

## Reading Notes 3

Rulin Wang

School quality is a major concern in the United States. Parents, educators and policymakers all want to improve school quality. Normally, parents are willing to pay more money for better schools. This paper analyzed the impact of school quality on surrounding housing prices. Authors found that parents are willing to pay 2.1 percent more for a 5 percent increase in test scores.

The impact of school quality on housing prices is not a new topic, and there have been many previous studies on this aspect. School quality is an abstract concept, generally reflected by average test scores. In the regression analysis, the logarithm of house prices was taken as the dependent variable. The core independent variable is the sum of average reading and math scores of fourth-graders in three years. It is worth noting that the house price is influenced by many other factors, such as bedroom, living room, bedroom interior area, building age, so authors put them as covariates. In addition, authors also added the square of housing age and lot size as independent variables. The innovation of this paper is that authors compared houses in the opposite side of attendance district boundaries, which are the geographic lines that determine which school a child attends within a school district. Authors argued that previous studies tended to overstate the effect of school quality on house prices because they ignored the effects of neighborhoods, taxes and school costs. The introduction of attendance district boundaries in this paper solved this problem well because houses are close to each other. The data of this paper were mainly selected from Middlesex, Essex, and Norfolk Counties in Massachusetts between 1993 and 1995. Massachusetts was chosen because its school districts are relative small, leading to homogeneity of populations within districts, which greatly improves the convenience of research. Elementary schools were selected for the study because of the diversity of elementary schools in the neighborhood, which facilitates comparative research.

In the first half of this paper, authors analyzed the influence of various factors on housing prices in the region. In the second half, authors tested the sensitivity of results and further discussed on attendance district boundaries. Authors found: (1) Bedrooms, bathrooms lot size and the square footage of the house are positively correlated with the house price; (2) The age of the building and the distance from the center city are both negatively related to the house price; (3) Parents are

willing to pay 2.1 percent more for a 5 percent increase in test scores. The effect of school quality on house prices is overestimated if neighborhoods characters are ignored; (4) Regression results are robust to different tests of specification and omitted variable biases.

In conclusion, this paper analyzed the impact of school quality on housing prices. The results show that parents do value school quality and are willing to pay more for it. In my opinion, this is a good econometric paper. First, by introducing the concept of attendance district boundaries, authors controlled some easily omitted variables. In addition, authors made sensitivity tests, which further increased the reliability of the study. But this paper also has limitations. First, the method of attendance district boundaries seem to apply only to specific small areas. When surveying middle schools or more complex cities, variables need to be controlled in other ways. Moreover, the quality of elementary schools is not always reflected in test results. Scores may be only one aspect of quality. Some other factors, such as the number of teachers and school facilities also affect the quality of the elementary school.