proficient in coding in these environments, he will not be able to fully assist with general coding and debugging issues.

Class Participation

The nature of the course is that of a seminar class: students are expected to participate actively in the discussion. I encourage the use of the "Discussion" feature in Canvas.

Academic Integrity

Academic misconduct like cheating, plagiarism, etc. will be taken very seriously and can lead to an overall failing grade. Plagiarism, for instance, includes quoting sources without referencing them. I will strictly follow University policies regarding academic misconduct. See: <http://www.facultycouncil.colostate.edu/files/manual/sectioni.htm#1.5>.

Accommodation for Disability

Reasonable requests for accommodation to disabilities will be entertained. However, students are responsible for requesting accommodations in a timely manner and must be recognized as eligible for the accommodation through Resources for Disabled Students (RDS). For more information see <http://rds.colostate.edu/index.asp>.

Title IX Information

CSUs Discrimination, Harassment, Sexual Harassment, Sexual Misconduct, Domestic Violence, Dating Violence, Stalking, and Retaliation policy designates faculty and employees of the University as "Responsible Employees. This designation is consistent with federal law and guidance, and requires faculty to report information regarding students who may have experienced any form of sexual harassment, sexual misconduct, relationship violence, stalking or retaliation. This includes information shared with faculty in person, electronic communications or in class assignments. As "Responsible Employees, faculty may refer students to campus resources (see below), together with informing the Office of Support and Safety Assessment to help ensure student safety and welfare. Information regarding sexual harassment, sexual misconduct, relationship violence, stalking and retaliation is treated with the greatest degree of confidentiality possible while also ensuring student and campus safety.

• Any student who may be the victim of sexual harassment, sexual misconduct, relationship violence, stalking or retaliation is encouraged to report to CSU through one or more of the following resources:

- Emergency Response 911
- Deputy Title IX Coordinator/Office of Support and Safety Assessment (970) 491-1350
- Colorado State University Police Department (non-emergency) (970) 491-6425

For counseling support and assistance, please see the CSU Health Network, which includes a variety of counseling services that can be accessed at: <http://www.health.colostate.edu>. And, the Sexual Assault Victim Assistance Team is a confidential student resource that does not have a reporting requirement and that can be of great help to students who have experienced sexual assault. The web address is <http://www.wgac.colostate.edu/need-help-support>.

Topics

Below you will find a tentative (but extremely ambitious) list of topics. Some topics will likely take more than a week, and therefore it may be difficult to get to cover all the topics listed. Also, please note that the following list is tentative: topics may be changed and/or dropped according to how the class progresses, and according to students' interest.

Part I: Background

Week 1 Preliminaries: Review of systems of differential equations. Local stability conditions in 2- and 3-dimensional systems. Application: the Goodwin (1967) model of the growth cycle, and the Barbosa-Taylor (2006) Neo-Goodwinian Model. Analysis, numerical implementation and simulations in Mathematica.

Part II: Growth, Cycles and Technical Change

Week 2 Julius, A.J., 2005. Steady State Growth and Distribution with an Endogenous Direction of Technical Change. *Metroeconomica* 56:1, 101-125.

Week 3 Tavani, D., 2012. Wage Bargaining and Induced Technical Change in a Linear Economy: Model and Application to the US, 1963-2003. *Structural Change and Economic Dynamics* 23, 117-126.

Week 4* Tavani, D., and Zamparelli, L., 2015. (TZ1) Endogenous Technical Change, Employment and Distribution in the Goodwin Model of the Growth Cycle. *Studies in Nonlinear Dynamics and Econometrics* 19:2, 209-226.

Week 5* Tavani, D., and Zamparelli, L., 2018. Growth, Income Distribution, and the Entrepreneurial State. *Journal of Evolutionary Economics*, online first.

Part II: The Neo-Kaleckian Model: Capacity Utilization, Aggregate Demand, Growth and Distribution

Week 6 Nikiforos, M., 2015. On the Utilization Controversy: a Theoretical and Empirical Discussion of the Kaleckian Model of Growth and Distribution. *Cambridge Journal of Economics* 40 (2), pp. 437-467.

Nikiforos, M., 2013. The (Normal) Rate of Capacity Utilization at the Firm Level. *Metroeconomica* 64 (3), pp. 513-538.

Week 7: Post Keynesian Economics: New Microeconomic Foundations

Petach, L., and Tavani, D., 2019. No one is alone: strategic complementarities, capacity utilization, growth, and distribution. *Structural Change and Economic Dynamics*, online first.

Tavani, D., and Petach, L., 2019. Firm beliefs and Long-Run Demand Effects in a Labor-constrained Model of Growth and Distribution. Available at SSRN: <https://ssrn.com/abstract=3333410>.

Part III: Dynamics of Inequality, Growth, and Income Shares

Week 8 Zamparelli, L., 2017. Wealth Distribution, the Elasticity of Substitution, and Piketty: an Anti-Dual Pasinetti Economy. *Metroeconomica* 68:4, 927-946.

Week 9 Kumar, R., Schoder, C., and Radpur, S., 2018 (KSR18). Demand Driven Growth and Capital Distribution in a Two-class model with Application to the United States. *Structural Change and Economic Dynamics* 47: 1-8

Week 10 Taylor, L., Foley, D., and Rezai, A., 2018 (TFR18). Demand Drives Growth All the Way: Goodwin, Kaldor, Pasinetti and the Steady State. *Cambridge Journal of Economics*, online first.

Week 11 Carvalho, L., and Rezai, A., 2016 (CR16). Personal income inequality and aggregate demand. *Cambridge Journal of Economics*, 40: 491-505.

Week 12 Kiefer, D., and Rada, C., 2015 (KR15) Profit maximizing goes global: the race to the bottom. *Cambridge Journal of Economics* 39: 1333-1350.

Part IV: Numerical Implementations

Weeks 13-16 Numerical implementations (and possibly extensions) of: Tavani 2012, Zamparelli 2016, KSR18, TFR18, CR16, KR15, or other papers to be discussed with the instructor.