SHANGHAI UNIVERSITY OF FINANCE AND ECONOMICS Advanced Macroeconomics II Spring 2020

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ONLINE TEACHING

Due to the risks associated with the novel coronavirus and guidance from the university, we have to change the in-classroom teaching to on-line teaching. I am deeply saddened to share this news, as it may bring some inconvenience to you, causing inefficiency during our learning process. Please know that our decision to change the teaching style should not in any way diminish our abiding commitment to the students. In fact, it's during difficult times like these that we can rely on the strength of our passion, and I hope you take the opportunity to do so. Please take extra precaution during this time, and don't hesitate to reach out and let us know how we can be supportive.

COURSE DESCRIPTION

This course covers 16 weeks from March 2 to June 15, and we meet every Monday 13:20-16:10. The prerequisite is **Advanced Macroeconomics I**, and it is primarily devoted to contemporary issues in growth and development. It begins by reviewing the fundamentals, followed by several advanced topics in endogenous growth, labor market, income distribution, and firm distribution/organization, misallocation, industrial transformation, and Chinese economy. The main purpose of this course is to help you explore the frontier of growth and development to jump-start your potentially fruitful research in these areas.

GRADING

You have two options, please report to TA about your choice by the end of the first week.

Option A You or your group, consisting at most **three** people, should finish a working paper by the end of semester. To help you achieve this goal, several short presentations on the progress of your work are arranged. Each of presentations may take 20 mins or less depending on class size. The scores are as follow: (i) Presentation 1: present pre-proposal (10%), (ii) Presentation 2: present a proposal (20%), (iii) Presentation 3: present preliminary results (30%), (iv) Presentation 4: present the final results (30%), (v) final draft of working paper (10%).

Option B Alternatively, based on your interest and given my approval, you or your group, consisting at most **three** people, can choose the take-home exams (both midterm and final). The scores are as follow: (i) midterm exam (50%), (ii) final exam (50%).

Attendance You can earn up to 5 bonus points (5%) for attendance. No reschedule of the presentation/exam or deferral of presentation/exam will be given except medical or family emergency.

TEXTS

There is no official textbook, the following books, however, may be useful at various occasions (no more than one or two chapters per book though). Some of these texts are particularly useful methodologically:

- [1] Daron Acemoglu (2009), Introduction to Modern Economic Growth, Princeton University Press.
- [2] Azaridis, C. (1993), Intertemporal Macroeconomics, Blackwell publisher.
- [3] Barro, R. and X. Sala-i-Martin (1995), Economic Growth, McGraw-Hill.
- [4] Romer, D. (1996), Advanced Macroeconomics, McGraw-Hill.
- [5] Ljungqvist, L. and T. Sargent (2000), Recursive Macroeconomic Theory, MIT Press.
- [6] Stokey, N. and R. Lucas with E. Prescott (1989), *Recursive Methods in Economic Dynamics*, Harvard University Press.

TIMETABLE

Week 1	Major Issues in Growth and Development
	Exploring the World of Growth and Development
	Micro/Macro data in Macroeconomics
	Mathematical Foundations of Dynamic Macroeconomic Analysis
	Computation in Macroeconomics
Week 2	Endogenous Growth Theory
	Technology Advancement
Week 3	Presentation 1: Pre-proposal
Week 4	Labor Market I
Week 5	Labor Market II
Week 6	Presentation 2: Proposal
Week 7	Income Distribution I
Week 8	Income Distribution II
Week 9	Firm Distribution/Organization
Week 10	Misallocation (Midterm exam handout)
Week 11	Presentation 3: Semi-final presentation (Midterm exam due)
Week 12	Industrial Transformation I
Week 13	Industrial Transformation II
Week 14	Chinese Economy I
Week 15	Chinese Economy II
Week 16	Presentation 4: Final presentation (Final exam handout)
Week 17	Hand-in working paper (Final exam due)

READINGS

A. Endogenous Growth

- [1] Lucas, R. E., Jr. (1988), "On the Mechanics of Economic Development," *Journal of Monetary Economics*, 22, 3-42.
- [2] Jones, L. and R. Manuelli (1990), "A Convex Model of Equilibrium Growth: Theory and Policy Implications," *Journal of Political Economy*, 98, 1008-1038.
- [3] Lucas, R. E., Jr. (1993), "Making a Miracle," Econometrica, 61, 251-272.
- [4] Barro, R. J. and X. Sala-i-Martin (1992), "Public Finance in Models of Endogenous Growth," *Review of Economic Studies*, 59, 645-661.
- [5] Barro, R. J. (1990). Government spending in a simple model of endogenous growth. *Journal* of *Political Economy*, 98(5, Part 2), S103-S125.
- [6] Akcigit, U. (2017). Economic growth: The past, the present, and the future. *Journal of Political Economy*, *125*(6), 1736-1747.
- [7] Akcigit, U., & Nicholas, T. (2019). History, Microdata, and Endogenous Growth. *Annual Review of Economics*, 11, 615-633.

B. Technology Advancement

- [1] Romer, P. (1990), "Endogenous Technological Change," *Journal of Political Economy*, 98, 71-102.
- [2] Aghion, P., & Howitt, P. (1992). A Model of Growth Through Creative Destruction. *Econometrica*: 323-351.
- [3] Garcia-Macia, D., Hsieh, C. T., & Klenow, P. J. (2019). How Destructive is Innovation? *Econometrica*.

C. Labor Market

- [1] Tamura, Robert (2001), "Teachers, growth, and convergence," *Journal of Political Economy*, 109, 1021-1059. 369-393.
- [2] Grossman, G. (2004), "The Distribution of Talent and the Pattern and Consequences of International Trade," *Journal of Political Economy*, 209-239.
- [3] Grossman, G. M., Helpman, E., Oberfield, E., & Sampson, T. (2017). Balanced growth despite Uzawa. *American Economic Review*, *107*(4), 1293-1312.
- [4] Acemoglu, D. and S. Johnson (2007), "Disease and Development: The Effect of Life Expectancy on Economic Growth," *Journal of Political Economy*, 115, 925-985.
- [5] Charles I. Jones (2016), "Life and Growth," Journal of Political Economy, 124, 539-578.
- [6] Lucas, R. (2004), "Life Earnings and Rural-Urban Migration," *Journal of Political Economy*, 112, S29-59.
- [7] Jovanovic, B. (2009), "The Technology Cycle and Inequality," *The Review of Economic Studies*, 76, 707-729.
- [8] Jovanovic, B. (2014). Misallocation and growth. *American Economic Review*, *104*(4), 1149-71.
- [9] Hsieh, C. T., Hurst, E., Jones, C. I., & Klenow, P. J. (2019). The Allocation of Talent and US Economic Growth. *Econometrica*.
- [10] Şahin, A., Song, J., Topa, G., & Violante, G. L. (2014). Mismatch unemployment. *American Economic Review*, 104(11), 3529-64.

- [11] Acemoglu, D., & Autor, D. (2011). Skills, tasks and technologies: Implications for employment and earnings. In *Handbook of Labor Economics* (Vol. 4, pp. 1043-1171).
- [12] Autor, David & Dorn, D. (2013). The growth of low-skill service jobs and the polarization of the US labor market. *American Economic Review*, *103*(5), 1553-97.
- [13] Lee, S. Y., & Shin, Y. (2017). Horizontal and vertical polarization: Task-specific technological change in a multi-sector economy (No. w23283). NBER working paper.

D. Income Distribution

- [1] Glomm, G. and B. Rivikumar (1992), "Public vs. Private Investment in Human Capital Endogenous Growth and Income Inequality," *Journal of Political Economy*, 100, 813-834.
- [2] Aghion, P. (2002), "Schumpeterian Growth Theory and the Dynamics of Income Inequality," *Econometrica*, 70, 855-882.
- [3] Violante, G. (2002), "Technological Acceleration, Skill Transferability and the Rise in Residual Inequality," *The Quarterly Journal of Economics*, 117, 297-338.
- [4] Kambourov, G. and I. Manovskii (2009), "Occupational Mobility and Wage Inequality," *The Review of Economic Studies*, 76, 731-759.
- [5] Piketty, T., & Saez, E. (2003). Income inequality in the United States, 1913–1998. *The Quarterly Journal of Economics*, 118(1), 1-41.
- [6] Aghion, P., Akcigit, U., Bergeaud, A., Blundell, R., & Hémous, D. (2018). Innovation and top income inequality. *The Review of Economic Studies*, 86(1), 1-45.
- [7] Jones, C. I., & Kim, J. (2018). A Schumpeterian model of top income inequality. *Journal of Political Economy*, *126*(5), 1785-1826.
- [8] Acemoglu, D., & Dell, M. (2010). Productivity differences between and within countries. *American Economic Journal: Macroeconomics*, 2(1), 169-88.
- [9] Burstein, A., E. Morales, and J. Vogel (2015), "Accounting for Changes in Between-Group Inequality," NBER #20855.
- [10] Song, J., Price, D. J., Guvenen, F., Bloom, N., & Von Wachter, T. (2019). Firming up inequality. *The Quarterly Journal of Economics*, 134(1), 1-50.
- [11] Piketty, T., & Zucman, G. (2014). Capital is back: Wealth-income ratios in rich countries 1700–2010. *The Quarterly Journal of Economics*, *129*(3), 1255-1310.
- [12] De Nardi, M. (2015), "Quantitative Models of Wealth Inequality: A Survey," NBER #21106.

E. Firm Distribution/Organization

- [1] Hopenhayn, H. A. (1992). Entry, exit, and firm dynamics in long run equilibrium. *Econometrica:* 1127-1150.
- [2] Eaton, J., & Kortum, S. (2002). Technology, geography, and trade. *Econometrica*, 70(5), 1741-1779.
- [3] Bernard, A. B., Eaton, J., Jensen, J. B., & Kortum, S. (2003). Plants and productivity in international trade. *American Economic Review*, 93(4), 1268-1290.
- [4] Melitz, M. J. (2003), "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," *Econometrica*, 71, 1695-1725.
- [5] Garicano, Luis. (2000). "Hierarchies and the Organization of Knowledge in Production." *Journal of Political Economy* 108(5):874–904.
- [6] Garicano, L. and Rossi-Hansberg E. (2006b). "Organization and inequality in a knowledge economy." *The Quarterly Journal of Economics* 121(4):1383–1435.

- [7] Caliendo, L. and Rossi-Hansberg E. (2012). "The impact of trade on organization and productivity." *The Quarterly Journal of Economics* 127(3):1393–1467.
- [8] Caicedo, S., Lucas Jr, R and Rossi-Hansberg E. (2019). "Learning, career paths, and the distribution of wages." *American Economic Journal: Macroeconomics* 11(1):49–88.
- [9] Jarosch, G., Oberfield E. and Rossi-Hansberg E. (2019). Learning from coworkers. NBER working paper.
- [10] Grobvosek, J. (2019). Managerial delegation, law enforcement, and aggregate productivity. Working Paper.

F. Misallocation

- [1] Restuccia, D. and R. Rogerson (2008), Policy Distortions and Aggregate Productivity with Heterogeneous Establishments," *Review of Economic Dynamics* 11(4), 707-720.
- [2] Hsieh, C. T. and P. Klenow (2009), "Misallocation and Manufacturing Productivity in China and India," *The Quarterly Journal of Economics*
- [3] Oberfield, E. (2013). Productivity and misallocation during a crisis: Evidence from the Chilean crisis of 1982. *Review of Economic Dynamics*, *16*(1), 100-119.
- [4] Buera, F., J. Kaboski and Y. Shin (2011), "Finance and Development: A Tale of Two Sectors," *American Economic Review*
- [5] Midrigan, V., & Xu, D. Y. (2014). Finance and misallocation: Evidence from plant-level data. *American Economic Review*, *104*(2), 422-58.
- [6] Gopinath, G., Kalemli-Özcan, Ş., Karabarbounis, L., & Villegas-Sanchez, C. (2017). Capital allocation and productivity in South Europe. *The Quarterly Journal of Economics*, 132(4), 1915-1967.
- [7] Jones, C. I. (2011). Intermediate goods and weak links in the theory of economic development. *American Economic Journal: Macroeconomics*, *3*(2), 1-28.
- [8] Osotimehin, S., & Popov, L. (2018). Misallocation and intersectoral linkages. Mimeo.
- [9] Liu, E. (2019). Industrial policies in production networks. *The Quarterly Journal of Economics*, 134(4), 1883-1948.
- [10] Baqaee, D. R., & Farhi, E. (2020). Productivity and misallocation in general equilibrium. *The Quarterly Journal of Economics*, 135(1), 105-163.

G. Industrial Transformation

- [1] Kongsamut, P., Rebelo, S., Xie, D. (2001), "Beyond balanced growth," *The Review of Economic Studies*, 68, 869–882.
- [2] Matsuyama, K. (2002), "The Rise of Mass Consumption Societies," Journal of Political Economy, 110, 1035-1070.
- [3] Herrendorf, Berthold & Rogerson, Richard & Valentinyi, Ákos, 2014. "Growth and Structural Transformation," in: Philippe Aghion & Steven Durlauf (ed.), *Handbook of Economic Growth*, edition 1, volume 2, chapter 6, pages 855-941, Elsevier
- [4] Restuccia, D., Yang, D. T., & Zhu, X. (2008). Agriculture and aggregate productivity: A quantitative cross-country analysis. *Journal of Monetary Economics*, *55*(2), 234-250.
- [5] Gollin, D., Lagakos, D., & Waugh, M. E. (2013). The agricultural productivity gap. *The Quarterly Journal of Economics*, 129(2), 939-993.
- [6] Lagakos, D., & Waugh, M. E. (2013). Selection, agriculture, and cross-country productivity differences. *American Economic Review*, *103*(2), 948-80.

- [7] Adamopoulos, T., & Restuccia, D. (2014). The size distribution of farms and international productivity differences. *American Economic Review*, *104*(6), 1667-97
- [8] Chen, C. (2017). Untitled land, occupational choice, and agricultural productivity. *American Economic Journal: Macroeconomics*, 9(4), 91-121.
- [9] Adamopoulos, T., Brandt, L., Leight, J., & Restuccia, D. (2017). Misallocation, selection and productivity: A quantitative analysis with panel data from China (No. w23039). NBER
- [10] Buera, F. J. and J. P. Kaboski (2012), "The Rise of the Service Economy," American Economic Review, 102, 2540-2569.
- [11] Duernecker, G., & Herrendorf, B. (2016). Structural transformation of occupation employment. Working paper, February.
- [12] Duernecker, G., Herrendorf, B., & Valentinyi, A. (2017). Structural Change within the Service Sector and the Future of Baumol's Disease.
- [13] Herrendorf, B., Rogerson, R., & Valentinyi, A. (2019). Structural Change in Investment and Consumption–A Unified Analysis.

H. Chinese Economy

- [1] Chow, Gregory C. (1993), "Capital Formation and Economic Growth in China," *The Quarterly Journal of Economics*, 108, 809-842.
- [2] Brandt, L., & Zhu, X. (2010). Accounting for China's growth. Working paper.
- [3] Zhu, X. (2012). Understanding China's growth: Past, present, and future. *Journal of Economic Perspectives*, 26(4), 103-24.
- [4] Tombe, T., & Zhu, X. (2019). Trade, migration, and productivity: A quantitative analysis of China. *American Economic Review*, *109*(5), 1843-72.
- [5] Choukhmane, T., Coeurdacier, N., & Jin, K. (2017). The one-child policy and household savings. Working paper.
- [6] Fang, H., & Qiu, X. (2020). "Golden Ages": A Tale of Two Labor Markets, Mimeo.
- [7] Piketty, T., Yang, L., & Zucman, G. (2019). Capital Accumulation, Private Property, and Rising Inequality in China, 1978–2015. *American Economic Review*, 109(7), 2469-96.
- [8] Song, Z., Storesletten, K., & Zilibotti, F. (2011). Growing like China. American Economic Review, 101(1), 196-233.
- [9] Brandt, L., Kambourov, G., & Storesletten, K. (2020). Barriers to Entry and Regional Economic Growth in China, working paper (No. tecipa-652).
- [10] Brandt, L., Dai, R., Kambourov, G., Storesletten, K., Zhang, X. (2020). Serial Entrepreneurship in China. Mimeo.
- [11] Bai, C., Hsieh, C.T., Song, Z., Wang, X. (2020). Conglomerate Formation in China. Mimeo.
- [12] Adamopoulos, T., Brandt, L., Leight, J., & Restuccia, D. (2017). Misallocation, selection and productivity: A quantitative analysis with panel data from China (No. w23039). NBER working paper.
- [13] Storesletten, Kjetil, Bo Zhao, and Fabrizio Zilibotti. (2017). "Fluctuating Like China: Business Cycles during Structural Change." Working paper.
- [14] Yao, W., & Zhu, X. (2018). Structural change and aggregate employment fluctuations in China and the US (No. tecipa-600).
- [15] Fang, L and B. Herrendorf (2019), "High-Skilled Services and Development in China", Working paper.
- [16] Xiong, W. (2018). The Mandarin Model of Growth (No. w25296). NBER working paper.

NOTE

I reserve the right to change this syllabus as time and circumstances dictate. Necessary changes will be announced in class and a copy of the revised syllabus will be posted on Blackboard.