



Federal Housing Assistance, Residential Relocation, and Educational Opportunities: Evidence from Baltimore

Helen F. Ladd; Jens Ludwig

The American Economic Review, Vol. 87, No. 2, Papers and Proceedings of the Hundred and Fourth Annual Meeting of the American Economic Association. (May, 1997), pp. 272-277.

Stable URL:

<http://links.jstor.org/sici?sici=0002-8282%28199705%2987%3A2%3C272%3AFHARRA%3E2.0.CO%3B2-X>

The American Economic Review is currently published by American Economic Association.

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at <http://www.jstor.org/about/terms.html>. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at <http://www.jstor.org/journals/aea.html>.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is an independent not-for-profit organization dedicated to and preserving a digital archive of scholarly journals. For more information regarding JSTOR, please contact support@jstor.org.

Federal Housing Assistance, Residential Relocation, and Educational Opportunities: Evidence from Baltimore

By HELEN F. LADD AND JENS LUDWIG*

A central objective of the Clinton Administration's housing policy is to provide residents in public housing with greater choices for moving to private-market housing, particularly outside of poor urban areas (John Goering et al., 1996). Through its primary rental-assistance program (Section 8), the Department of Housing and Urban Development (HUD) now assists more households to live in private housing with vouchers or certificates than currently live in public housing (Jason De Parle, 1996).

HUD and others hope that moving families out of public housing projects will, among other things, improve the educational opportunities and outcomes for children, an important outcome if these children are to escape from poverty as adults. Unlike school choice or voucher programs for education, residential relocation could potentially change all of the factors that influence children's educational outcomes: schools, household environments, and neighborhoods (Charles Clotfelter, 1993). However, improved outcomes are most likely to occur if low-income families move to neighborhoods characterized by low poverty and good schools.

Although programs to move disadvantaged families into the private housing market generally receive support from both conservatives and liberals, more controversial are programs

that move such families to racially or economically diverse neighborhoods. Evaluations of the Gautreaux program in Chicago, a court-ordered remedy that relocated families from public housing projects in Chicago's south and west sides to other parts of Chicago and its suburbs, indicated that moving families to more racially diverse suburban communities enhanced not only the employment opportunities of parents, but also the educational opportunities and outcomes of participating children (James Rosenbaum, 1995). The apparently positive results for the Gautreaux program, combined with some limitations of the Gautreaux evaluations, induced HUD to propose a more extensive experiment to explore some of the same issues. Its "Moving to Opportunity" (MTO) demonstration currently is operating in five U.S. cities.¹

The MTO program randomly assigns families living in public or Section 8 project-based housing in targeted, high-poverty urban census tracts into three groups: experimental-group families who receive Section 8 vouchers or certificates that require them to move to census tracts with poverty rates less than 10 percent; comparison-group families who receive Section 8 housing assistance with no constraints on the new location; and control-group families who receive no rental assistance. The experimental families also receive assistance with their housing search and additional counseling services from a local nonprofit agency.

The MTO program will improve educational outcomes for the children in the experimental and comparison groups *provided* families successfully relocate, children accompany their parents to the new neighborhoods, the educational opportunities experienced by children are higher in their new environments,

* Sanford Institute of Public Policy, Duke University, Box 90245, Durham, NC 27708, and Georgetown Graduate Public Policy Program, Georgetown University, 3600 N Street, N.W., Washington, DC 20007, respectively. Funding was provided by the U.S. Department of Housing and Urban Development, the Spencer Foundation, and the Mellon Foundation (Ludwig). Thanks to Laura Hodges, Kerry Whitacre, Rohit Burman, Juan Carlos Mendoza, Matt Kazmierczak, James Peterson, Baltimore Community Assistance Network, Abt, and the Maryland Department of Education for assistance. Thanks to Ruth Crystal, John Goering, Deborah Reed, and the CSWEP committee for extremely helpful comments.

¹ The five cities are Baltimore, Boston, Chicago, Los Angeles, and New York.

and MTO parents and children react to these changes in ways that translate into improved educational outcomes. Because none of these steps is assured, the effects of MTO on the educational outcomes of children are difficult to predict. The experimental design of the MTO demonstration provides an excellent opportunity to examine the potential effects of residential-relocation programs, and neighborhood effects more generally, on the educational outcomes of children.

This paper reports our preliminary analysis of these effects in Baltimore, MD. In particular, we focus on the relationship between the accessibility of affordable rental housing in the Baltimore area and changes in the educational opportunities of MTO children, as measured here by school characteristics.²

I. The Role of Market and Program Constraints

The data used in this paper include population and housing-stock characteristics for all census tracts within Maryland, taken from the 1990 census, together with school-level data from the Maryland Department of Education on student pass rates on statewide standardized reading and math tests, socioeconomic and racial composition of the student body, and student mobility. The MTO program objective for Baltimore is to relocate 143 families in the experimental group and 143 in the comparison group; the control group is likely to be somewhat smaller. For this paper, we have the new addresses for 90 percent of experimental-group relocators and 46 percent of relocators in the comparison group, and the names of the new schools attended by 35 experimental-group children and 28 control-group children.³

For the comparison group, the main constraint is the Section 8 standards. We estimate that about 30 percent of the housing units in the city of Baltimore are renter-occupied and affordable under Section 8 standards, versus

15 percent of units in the suburban parts of the Baltimore area.⁴ Given the transportation advantages and access to friends and family obtained by relocating within the city, together with the possibility of racial discrimination in the suburbs, we are not surprised to observe that 97 percent of comparison-group families chose to move to other parts of the city. This movement keeps these families in the lowest-income, predominantly African-American parts of the Baltimore area. Almost nine out of ten comparison-group families relocated to census tracts with poverty rates of 10 percent or more, and two out of five moved to tracts with rates of 30 percent or more.

The MTO requirement that experimental families live in areas of low poverty clearly increases the relative attractiveness of the suburbs relative to the city. We estimate that only 5.8 percent of the housing units in the city are renter-occupied, affordable under Section 8, and located in low-poverty areas, which is about half the rate of 11.8 percent in the suburbs. Moreover, almost four-fifths of all the affordable rental units in low-poverty tracts in the Baltimore area are located outside the city. Consistent with this information, our preliminary data show that, in contrast to 3 percent of the comparison group, 38 percent of the families in the experimental group who successfully relocated moved out of the city.

II. Quality of the Accessible Schools

Of primary interest is how the constraints imposed both by the rental-housing market and the program requirement of low-poverty census tracts affect the educational opportunities available to MTO children. Table 1 provides a first look at the characteristics of Baltimore-area public schools by four categories that are relevant for the MTO program. The categories include the 65 MTO baseline schools, attended by the children of MTO enrollees at the time they signed up; the 114 other public schools in the city of Baltimore,

² In future work we will explore the classroom experiences of MTO children using the results of follow-up survey data.

³ Because of the MTO design, these should be random samples of all experimental- and comparison-group families (Ladd and Ludwig, 1996).

⁴ The Baltimore suburbs are defined here as Anne Arundel, Baltimore, and Howard counties. For details on how we estimated affordability of rental housing, see Ladd and Ludwig (1996).

TABLE 1—STUDENT CHARACTERISTICS AND OUTCOMES IN MARYLAND PUBLIC SCHOOLS, 1995

Characteristic	MTO baseline	Rest of city	Suburbs	State
Percentage of students:				
Subsidized lunch	66.8	70.6	17.8	30.4
Absent >20 days	40.3	21.4	8.9	13.6
Drop-out rate	13.1	9.5	2.8	4.1
Percentage satisfactory:				
Reading	8.4	9.7	35.7	29.8
Math	16.2	17.2	54.8	45.2

Notes: Baltimore suburbs are defined as Anne Arundel, Baltimore, and Howard counties. Data from the Maryland Department of Education for 1995.

which represent the set available to most of the comparison-group children; the 328 schools in the Baltimore suburbs, some of which are available to the children in the experimental group; and for purposes of comparison, the 1,256 other Maryland public schools.

The first three rows show that the challenges facing city schools, whether MTO baseline or other schools, are much greater than those facing suburban schools. The city schools have much higher proportions of poor children (as proxied by participation in subsidized lunch programs) and children who are absent more than 20 days per year. MTO baseline and other Baltimore city public schools do not differ much with respect to drop-out rates and the percentage of students with “satisfactory” scores on the Maryland state reading and math assessment (henceforth “pass rates”). Not surprisingly, the largest differences occur between the city and suburban schools. The clearest conclusion to emerge from this table is that families who use the standard Section 8 program to move out of public housing to other parts of the city may experience only modest changes in the characteristics of their children’s schools.

Schools with higher average student outcomes are preferable to those with lower student outcomes to the extent that high-performing peers generate positive spillover

effects, an outcome that is plausible but not convincingly documented (Christopher Jencks and Susan Mayer, 1990; William Evans et al., 1992). Importantly, high average outcomes may largely reflect the socioeconomic backgrounds of a school’s students rather than the effectiveness of the school itself. For the purposes of measuring school effectiveness, we prefer to focus on each school’s value-added, that is, the contribution of the school to the learning of its students after adjusting for the effects of student characteristics and prior performance.

In the absence of longitudinal data at the student level, we rely on pseudo cohorts of students to estimate our value-added models. The dependent variable in each equation is the log of the odds of each school’s 5th-grade pass rate on the state reading or math test. Explanatory variables include several measures of a school’s student population, including socioeconomic characteristics and withdrawal rates. As a proxy for prior performance, we include pass rates for 3rd-graders in the same school in 1993; the groups of students will differ somewhat because of student mobility, which is particularly high in city schools (where withdrawal rates exceed 20 percent).⁵

By adding to this model dichotomous indicator variables for the affordability of the housing stock, we can examine the relative effectiveness of the public schools that are located in the census tracts that are most accessible to MTO comparison-group families. (In the absence of information about school catchment areas, we must assume that each school serves students in the census tract within which the school is located). To construct the accessibility measures we first rank the schools in the Baltimore area by the percentage of the housing units in the school’s census tract that are affordable and accessible under the Section 8 standards and then divide them into quartiles, which allows for a nonlinear relationship between rental housing and school quality. Schools in the lowest quartile

⁵ Alternative models produced results similar to those presented here. For further details on the value-added model and additional results, see Ladd and Ludwig (1996).

TABLE 2—SELECTED COEFFICIENT ESTIMATES FROM VALUE-ADDED REGRESSIONS FOR 5TH-GRADE READING AND MATH PASS RATES IN 1993 IN MARYLAND

Independent variable	Coefficients	
	Reading	Math
Quartile 1	base	base
Quartile 2	-0.11 (1.39)	-0.01 (0.12)
Quartile 3	-0.06 (0.66)	-0.08 (0.11)
Quartile 4	-0.38* (3.50)	-0.36* (2.89)
Rest of Maryland	0.75* (2.66)	0.67 (1.89)

Notes: Numbers in parentheses are *t* statistics. Quartiles are defined by percentage of affordable and accessible rental housing in the census tract in which the school is located. Quartile 1 is the lowest quartile. Cells contain coefficients estimated from a value-added model that includes student socioeconomic and mobility variables, along with each school's 3rd-grade pass rate in 1993.

* Statistically significant at the 5-percent level.

are those with the lowest proportion of housing units affordable to MTO families; these serve as our base category. A separate variable is included to indicate those schools in Maryland that are outside of the Baltimore area.

The results are presented in Table 2. The schools that are likely to be most accessible to families with Section 8 vouchers (i.e., are located within census tracts with the highest proportion of housing units that are rental and affordable) appear to be significantly less effective than the schools that are located in census tracts with less-affordable rental housing. The quartile-4 coefficients of -0.38 for reading and -0.36 for math translate into differences of 22 percent and 15 percent in pass rates in the most-accessible areas compared to the least-accessible areas.

Experimental-group families will be similarly constrained to apartments with rents below the Section 8 payment standards. However, the MTO requirement that such families move to census tracts with low poverty rates eliminates from consideration much of the housing in the Baltimore area. The questions of interest are whether housing-market con-

TABLE 3—SELECTED COEFFICIENT ESTIMATES FROM VALUE-ADDED REGRESSIONS FOR 5TH-GRADE READING AND MATH PASS RATES IN 1995

Independent variable	Coefficients	
	Reading	Math
Poverty >10 percent	-0.55* (4.56)	-0.48* (3.33)
Remaining schools:		
Quartile 1	base	base
Quartile 2	-0.18* (1.96)	-0.08 (0.67)
Quartile 3	-0.06 (0.67)	0.03 (0.24)
Quartile 4	0.00 (0.03)	-0.09 (0.75)
Rest of Maryland	0.08 (1.21)	0.004 (0.05)

Notes: Numbers in parentheses are *t* statistics. Quartiles are defined by the availability (percentage) of affordable housing for rent within low-poverty census tracts. Quartile 1 is the lowest quartile. Cells contain coefficients estimated from value-added models that include student socioeconomic and mobility variables, as well as each school's 3rd-grade pass rate in 1993.

* Statistically significant at the 5-percent level.

straints push experimental families into the least effective schools within the low-poverty areas of Baltimore, and whether these schools are in fact better than those found in areas with more poverty. In Table 3 we have constructed a separate category for all the schools located in census tracts in the Baltimore area with poverty rates of 10 percent or more and then have classified the remaining schools by quartiles based on the availability of affordable housing. Schools in low-poverty areas with the smallest proportions of affordable rental housing serve as the comparison group, and a separate indicator variable is included for Maryland schools outside of the Baltimore area.

The table shows that schools located in census tracts with poverty rates of at least 10 percent are on average among the least effective in the Baltimore area and the state of Maryland as a whole. Hence, constraining families to move to areas of low poverty clearly benefits children. The coefficients of -0.55 for reading and -0.48 for math translate into differences

of 46 percent and 22 percent in pass rates for students in high-poverty areas compared to low-poverty areas. However, within the set of low-poverty census tracts in the Baltimore area, we observe little relationship between the availability of affordable rental housing and school effectiveness.

Our preliminary analysis of the actual schools attended by 35 students in the experimental group and 28 students in the control group corroborates these conclusions. Based on the residuals from the value-added model, we conclude that the new schools for the experimental children are better than those attended by the control group. Specifically, the difference between the average residuals (transformed from the log-odds specification back to pass rates) for children in the experimental group are 3.82 percentage points above those for the control group in reading and 3.23 percentage points higher in math.⁶ By way of comparison, the average reading and math pass rates in the MTO baseline schools are equal to 8.4 percent and 16.2 percent, respectively.

III. Conclusions

The concept of using housing assistance to help public-housing residents move to private-market apartments appears to enjoy bipartisan support in Congress. One hope for such a program is that it will improve the educational opportunities of children currently living in areas of concentrated urban poverty and will thereby break the transmission of poverty from one generation to another.

Our analysis suggests that providing public-housing residents with Section 8 housing vouchers will not necessarily improve the educational opportunities of children in these families. The main reason is that most of the families who participate are likely to move to other parts of the city, where the schools are not much better than in the areas serving public housing projects.

⁶ These comparisons include information only for experimental-group families who successfully relocated. When we include the schools attended by children in experimental-group families who did not relocate, the experimental-school advantage decreases, but only slightly.

In contrast, when families are given Section 8 vouchers that can be used only in census tracts with low poverty rates, the educational opportunities for their children are likely to improve. This conclusion holds both when such opportunities are assessed in terms of average student outcomes and when they are assessed in terms of our value-added measure of school effectiveness. The program restriction that families live in low-poverty areas encourages many families to move to the suburbs and, for moves within the city, apparently helps them avoid the less-effective schools.

While a program requirement that actively promotes the economic desegregation of public-housing residents appears to be sufficient, and perhaps necessary, for improving the educational opportunities of children, it may pose several difficulties. Requiring families to relocate to low-poverty areas may reduce the attractiveness of the program to some participants, or may make successful relocation more difficult. Despite the guidance and support of a local nonprofit agency during the housing search, more families in the experimental group than in the comparison group either dropped out of MTO or were unable to locate housing within the maximum search period allowed under the program (40 percent vs. 29 percent) (Goering et al., 1996).⁷ Moreover, such a constraint raises the budgetary costs for counseling and other housing-search services and may also increase political costs as voters in low-poverty areas fear the influx of new, low-income residents. On a more optimistic note, while political opposition to MTO in the Baltimore suburbs served to limit the scope of HUD's demonstration at the beginning, political opposition at all five MTO sites has recently been fairly muted.

REFERENCES

- Clotfelter, Charles T. "The Private Life of Public Economics." *Southern Economic Journal*, April 1993, 59(4), pp. 579-96.

⁷ Both figures are far below the non-lease-up rate of 75 percent observed for Gautreaux families in Chicago (Goering et al., 1996).

- De Parle, Jason.** "Slamming the Door." *New York Times Magazine*, 20 October 1996, pp. 52-57+.
- Evans, William; Oates, Wallace and Schwab, Robert.** "Measuring Peer Group Effects: A Study of Teenage Behavior." *Journal of Political Economy*, October 1992, 100(5), pp. 966-91.
- Goering, John; Carnevale, Katherine and Teodoro, Manuel.** *Expanding housing choices for HUD-assisted families: Moving to opportunity*. Washington, DC: Department of Housing and Urban Development, 1996.
- Jencks, Christopher and Mayer, Susan E.** "The Social Consequences of Growing Up in a Poor Neighborhood," in Laurence Lynn and Michael McGeary, eds., *Inner-city poverty in the United States*. Washington, DC: National Academy Press, 1990, pp. 111-86.
- Ladd, Helen F. and Ludwig, Jens.** "Moving to Opportunity: Impact on Educational Opportunities in Baltimore." Unpublished manuscript prepared for the Annual Association for Public Policy Analysis and Management Research Conference, Pittsburgh, PA, 1996.
- Rosenbaum, James E.** "Changing the Geography of Opportunity by Expanding Residential Choice: Lessons from the Gautreaux Program." *Housing Policy Debate*, 1995, 6(1), pp. 231-69.

LINKED CITATIONS

- Page 1 of 1 -



You have printed the following article:

**Federal Housing Assistance, Residential Relocation, and Educational Opportunities:
Evidence from Baltimore**

Helen F. Ladd; Jens Ludwig

The American Economic Review, Vol. 87, No. 2, Papers and Proceedings of the Hundred and Fourth Annual Meeting of the American Economic Association. (May, 1997), pp. 272-277.

Stable URL:

<http://links.jstor.org/sici?sici=0002-8282%28199705%2987%3A2%3C272%3AFHARRA%3E2.0.CO%3B2-X>

This article references the following linked citations. If you are trying to access articles from an off-campus location, you may be required to first logon via your library web site to access JSTOR. Please visit your library's website or contact a librarian to learn about options for remote access to JSTOR.

References

The Private Life of Public Economics

Charles T. Clotfelter

Southern Economic Journal, Vol. 59, No. 4. (Apr., 1993), pp. 579-596.

Stable URL:

<http://links.jstor.org/sici?sici=0038-4038%28199304%2959%3A4%3C579%3ATPLOPE%3E2.0.CO%3B2-W>

Measuring Peer Group Effects: A Study of Teenage Behavior

William N. Evans; Wallace E. Oates; Robert M. Schwab

The Journal of Political Economy, Vol. 100, No. 5. (Oct., 1992), pp. 966-991.

Stable URL:

<http://links.jstor.org/sici?sici=0022-3808%28199210%29100%3A5%3C966%3AMPGEAS%3E2.0.CO%3B2-A>