

Tentative Syllabus for Econ 5091, Spring 2021
Seminar in Macroeconomics
Department of Economics, National Tsing Hua University

Instructor: Shu-shiuan Lu
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Lecture: T 9:20-11:50 @TSMC 732
Office Hour: By appointment
Class Website: iLMS System (<http://lms.nthu.edu.tw/>)

COURSE DESCRIPTION

In this course, we will cover several Macroeconomics related topics. We will discuss some macroeconomic facts and issues, and then discuss the techniques for exploring the mysteries of economic development. This is a course designed for graduate students.

LEARNING OBJECTIVES

Students will explore several topics in Macroeconomics relating to economic growth and development. Moreover, we will also discuss some techniques for understanding how and why some countries grow fast and some grow slow. We will explore the issue of development and growth from the perspective of neoclassical models.

TEXTBOOK

Course material will be drawn from several sources.

COURSE REQUIREMENTS

Students need to complete an individual presentation, an individual research paper and to take the exam.

Evaluation:

Presentation: 20%; Homework assignment: 20%; Research paper: 30%; Exam: 30%

Tentative outline

1. Fundamentals 1: Models about growth

1.1. Malthusian

Barro, R. B., and Sala-i-Martin, X., (2003). Economic Growth, Cambridge, MA: MIT Press: Chap 1

1.2. Solow

Barro, R. B., and Sala-i-Martin, X., (2003). Economic Growth, Cambridge, MA: MIT Press: Chap 2

2. Fundamentals 2: Ramsey-Cass-Koopmans Model

Cooley, Thomas F. and Prescott, Edward C., (1995). "Economic Growth and Business Cycles," in Frontiers of Business Cycle Research, T.F. Cooley, editor. Princeton University Press. pp. 1-38.

Lucas, R..E. and Stokey, N.L., Recursive Methods in Economic Dynamics, pp. 8-14

3. Fundamentals 3: Convergence and Balanced Growth Path

Romer, D., (2006), Advanced Macroeconomics, New York, NY: McGraw-Hill: P. 132; pp. 31-35; 61-62

4. Fundamentals 4: Model Construction

4.1. Utility function

*Boppart, T., and Krusell, P. (2016) "Labor Supply in the Past, Present, and Future: A Balanced-Growth Perspective." NBER Feb 2016 Meeting Paper.

Gollin, D., Parente, S., and Rogerson, R. (2007), "The Food Problem and the Evolution of International Income Levels," Journal of Monetary Economics, 54(4): 1230-1255

Hansen, G., (1985)., "Indivisible Labor and the Business Cycle", Journal of Monetary Economics, 16, 309-327

King, R. G., Plosser C. I. , and Rebelo, S. T. (1988) "Production, Growth, and Business Cycles: The Basic Neoclassical Model." Journal of Monetary Economics, 21, 195-232

4.2. Production function

*Hall, R. E., Jones, C. I., (1999). "Why Do Some Countries Produce So Much More Output Per Worker Than Others?" Quarterly Journal of Economics, 1, 83-116

*Koh, D., Santaella-Llopi, R, and Zhan, Y. (2016) "Labor Share Decline and Intellectual Property Products Capital." NBER Feb 2016 Meeting Paper

5. Computations

5.1. MATLAB ®

Manselman, D., and Littlefield, B., (2005). Mastering MATLAB 7, New Jersey: Pearson Prentice Hall

5.2. Good references

Kenneth L. Judd, Numerical Methods in Economics, the MIT Press

Harald Uhlig, "A Toolkit for Analyzing Nonlinear Dynamic Stochastic Models Easily," manuscript.

6. Topic 1: Business Cycle Accounting

Chari, V. V., Kehoe, P. J., McGrattan, E. R., (2002). "Accounting for the Great Depression," American Economic Review, 92, 22-27

Chari, V. V., Kehoe, P. J., McGrattan, E. R., (2007). "Business Cycle Accounting," Econometrica, 75 (3), 781-836

Cole, H. L., Ohanian, L. E., (1999). "The Great Depression in the United States from a Neoclassical Perspective," Federal Reserve Bank of Minneapolis Quarterly Review Winter 1999, 23 (1), 2-24

- Cole, H. L., Ohanian, L. E., (2002). "The U.S. and U.K. Great Depression through the Lens of Neoclassical Growth Theory", American Economic Review, 92 (2), 28-32
- Lahiri, A., Yi, K.-M., 2009. A Tale of Two States: Maharashtra and West Bengal. Review of Economic Dynamics, 12(3), 523-542
- Mulligan, C. (2005). "Public Policies as Specification Errors", Review of Economic Dynamics, 8(4), 905-926

7. Topic 2: Data Collection

- Barro, R. B., Lee, J.-W., 2001. International Data on Education Attainment: Update and Implications. Oxford Economic Papers, 3, 541-563
- Beck, T., Levine, R., Loayza, N., 2000. Finance and the Source of Growth. Journal of Financial Economics 58, 261-300
- Cociuba, S., Prescott, E. C., and Ueberfeldt, A., 2009. U.S. Hours and Productivity Behavior Using CPS Hours Worked Data: 1947-III to 2009-III. Data Project, Federal Reserve Bank of Dallas.
- Feenstra, R. C., Inklaar, R. and Timmer, M. P. (2015), "The Next Generation of the Penn World Table" American Economic Review, 105 (10). 3150-3182
- Levine, Rose, Loayza, Norman, and Beck, Thorsten. (2000). "Financial Intermediation and Growth: Causality and Causes." Journal of Monetary Economics 46, 31-77
- Timmer, M. P., De Vries, G. J. De Vries, K. (2014) "Patterns of Structural Change in Developing Countries." GGDC research memorandum 149 .

8. Topic 3: Financial Development and Growth

- Deidda, Luca G. (2006). "Interaction between Economic and Financial Development." Journal of Monetary Economics 53, 233-248
- King, Robert G. and Levine, Rose. (1993a). "Finance and Growth: Schumpeter Might be Right." The Quarterly Journal of Economics 108 (3), 717-737
- King, Robert G. and Levine, Rose. (1993b). "Finance, Entrepreneurship, and Growth." Journal of Monetary Economics 32, 513-542
- Lu, S.-S. (2013). "The Role of Capital Market Efficiency in Long-term Growth: A Quantitative Exploration." Journal of Macroeconomics, 36, 161-174

9. Topic 4: Growth Across Time and Space

9.1. Empirics of modern economic growth I: Growth over time

- *De la Croix, David, Doepke, Matthias, Mokyr, Joel, (2016) "Clans, Guilds, and Markets: Apprenticeship Institutions and Growth in the Pre-industrial Economy." UCL working paper
- *Hsieh, C.-T., (1999). "Productivity Growth and Factor Prices in East Asia." American Economic Review, 89 (2), 133-138

- *Hsieh, C.-T., (2002). "What Explains the Industrial Revolution in East Asia? Evidence from the Factor Markets." American Economic Review, 92 (3), 502-526
- Mankiw, N., Romer, D., and Weil, D., N., (1992). "A Contribution to the Empirics of Economic Growth," Quarterly Journal of Economics, 107, 407-427
- *Young, A., (1994). "Lessons from the East Asia NICs: A Contrarian View," European Economic Review, 38, 964-973
- *Young, A., (1995). "The Tyranny of Numbers: Confronting the Statistical Realities of the East Asian Growth Experience," Quarterly Journal of Economics, 110(3), 641-680
- Lu, S.-S. (2012). "East Asian Growth Revisited from the Perspective of Neoclassical Model," Review of Economic Dynamics 15, 359-376

9.2. Empirics of modern economic growth II: Cross country income differences

- *Caselli, F., (2005). "Accounting for Cross Country Income Differences." Chapter 9 in the Handbook of Economic Growth, 1A, Aghion, P., Durlauf, S. N., (Eds.), The Netherlands: Elsevier B. V.
- *Hall, R. E., Jones, C. I., (1999). "Why Do Some Countries Produce So Much More Output Per Worker Than Others?" Quarterly Journal of Economics, 1, 83-116
- *Hendricks, Lutz, Schoellman, Todd, (2016). "Human Capital and Development Accounting: New Evidence from Wage Gains at Migration." NBER Feb 2016 Meeting Paper.
- *Klenow P. J., Rodriguez-Clare A., (1997a). "The Neoclassical Revival in Growth Economies: Has It Gone too Far?" 1997 NBER Macroeconomics Annual, 73 – 114
- *Klenow P. J., Rodriguez-Clare A., (1997b). "Economic Growth: A Review Essay." Journal of Monetary Economics, 40, 597-617

10. Fundamentals 5: Productivity Growth

Romer, D., (2006), *Advanced Macroeconomics*, New York, NY: McGraw-Hill: pp. 98-113

- *Hsieh, C.-T., Klenow, P. J., 2009. Misallocation and Manufacturing TFP in China and India. Quarterly Journal of Economics, 124, 1403-1448

11. Topic 5: Taiwan's wage issues

- *Lin, Y.-L. and T.-T. Yang (2017), "Decoupling of Wage Growth and Productivity Growth in Taiwan: An Empirical Investigation," Academica Economic Papers, 46(2), 263-322
- Lin, C.-C., J.-J. Chang, and S.-S. Lu (2017), "Wage Stagnation? Fact Disclosure and Cross-Country Comparison," Journal of Social Sciences and Philosophy, 29(1), 87-125.
- Chen, H.-J. and C.-W. Kuo (2014), "The Possible Causes and Solutions for Taiwan's Wage Stagnation," in Economic Daily News (ed.), *The R.O.C. Economy Yearbook 2014*, 32-39, Taipei: Economic Daily News.
- Huang, D.-S. (2015), "On the Wage Stagnation of Taiwan: Trade and FDI Partners under Globalization," Review of Social Sciences, 9(1), 33-58.
- Huang, D.-S., B.-J. Liu and T.-H. Yang (2014), "The Phenomena of Taiwan's Real Wage Stagnation,"

14-A012, Taipei: Institute of Economics, Academia Sinica.

*Yang, T.-T. and M.-C. Luoh (2009), "Who Pays Pensions? The Impact of New Labor Pension Scheme on Labor Wages," *Academia Economic Papers*, 37(3), 339-368.

Chan, C.-L. (2011), "Analyzing the Causes of Taiwan's Wage Issues Using Labor Productivity," *Taiwan Economic Research Monthly*, 34(9), 112-120.

Lu, S. S. (2018) "A Quantitative Exploration of the Causes of Taiwan's wage stagnation," *Academia Economic Papers*, 46 (4), 519-553

Approximate Class Timeline

Date	Content
02/23	Introduction
03/02	Fundamentals 1: Malthusian Model
03/09	Fundamentals 1: Solow Model
03/16	Fundamentals 2: Model: Ramsey-Cass-Koopmans
03/23	Fundamentals 3 : Balanced Growth Path, Convergence
03/30	Fundamentals 4: Model Construction
04/06	Fundamentals 5: Productivity Growth
04/13	Topic 1: From Model to Data, Business Cycle Accounting (BCA)
04/20	Topic 2: Data Collection
04/27	Topic 3: Financial Development and Growth (Model with add-in)
05/04	Special Topic: Matlab
05/11	Special Topic: Matlab
05/18	Topic 5: Taiwan's wage issue (application of BCA)
05/25	Exam on Fundamentals 1-5
06/01	Topic 4: Growth Across Time, Accountings for Growth and Paper Discussion
06/08	Topic 4: Growth Across Space and Paper Discussion
06/15	Paper Discussion on Model Construction; Preliminary draft due
06/22	Final Draft of Paper Due