

URBAN ECONOMICS – handout no. 1a

Read O’Sullivan ch. 1-3.

Questions:

1. Which of the three urban definitions used by the Census Bureau (urban area, metropolitan area, principal city) is closest to the economist’s definition of a city?
2. Economists define an urban area as an area with high population density relative to surrounding areas. Why?
3. Explain how (a) partying on Saturday nights and (b) rioting are two examples of self-reinforcing effects that generate extreme outcomes.
4. Give examples of positive and negative externalities on campus.
5. What is some evidence for the existence economies of scale on campus?
6. With IRTS, how do transportation costs affect city viability?
(O’Sullivan)
7. Is there any similarity between the first two localization economies, scale economies in intermediate inputs and labor-market economies?
(O’Sullivan)

URBAN ECONOMICS – handout no. 1b

Read Glaeser.

Questions:

1. What is the empirical evidence on localization and urbanization economies? (O'Sullivan and Glaeser)
2. How have changes in the costs of moving people and goods affected the reasons for cities? (Glaeser)
3. How are changes in communication technology likely to affect cities? (Glaeser)
4. What is the single most important congestion cost in cities? (Glaeser)

URBAN ECONOMICS – handout no. 2

Readings: McDonald and McMillen, ch. 5 (Land Rent and Land Use);
O'Sullivan ch. 6 and pp. 153-160.

Questions:

1. In Ricardo's theory of land rent, why must the marginal land type earn zero rent (assuming not all of it is rented)?
2. Why does an increase in price p or a decrease in marginal cost c raise a firm's bid-rent curve in parallel?
3. Why does a reduction in transportation cost per mile, t , flatten a firm's bid-rent function without changing the intercept?
4. Why does an increase in output per acre, Q^* , raise the intercept of a firm's bid-rent function and make the function steeper?
5. The textbook gives a reason why bid-rent functions are probably convex. What is this reason? Can you think of any forces that might weaken this effect?
6. How does the household bid-rent function depend on the number of children?
7. How does it depend on household income? Can this be explained in terms of income and substitution effects?
8. McDonald presents a model with 3 concentric rings: commercial, manufacturing, and residential. What complications are missing from the model that might change its conclusions?
9. Why is the gradient of population density an increasing function of city age and a declining function of city population?

URBAN ECONOMICS – handout no. 3

Readings: O’Sullivan pp. 153-160.

Questions:

1. Is the open-city model most accurate in the short or long run? What assumptions make this true?
2. When a city’s export price rises, why does the residential sector become denser? What changes would we expect in dwelling types?
3. When a streetcar is introduced, what initially happens to the household bid-rent function? How does this affect the CBD-SRD border (before general equilibrium effects are taken into account)? After taking account of general equilibrium effects, what happens to the rental gradient (rent as a function from city center) – must rent be higher everywhere?
4. What is the partial equilibrium effect of a tax on residential buildings on the household bid-rent curve? In general equilibrium, does the tax raise or lower the wage in the city? Why?

URBAN ECONOMICS – handout no. 4

Readings: O’Sullivan ch. 7 excluding pp. 153-160; Mieszkowski article.

Questions:

1. Can you think of any examples, from personal experience, of cities that are not monocentric?
2. Think of a histogram where the horizontal axis is distance from the city center and the vertical axis is population density. Suppose the population of a monocentric city grows. In which direction would the histogram have to grow for the percent of the population living in the central city to remain unchanged? Is this plausible? Accordingly, is a declining population gradient proof of the decline of the monocentric city?
3. How does the intracity truck affect rents in different parts of the CBD?
4. O’Sullivan says that deductible mortgages and FHA guarantees contributed to suburbanization since they increase demand for housing, which is cheaper in the suburbs. Is there anything wrong with this argument? Can you offer another reason for these programs to encourage suburbanization?

URBAN ECONOMICS – handout no. 5

Readings: O'Sullivan ch. 15 and ch. 8 (excluding pp. 173-177)

1. Is education a local public good?
2. What, if anything, is wrong with the median voter model's assumptions?
3. Which assumptions of the Tiebout model seem unduly strong?
4. Figure 13-8 in O'Sullivan (p. 341) indicates that racial segregation is increasing in the size of the metropolitan area. Why might this be?
5. Based on O'Sullivan's Figures 13-7 (p. 340) and 13-9 (p. 343), how does the pattern of educational segregation differ from the pattern of racial segregation?

URBAN ECONOMICS – handout no. 6

Readings: O'Sullivan ch. 14

Questions:

1. Schiller (O'Sullivan p. 360) finds that the quality of education received by black central-city residents is about the same as that received by white HS dropouts. What does this imply about central-city schools? E.g., does it imply that they don't teach as well?
2. O'Sullivan (p. 360) also reports that scores on standardized tests tend to be very low in high-poverty urban school districts. Does this show conclusively that schools are worse in such districts?
3. Orfield (O'Sullivan p. 360) finds that in the Gautreaux program in Chicago, in which inner city families are given the option of moving to subsidized housing in the suburbs, the children of those who move have better educational outcomes (fewer HS dropouts and more college graduates). Meldrum and Eaton find that black students in integrated schools have much higher test scores than black students in segregated schools. Do these studies show conclusively that poor educational outcomes of blacks in segregated inner-city schools are due to the schools and not to the home environment?
4. (Spatial Mismatch) Rafael 1998 (O'Sullivan pp. 357-8): in the San Francisco CMSA in the 1980s, employment increased by 20% near white neighborhoods but by only 2% near black neighborhoods. Assume this is a widespread phenomenon. Why might this be occurring, and how might it be stopped?
5. Which solution to the underclass problem, dispersion of the underclass population or development of inner cities, seems the most likely to succeed and why?
6. How does Phelps's theory of job market discrimination respond to Becker? Can you propose any other theories of discrimination that stand up to Becker's critique?
7. What do you think has caused the increase in the proportion of female-headed households?
8. Suppose that when the cash value of in-kind transfers (food stamps, public housing, Medicaid) is included in poverty, we find that the poverty rate has dropped to 1%. What would make you suspicious of this result, if anything?
9. What do you think should be done to address the poverty problem? Is workfare (as in the 1996 reform act) going to work?

URBAN ECONOMICS – handout no. 7

Readings: O’Sullivan ch. 15.

1. In studies of the educational production function, achievement is often defined as the *change* in test score of particular child over given (e.g., 1 year) period. Why use the change and not the level?
2. O’Sullivan argues that the results in the Coleman report are due to statistical errors: if you enter school inputs in the regression before entering home variables, school inputs do appear to have an effect. Does this by itself establish a causal role for school inputs?
3. O’Sullivan reports that a teacher’s educational level does not affect her students’ achievement. Does this mean that a high school dropout would be an effective teacher?
4. Card and Krueger regress statewide wages on statewide spending per pupil and find that the elasticity is about 0.15, meaning that a 10% difference in spending is associated with a 1.5% difference in wages. This implies that raising spending by 10% will raise wages by 1.5% in the long run. Is this interpretation correct?
5. Neal 1997 found that urban minority students who attend Catholic high schools have higher graduation rates than those who attend public schools. Does this imply that Catholic high schools are more effective?
6. Can you think of any justification for not requiring equal spending per pupil among school districts?
7. Urban schools tend not to benefit from spending equalization programs. Why?
8. What are the pros and cons of a voucher system?

URBAN ECONOMICS – handout no. 8

Readings: O'Sullivan ch. 16; Freeman article.

Questions:

1. Freeman argues that if the incarceration rate had not risen from 1977 to 1992, the crime rate would have skyrocketed. Essentially, he adds the crimes that would be committed by the additional prisoners to the actual crime rate, assuming 10 crimes/year for the prisoners. Are there any problems with this approach?
2. Freeman attributes the increase in index crimes and victimization rates partly to the increase in illegal drug demand. What is the main problem with this claim, and what is one response to it?
3. Reynolds estimated a crime cost of \$2,331 per household in 1983 (= \$3,815 in 1998 dollars). The biggest category was business fraud (\$600/household in 1983 dollars). Business fraud includes bribes and kickbacks and the fencing of stolen property. Another crime cost that Reynolds includes in his overall figure is the opportunity cost of prison time. Should all of these be included in the costs of crime? Why or why not?
4. Grogger (1994, cited in Freeman p. 409) estimates a supply elasticity of crime with respect to legitimate sector wages of 1 for young men. So the recent drop in earnings of the less skilled would have led to a 23% increase in crimes committed from the mid-1970s to the late 1980s, which is comparable to the 18% increase in the index-crime arrest rate. Can this explain the increase in criminal propensity that Freeman estimates?
5. O'Sullivan cites an estimate that the elasticity of the property crime rate with respect to the probability of arrest is about -0.5 : a 10% increase in arrest ratio lowers number of crimes by about 5%. Is there any problem with interpreting this in causal terms?
6. Wilson (1975), cited in O'Sullivan (p. 424), reports that 25-67% of property crimes are committed by drug addicts. O'Sullivan cautions that it is not clear how many of these crimes were committed solely to support drug habits. What are some other stories that could explain Wilson's finding?

URBAN ECONOMICS – handout no. 9

Readings: O’Sullivan ch. 17

Questions:

1. What is the hedonic approach? What assumptions does it make that may be too strong?
2. Use the filtering model to describe the effects of program to build low income housing when there are 3 housing types: low, medium, and high.
3. O’Sullivan gives a model where the annual cost of owning a rental unit is $C_r = V*(i_r + d_r + m_r)$ where V is the market value, i_r is the interest rate, d_r is the depreciation rate, and m_r is the maintenance rate. The annual cost of owning an identical unit and living in it is $C_o = V*(i_o + d_o + m_o)$ where i_o , d_o , and m_o are the interest rate, depreciation rate, and maintenance cost rate for owner-occupied housing. A household owns if $C_o < C_r$ and rents otherwise. What is left out of this model, other than taxes?
4. Landlords and home owners can both deduct mortgage interest payments from their income tax. Why then do we say that the mortgage interest deduction creates a bias towards home ownership?

URBAN ECONOMICS – handout no. 10

Readings: O’Sullivan ch. 18; Arnott article in reader.

Questions:

1. O’Sullivan reports that in 1991, 28% of households were “cost-burdened”: they payed over 30% of their income for housing expenses. What is wrong with this measure?
2. O’Sullivan claims that one reason housing projects have high crime rates is their physical structure: clusters of dense, high rise apartment buildings. What is it about this physical structure that might encourage crime?
3. One of the rules for rent certificates is that the actual rent cannot exceed the “fair market rent” for a standard low income dwelling. Can you think of any rationale for this restriction?
4. Taking as given that a particular city has rent control, are the practices of ‘key money’ and ‘finders fees’ in that city efficient or inefficient?
5. O’Sullivan states that redistribution should be left to the federal government. Why?

URBAN ECONOMICS – handout no. 11

Readings: O’Sullivan ch. 19.

Questions:

1. O’Sullivan states that education creates positive externalities in the workplace and through voting. What are some other externalities created by education? Aside from externalities, are there any other reasons that we might not expect every child to get the right amount of education in a fully private school system?
2. The FBI typically has jurisdiction only over crimes that involve crossing state borders, while state and local police deal with intrastate crime. Why might this be efficient?
3. Why do you think local governments find it optimal to rely more on property taxes than on income and sales taxes?
4. Under Tiebout, the property tax is not progressive. The wealthy simply secede from the poor and form their own community with lower property tax rates. What real-world forces limit this tendency, if any?

URBAN ECONOMICS – handout no. 12

Readings: O'Sullivan ch. 11-12.

Questions:

1. The private car is used by 83% of commuters. Why might mass transit still be an important issue?
2. O'Sullivan's preferred policy for dealing with congestion is a congestion tax. Most transportation economists agree with him and many have made their views known to policymakers. Yet congestion taxes are rarely used. Which political and economic considerations argue against congestion taxes?
3. What is one advantage of a parking tax that a pure congestion tax does not have?
4. O'Sullivan argues that a transit subsidy may lead to excessive transit ridership. Under what circumstances would a small transit subsidy fail to improve efficiency?