

BGPE course: Regional and Urban Economics

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Objectives: This course will explore a range of topics related to current research in urban and regional economics: the modelling and estimation of agglomeration economies; the costs of cities and their internal structure with emphasis on land use regulations and transportation; amenities and the local supply of labour; the sizes and functions of cities. Both theory and empirics will be covered. Special attention will be devoted to building bridges with other fields including labour, international, public, IO, and development.

Schedule:

Sunday 25 March

19.00 Welcome meeting and dinner

Monday 26 March

9.00-10.30 Lecture: agglomeration theory (part 1)
10.30-11.00 Break
11.00-12.30 Lecture: agglomeration theory (part 2)
12.30-14.00 Lunch
14.00-15.30 Lecture: Agglomeration empirics (part 1)
15.30-16.00 Break
16.00-17.30 Lecture: Agglomeration empirics (part 2)
19.00 Dinner

Tuesday 27 March

9.00-10.30 Paper presentation: Ahfeldt et al. (2015)
10.30-11.00 Break
11.00-12.30 Paper presentation: De la Roca and Puga (2017)
12.30-14.00 Lunch
14.00-15.30 Lecture: Monocentric model (part 1)
15.30-16.00 Break
16.00-17.30 Lecture: Monocentric model (part 2)
19.00 Dinner

Wednesday 28 March

- 9.00-10.30 Lecture: dispersion empirics (part 1)
- 10.30-11.00 Break
- 11.00-12.30 Lecture: dispersion empirics (part 2)
- 12.30-14.00 Lunch
- 14.00-15.30 Paper presentation: Combes et al (2016)
- 15.30-16.00 Break
- 16.00-17.30 Paper presentation: Akbar and Duranton (2018)
- 19.00 Dinner

Thursday 29 March

- 9.00-10.30 Lecture: quality of life and mobility (part 1)
- 10.30-11.00 Break
- 11.00-12.30 Lecture: quality of life and mobility (part 2)
- 12.30-14.00 Lunch
- 14.00-15.30 Paper presentation: Diamond (2016)
- 15.30-16.00 Break
- 16.00-17.30 Lecture: urban systems, growth, and Zipf's law (part 1)
- 19.00 Dinner

Friday 30 March

- 9.00-10.30 Lecture: urban systems, growth, and Zipf's law (part 2)
- 10.30-11.00 Break
- 11.00-12.30 Lecture: urban systems, growth, and Zipf's law (part 3)
- 12.30-14.00 End of course and lunch

General issues:

1. This course hopes to achieve several objectives:

- Provide you with substantive knowledge about the economics of cities and regions.
- Foster your technical knowledge about a number of modelling aspects, econometrics techniques, and the link between the two.
- Make you think critically (and hopefully creatively) about existing research.

2. The course builds on standard microeconomic theory (adapted to the complications introduced by space) and econometrics. Familiarity with standard first year PhD microeconomics and empirical methods will be assumed. Given the range of problems that urban and regional economists face, no single empirical approach is expected to fully dominate.

3. The assessment will consist in:

- One 90 minutes open-book exam, scheduled on April 13th (100%)

Syllabus:

(“+” => compulsory reading)

Agglomeration: Theory

+ Duranton, Gilles and Diego Puga. 2004. Micro-foundations of urban agglomeration economies. In Vernon Henderson and Jacques-François Thisse (eds.) *Handbook of Regional and Urban Economics*, volume 4. Amsterdam: North-Holland, 2063–2117.

Agglomeration: Empirics

+ Combes, Pierre- Philippe and Laurent Gobillon. 2015. The empirics of agglomeration economies. In Gilles Duranton, J. Vernon Henderson, and William C. Strange (eds.) *Handbook of Regional and Urban Economics*, volume 5. Amsterdam: North-Holland.

IV:

- Combes, Pierre- Philippe, Gilles Duranton, Laurent Gobillon, and Sébastien Roux. 2010. Estimating agglomeration economies with history, geology, and worker effects. In Edward L. Glaeser (ed.) *The Economics of Agglomeration*. Cambridge (Mass.): NBER, 15–65.

Quasi-Experiments:

- Greenstone, Michael, Richard Hornbeck, and Enrico Moretti. 2010. Identifying agglomeration spillovers: Evidence from winners and losers of large plants openings. *Journal of Political Economy* 118(3):536–598.

Agglomeration: Empirics part 2

Structural:

+ Ahlfeldt Gabriel M, Stephen J. Redding, Daniel M. Sturm and Nikolaus Wolf. 2015. The economics of density: Evidence from the Berlin Wall. *Econometrica* 83(6): 2127-2189.

- Baum-Snow, Nathaniel and Ronni Pavan. 2010. Understanding the city size wage gap. *Review of Economic Studies* 79(1): 88-127.

- Holmes, Thomas J. 2011. The diffusion of Wal-Mart and economies of density. *Econometrica* 79(1): 253-302.

Identifying the sources of agglomeration:

- Combes, Pierre- Philippe, Gilles Duranton, Laurent Gobillon, Diego Puga and Sébastien Roux. 2012. The Productivity Advantages of Large Cities: Distinguishing Agglomeration from Firm Selection. *Econometrica* 80(6): 2543-2594.

+ De la Roca, Jorge and Diego Puga. 2017. Learning by working in big cities. *Review of Economic Studies* 84(1): 106-142

- Ellison, Glenn, Edward L. Glaeser, and William R. Kerr. 2010. What causes industry agglomeration? Evidence from coagglomeration patterns. *American Economic Review* 100(3):1195–1213.

Dispersion: Theory

+ Duranton, Gilles, and Diego Puga. 2015. Urban land use (section 2-5). In Gilles Duranton, J. Vernon Henderson, and William C. Strange (eds.) *Handbook of Regional and Urban Economics*, volume 5. Amsterdam: North-Holland.

Dispersion: Empirics

+ Duranton, Gilles, and Diego Puga. 2014. Urban land use (section 6-9). In Gilles Duranton, J. Vernon Henderson, and William C. Strange (eds.) *Handbook of Regional and Urban Economics*, volume 5. Amsterdam: North-Holland.

Dispersion: Empirics, part 2

+ Akbar, Prottoy A. and Gilles Duranton. 2018. Measuring congestion in a highly congested city: Bogotá. Processed, University of Pennsylvania.

+ Combes, Pierre-Philippe, Gilles Duranton, and Laurent Gobillon. 2017. The costs of agglomeration: Housing and land prices in French cities. Processed, University of Pennsylvania.

- Hsieh, Chang-Tai, and Enrico Moretti. 2017. Housing constraints and spatial misallocation. Processed, University of California Berkeley.

- Hsieh, Chang-Tai and Peter J. Klenow. 2009. Misallocation and manufacturing TFP in China and India. *Quarterly Journal of Economics* 124(4):1403–1448.

Local labour supply and amenities: Theory

- Glaeser, Edward L. and Joshua D. Gottlieb. 2009. The wealth of cities: Agglomeration economies and spatial equilibrium in the United States. *Journal of Economic Literature* 47(4):983–1028.

- Kline, Patrick and Enrico Moretti. 2014. People, places and public policy: some simple welfare economics of local economic development programs. *Annual Review of Economics* 6(0), 629-662.

+ Moretti, Enrico. 2011. Local labor markets. In Orley Ashenfelter and David Card (eds.) *Handbook of Labor Economics, volume 4*. Amsterdam: North-Holland. 1237-1313.

Local labour supply and amenities: Empirics

- Albouy, David. 2012. Are big cities really bad places to live? Improving quality-of-life estimates across cities. Processed, University of Michigan.

- Beaudry, Paul, Green, David A., and Sand, Ben. 2014. Spatial equilibrium with unemployment and wage bargaining: Theory and estimation. *Journal of Urban Economics* 79(0), 2–19.

+ Diamond, Rebecca. 2016. The determinants and welfare implications of US workers' diverging location choices by skill: 1980-2000. *American Economic Review* 106(3), 479-524.

- Ganong, Peter and Daniel Shoag. 2017. Why has regional income convergence in the U.S. declined? *Journal of Urban Economics*, forthcoming.

- Lee, Sanghoon and Jeffrey Lin. 2017. Natural amenities, neighborhood dynamics, and persistence in the spatial distribution of income. *Review of Economic Studies*, forthcoming.

- Rappaport, Jordan. 2004. Moving to nice weather. *Regional Science and Urban Economics* 37(3): 375–398.

- Blanchard, Olivier Jean and Lawrence F. Katz. 1992. Regional Evolutions. *Brookings Papers on Economic Activity* 0(1): 1–61.

Systems of cities, growth and Zipf's law

+ Behrens, Kristian, and Frédéric Robert-Nicoud, 2015. Agglomeration theory with heterogeneous agents. In Gilles Duranton, J. Vernon Henderson, and William C. Strange (eds.) *Handbook of Regional and Urban Economics*, volume 5. Amsterdam: North-Holland.

+ Duranton, Gilles and Diego Puga. 2014. The growth of cities. In Philippe Aghion and Steven N. Durlauf (eds.) *Handbook of Economic Growth*, volume 2B. Amsterdam: North-Holland, 781–853.