URBAN ECONOMICS TOPICS: SEGREGATION, GENTRIFICATION, SCHOOL CHOICE, AND INEQUALITY

Samantha Snyder
SHaPE Brownbag Seminar
Purdue University
November 25, 2008
Outline

- Overview of some urban economic topics
- Segregation and gentrification
- School choice provision
- Discussion of a school choice simulation
- Preliminary equilibrium model of school vouchers
- Possible cross effects of neighborhood change and school choice
Urban Economics

- Urban Development (and Redevelopment)
- Land Use
- Transportation
- Problems
  - Household Sorting
  - Poverty
  - Education
  - Crime
- Housing
- Government
Segregation

- Racial and economic
- Spatial mismatch hypothesis
- White flight
- Persistent poverty
  - Peer effects
  - Antisocial behavior
  - Spillovers
    - Can anything positive be said for segregation?
- Policy or lack of policy
  - Fiscal feasibility
Gentrification

- ‘Recent’ phenomenon of repopulation of urban centers by higher income, non-minority residents
- Results in higher rents, property values, property tax revenues
- Urban renewal and anti-blight policies
- Reduces segregation
- Increases inequality?
School Choice

- Response to failing public schools
- Voucher programs, magnet schools, charter schools, district/state choice, lotteries
- Voucher pros: failing schools lose students and are forced to improve due to competitive forces, increases accessibility to private education for low income families
- Voucher cons: decrease funding in schools that are already struggling, not well-targeted so students who leave don’t fit profile of children in ‘need’
Vouchers

- Are certain types of households more likely to use vouchers?
- Are they the households that choice policy is hoping to target?
- How can we measure the consequences of enacting a voucher program?
- Unobservable variables potentially play a large role in predicting program participation.
Estimate model of public school choice

Use factor analysis to uncover latent variables relating to student and parent attitudes towards education

Predict private school enrollment

Simulate effects of a voucher program that increases private school enrollment

Examines impact of program on moving and staying population
Lankford and Wyckoff

- Want to know household characteristics that are difficult to measure
- Use measureable variables like visits to museums or libraries to get information on parental and student interest and involvement in education
- Latent variables as constructed add explanatory power to the probit model estimating probability of enrolling in private school
- Examine mean probability of private school enrollment for high and low levels of explanatory variables
<table>
<thead>
<tr>
<th>Variables</th>
<th>Probit Estimates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Income</td>
<td>0.365 (11.258)</td>
</tr>
<tr>
<td>College Education</td>
<td>0.296 (5.392)</td>
</tr>
<tr>
<td>High School Education</td>
<td>0.549 (4.019)</td>
</tr>
<tr>
<td>Black</td>
<td>-0.335 (-4.325)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-0.660 (-8.855)</td>
</tr>
<tr>
<td>Factors</td>
<td></td>
</tr>
<tr>
<td>Student involvement and interest in own education</td>
<td>0.116 (3.316)</td>
</tr>
<tr>
<td>General intellectual interest of student and parent(s)</td>
<td>0.192 (4.279)</td>
</tr>
<tr>
<td>Parental involvement and interest in child’s education</td>
<td>0.085 (2.094)</td>
</tr>
</tbody>
</table>
Simulate increase in private school enrollment from 25% to 35%

Examine public school population characteristics before and after program

Examine characteristics of ‘movers’

Examine population characteristics for schools originally at the bottom of the distribution

Also important to consider economies of scale in education provision

- Private school enrollment growing – lower costs per student
- Public school enrollment declining – higher cost per student
<table>
<thead>
<tr>
<th>Student, Parent and Teacher Survey Question</th>
<th>Before Voucher</th>
<th>After Voucher</th>
<th>Movers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Income</td>
<td>32,899</td>
<td>30,814</td>
<td>46,450</td>
</tr>
<tr>
<td>Proportion of Parents with College Education</td>
<td>0.234</td>
<td>0.210</td>
<td>0.388</td>
</tr>
<tr>
<td>Proportion of Students who are Black</td>
<td>0.260</td>
<td>0.279</td>
<td>0.139</td>
</tr>
<tr>
<td>Rarely Complete HW</td>
<td>0.324</td>
<td>0.336</td>
<td>0.244</td>
</tr>
<tr>
<td>Participation in PTO</td>
<td>0.248</td>
<td>0.234</td>
<td>0.338</td>
</tr>
<tr>
<td>Parent Volunteers</td>
<td>0.180</td>
<td>0.169</td>
<td>0.254</td>
</tr>
<tr>
<td>Parents Expect College</td>
<td>0.607</td>
<td>0.590</td>
<td>0.716</td>
</tr>
</tbody>
</table>
Supply and Demand Model
Consideration of Gentrification and School Choice

- Gentrification and school choice both have their pros and cons
- Historically, both inner city neighborhoods and schools have been characterized by high degrees of racial and economic segregation
  - Poor employment outcomes
  - Poor educational outcomes
- One of the important positive effects of gentrification is increased diversity in inner city neighborhoods...and you would think schools as well!
Consideration of Gentrification and School Choice

- Before school choice programs, and within segregated areas, local school demographics likely matched neighborhood population demographics.
  - This has important implications for peer effects and reinforcing positive or negative spillovers both at school and in the neighborhood.
- With gentrification (but without school choice) it would be expected that with increased neighborhood diversity, there would be increased diversity at the local school.
  - Again, consideration of peer effects are important.
  - Likely beneficial effects to historic populations.
When school choice programs also play a role, the link between neighborhood characteristics and school characteristics can be altered or broken:
- Gentrifying populations do not educate their children at the local school.
- Highly motivated families in the historic population also remove their children, with barriers to alternative education now reduced.
- Children left behind face even more polarized conditions.

How are peer groups determined? School or neighborhood? What if these are no longer the same?

Do these considerations work to temper the positive effects often attributed to gentrification?
Consideration of Gentrification and School Choice

- How can we tell when gentrification is occurring?
  - Changes in housing prices/rents, increases in home renovations, increases in vacant lot development, demographic changes...is it okay to use media sources to identify gentrification?

- How can we tell when school choice is occurring?
  - It is easy to know when it is available...how can we tell if it is being used, and by whom?
Linking these ideas back to the distinction between segregation and inequality, if the concurrence of gentrification and school choice decreases neighborhood segregation but increases educational inequality, how can policy address this?

What are the impacts on educational and lifetime outcomes on students educated in the ‘left behind’ schools?

- Does it matter whether or not they live in a gentrified neighborhood? Do school peer effects dominate? Neighborhood effects?