SHANGHAI UNIVERSITY OF FINANCE AND ECONOMICS Advanced Macroeconomics II Spring 2021

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COURSE DESCRIPTION

This course covers 16 weeks from March 1 to June 14, and we meet every Monday 18:00-20:35. It is primarily devoted to contemporary issues in growth and development, and the prerequisite is **Advanced Macroeconomics I**. It begins by reviewing the fundamentals, followed by several advanced topics in endogenous growth, labor market, income distribution, and firm distribution/organization, misallocation, structural 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.

TEXTS

There is no official textbook, the following books, however, may be useful at various occasions. Some of these texts are particularly useful methodologically:

- [1] Acemoglu, D. (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] Ljungqvist, L. and T. Sargent (2000), Recursive Macroeconomic Theory, MIT Press.
- [5] Romer, D. (1996), Advanced Macroeconomics, McGraw-Hill.
- [6] Stokey, N. and R. Lucas with E. Prescott (1989), *Recursive Methods in Economic Dynamics*, Harvard University Press.

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 (20%), (ii) Presentation 2: present motivation (20%), (iii) Presentation 3: present model (20%), (iv) Presentation 4: present theoretical/quantitative results (20%), (v) Final draft of working paper (20%).

Option B Alternatively, based on your interest and given my approval, you or your group, consisting at most **three** people, can choose to present a recently published/working paper, of which the presentation will be divided into four parts. The scores are as follow: (i) Presentation 1: present contribution/related literature (20%), (ii) Presentation 2: present related data/facts/empirics (20%), (iii) Presentation 3: present model (20%), (iv) Presentation 4: present theoretical/quantitative results (20%), (v) Polished slides (20%).

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.

TIMETABLE

- Week 1 Introduction/Review: Issues/Facts/Data/Math/Computation
- Week 2 Modern Growth Theory
- Week 3 **Presentation 1: Pre-proposal (Contribution)**
- Week 4 Labor Market I: Talent Allocation
- Week 5 Labor Market II: Mismatch
- Week 6 **Presentation 2: Motivation**
- Week 7 Income Distribution: Theory and Empirics
- Week 8 Firm Distribution/Organization
- Week 9 Misallocation I: Measurement
- Week 10 Misallocation II: Linkage/Network
- Week 11 **Presentation 3: Model**
- Week 12 Structural Transformation I: Growth
- Week 13 Structural Transformation II: Agriculture/Service
- Week 14 Chinese Economy I
- Week 15 Chinese Economy II
- Week 16 **Presentation 4: Results**
- Week 17 Hand in working paper (slides)

READINGS

A. Modern Growth Theory

- [1] Lucas, R. E., Jr. (1988), "On the Mechanics of Economic Development," *Journal of Monetary Economics*, 22, 3-42.
- [2] Lucas, R. E., Jr. (1993), "Making a Miracle," Econometrica, 61, 251-272.
- [3] Barro, R. J. (1990). Government spending in a simple model of endogenous growth. *Journal* of *Political Economy*, 98(5, Part 2), S103-S125.
- [4] Romer, P. (1990), "Endogenous Technological Change," *Journal of Political Economy*, 98, 71-102.
- [5] Aghion, P., & Howitt, P. (1992). A Model of Growth Through Creative Destruction. *Econometrica*: 323-351.
- [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.
- [8] CAI, J., & LI, N. (2019). Growth Through Inter-sectoral Knowledge Linkages. *Review of Economic Studies*, 86, 1827-1866.
- [9] Buera, F. J., & Oberfield, E. (2020). The global diffusion of ideas. *Econometrica*, 88(1), 83-114.
- [10] Ufuk, A., Douglas, H., & Serrano-Velarde, N. A. B. (2020). Back to basics: basic research spillovers, innovation policy and growth. *The Review of Economic Studies*.

[11] Jarosch, G., Oberfield, E., & Rossi-Hansberg, E. (Forthcoming). Learning from Coworkers. *Econometrica*

B. Labor Market

- [1] Lucas, R. (2004), "Life Earnings and Rural-Urban Migration," *Journal of Political Economy*, 112, S29-59.
- [2] Charles I. Jones (2016), "Life and Growth," Journal of Political Economy, 124, 539-578.
- [3] Hsieh, C. T., Hurst, E., Jones, C. I., & Klenow, P. J. (2019). The Allocation of Talent and US Economic Growth. *Econometrica*.
- [4] Jovanovic, B. (2014). Misallocation and growth. *American Economic Review*, 104(4), 1149-71.
- [5] Şahin, A., Song, J., Topa, G., & Violante, G. L. (2014). Mismatch Unemployment. American *Economic Review*, 104(11), 3529-64.
- [6] Deming, D. J. (2017). The growing importance of social skills in the labor market. *The Quarterly Journal of Economics*, 132(4), 1593-1640.
- [7] Guvenen, F., Kuruscu, B., Tanaka, S., & Wiczer, D. (2020). Multidimensional skill mismatch. *American Economic Journal: Macroeconomics*, 12(1), 210-44.
- [8] Lise, J., & Postel-Vinay, F. (2020). Multidimensional skills, sorting, and human capital accumulation. *American Economic Review*, 110(8), 2328-76.
- [9] Acemoglu, D., & Autor, D. (2011). Skills, tasks and technologies: Implications for employment and earnings. In *Handbook of Labor Economics* (Vol. 4, pp. 1043-1171).
- [10] 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.
- [11] Goos, M., Manning, A., & Salomons, A. (2014). Explaining job polarization: Routinebiased technological change and offshoring. *American Economic Review*, *104*(8), 2509-26.
- [12] Sang Yoon (Tim) Lee & Yongseok Shin, 2018. "Horizontal and Vertical Polarization: Task-Specific Technological Change in a Multi-Sector Economy," NBER Working Paper

C. 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] Jovanovic, B. (2009), "The Technology Cycle and Inequality," *The Review of Economic Studies*, 76, 707-729.
- [5] Kambourov, G. and I. Manovskii (2009), "Occupational Mobility and Wage Inequality," *The Review of Economic Studies*, 76, 731-759.
- [6] Piketty, T., & Saez, E. (2003). Income inequality in the United States, 1913–1998. *The Quarterly Journal of Economics*, 118(1), 1-41.
- [7] 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.
- [8] Jones, C. I., & Kim, J. (2018). A Schumpeterian model of top income inequality. *Journal of Political Economy*, 126(5), 1785-1826.

- [9] Acemoglu, D., & Dell, M. (2010). Productivity differences between and within countries. *American Economic Journal: Macroeconomics*, 2(1), 169-88.
- [10] Ariel Burstein & Eduardo Morales & Jonathan Vogel, 2019. "Changes in Between-Group Inequality: Computers, Occupations, and International Trade," American Economic Journal: Macroeconomics, American Economic Association, vol. 11(2), pages 348-400, April.
- [11] 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.
- [12] 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.
- [13] De Nardi, M. (2015), "Quantitative Models of Wealth Inequality: A Survey," NBER working paper #21106.

D. Firm Distribution/Organization

- [1] Hopenhayn, H. A. (1992). Entry, exit, and firm dynamics in long run equilibrium. *Econometrica:* 1127-1150.
- [2] Melitz, M. J. (2003), "The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity," *Econometrica*, 71, 1695-1725.
- [3] Garicano, Luis. (2000). "Hierarchies and the Organization of Knowledge in Production." *Journal of Political Economy* 108(5):874–904.
- [4] Garicano, L. and Rossi-Hansberg E. (2006). "Organization and inequality in a knowledge economy." *The Quarterly Journal of Economics* 121(4):1383–1435.
- [5] Caliendo, L. and Rossi-Hansberg E. (2012). "The impact of trade on organization and productivity." *The Quarterly Journal of Economics* 127(3):1393–1467.
- [6] 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.
- [7] Grobvosek, J. (2020). Managerial delegation, law enforcement, and aggregate productivity. *Review of Economic Studies*.
- [8] Ufuk Akcigit, Harun Alp and Michael Peters (2021). "Lack of Selection and Limits to Delegation: Firm Dynamics in Developing Countries," *American Economic Review*.

E. 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] Liu, E. (2019). Industrial policies in production networks. *The Quarterly Journal of Economics*, 134(4), 1883-1948.
- [9] Boehm, J., & Oberfield, E. (2020). Misallocation in the Market for Inputs: Enforcement and the Organization of Production. *The Quarterly Journal of Economics*, *135*(4), 2007-2058.
- [10] Baqaee, D. R., & Farhi, E. (2020). Productivity and misallocation in general equilibrium. *The Quarterly Journal of Economics*, *135*(1), 105-163.
- [11] Bigio, S., & La'o, J. (2020). Distortions in production networks. *The Quarterly Journal of Economics*, 135(4), 2187-2253.
- [12] Osotimehin, S., & Popov, L. (2020). Misallocation and Intersectoral Linkages.

F. Structural Transformation

- [1] Kongsamut, P., Rebelo, S., Xie, D. (2001), "Beyond balanced growth," *The Review of Economic Studies*, 68, 869–882.
- [2] NGAI, L. RACHEL and CHRISTOPHER A. PISSARIDES (2007), "Structural Change in a Multisector Model of Growth", *American Economic Review*.
- [3] Boppart, T. (2014). Structural change and the Kaldor facts in a growth model with relative price effects and non-Gorman preferences. *Econometrica*, 82(6), 2167-2196.
- [4] Duernecker, G., & Herrendorf, B. (2016). Structural transformation of occupation employment.
- [5] Herrendorf, B., Rogerson, R., & Valentinyi, A. (2020). Structural Change in Investment and Consumption–A Unified Analysis. *The Review of Economic Studies*
- [6] Comin, D., Lashkari, D., & Mestieri, M. (2021). Structural Change with Long-run Income and Price Effects. *Econometrica*
- [7] 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.
- [8] Gollin, D., Lagakos, D., & Waugh, M. E. (2013). The agricultural productivity gap. *The Quarterly Journal of Economics*, 129(2), 939-993.
- [9] Lagakos, D., & Waugh, M. E. (2013). Selection, agriculture, and cross-country productivity differences. *American Economic Review*, *103*(2), 948-80.
- [10] Adamopoulos, T., & Restuccia, D. (2014). The size distribution of farms and international productivity differences. *American Economic Review*, *104*(6), 1667-97
- [11] Chen, C. (2017). Untitled land, occupational choice, and agricultural productivity. *American Economic Journal: Macroeconomics*, 9(4), 91-121.
- [12] Adamopoulos, T., Brandt, L., Leight, J., & Restuccia, D. (2017). Misallocation, selection and productivity: A quantitative analysis with panel data from China. NBER working paper.
- [13] Adamopoulos, T. and Restuccia, D., (2018). Geography and agricultural productivity: Cross-country evidence from micro plot-level data. NBER working paper.
- [14] Julieta Caunedo and Elisa Keller (2020). Capital Obsolescence and Agricultural Productivity. *The Quarterly Journal of Economics*.
- [15] Buera, F. J. and J. P. Kaboski (2012), "The Rise of the Service Economy," American Economic Review, 102, 2540-2569.
- [16] Duernecker, G., Herrendorf, B., & Valentinyi, A. (2017). Structural Change within the Service Sector and the Future of Baumol's Disease.
- [17] Hsieh, C. T., & Rossi-Hansberg, E. (2020). The Industrial Revolution in Services.

G. Chinese Economy

[1] Brandt, L., and Zhu, X. (2010). Accounting for China's growth. Working paper.

- [2] Zhu, X. (2012). Understanding China's growth: Past, present, and future. *Journal of Economic Perspectives*, 26(4), 103-24.
- [3] Tombe, T., and Zhu, X. (2019). Trade, migration, and productivity: A quantitative analysis of China. *American Economic Review*, *109*(5), 1843-72.
- [4] Hao, T., Sun, R., Tombe, T., Zhu, X. (2020). The effect of migration policy on growth, structural change, and regional inequality in China. *Journal of Monetary Economics*.
- [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. (2019). "Business Cycle during Structural Change: Arthur Lewis' Theory from a Neoclassical Perspective." Working paper.
- [14] Yao, W., and Zhu, X. (2021). "Structural change and aggregate employment fluctuations in China and the US.", *International Economic Review*.
- [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.

Updated on March 27, 2021.

APPENDIX: PAPERS FOR PRESENTATION

- [1] Garcia-Macia, D., Hsieh, C. T., & Klenow, P. J. (2019). How Destructive is Innovation? *Econometrica*.
- [2] Caliendo, Lorenzo, Fernando Parro, Esteban Rossi-Hansberg, and Pierre-Daniel Sarte. (2018)
 "The Impact of Regional and Sectoral Productivity Changes on the U.S. Economy." *Review of Economic Studies*,
- [3] Jones, C. I. (2020). Taxing Top Incomes in a World of Ideas.
- [4] Buera, F. J., & Oberfield, E. (2020). The global diffusion of ideas. *Econometrica*, 88(1), 83-114.
- [5] Ufuk, A., Douglas, H., & Serrano-Velarde, N. A. B. (2020). Back to basics: basic research spillovers, innovation policy and growth. *The Review of Economic Studies*.
- [6] Jarosch, G., Oberfield, E., & Rossi-Hansberg, E. (Forthcoming). Learning from Coworkers. *Econometrica*
- [7] Deming, D. J. (2017). The growing importance of social skills in the labor market. *The Quarterly Journal of Economics*, 132(4), 1593-1640.
- [8] Lise, J., & Postel-Vinay, F. (2020). Multidimensional skills, sorting, and human capital accumulation. *American Economic Review*, 110(8), 2328-76.
- [9] Goos, M., Manning, A., & Salomons, A. (2014). Explaining job polarization: Routine-biased technological change and offshoring. *American Economic Review*, 104(8), 2509-26.
- [10] Sang Yoon (Tim) Lee & Yongseok Shin, 2018. "Horizontal and Vertical Polarization: Task-Specific Technological Change in a Multi-Sector Economy," NBER Working Paper
- [11] Ariel Burstein & Eduardo Morales & Jonathan Vogel, 2019. "Changes in Between-Group Inequality: Computers, Occupations, and International Trade," American Economic Journal: Macroeconomics, American Economic Association, vol. 11(2), pages 348-400, April.
- [12] 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.
- [13] Ufuk Akcigit, Harun Alp and Michael Peters (2021). "Lack of Selection and Limits to Delegation: Firm Dynamics in Developing Countries," *American Economic Review*.
- [14] Midrigan, V., & Xu, D. Y. (2014). Finance and misallocation: Evidence from plant-level data. *American Economic Review*, *104*(2), 422-58.
- [15] Boehm, J., & Oberfield, E. (2020). Misallocation in the Market for Inputs: Enforcement and the Organization of Production. *The Quarterly Journal of Economics*, *135*(4), 2007-2058.
- [16] Baqaee, D. R., & Farhi, E. (2020). Productivity and misallocation in general equilibrium. *The Quarterly Journal of Economics*, *135*(1), 105-163.
- [17] Bigio, S., & La'o, J. (2020). Distortions in production networks. *The Quarterly Journal of Economics*, 135(4), 2187-2253.
- [18] Osotimehin, S., & Popov, L. (2020). Misallocation and Intersectoral Linkages.
- [19] Boppart, T. (2014). Structural change and the Kaldor facts in a growth model with relative price effects and non-Gorman preferences. *Econometrica*, 82(6), 2167-2196.
- [20] Comin, D., Lashkari, D., & Mestieri, M. (2021). Structural Change with Long-run Income and Price Effects. *Econometrica*
- [21] Adamopoulos, T. and Restuccia, D., (2018). Geography and agricultural productivity: Cross-country evidence from micro plot-level data. NBER working paper.
- [22] Julieta Caunedo and Elisa Keller (2020). Capital Obsolescence and Agricultural Productivity. *The Quarterly Journal of Economics*.

- [23] Buera, F. J. and J. P. Kaboski (2012), "The Rise of the Service Economy," American Economic Review, 102, 2540-2569.
- [24] Hsieh, C. T., & Rossi-Hansberg, E. (2020). The Industrial Revolution in Services.
- [25] Hao, T., Sun, R., Tombe, T., Zhu, X. (2020). The effect of migration policy on growth, structural change, and regional inequality in China. *Journal of Monetary Economics*.
- [26] Choukhmane, T., Coeurdacier, N., & Jin, K. (2017). The one-child policy and household savings. Working paper.
- [27] Yao, W., and Zhu, X. (2021). "Structural change and aggregate employment fluctuations in China and the US.", *International Economic Review*.