

**SHANGHAI UNIVERSITY OF FINANCE AND ECONOMICS**  
**Advanced Macroeconomics II**  
**Spring 2022**

Instructor: Rongsheng Tang  
E-mail: tang.rongsheng@sufe.edu.cn  
Office: Institute for Advanced Research 219  
Office Hour: Mon 10:10-11:10

TA: Ziyao Deng  
E-mail: ziyao@163.sufe.edu.cn  
Office: TBA  
Office Hour: TBA

**COURSE DESCRIPTION**

This course covers 16 weeks from February 21 to June 6, and we meet every Monday 18:00-20:35. 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, 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 or your group, consisting of up to 2 students, will 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	<b>Presentation 1: Contribution</b>
Week 4	<b>Presentation 1: Contribution</b>
Week 5	Labor Market: Talent Misallocation/Mismatch

Week 6	Income Distribution: Theory and Empirics
Week 7	<b>Presentation 2: Motivation</b>
Week 8	<b>Presentation 2: Motivation</b>
Week 9	Firm Distribution/Organization
Week 10	Misallocation: Measurement/Linkage/Network
Week 11	<b>Presentation 3: Model</b>
Week 12	<b>Presentation 3: Model</b>
Week 13	Structural Transformation: Growth/Agriculture/Service
Week 14	Chinese Economy
Week 15	<b>Presentation 4: Results</b>
Week 16	<b>Presentation 4: Results</b>
Week 17	Hand in 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] 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*.
- [9] Hopenhayn, H., & Squintani, F. (2021). On the Direction of Innovation. *Journal of Political Economy*, 129(7), 1991-2022.
- [10] Ufuk Akcigit, John Grigsby, Tom Nicholas, Stefanie Stantcheva, Taxation and Innovation in the 20th Century, *The Quarterly Journal of Economics*, 2021
- [11] CAI, J., & LI, N. (2019). Growth Through Inter-sectoral Knowledge Linkages. *Review of Economic Studies*, 86, 1827-1866.
- [12] Buera, F. J., & Oberfield, E. (2020). The global diffusion of ideas. *Econometrica*, 88(1), 83-114.
- [13] Jarosch, G., Oberfield, E., & Rossi-Hansberg, E. (2021). Learning from coworkers. *Econometrica*, 89(2), 647-676.
- [14] Buera, F. J., Hopenhayn, H., Shin, Y., & Trachter, N. (2021). Big Push in Distorted Economies (No. w28561). *NBER working paper*.

## **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] Hector Chade, Ilse Lindenlaub. (2021). Risky Matching, *The Review of Economic Studies*.
- [10] Acemoglu, D., & Autor, D. (2011). Skills, tasks and technologies: Implications for employment and earnings. In *Handbook of Labor Economics* (Vol. 4, pp. 1043-1171).
- [11] 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.
- [12] Goos, M., Manning, A., & Salomons, A. (2014). Explaining job polarization: Routine-biased technological change and offshoring. *American Economic Review*, 104(8), 2509-26.
- [13] Sang Yoon (Tim) Lee & Yongseok Shin, 2018. "Horizontal and Vertical Polarization: Task-Specific Technological Change in a Multi-Sector Economy," *NBER Working Paper*
- [14] Acemoglu, D., & Restrepo, P. (2022). Demographics and automation. *The Review of Economic Studies*, 89(1), 1-44.

## **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] Jonas Loebbing, An Elementary Theory of Directed Technical Change and Wage Inequality, *The Review of Economic Studies*, 2021
- [7] Acemoglu, D., & Restrepo, P. (2021). Tasks, automation, and the rise in us wage inequality (No. w28920). *NBER working paper*.
- [8] Huneeus, F., Kroft, K., & Lim, K. (2021). Earnings Inequality in Production Networks (No. w28424). *NBER working paper*.

- [9] Piketty, T., & Saez, E. (2003). Income inequality in the United States, 1913–1998. *The Quarterly Journal of Economics*, 118(1), 1-41.
- [10] 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.
- [11] Jones, C. I., & Kim, J. (2018). A Schumpeterian model of top income inequality. *Journal of Political Economy*, 126(5), 1785-1826.
- [12] Acemoglu, D., & Dell, M. (2010). Productivity differences between and within countries. *American Economic Journal: Macroeconomics*, 2(1), 169-88.
- [13] Burstein, A., Morales, E., & Vogel, J. (2019). Changes in between-group inequality: computers, occupations, and international trade. *American Economic Journal: Macroeconomics*, 11(2), 348-400.
- [14] 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.
- [15] 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.
- [16] De Nardi, M. (2015), “Quantitative Models of Wealth Inequality: A Survey,” NBER working paper.

#### **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. *Working paper*.

## **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. (2021). Structural transformation of occupation employment. *Working paper*.
- [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*, 89(1), 311-374.
- [7] Francisco J Buera, Joseph P Kaboski, Richard Rogerson, Juan I Vizcaino (2021), “Skill-Biased Structural Change”, *The Review of Economic Studies*.
- [8] 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.
- [9] Gollin, D., Lagakos, D., & Waugh, M. E. (2013). The agricultural productivity gap. *The Quarterly Journal of Economics*, 129(2), 939-993.
- [10] Lagakos, D., & Waugh, M. E. (2013). Selection, agriculture, and cross-country productivity differences. *American Economic Review*, 103(2), 948-80.
- [11] Adamopoulos, T., & Restuccia, D. (2014). The size distribution of farms and international productivity differences. *American Economic Review*, 104(6), 1667-97
- [12] Chen, C. (2017). Untitled land, occupational choice, and agricultural productivity. *American Economic Journal: Macroeconomics*, 9(4), 91-121.
- [13] Adamopoulos, T., Brandt, L., Leight, J., & Restuccia, D. (2017). Misallocation, selection and productivity: A quantitative analysis with panel data from China. *NBER working paper*.

- [14] Adamopoulos, T. and Restuccia, D., (2018). Geography and agricultural productivity: Cross-country evidence from micro plot-level data. *NBER working paper*.
- [15] Julieta Caunedo and Elisa Keller (2020). Capital Obsolescence and Agricultural Productivity. *The Quarterly Journal of Economics*.
- [16] Buera, F. J. and J. P. Kaboski (2012), “The Rise of the Service Economy,” *American Economic Review*, 102, 2540-2569.
- [17] Duernecker, G., Herrendorf, B., & Valentinyi, A. (2017). Structural change within the service sector and the future of Baumol's disease. Available at SSRN 3082293.
- [18] Hsieh, C. T., & Rossi-Hansberg, E. (2019). The industrial revolution in services (No. w25968). *NBER working paper*.

## **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] Choukhmane, T., Coeurdacier, N., & Jin, K. (2017). The one-child policy and household savings. *Working paper*.
- [5] Fang, H., & Qiu, X. (2020). “Golden Ages”: A Tale of Two Labor Markets. *NBER*
- [6] 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.
- [7] Song, Z., Storesletten, K., & Zilibotti, F. (2011). Growing like China. *American Economic Review*, 101(1), 196-233.
- [8] Brandt, L., Kambourov, G., & Storesletten, K. (2020). Barriers to Entry and Regional Economic Growth in China, *working paper (No. tecipa-652)*.
- [9] Brandt, L., Dai, R., Kambourov, G., Storesletten, K., Zhang, X. (2021). Serial Entrepreneurship in China. Mimeo.
- [10] Bai, C., Hsieh, C.T., Song, Z., Wang, X. (2019). Conglomerate Formation in China. Mimeo.
- [11] Adamopoulos, T., Brandt, L., Leight, J., & Restuccia, D. (2017). Misallocation, selection and productivity: A quantitative analysis with panel data from China (No. w23039). *NBER*
- [12] Storesletten, K., Zhao, B., & Zilibotti, F. (2019). Business Cycle during Structural Change: Arthur Lewis' Theory from a Neoclassical Perspective (No. w26181). *NBER*
- [13] Yao, W., and Zhu, X. (2021). “Structural change and aggregate employment fluctuations in China and the US.”, *International Economic Review*.
- [14] Fang, L and B. Herrendorf (2021), “High-Skilled Services and Development in China”, *Journal of Development Economics*.
- [15] 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 February 20, 2022.**

## APPENDIX: PAPERS FOR PRESENTATION

- [1] 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.
- [2] Huneeus, F., Kroft, K., & Lim, K. (2021). Earnings Inequality in Production Networks (No. w28424). *NBER working paper*.
- [3] Chade, H., & Lindenlaub, I. (2015). Risky matching. *The Review of Economic Studies*.
- [4] Acemoglu, Daron and Restrepo, Pascual.(2021). Tasks, Automation, and the Rise in US Wage Inequality, *NBER working paper*.
- [5] Ufuk Akcigit, John Grigsby, Tom Nicholas, Stefanie Stantcheva.(2021). Taxation and Innovation in the 20th Century, *The Quarterly Journal of Economics*
- [6] Loebbing, J. (2022). An elementary theory of directed technical change and wage inequality. *The Review of Economic Studies*, 89(1), 411-451.
- [7] Francisco J Buera, Joseph P Kaboski, Richard Rogerson, Juan I Vizcaino (2021), “Skill-Biased Structural Change”, *The Review of Economic Studies*.
- [8] Hopenhayn, H., & Squintani, F. (2021). On the Direction of Innovation. *Journal of Political Economy*, 129(7), 1991-2022.
- [9] Anna Gumpert, Henrike Steimer, and Manfred Antoni. Firm Organization with Multiple Establishments. *The Quarterly Journal of Economics*, 2021.
- [10] Mark Schankerman and Florian Schuett. Patent Screening, Innovation, and Welfare. *The Review of Economic Studies*, 2021.
- [11] Federico Rossi. The relative efficiency of skilled labor across countries: Measurement and interpretation. *American Economic Review*, 112(1):235–66, January 2022.
- [12] Zhifeng Cai and Jonathan Heathcote. College tuition and income inequality. *American Economic Review*, 112(1):81–121, January 2022.
- [13] Lorenzo Caliendo, Fernando Parro, Luca David Opromolla, and Alessandro Sforza. Goods and factor market integration: A quantitative assessment of the EU enlargement. *Journal of Political Economy*, 129(12):3491–3545, 2021.
- [14] Manuel García-Santana, Josep Pijoan-Mas, and Lucciano Villacorta. Investment demand and structural change. *Econometrica*, 89(6):2751–2785, 2021.
- [15] Simon Board and Moritz Meyer-ter Vehn. Learning dynamics in social networks. *Econometrica*, 89(6):2601–2635, 2021.
- [16] Liu, E., & Ma, S. (2021). Innovation Networks and Innovation Policy (No. w29607). *NBER working paper*.
- [17] Peters, M., & Zilibotti, F. (2021). Creative Destruction, Distance to Frontier, and Economic Development (No. w29333). *NBER working paper*.
- [18] Adermon, A., Lindahl, M., & Palme, M. (2021). Dynastic human capital, inequality, and intergenerational mobility. *American Economic Review*, 111(5), 1523-48.
- [19] Fan, J. (2019). Internal geography, labor mobility, and the distributional impacts of trade. *American Economic Journal: Macroeconomics*, 11(3), 252-88.
- [20] König, Michael, et al. From imitation to innovation: Where is all that Chinese R&D going?. (No. w27404). *NBER working paper*.
- [21] Cavounidis, C., Dicandia, V., Lang, K., & Malhotra, R. (2021). The evolution of skill use within and between jobs (No. w29302). *NBER working paper*.
- [22] Baccara, M., Lee, S., & Yariv, L. (2021). Task Allocation and On-the-job Training (No. w29312). *NBER working paper*.

- [23] Aghion, P., Bergeaud, A., Boppart, T., Klenow, P. J., & Li, H. (2019). A theory of falling growth and rising rents (No. w26448). *NBER working paper*.
- [24] Peters, M. (2020). Heterogeneous markups, growth, and endogenous misallocation. *Econometrica*, 88(5), 2037-2073.
- [25] Peters, M., & Walsh, C. (2021). Population growth and firm dynamics (No. w29424). *NBER working paper*.
- [26] Markus K Brunnermeier, Michael Sockin, Wei Xiong, (2021) China's Model of Managing the Financial System, *The Review of Economic Studies*.
- [27] Adamopoulos, T., Brandt, L., Chen, C., Restuccia, D., & Wei, X. (2022). Land Security and Mobility Frictions (No. w29666). *NBER working paper*.
- [28] Liu, E., Mian, A., & Sufi, A. (2022). Low interest rates, market power, and productivity growth. *Econometrica*, 90(1), 193-221.
- [29] Akcigit, U., & Melitz, M. (2022). International Trade and Innovation (No. w29611). *NBER working paper*.
- [30] Sockin, M., & Xiong, W. (2022). Decentralization Through Tokenization (No. w29720). *NBER working paper*.
- [31] Battiston, D., Blanes i Vidal, J., & Kirchmaier, T. (2021). Face-to-face communication in organizations. *The Review of Economic Studies*, 88(2), 574-609.
- [32] Wouter Dessein, Andrea Prat. (2022) "Organizational Capital, Corporate Leadership, and Firm Dynamics". *Journal of Political Economy*.
- [33] Philippe Aghion, Antonin Bergeaud & John Van Reenen. (2021). The Impact of Regulation on Innovation. *NBER working paper*.
- [34] Adrien Bilal, Niklas Engbom, Simon Mongey and Giovanni L. Violante. (2021). Labor Market Dynamics When Ideas are Harder to Find. *NBER working paper*.
- [35] David W. Berger, Kyle F. Herkenhoff, and Simon Mongey. (2021). Labor Market Power. *American Economic Review (forthcoming)*.
- [36] Ufuk Akcigit, Douglas Hanley & Stefanie Stantcheva. (2021). Optimal Taxation and R&D Policies. *NBER working paper*.