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Reading Notes: Do Better School Matters?

The paper discusses an old topic of measuring schools’ quality but taking a very interesting approach in assessing the value of high-quality schools. Instead of using earnings or test scores to show high-quality education’s value, the author uses house prices along the neighborhood boundary to estimate people’s perceived value of high-quality education. In this way, we are less worried about the fact that high quality schools tend to be located in better neighborhoods. This is because houses located near that boundary will be more or less similar after controlling for houses characteristics, but school assignment is different. Using this advantage, the paper uses data collected from three counties in Massachusetts and finds that there is a significant relationship between the education quality (measured in elementary school test score) and the housing prices among those located along the boundaries within certain miles. With this summary in mind, for the rest of the notes, I will first describe the data used in this paper. Next, I will discuss the methodology and the results. Lastly, I will provide my discussion on this paper.

The data used in this paper includes all housing sales data from 1993 to 1995 of three counties, Middlesex, Essex, and Norfolk, in Massachusetts. The sample was chosen because of counties' small district size and population homogeneity. Thus, the samples here actually provide an additional control for some possible unobserved factors. The author further limits the study to single-family houses for compatibility reasons and sorts each house to different district boundaries based on proximity, with each house assigned only to the nearest boundary. If the boundary is not clearly defined by the county, houses within these school districts would be excluded from the data. Lastly, school districts that allow flexible school choices are also excluded as the boundary would not provide controls previously mentioned. In the end, we have left with a sample covering 39 school districts.

With data cleaned and samples clearly defined, I will next discuss the paper’s method and results part. The method is very straightforward: simple OLS between natural log of housing prices and house’s characteristics, a dummy indicating whether the house is located within a certain distance from the boundary, and each district school’s average test score. The results of this regression under different distances from the boundary are all very significant. In fact, as we move closer and closer to the boundary, the results become more significant and the coefficient of test score to log house price is also bigger. These results show that parents are willing to pay more to simply locate on the other side of the boundary and get their children to enroll in a school with higher education quality.

Overall, I believe this is a very good paper using a brilliant method. However, I wonder if the results can be generalized as parents living in Boston, Massachusetts may value education more on education. As we all know, many Ivy league colleges, including Harvard, MIT, and Boston College, are all located around that area so parents there would probably value the quality of education more. Thus, instead of measuring the real value of high-quality education, the paper could be now measuring how Massachusetts parents value education as reflected in housing prices. The fact that the overall houses prices coefficient is bigger than housing prices within a certain distance from the boundary in the results table shows some of my concerns. However, since the method is highly replicable, other researchers can also re-run the research using a different set of data from a different state, or even go national. These replications could provide strong additional supports for the conclusion of this paper.