# Charter School Entry and Local Teacher Labor Markets

Lucy C. Sorensen, Stephen B. Holt



UNIVERSITY AT ALBANY State University of New York

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- Recently, North Carolina removed the cap on the number of charters allowed in the state and relaxed other regulations.

# Research Question

How will the resulting growth impact teacher mobility at traditional public schools?

 Data from North Carolina Education Research Data Center (NCERDC)

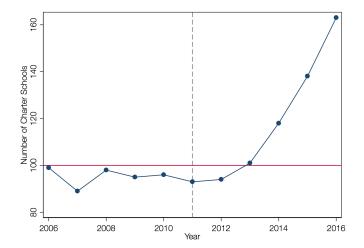
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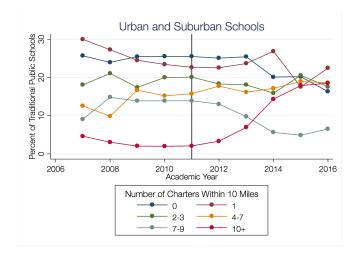
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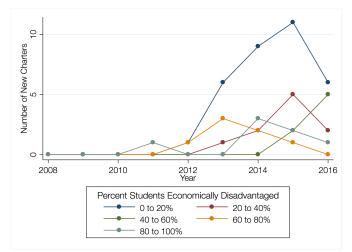
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- Restrict sample to schools that contain at least one grade level between 3 and 8



# Geographic concentration of charters, by year





# **Empirical strategy**

$$Y_{sdt} = \alpha_0 + \alpha_1 CharterPenetration_{s,t-1} + \theta_s + \delta_t + \gamma_{dt} + \mu_{ist}$$

- $\bullet$   $Y_{sdt}$  represents school-level average teacher characteristics
- CharterPenetration is a set of indicators for the number of charters within 10 miles the prior year
- $\theta_s$ ,  $\delta_t$ , and  $\gamma_{dt}$  represent school, year, district-specific time FE to account for latent school, year, and district trends
- $\alpha_1$  is our parameter of interest
- Robust standard errors clustered at the school-level

|  | (1)      | (2)        | (3)        |
|--|----------|------------|------------|
|  | Turnover | Experience | Teacher MA |
|  |          |            |            |
| 1 charter in 10 miles  | 0.05***  | 0.25       | -0.01      |
|  | (0.02)   | (0.34)     | (0.02)     |
| 2-3 charters in 10 miles   | 0.06***  | 0.72*      | 0.02       |
|  | (0.02)   | (0.42)     | (0.02)     |
| 4-6 charters in 10 miles   | 0.06**   | 0.91*      | 0.04       |
|  | (0.03)   | (0.49)     | (0.03)     |
| 7-9 charters in 10 miles   | 0.01     | 1.10**     | 0.07**     |
|  | (0.03)   | (0.55)     | (0.03)     |
| 10+ charters in 10 miles   | -0.01    | 0.74       | 0.06*      |
|  | (0.03)   | (0.61)     | (0.03)     |
| Observations   | 8,497    | 9,313      | 9,305      |
| R-squared  | 0.79     | 0.96       | 0.88       |
| All FE   | YES      | YES        | YES        |
| distribution and a state of the |          |            |            |

Note:

\*\*\* p<0.01, \*\* p<0.05, \* p<0.10.

# Effect of charter sector size on High-FRL TPS teachers

|                   | (1)       | (2)         | (3)        | (4)        |
|-------------------|-----------|-------------|------------|------------|
|                   | Turnover  | Teacher V-A | Experience | Teacher MA |
| Charter N         | -0.008*** | -0.002*     | 0.034      | -0.001     |
|                   | (0.003)   | (0.001)     | (0.048)    | (0.003)    |
| Low-FRL Charter N | 0.004     | -0.001      | -0.166***  | -0.005*    |
|                   | (0.003)   | (0.001)     | (0.057)    | (0.003)    |
| Observations      | 7,345     | 7,345       | 7,336      | 7,326      |
| R-squared         | 0.809     | 0.752       | 0.961      | 0.889      |
| All FE            | YES       | YES         | YES        | YES        |

Note: \*\*\* p<0.01, \*\* p<0.05, \* p<0.10.

Conclusion

# Conclusions

• Charter sector has grown and the nature of entering charters is different in important ways

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- Both the nature of schools serving targeted populations and number of alternatives nearby changes teacher labor market decisions
- Overall, large nearby charter sector seems to draw novice teachers from TPS
- For economically disadvantaged schools, there seems to be an impact on teacher effectiveness as well
- The entry of charter schools serving more economically advantaged students seems to draw more experienced teachers from disadvantaged schools

• Deeper exploration of new equilibrium in distribution of teachers across charter and TPS along different dimensions

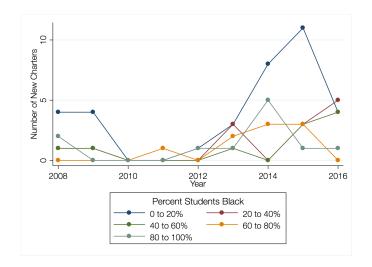
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- Consider access to quality instruction implications

Conclusion

Thank You! Comments welcome. Contact: sbholt@albany.edu

Conclusion



|                             | (1)          | (2)            | (3)      |  |  |  |  |
|-----------------------------|--------------|----------------|----------|--|--|--|--|
|                             | Movers       | Movers         | Stayers  |  |  |  |  |
| Characteristics             | (To Charter) | (To Other TPS) | (At TPS) |  |  |  |  |
| Pre-Removal of Charter Cap  |              |                |          |  |  |  |  |
| Value-Added (SDs)           | -0.037       | -0.018         | -0.001   |  |  |  |  |
|                             | (0.143)      | (0.146)        | (0.153)  |  |  |  |  |
| Years of Experience         | 10.339       | 9.433          | 11.859   |  |  |  |  |
|                             | (10.084)     | (8.427)        | (8.987)  |  |  |  |  |
| Lateral/Provisional License | 0.148        | 0.086          | 0.065    |  |  |  |  |
| Advanced Degree             | 0.272        | 0.286          | 0.304    |  |  |  |  |
| Post-Removal of Charter Cap |              |                |          |  |  |  |  |
| Value-Added (SDs)           | 0.002        | 0.006          | 0.029    |  |  |  |  |
|                             | (0.119)      | (0.133)        | (0.138)  |  |  |  |  |
| Years of Experience         | 8.569        | 9.302          | 12.216   |  |  |  |  |
|                             | (6.710)      | (7.316)        | (8.319)  |  |  |  |  |
| Lateral/Provisional License | 0.068        | 0.062          | 0.048    |  |  |  |  |
| Advanced Degree             | 0.319        | 0.336          | 0.353    |  |  |  |  |