Reading Notes on *Does Better Schools Matter? Parental Valuation of Elementary Education*

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Parents have spent plenty of time and resources looking for a good school for their children since they want their children to win at the starting line and have a better future. Most parents believe school districts with higher house prices have better education quality and are willing to move to those school districts. Although previous researchers studied parents' valuation on school quality by measuring their willingness to pay for houses in a good school district, some variables that are not fully controlled, like neighborhood characteristics, might lead to biased results. The researcher Sandra E. Black has noticed the omitted variable bias and then put forward a new model to study the relationship between house prices and school quality.

The author has adopted the data of 22,679 single-family residences in 39 school districts in Massachusetts and excluded the intradistrict school choice. Then she uses the fourth grade Massachusetts Educational Assessment Program (MEAP) test score for her emphases of the study. The advantage is that not only the confounding effect of relevant neighborhood variables can be reduced as much as possible, but the test score has been proved proper for measuring the school quality.

Although the author finds that the results are consistent by comparing the previous hedonic housing price regression and the new model, which includes the relevant house level and neighborhood characteristics, unmeasured neighborhood characteristics problems remain unsolved. Then the author includes the boundary fixed effects and restricts the distance from the boundary in the new model. She finds that parents are willing to pay 2.1 percent more on houses for a 5 percent increase in elementary school test scores. Results have shown that the value of the school quality has been overestimated without including the neighborhood characteristics variable. The coefficient on the elementary school test score in the original model is twice that of the new model. In other words, the author has proved that omitting the neighborhood characteristics will lead to biased predictions.

Sandra E. Black also tests the sensitivity of results through several specification tests. Since she believes the neighborhood division might influence the opposite sides of attendance district

boundaries, she excludes the boundaries like tracks and finds that there is no great change in the coefficient of test scores. Besides, she has used the artificial "control" group and boundary dummies to test if better neighborhoods will be related to good test scores. However, the results show that this hypothesis is invalid. Moreover, she tests the assumption that the unobservable differences in house quality will contribute to the difference in test scores by looking at the observable house characteristics such as the lot size. She concludes that the unobservable variables are not statistically significant. In the end, she studies the influence of the house with different numbers of bedrooms by including the interaction of the test score and the dummy variables of the number of bedrooms. It turns out that the results are irrelevant with the unobserved differences in house quality.

In conclusion, the author has noticed the omitted variable biases in the previous research and conducted a series of specification tests and sensitivity tests to analyze parents' emphasis on school quality. She makes a robust conclusion that parents are willing to pay more on houses for better school quality. However, this research paper has one limitation. Since the test score also depends on students' intelligence levels, this variable should be considered if the test score is used to measure school quality.