Fall 2008 DUKE UNIVERSITY Department of Economics

Economics 145/245: URBAN ECONOMICS

Professor: Charles Becker Telephone: 919-660-1885

Email: cbecker@econ.duke.edu if down: charlibek@yandex.ru
Office: 138 Social Sciences (corner office in EcoTeach area)
Office Hours: Monday and Wednesday 4:15 – 5:30 and by appointment

Class: Wednesday 6:00 – 8:30 PM

Social Sciences 124

Teaching Assistant: Harry Jones <u>hpj@duke.edu</u>

- 1. Course description. This course will analyze issues of spatial economics, including why cities are formed, patterns of residential and business location, models of housing market segregation, business location, and urban population "explosions" in developing countries. The course begins with an overview of the monocentric city model, explaining patterns of population density, commuting, and housing values. This course is the paired with Econ 146/246, a follow-on course that explores social issues and agglomeration economies in more detail. In contrast, this course will emphasize real estate and financial aspects of the housing market. A second major theme of this course will be the economy of Durham, and the underlying residential and commercial patterns.
- 2. **Prerequisites**: Econ 55. Introductory econometrics (Econ 139) will be extremely useful. Working knowledge of differential and integral calculus, econometrics, and Excel is necessary.
- 3. Texts. There is one required text. Copies of required journal articles and other readings, if not available through the library or Internet, will be kept on file in the EcoTeach Center. Most articles can be obtained online through Duke's electronic journal collection, and also by downloading from various websites. My class notes will be posted on Blackboard. These are intended to be supplemental, and are neither a perfect substitute for class or for the readings.
 - ➤ John F. McDonald and Daniel P. McMillen. 2007. Urban Economics & Real Estate. Malden, MA: Blackwell. (required)

The following are four books that together would serve as the base for graduate students wanting to do a field in urban economics. These are:

- Masahisa Fujita, Paul Krugman, and Anthony Venables. 2001. The Spatial Economy. Cambridge, MA: MIT Press.
- Jean-Marie Huriot and Jacques-François Thisse, Eds. 2000. Economics of Cities. Cambridge, UK: Cambridge University Press.
- Richard Arnott and Katz and Daniel P. McMillen, Eds.. 2007. A Companion to Urban Economics. Malden, MA: Blackwell.
- J. Vewrnon Henderson, 2004 *North-Holland Handbook of Urban and Regional Economics, Vol. 4*. The papers can be downloaded from http://www.econ.brown.edu/faculty/henderson/handbook.html.

Two more books you can download (we get them electronically at the library) are

- Gary Burtless and Janet Rothenberg Pack, Eds. 2005. *Brookings-Wharton Papers on Urban Affairs*. Washington, DC: Brookings (referred to below as BWPUA 2005).
- Bruce Katz and Robert Lang, Eds. 2003. Redefining Urban and Suburban America: Evidence from Census 2000, Vol. 1. Washington, DC: Brookings.

4. Honor code and course policies. Failure to acknowledge assistance on an assignment, or to cite a source of information used in an assignment, or to represent the work of others as your own, violates the University's honor code. Any violations may result in failure of the assignment or the course, or expulsion from the University.

Any exam missed for a non-legitimate reason will be accorded the grade of 0. Any exam missed for a legitimate reason will be made up with an oral exam as soon as EcoTeach can schedule it.

Late work will be penalized by 1/3 grade point per day late (excluding Sundays).

Assignments must be submitted via Blackboard. An electronic and a hard copy of the term paper must be submitted to the instructor.

Standard formatting for regular text material shall be as follows: 1-inch margins top/bottom/left/right; 1.5 line spacing; extra space between paragraphs; Garamond 12 font; right hand justification for main text. References and footnotes should be single space (with space between individual citations) and Garamond 11 font.

Assignments and term papers that have not gone through a basic spell and grammar check will not be accepted. Files attached with viruses will be deleted and not regarded as submitted; if for some reason the virus gets through and infects one of my computers, you will receive a grade of 0 for the assignment.

5. <u>Grading and assignments</u>. The grades will be determined as weighted averages of exam and homework performances:

Durham overview	5%	Sept 10
Literature survey and technical presentation (10% each)	20%	Sept 17, Oct 15
Durham paper	20%	Nov 5
Research project/term paper	35%	Dec 3
Final examination ¹	20%	Dec 14

The essays/presentations include (1) an untrained overview of Durham, (2) a brief literature survey on a policy topic of interest, with dissemination via Blackboard to the class, (3) a technical presentation (via Blackboard, but also possibly "live"): short but detailed presentation of a formal (i.e., mathematical) spatial economic model, or pertinent statistical technique, and (4) an analysis of an urban policy issue relevant to Durham. Presentations will occur during or near the first half of the semester; all topics must receive the instructor's approval.

The **term paper** is expected to be 15-20 pages in length plus tables, on a topic of the student's choice, but subject to instructor approval. The paper is expected to involve [a] original empirical or theoretical research (required of graduate students in Econ 245), or [b] a comprehensive survey a topic, and provide policy analysis in light of recent data and research. However, I will push strongly for all students to undertake original empirical work, regardless of whether or not it makes use of sophisticated statistical techniques.

The **final examination** will be comprehensive, but will have a Durham focus.

6. **Focus: Durham – initial assignment and final exam.** One of the purposes of this course is to give you a much deeper understanding of the community in which you are at least temporarily living; I also want to

¹ I reserve the right to cancel the final, in which case the Durham paper will count for 30% and the term paper 45% of the total grade.

remove the abstractness of the course topic. To tie it in, your first and last assignments (the last being the final exam) will focus on Durham.

In the first, I simply want you to visit 11 sites in Durham and observe. For each one, write up notes (a paragraph on each) on what strikes you about the street, neighborhood or commercial area (one block in all directions of the point identified). This assignment should only be a total of 3-4 pages, but it will be time consuming, because you have to travel all over Durham. How you do it is part of the assignment. If you don't have a car or bicycle, you can rent a bike over at the bike store next to Whole Foods at Broad and Perry. You should choose 11 of the 22 sites listed below, but be aware that credit will be given for diversity of selection.

The locations are:

Geer St., from Morris to Cheek Kent St., from Chapel Hill to University Drive Cole Mill Rd. and Stoneybrook Northgate Mall Downtown loop Alston Drive, from Cecil to Geer Fayetteville and NC 54 (three blocks in all directions) South St. from Apex to University Dr. Roxboro, from Pettigrew to Old Oxford Rd. Stoneybrook Drive, from Cole Mill Rd. to Carver Foster St., from Washington to Chapel Hill Rd. Surrey Rd., from Hope Valley to Devon Ridge Rd., from Cornwallis to Pickett Old NC 10 and Hemlock Dr. Cheek Rd., from Geer to Falls Lake Club Blvd., from Hillandale to N. Duke Burch Ave., from Swan to Buchanan Buchanan Blvd., from Yancey to Knox James, from University Ave. to Morehead Harvard Ave. E. Main, from Roxboro to Guthrie Roxboro-Club-Acadia-Lavender loop

Notes:

• You should be able to do this in half a day.

NC Central University and surrounding area

- I recommend going in daylight.
- If driving, do not park in a bad neighborhood and take notes. This makes you look like an inexperienced undercover police officer.
- International students *must* pair with an American student.

The final exam also will focus on some of the communities listed above. But, this time I will prepare some specific questions in advance, and allow you to come to the final with a notebook on these locations. The exam will ask you to apply specific theoretical models to explain the patterns you observe, and also will have you compare these patterns to empirical findings from other cities.

7. **Focus: Durham – paper**. This is a short paper of 6 to 8 pages (plus tables) in which you are to address a spatial feature or policy issue related to Durham, subject to my approval. Ideally, the paper will involve data analysis and address an issue of policy interest; it will also include a discussion of past patterns or policy decisions. Recent topics range from analyses of the determinants of commercial property prices/rental

rates to determinants of housing values in Durham and Orange Counties to analysis of trends in racial segregation to analysis of patterns of new housing starts and residential density to an analysis of the impact of the Durham jail's site for downtown expansion.

Durham has great data and websites:

American Tobacco Historic District http://www.americantobaccohistoricdistrict.com/

Corporation for Economic Development: http://www.cfed.org/home.m

Detailed maps of Durham and other useful information http://gisweb2.ci.durham.nc.us/sdx/imap_launch.html

Downtown Durham Inc http://www.downtowndurham.com/

 Duke library census data site:
 http://docs.lib.duke.edu/maps/guides/census.html

 Durham interactive mapping applications
 http://gisweb2.ci.durham.nc.us/sdx/imap_launch.html

 Durham quick facts from US census:
 http://quickfacts.census.gov/qfd/states/37/3719000.html

Durham city govt demographics by tract: http://www.durhamnc.gov/departments/planning/pdf/demographics.pdf
Durham Housing Authority

http://www.durhamhousingauthority.org/new%5Fsite/

Durham HOPE VI site http://www.durhamhopevi.com/default.asp

Durham Chamber of Commerce http://www.durhamchamber.org/

Durham City Govt – Office of Econ. & Employment Dev. http://www.durhamnc.gov/departments/eed/sop.cfm

Hayti historical district homepage http://www.ibiblio.org/hayti/

Hayti Heritage Center/St. Joseph's Historic Foundation http://www.hayti.org/

LINC (log into North Carolina) http://linc.state.nc.us/

NC collection at the Durham County library

NC demographic & statistical data sources

NC crime statistics

http://statelibrary.dcr.state.nc.us/iss/ncdataresources.html

http://sbi2.jus.state.nc.us/crp/public/2000/2000.htm

NC city & town detailed profiles: http://www.city-data.com/city/North-Carolina.html

Old West Durham Association http://www.owdna.org/snaps10.htm

Real estate data: http://www.zillow.com/
Southern Growth Policies Board: http://www.southern.org/

Self Help Credit Union http://www.self-help.org/

US Census, small area income & poverty estimates
US Census, Historical Statistics of the US, millennial edition

http://www.census.gov/hhes/www/saipe/saipe.html
http://hsus.cambridge.org/HSUSWeb/HSUSEntryServlet

Best local blogs:

Bull City Rising (read this every day) http://www.bullcityrising.com/

Endangered Durham

Carpe Durham

Bull's Eye (N&O)

http://endangereddurham.blogspot.com/
http://carpedurham.wordpress.com/
http://blogs.newsobserver.com/bullseye/

Other useful data sites:

Asian Bonds Online http://asianbondsonline.adb.org/regional/regional.php
Atlanta Fed's EconSouth

http://www.frbatlanta.org/publica/pubs_pubrouter.cfm?pub_type=ECON%20SOUTH

City-data.com http://www.city-data.com/
Cityfeet http://www.cityfeet.com/

Econ 145 data resources at Perkins Library http://library.duke.edu/data/courses/econ_urban.html

GeoDa (intro to spatial data analysis)

https://www.geoda.uiuc.edu/
HMDA (Housing Mortgage Disclosure Act)

http://www.ffiec.gov/hmda/

HUD state-of-the-cities data system http://socds.huduser.org/quicklink/screen3.odb?citystring=3719000

LoopNet http://www.loopnet.com/

OFHEO housing value data: http://www.ofheo.gov/Landing.asp

Philadelphia Neighborhood Information System

http://cml.upenn.edu/nis/
Properazzi (global property listings)

http://www.properazzi.com/
http://www.ipums.umn.edu/

Spatial econometrics with Matlab http://spatial-econometrics.com/

Transportation Research Board of the National Academies http://www.trb.org/

US Census, American FactFinder

http://factfinder.census.gov/servlet/DatasetMainPageServlet? lang=en& ts=181225560515& ds name=ACS 2005 EST G00 & program

US Census, county business patterns http://www.census.gov/epcd/cbp/view/cbpview.html

WSJ online real estate journal http://online.wsj.com/real-estate

Warehouse of data on racial populations http://www.jointcenter.org/DB/index.htm

Zillow

Zilpy (rental site)

Brookings-Wharton Papers on Urban Affairs bttp://muse.jbu.edu/journals/brookings-wharton papers on urban affairs/

http://www.zillow.com/

http://www.zilpy.com/

Cityscape http://www.buduser.org/periodicals/cityscape.btml

International Journal of Urban & Regional Research http://www.blackwell-synergy.com/loi/ijur

Journal of Housing Economics http://www.sciencedirect.com/science/journal/10511377

Journal of Real Estate Finance & Economics http://nnw.springerlink.com/content/102945/
Journal of Real Estate Literature http://business.fullerton.edu/finance/irel/default.htm

Journal of Real Estate Portfolio Management

http://cbeweb-1.fullerton.edu/finance/jrepm/

 Journal of Real Estate Research
 http://business.fullerton.edu/Finance/Journal/

 Journal of Regional Science
 http://www.blackwell-synergy.com/toc/jors/48/2

Journal of Transport Economics & Policy http://nnw.bath.ac.uk/e-journals/jtep/

 Journal of Urban Affairs
 http://www.blackwell-synergy.com/toc/juaf/30/2

 Journal of Urban Economics
 http://www.sciencedirect.com/science/journal/00941190

Real Estate Economics http://proquest.umi.com/pqdlink?Ver=1&Exp=06-17-2013&RQT=318&PMID=18753&clientId=15020&cfc=1

Regional Science & Urban Economics http://nww.sciencedirect.com/science/journal/01660462
Urban Studies http://nww.gla.ac.uk/urbanstudiesjournal/

US Housing Market Conditions

<u>http://www.huduser.org/periodicals/ushmc.html</u>

8. **Visiting speakers.** In addition to learning about Durham and the Triangle region, we will have one or two visiting speakers. One likely presentation is by Freeman Ledbetter, a local housing developer who has built homes (all unique – no cookie-cutters) all over Durham. I hope as well to bring in major developers Andrew Rothschild (Scientific Properties) and Michael Lemanski (Greenfire Development), as well as representatives from DDI and the city government. On days with visitors, you will be responsible for getting material from my on-line lecture notes. My guess is that we will have visitors 2-4 times during the course of the semester.

9. <u>Course outline and lots of literature.</u> As we come to each topic, I will give an updated a list of required and optional readings. You should regard the following more of a starting bibliography than a reading list. **The most important papers are starred (*)**. Others are optional and good choices for your technical review.

You should also see this list as a guide, rather than something you are expected to master. The McDonald and McMillen text is the core, and you should read it. You are also responsible for everything covered in my notes. If that material is technical, I will cover it in class, and not expect you to cover much else. If it is not terribly technical from the standpoint of theoretical difficulty, I will expect you to read one or more of the optional readings, and be prepared to discuss it in class. Finally, I should note that many of the topic delineations (and hence reading assignments) are rather arbitrary. Don't worry about it: as the semester progresses, earlier pieces will fit into the topics we are discussing. The structure as presently designed is one that bounces back and forth, gradually building technical models during the course of the semester, rather than providing half a semester of grueling models, followed by policy and implications. I think you'll enjoy this mixed approach more.

In addition to the materials given below, when beginning a research paper (or thesis), a great place to start is with the comprehensive surveys in the North-Holland *Handbook* series.

Overview: thinking of cities from an economic perspective

Wednesday August 27

Introductory Lecture: Why do cities exist?

- McDonald & McMillen, Chs. 1-3. *
- Richard Arnott and Daniel McMillen, Eds., 2006, *A Companion to Urban Economics*. Malden, MA: Blackwell; part I (chapters 1-4).

Stylized facts and patterns I: big and small cities

- Edward Glaeser. 1998. "Are cities dying?" Journal of Economic Perspectives 12(2). *
- Bruce Katz and Robert Lang, Eds. 2003. Redefining Urban and Suburban America: Evidence from Census 2000, Vol.
 Washington, DC: Brookings. Chapters TBA.
- J. Vernon Henderson and Anthony Venables, 2008, "The dynamics of city formation," Cambridge, MA: NBER working paper 13769.

Wednesday September 3 Stylized facts and patterns II: central place theory

- McDonald & McMillen, Ch. 4. *
- Kenneth Rosen and Mitchell Resnick. 1980. "The size distribution of cities: an examination of the Pareto law and primacy." *Journal of Urban Economics* **8**: 165-186.

Stylized facts and patterns III: urban economic growth

- McDonald & McMillen, Chs. 19-20.*
- Gavin Wright. 1987. "The economic revolution in the American south." *Journal of Economic Perspectives* **1**(1): 161-178.
- Jordan Rappaport, 2005. "The shared fortunes of cities and suburbs," Federal Reserve Bank of Kansas City Economic Review 2005 Third Quarter: 33-60, http://sbmt.bsu.by/news/indexru.htm; data set also available.
- Jordan Rappaport, 2007, "Moving to nice weather," Regional Science & Urban Economics 37: 375-398.
- William H. Frey and Kao-Lee Liaw, 2005. "Migration within the United States: role of race-ethnicity," *BWPUA 2005*: 207-248.
- Edward Glaeser and Kristina Tobio, 2007, "The rise of the sunbelt," Cambridge, MA: Harvard University, Department of Economics, HIER discussion paper no. 2135.

Section 1: Economic Models of Cities

Wednesday September 10 Land rent and urban structure

- McDonald & McMillen, Ch. 5*
- Edwin Mills and Bruce Hamilton. 1989. *Urban Economics* (Ed 4). Glencoe, IL: Scott-Foresman, Appendix A "Simplified mathematical model of urban structure." *
- Kenneth Small and S. Song. 1994 (November). "Population and employment densities: structure and change." *Journal of Urban Economics*: 292-313.

Land use in the monocentric and modern cities

- McDonald & McMillen, Chs. 6-7*
- Richard Arnott and Daniel McMillen, Eds., 2006, *A Companion to Urban Economics*. Malden, MA: Blackwell; chapters 5-6.
- Jan Brueckner, J-F Thisse, and Yves Zenou. 1999. "Why is central Paris rich and downtown Detroit poor? An amenity-based theory." *European Economic Review* **43**: 91-107.*
- Edward Glaeser and Giacomo Ponzetto, 2007, "Did the death of distance hurt Detroit and help New York?" Cambridge, MA: NBER working paper 13710.
- Alain Bertaud and Stephen Malpezzi, 2003, "The spatial distribution of population in 48 world cities: Implications for economies in transition," Madison, WI: University of Wisconsin, Center for Urban Land Economics Research, unpublished ms.
- Thomas Nechyba and Randall Walsh, 2004. "Urban sprawl," *Journal of Economic Perspectives*, **18**(4): 177-200.
- Edward Glaeser, Matthew Kahn, and Chenghuan Chu. 2001. "Job sprawl: employment location in US metropolitan areas." *Brookings Institution Survey Series* (May): 1-8.
- Andrew Plantinga and Stephanie Bernell, 2007, "The association between urban sprawl and obesity: is it a two-way street?" *Journal of Regional Science* **47**(5): 857-879.
- Matthew Turner, 2006, "A simple theory of smart growth and sprawl," Journal of Urban Economics 61: 21-44.

- J. Vernon Henderson and Arindam Mitra. 1996. "The new urban landscape: developers and edge cities." Regional Science & Urban Economics 26: 613-643.
- Stephen LeRoy and Jon Sonstelie. 1983. "Paradise lost and regained: transportation innovation, income, and residential segregation." *Journal of Urban Economics* **13**: 67-89.
- Edward Glaeser and Janet Kohlhase, 2003, "Cities, regions, and the decline of transport costs," Cambridge, MA: Harvard University, Department of Economics, HIER discussion paper no. 2014.
- Assignment 1 (Durham overview) due

Wednesday September 17 Agglomeration and other economies

- McDonald & McMillen, Chs. 19-20. *
- Gordon Hanson. 2001. "Scale economies and the geographic concentration of industry." *Journal of Economic Geography* 1: 255-276.
- Edward Glaeser and Albert Saiz, 2004. "The rise of the skilled city," in William Gale and Janet Rothenberg Pack, Eds. Brookings-Wharton Papers on Urban Affairs 2004. Washington, DC: Brookings. *
- Joseph Gyourko, Christopher Mayer, and Todd Sinai, 2006 (June), "Superstar cities," Philadelphia, PA: University of Pennsylvania, Wharton School, NBER working paper 12355.
- Yannis Ioannides, Henry Overman, Esteban Rossi-Hansberg, and Kurt Schmidheiny, 2007, "The effect of information and communication technologies on urban structure," Munich: CESifo working paper 2049.
- Paolo Epifani, 2005, "Heckscher-Ohlin and agglomeration," Regional Science & Urban Economics 35: 645-657.
- Shihe Fu, 2007, "Smart café cities: testing human capital externalities in the Boston metropolitan area," *Journal of Urban Economics* **61**: 86-111.
- Joshua Drucker and Edward Feser, 2007, "Regional industrial dominance, agglomeration economies, and manufacturing plant productivity," Washington, DC: US Bureau of the Census, Center for Economic Studies, working paper CES 07-31.
- Sabrina Di Addario and Eleonora Patacchini, 2007, "Wages and the city: evidence from Italy," Milan: University of Milan Department of Economics, Centro Studi Luca d'Aglianoi, development studies working paper no. 231.

Land use controls, zoning, and the Tiebout model

- McDonald & McMillen, Ch. 13.*
- William Fischel, 2004, "An economic history of zoning and a cure for its exclusionary effects," Urban Studies 41(2): 317-340.*
- Charles Tiebout. 1956. "A pure theory of local expenditures." Journal of Political Economy 64: 416-24.*
- Casey Dawkins and Arthur Nelson, 2002, "Urban containment policies and housing prices: an international comparison with implications for future research," *Land Use Policy* **19**: 1-12.
- Paul Thorsnes and John Reifel, 2007, "Tiebout dynamics: neighborhood response to a central-city/suburban house-price differential," *Journal of Regional Science* **47**(4): 693-719.
- Theodore Crone, 2006 (August), "Capitalization of the quality of local public schools: what do home buyers value?" Philadelphia, PA: Federal Reserve Bank of Philadelphia, working paper no. 06-15.
- Edward Glaeser and Joseph Gyourko, 2002, "The impact of zoning on housing affordability," Cambridge, MA: Harvard University, Department of Economics, HIER discussion paper no. 1948.
- Edwin Mills, 2006, "Sprawl and jurisdictional fragmentation," in William Gale and Janet Rothenberg Pack, Eds. *Brookings-Wharton Papers on Urban Affairs 2006*. Washington, DC: Brookings, pp. 231-256.
- Thomas Nechyba, 2003. "School Finance, Spatial Income Segregation and the Nature of Communities," *Journal of Urban Economics* **54**(1), 61-88, July.
- Raquel Fernandez and Richard Rogerson, 1997, "Keeping people out: income distribution, zoning, and the quality of public education," *International Economic Review* **38**(1): 23-42.
- Assignment 2 (literature survey) due

Section 2: US Racial Housing Segregation and housing demand

Wednesday September 24 Household sorting, search costs, and segregation

- McDonald & McMillen, Chs. 8-9. *
- D.M. Chambers. 1992 (September). "The racial housing price differential in racially transitional neighborhoods." *Journal of Urban Economics*: 214-232.
- J.B. Cullen and Steven Levitt. 1999. "Crime, urban flight, and the consequences for cities." Review of Economics & Statistics 81: 159-169. *
- Helen Ladd. 1998. "Evidence on discrimination in mortgage lending." Journal of Economic Perspectives 12(2).*
- Stephen Ross, Margery Austin Turner, Erin Godfrey, and Robin Smith, 2008, "Mortgage lending in Chicago and Los Angeles: a paired-testing study of the pre-application process," *Journal of Urban Economics* **63**: 902-919.
- Patrick Bayer, Hanming Fang, and Robert McMillan, 2005, "Separate when equal? Racial sorting and residential segregation," New Haven, CT: Yale University, Department of Economics, unpublished ms. *
- R. Alan Walks and Larry S. Bourne, 2006, "Ghettos in Canada's cities? Racial segregation, ethnic enclaves and poverty concentration in Canadian urban areas," *Canadian Geographer* **50**(3): 273-297.
- Paul Courant, 1978, "Racial prejudice in a search model of the urban housing market." *Journal of Urban Economics* 5: 329-345. *
- Bo Zhao, 2005. "Does the number of houses a broker shows depend on a homeseeker's race?" *Journal of Urban Economics* **57**(1): 128-147.
- Alicia Munnell, LE Browne, J. McEarney, and GMB Tootell. 1996 (March). "Mortgage Lending in Boston: interpreting HMDA data." *American Economic Review*: 25-53. *
- Casey Dawkins, 2007, "Space and the measurement of income segregation," *Journal of Regional Science* **47**(2): 255-272.
- Tara Watson, 2006, "Metropolitan growth, inequality, and neighborhood segregation by income," in William Gale and Janet Rothenberg Pack, Eds. *Brookings-Wharton Papers on Urban Affairs 2006*. Washington, DC: Brookings.
- Rucker C. Johnson. 2006, "Landing a job in urban space: the extent and effects of spatial mismatch," Regional Science & Urban Economics 36: 331-372.
- Christian Hilber and Yingchun Liu, 2008, "Explaining the black-white homeownership gap: the role of own wealth, parental externalities and locational preferences, *Journal of Housing Economics* **17**: 152-174.*
- David Cutler, Edward Glaeser, and Jacob Vigdor, 2008, "When are ghettos bad? Lessons from immigrant segregation in the United States," Cambridge, MA: Harvard University, Department of Economics HIER discussion paper no. 2152.
- Gregory Fairchild, 2007, "Ecological succession via gentrification: the response of incumbent entrepreneurs," Charlottesville, VA: University of Virginia, Darden Business School working paper no. 1019574.
- Fahui Wang, 2007, "Job access in disadvantaged neighborhoods in Cleveland, 1980-2000: Implications for spatial mismatch and association with crime patterns," *Cityscape* **9**(3).
- Sarah Reber, 2007, "School desegregation and educational attainment for blacks," Cambridge, MA: NBER working paper 13193.

More models

- Alex Anas, Richard Arnott, and Kenneth Small. 1998 (September). "Urban spatial structure." Journal of Economic Literature: 1426-1464.
- N. Gregory Mankiw and David Weil, 1989, "The baby boom, the baby bust, and the housing market," Regional Science & Urban Economics 19: 235-258. Also see critics and their response in volume 21.
- John Metzger, 2000, "Planned abandonment: The neighborhood life-cycle theory and national urban policy," *Housing Policy Debate* **11**(1): 7-40.
- Keith Ihlanfeldt, 2005 (November), "The effect of land use regulation on housing and land prices," Tallahassee: Florida State University, Department of Economics, unpublished ms.

Section 3: Real Estate

Wednesday October 1

Real Estate Law, Institutions, and Markets (demand and supply)

- McDonald & McMillen, Chs. 10-12. *
- Michelle White. 1986. "Property taxes and urban housing abandonment." Journal of Urban Economics 20: 312-330.
- Edward Glaeser and Jesse Shapiro, 2002, "The benefits of the home mortgage interest deduction," Cambridge, MA: Harvard University, Department of Economics, HIER discussion paper no. 1979.
- Richard Arnott and Daniel McMillen, Eds., 2006, *A Companion to Urban Economics*. Malden, MA: Blackwell; chapters 9, 12, 13, 14.
- Edward Glaeser, Joseph Gyourko, and Raven Saks 2005, "Urban growth and housing supply," Cambridge, MA: Harvard University, Department of Economics, HIER discussion paper no. 2062.
- Richard Arnott, 2006, "Effects of property taxation on development timing and density," in William Gale and Janet Rothenberg Pack, Eds. *Brookings-Wharton Papers on Urban Affairs 2006*. Washington, DC: Brookings.
- Tom Hertz, et al., 2007, "The inheritance of educational inequality: international comparisons and fifty-year trends," B.E. Journal of Economic Analysis & Policy 7(2) (Advanced: article 10)
- Terra McKinnish, Randall Walsh, and T. Kirk White, 2008, "Who gentrifies low income neighborhoods?" Washington, DC: US Bureau of the Census, Center for Economic Studies discussion paper CES 08-02.
- John Quigley and Stephen Raphael, 2004, "Is housing unaffordable? Why isn't it more affordable?" *Journal of Economic Perspectives* **18**(1): 129-152.
- Scott Susin, 2002, "Rent vouchers and the price of low-income housing" *Journal of Public Economics* **83**: 109-152.
- Ilho Yoo and Inhyouk Koo, 2008, "Do children support their parents' application for reverse mortgages? A Korean case," Seoul: Korean Development Institute working paper 08-03.
- Erling Røed Larson and Steffen Weum, 2008, "Testing the efficiency of the Norwegian housing market,"
 Journal of Urban Economics, in press.
- David Sims, 2007, "Out of control: what can we learn from the end of Massachusetts rent control?" *Journal of Urban Economics* **61**: 129-151.
- Robert Helsley and William Strange, 2008, "A game-theoretic analysis of skyscrapers," *Journal of Urban Economics* **64**: 49-64.*
- Xudong An, Raphael Bostic, Yongheng Deng, and Stuart Gabriel, 2007, "GSE loan purchases, the FHA, and
 housing outcomes in targeted, low-income neighborhoods," Brookings-Wharton Papers on Urban Affairs, pp.
 205-256.
- Dwight Jaffee and John Quigley, 2007, "Housing subsidies and homeowners: what role for government-sponsored enterprises?" *Brookings-Wharton Papers on Urban Affairs*, pp. 103-149.
- Michael LaCour-Little, 2007, "The home purchase mortgage preferences of low- and moderate-income households," *Real Estate Economics* **35**(3): 265-290.

Mobile homes

- Maria Marshall and Thomas Marsh, 2007, "Consumer and investment demand for manufactured housing units," *Journal of Housing Economics* **16**: 59-71.
- Carl Mason and John Quigley, 2007, "The curious institution of mobile home rent control," *Journal of Housing Economics* **16**: 189-208.*
- Diehang Zheng, Yongheng Deng, Peter Gordon, and David Dale-Johnson, 2007, "An examination of the impact of rent control on mobile home prices in California," *Journal of Housing Economics* **16**: 209-242.
- Dirk Early, 1998, "The role of subsidized housing in reducing homelessness: an empirical investigation using micro-data," *Journal of Policy Analysis & Management* **17**(4): 687-696.
- Assignment 3 (technical article presentation) due

Wednesday October 8 Real estate asset valuation, development, and investment

- McDonald & McMillen, Chs. 15-16. *
- Raymond Palmquist, Fritz Roka, and Tomislav Vukina, 1997, "Hog operations, environmental effects, and residential property values." *Land Economics* **73**(1): 114-124.*
- Okmyung Kim, Jamie Brown Kruse, and Craig Landry, 2008, "Flood hazards, insurance rates, and amenities: Evidence from the coastal housing market," *Journal of Risk & Insurance* **75**(1): 63-82.*
- N. Edward Coulson and Daniel McMillen, 2008, "Estimating time, age, and vintage effects in housing prices," *Journal of Housing Economics* (in press).
- Raphael Bostic, Stanley Longhofer, and Christian Redfearn, 2007, "Land leverage: decomposing home price dynamics," Real Estate Economics 35(2): 183-208.*
- Geoffrey Turnbull, Jonathan Dombrow, and CF Sirmans, 2006, "Big house, little house: relative size and value," Real Estate Economics 34(3): 439-456.
- John Harding, Stuart Rosenthal, and CF Sirmans, 2007, "Depreciation of housing capital, maintenance, and house price inflation: estimates from a repeat sales model," *Journal of Urban Economics* **61**: 193-217.*
- Masayuki Nakagawa, Makota Saito, and Hisaki Yamaga, 2007, "Earthquake risk and housing rents: evidence from the Tokyo metropolitan area," Regional Science & Urban Economics 37: 87-99.
- Douglas Noonan, Douglas Krupka, and Brett Baden, 2007, "Neighborhood dynamics and price effects of Superfund site clean-up," *Journal of Regional Science* **47**(4): 665-692.
- Grace Wong, 2008, "Has SARS infected the property market? Evidence from Hong Kong," *Journal of Urban Economics* **63**: 74-95.
- Alberto Abadie and Sofia Dermisi, 2008, "Is terrorism eroding agglomeration economies in central business districts? Lessons from the office real estate market in downtown Chicago," Harvard University, Kennedy School of Government, HKS faculty research working paper RWP08-019.
- Jaren Pope, 2008, "Buyer information and the hedonic: the impact of a seller disclosure on the implicit price for airport noise," *Journal of Urban Economics* **63**: 498-516.
- David M. Brasington and Diane Hite, 2008, "A mixed index approach to identifying hedonic price models," Regional Science & Urban Economics 38: 271-284 (not for the casual, non-econometrically-oriented reader).
- Charles Clotfelter. 1975. "The effect of school desegregation on housing prices." Review of Economics & Statistics 57: 446-451.
- Caroline Hoxby, 2000, "Does competition among public schools benefit students and taxpayers," *American Economic Review* **90**(5): 1209-1238.
- C.Y. Yiu and C.S. Tam, 2007, "Housing price gradient with two workplaces an empirical study in Hong Kong," Regional Science & Urban Economics 37: 413-429.
- Morris Davis and Michael Palumbo, 2008, "The price of residential land in large US cities," *Journal of Urban Economics* **63**: 352-384.*
- Andrew Haughwout, James Orr, and David Bedoll, 2008, "The price of land in the New York metropolitan area," New York: Federal Reserve Bank of New York Current Issues in Economics & Finance 14(3): 1-7.
- Robert Schiller, 2008, "Derivatives markets for home prices," Cambridge, MA: NBER working paper 13962.*
- Andrey Pavlov and Susan Wachter, 2006, "The inevitability of marketwide underpricing of mortgage default risk," Real Estate Economics 34(4): 479-496.*
- Richard Dye and Daniel McMillen, 2007, "Teardowns and land values in the Chicago metropolitan area," *Journal of Urban Economics* 61: 45-63.
- John Clapp, Anupam Nanda, and Stephen Ross, 2008, "Which school attributes matter? The influence of school district performance and demographic composition on property values," *Journal of Urban Economics* 63: 451-466.
- Zhenguo Lin and Kerry Vandell, 2007, "Illiquidity and pricing biases in the real estate market," Real Estate Economics 35(3): 291-330.
- Avanidhar Subrahmanyam, 2007, "Liquidity, return and order-flow linkages between REITs and the stock market," Real Estate Economics 35(3): 383-408.*
- Colin Lizieri, Stephen Satchell, and Qi Zhang, 2007, "The underlying return-generating factors for REIT returns: an application of independent component analysis," Real Estate Economics 35(4): 569-598.

- Susanne Cannon, Norman Miller, and Gurupdesh Pandher, 2006, "Risk and return in the US housing market: a cross-sectional asset-pricing approach," Real Estate Economics 34(4): 519-552.
- Richard Buttimer and Stephen Ott, 2007, "Commercial real estate valuation, development and occupancy under leasing uncertainty," Real Estate Economics 35(1): 21-56.
- David Brasington and Diane Hite, 2008, "A mixed index approach to identifying hedonic price models," Regional Science & Urban Economics 38: 271-284. Not for anyone without a few econometrics classes.
- Term paper topic and outline due

Wednesday October 15 Sub-prime mortgages and other financial issues

- McDonald & McMillen, Chs. 17-18. *
- Gregory Elliehausen and Michael Staten, 2004, "Regulation of subprime mortgage products: an analysis of North Carolina's predatory lending law," *Journal of Real Estate Finance & Economics* **29**(4): 411-433.
- Anthony Pennington-Cross and Souphala Chomsisengphet, 2007, "Subprime refinancing: equity extraction and mortgage termination," Real Estate Economics 35(2).
- Joseph Nichols, Anthony Pennington-Cross, and Anthony Yezer, 2005, "Borrower self-selection, underwriting costs, and subprime mortgage credit supply," *Journal of Real Estate Finance & Economics* **30**(2): 197-219.
- Michelle Danis and Anthony Pennington-Cross, 2008, "The delinquency of sub-prime mortgages," *Journal of Economics & Business* **60**: 67-90.
- John Farris and Christopher Richardson, 2004, "The geography of subprime mortgage prepayment penalty options," *Housing Policy Debate* **15**(3).
- Paul Calem, Kevin Gillen, and Susan Wachter, 2004, "The neighborhood distribution of subprime mortgage lending," *Journal of Real Estate Finance & Economics* **29**(4): 393-410.*
- Simon Firestone, Robert Van Order, and Peter Zorn, 2007, "The performance of low-income and minority mortgages," Real Estate Economics 35(4): 479-504.*
- Seow Eng Ong, Poh Har Now, and Andrew Spieler, 2006, "Price premium and foreclosure risk," Real Estate Economics 34(2): 211-242.*
- Benjamin Keys, Tanmoy Mukherjee, Amit Seru, and Vikrant Vig, 2008, "Did securitization lead to lax screening? Evidence from subprime loans," Chicago: University of Chicago, Graduate School of Business, unpublished ms.
- Jan Kregel, 2008, "Changes in the USA financial system and the subprime crisis," Annandale-on-Hudson, NY: Bard College, Levy Economics Institute, working paper no. 530.
- Michael Mah-Hui Lim, 2008, "Old wine in a new bottle: subprime mortgage crisis causes and consequences," Annandale-on-Hudson, NY: Bard College, Levy Economics Institute, working paper no. 532.
- Atif Mian and Amir Sufi, 2008, "The consequences of mortgage credit expansion: evidence from the 2007 mortgage default crisis," Chicago: University of Chicago, Graduate School of Business, unpublished ms.
- O. Emre Ergungor, 2007, "Foreclosures in Ohio: Does lender type matter?" Cleveland: Federal Reserve Bank of Cleveland working paper 07/24.
- Michael Barr, 2008, "Financial services, saving and borrowing among low- and moderate-income households: Evidence from the Detroit Area Household Financial Services Survey," Ann Arbor: University of Michigan Law School, unpublished ms.

Wednesday October 22 Housing booms and busts

- Karl Case, John Quigley, and Robert Schiller. 2004. "Comparing wealth effects: the stock market vs. the housing market." Berkeley, CA: University of California, Berkeley Department of Economics, Advances in Microeconomics 5(1).*
- Robert Schiller, 2007 (June), "Historic turning points in real estate," New Haven, CT: Yale University, Department of Economics, Cowles Foundation Discussion Paper no. 1610.
- Robert Schiller, 2007 (September), "Understanding recent trends in house prices and home ownership," New Haven, CT: Yale University, Department of Economics, Cowles Foundation Discussion Paper no. 1630.
- Yongheng Deng and John Quigley, 2008, "Index revision, house price risk, and the market for house price derivatives," Berkeley, CA: University of California Berkeley, Department of Economics, unpublished ms.

- William Wheaton and Gleb Nechayev, 2008, "The 1998-2005 housing 'bubble' and the current 'correction': What's different this time?" *Journal of Real Estate Research* **30**(1): 1-26.
- Edward Glaeser and Joseph Gyourko, 2004, "Urban decline and durable housing," Cambridge, MA: Harvard University Department of Economics, unpublished ms.
- Edward Glaeser and Joseph Gyourko, 2007, "Housing dynamics," Cambridge, MA: Harvard University, Department of Economics, HIER discussion paper no. 2137.
- Edward Glaeser, Joseph Gyourko, and Albert Saiz, 2008, "Housing supply and housing bubbles," Cambridge, MA: Harvard University, Department of Economics, HIER discussion paper no. 2158.
- Stephen Malpezzi and Susan Wachter, 2005, "The role of speculation in real estate cycles," *Journal of Real Estate Literature* **13**(2): 141-164.
- Chen-Liang Chen, Chung-Ming Kuan, and Chu-Chia Lin, 2007, "Saving and housing of Taiwanese households: new evidence from quantile regression analyses," *Journal of Housing Economics* **16**: 102-126.
- Charles Goodhart and Boris Hofmann, 2008, "House prices, money, credit and the macroeconomy,"
 Frankfurt: European Central Bank working paper no. 888.
- Allen Goodman and Thomas Thibodeau, 2008, "Where are the speculative bubbles in US housing markets?" *Journal of Housing Economics* **17**: 117-137.*

Local governments, property rights, and local economic development

- McDonald & McMillen, Ch. 13*
- Robert Inman and Daniel Rubinfeld. 1997. "Rethinking federalism." Journal of Economic Perspectives 11(4): 43-65.
- Stephen Malpezzi. 1998. "Welfare analysis of rent control with side payments: a natural experiment in Cairo, Egypt." Regional Science & Urban Economics 28: 773-795. *
- Keith Ihlanfeldt, 2007, "The effect of land use regulation on housing and land prices," *Journal of Urban Economics* **61**: 420-435.*
- Karen Destorel Brown, 2001, "Expanding affordable housing through inclusionary zoning: lessons from the Washington metropolitan area," Washington, DC: Brookings Institution, Center on Urban and Metropolitan Paper, discussion paper.
- Jamie Randall McCall, 2008, "The use of eminent domain by North Carolina counties," Chapel Hill, NC: University of North Carolina, School of Government, unpublished MPAS thesis.
- Jan Rouwendal and J. Willemijn van der Straaten, 2008, "The costs and benefits of providing open space in cities," Amsterdam: Tinbergen Institute discussion paper TI 2008-001/3.
- Thomas Miceli and C.F. Sirmans, 2007, "The holdout problem, urban sprawl, and eminent domain," *Journal of Housing Economics* **16**: 309-319.

Wednesday October 29 International real estate topics

- Richard Arnott and Daniel McMillen, Eds., 2006, *A Companion to Urban Economics*. Malden, MA: Blackwell; chapters 10-11.
- Kala Seetharam Sridhar, 2007, "Density gradients and their determinants: evidence from India," Regional Science & Urban Economics 37: 313-344.*
- Luc Anselin, Nancy Lozano-Gracia, Uwe Deichmann, and Somik Lall, 2008, "Valuing access to water a spatial hedonic approach applied to Indian cities," Washington, DC: World Bank policy research working paper 4533.*
- Siqi Zheng and Matthew Kahn, 2008, "Land and residential property markets in a booming economy: new evidence from Beijing," *Journal of Urban Economics* **63**: 743-757.*
- Akie Takeuchi, Maureen Cropper, and Antonio Bento, 2008, "Measuring the welfare effects of slum improvement programs: the case of Mumbai," *Journal of Urban Economics* **64**: 65-84.
- Somik Lall and Mattias Lundberg, 2008, "What are public services worth, and to whom? Non-parametric estimation of capitalization in Pune," *Journal of Housing Economics* 17: 34-64.
- Balács Égert and Dubravko Mihaljek, 2007, "Determinants of house prices in Central and Eastern Europe,"
 Ann Arbor, MI: University of Michigan, William Davidson Institute working paper no. 894.

- Arthur Grimes and Yun Liang, 2007, "Spatial determinants of land prices in Auckland: does the metropolitan urban limit have an effect?" Wellington, NZ: Motu Economic and Public Policy Research working paper 07-09.
- Sachiko Miyamoto, 2007, "Household asset selection and real estate in Japan the land price rebound's impact from the perspective of regional characteristics," *Nomura Capital Market Review* **10**(2).
- Vanessa Nadalin and Danilo Igliori, 2007, "Determinants of vacancy rates in Sao Paolo's metropolitan area: a spatial approach," Cambridge, UK: University of Cambridge, Department of Land Economy, unpublished ms.
- Sherry Z. Zhou and Helen X.H. Bao, "Modeling price dynamics in the Hong Kong property market," Kowloon, HK: City University of Hong Kong, unpublished ms.
- Yizhen Gu, 2008, "The impacts of rail transit on property values: Empirical study in Beijing," Beijing Beijing Municipal Institute of City Planning & Design, Department of Planning Research, unpublished ms.

Property rights in developing countries and other local government issues

- Jean Lanjouw and Philip Levy. 2002. "Untitled: a study of formal and informal property rights in urban Ecuador." *Economic Journal* 112: 986-1019.*
- David Dowall and M. Leaf. 1991. "The price of land for housing in Jakarta." Urban Studies 28(5): 707-722.*
- Liza Weinstein, 2008, "Mumbai's development mafias: globalization, organized crime and land development," *International Journal of Urban & Regional Science* **32**(1): 22-39.

Section 4: Urban Transportation

Wednesday November 5 Autos, highways, and congestion

- McDonald & McMillen, Ch. 14. *
- Kenneth Small. 1997. "Urban economics and urban transportation policy in the United States." Regional Science & Urban Economics 27: 671-691.
- Akie Takeuchi, Maureen Cropper, and Antonio Bento, 2007, "The impact of policies to control motor vehicle emissions in Mumbai, India," *Journal of Regional Science* 47(1): 27-46.
- Albert Saiz, 2006, "Dictatorships and highways," Regional Science & Urban Economics 36: 187-206.
- Richard Arnott, 2007, "Congestion tolling with agglomeration economies," Journal of Urban Economics 62: 187-203.

Mass Transit

- Christopher Bollinger and Keith Ihlanfeldt. 1997. "The impact of rapid rail transit on economic development: the case of Atlanta's MARTA." *Journal of Urban Economics* **42**: 179-204.
- Clifford Winston and Vikram Maheshri, 2007, "On the social desirability of urban rail transit systems," *Journal of Urban Economics* 62: 362-382.*
- Edward Glaeser, Matthew Kahn, and Jordan Rappaport, 2008, "Why do the poor live in cities? The role of public transportation," *Journal of Urban Economics* **63**: 1-24.
- N. Ed Coulson and Robert Engle. 1987. "Transportation costs and the rent gradient." *Journal of Urban Economics* **21**: 287-297.
- Richard Arnott and Daniel McMillen, Eds., 2006, *A Companion to Urban Economics*. Malden, MA: Blackwell; chapters 15-18.
- Nathaniel Baum-Snow and Matthew Kath, 2005. "Effects of urban rail expansions: evidence from sixteen cities, 1970-2000," *BWPUA 2005*: 147-197.
- Claudio Agostini and Gaston Palmucci, 2008, "Anticipated capitalization of the Santiago metro system on housing prices," Santiago, Chile: Universidad Alberto Hurtado, Department of Economics, unpubl. ms.
- Matthew Kahn, 2007, "Gentrification trends in new transit-oriented communities: evidence from 14 cities that expanded and build rail transit systems," Real Estate Economics 35(2).*
- Peter Nelwon *et al.*, 2007, "Transit in Washington, DC: current benefits and optimal level of provision," *Journal of Urban Economics* **62**: 231-251.*
- Assignment 4 (Durham urban policy analysis) due

Section 5: Business Location Theory & Economic Geography

Wednesday November 12 Business location and the core model of spatial economics

- McDonald & McMillen, Ch. 21. *
- Becker notes*
- Steven Brakman, Harry Garretsen, and Charles van Marrewijk. 2001. *An Introduction to Geographical Economics*. Cambridge, UK: Cambridge University Press, Chs. 2-3. http://www.few.eur.nl/few/people/vanmarrewijk/geography/

Wednesday November 29 City and business location II: economic development strategies

- Paul Courant. 1994. "How would you know a good economic development policy if you tripped over one? Hint: don't just count jobs." *National Tax Journal* **47**(4): 863-881.
- Timothy Bartik, 2003. "Thoughts on American manufacturing decline and revitalization." Kalamazoo, MI: Upjohn Institute working paper 03-96.
- Timothy Bartik, Charles Becker, John Bush, and Steven Lake. 1987. "Saturn and state economic development." Forum for Applied Research & Public Policy, pp. 27-40.
- Marlon Boarnet and William Bogart. 1996. "Enterprise zones and employment: evidence from New Jersey."
 Journal of Urban Economics 40: 198-215.
- Donald Smith and Richard Florida. 1994. "Agglomeration and industrial location: an econometric analysis of Japanese-affiliated manufacturing establishments in automotive-related industries," *Journal of Urban Economics* **36**: 23-41.
- Kelly Edmiston. 2004. "The net effect of large plant locations and expansions on county employment." *Journal of Regional Science* **44**(2): 289-320.
- Marlon Boarnet and William Bogart. 1996. "Enterprise zones and employment: evidence from New Jersey." *Journal of Urban Economics* **40**: 198-215.
- Jeffrey Zax and John Kain, 1996, "Moving to the suburbs: do relocating companies leave their Black employees behind?" *Journal of Labor Economics* **14**(3): 472-504. *
- Jianqing Rian and Xiaobo Zhang, 2008, "Finance and cluster-based industrial development in China,"
 Washington, DC: International Food Policy Research Institute discussion paper 00768.
- David Neumark, Junfu Zhang, and Stephen Ciccarella, 2008, "The effects of Wal-Mart on local labor markets,"
 Journal of Urban Economics 63: 405-430.
- J. Vernon Henderson and Yukako Ono, 2008, "Where do manufacturing firms locate their headquarters?" *Journal of Urban Economics* **63**: 431-450.
- Matia Basso and Patrick Kline, 2008, "Do local economic development programs work? Evidence from the Federal Empowerment Zone program," New Haven: Yale University Department of Economics, Cowles Foundation discussion paper no. 1638.
- Zuhui Huang, Xiaobo Zhang, and Yunwei Zhu, 2007, "The role of clustering in rural industrialization: a case study of the footwear industry in Wenzhou," Washington, DC: International Food Policy Research Institute: IFPRI discussion paper 00705.
- James Feyrer, Bruce Sacerdote, and Ariel Dora Stern, 2007, "Did the rust belt become shiny? A study of cities and counties that lost steel and auto jobs in the 1980s," *Brookings-Wharton Papers on Urban Affairs*, pp. 41-89.
- Eric Strobl, 2008, "The economic growth impact of hurricanes: Evidence from US coastal counties," Bonn: IZA discussion paper no, 3619.
- Shujie Yao and Xiuyun Yang, 2008, "Airport development and regional economic growth in China," Nottingham, UK: University of Nottingham research paper 2008/07.
- Atsushi Iimi, 2008, "Effects of improving infrastructure quality on business costs: evidence from firm-level data," Washington, DC: World Bank *policy research working paper 4581*.

Section 6: Population Explosions and Productivity Growth Centers: Cities in Developing Countries

Wednesday December 3 Urban growth in developing countries

- Panel on Urban Population Dynamics, National Research Council. 2003. Cities Transformed. Washington, DC: National Academies Press, Chs. 3, 4, 6, 7.
- J. Vernon Henderson, 2005. "Growth of China's medium-size cities," BWPUA 2005: 263-295.
- D. da Mata, U. Deichmann, JV Henderson, SV Lall, and HG Wang, 2007, "Determinants of city growth in Brazil," *Journal of Urban Economics* **62**: 252-272.
- Shahid Yusuf, 2007, "About urban mega regions: knowns and unknowns," Washington, DC: World Bank policy research working paper 4252.
- Lixing Li, 2008 (April), "The incentive role of creating 'cities' in China," College Park, MD: University of Maryland, unpubl. ms.

Labor markets and migration in developing countries

- Panel on Urban Population Dynamics, National Research Council. 2003. Cities Transformed. Washington, DC: National Academies Press, Ch. 8. *
- John Knight and Lina Song. 2003. "Increasing urban wage inequality in China." *Economics of Transition* **11**(4): 597-619.
- Panel on Urban Population Dynamics, National Research Council. 2003. *Cities Transformed.* Washington, DC: National Academies Press, Chs. 8, 9.
- Edward Glaeser and Janet Kohlhase. 2003. "Cities, regions, and the decline of transport costs." Cambridge, MA: Harvard Institute of Economic Research *discussion paper 2014*.
- Chris Beauchemin and Philippe Bocquier, 2004 (October). "Migration and urbanization in Francophone West Africa: an overview of recent empirical evidence," *Urban Studies* 41(11): 2245-2272. *
- Kristian Behrens and Alain Pholo Bala, 2006 (December), "Do rent-seeking and interregional transfers contribute to urban primacy in sub-Saharan Africa?" Louvain-la-Neuve, Belgium: Université catholique de Louvain, CORE *Discussion Paper* #2006/114.
- Arne Bigsten, Taye Mengistae, and Abebe Shimales, 2007 (March), "Mobility and earnings in Ethiopia's urban labor markets: 1994-2004," Washington DC: World Bank Research Working Paper 4168.
- Martin Ravallion, Shaohua Chem, and Prem Sangraula, 2007 (April), "New evidence on the urbanization of global poverty," Washington, DC: World Bank Policy Research Working Paper 4199.*
- S. Chandrasekhar and Abhiroop Mukhopadhyay, "Multidimensions of urban poverty: evidence from India," Mumbai: Indira Gandhi Institute of Development Research, unpublished ms.
- Sandra Poncet, 2006, "Provincial dynamics in China: borders, costs and economic motivations," Regional Science & Urban Economics 36: 385-398.
- Yuting Liu, Shenjing He, and Fulong Wu, 2008, "Urban pauperization under China's social exclusion: a case study of Nanjing," *Journal of Urban Affairs* **30**(1): 21-36.
- Sylvie Démurger, Marc Gurgand, Li Shi, and Yue Ximing, 2008, "Migrants as second-class workers in China?
 A decomposition analysis," Écully, France: Centre National de la Recherche Scientifique GATE working paper w.p. 08-08.
- Term paper final version due

Sunday December 14 Final Exam 7:00 – 10:00 PM