Neighborhoods, Cities, and Economic Mobility

(draft)

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Although the literature on intergenerational economic mobility in the United States has advanced considerably over time, less progress has been made in explaining the mechanisms leading to the persistence of economic status across generations. Empirical research designed to explain similarities in economic status across generations has focused primary attention on characteristics of individuals or families. This article expands the focus beyond the individual and the family to consider features of communities and cities.

This focus on the spatial foundations of economic mobility in the United States is based on two basic claims (Sharkey and Faber 2014). The first claim is that systems of stratification are organized, in part, along spatial lines. This claim is uncontroversial. The spatial organization of American social, economic, and political life is reflected in zoning decisions, political districts, school catchment areas, siting of environmental hazards, the boundaries of police precincts, and the location decisions of public institutions and private firms. The second claim is that the spatial organization of America's stratification system affects the life chances, and the economic trajectories, of different segments of the population in ways that maintain, and reinforce, inequality. This claim has been the subject of more vigorous debate, and the empirical evidence that has been generated to support or refute this claim is the focus of this article.

The article is guided by three questions: 1) How do residential contexts affect prospects for mobility? 2) How do cities and metro areas affect economic mobility? 3) What are the implications for social policy?

How do residential contexts affect prospects for mobility?

Evidence from observational studies

Only a small number of studies have analyzed the relationship between childhood neighborhood conditions and adult economic outcomes, primarily because there are few datasets that follow sample members across multiple generations. Most of the observational studies that allow for cross-generational analysis draw on data from the Panel Study of Income Dynamics (PSID) and find an association between measures of neighborhood economic status during childhood and adult economic status, although the strength of the association varies widely depending on the methods used, the specific neighborhood measures considered in the analysis, the outcome under study, and the sub-populations examined. Studies conducted by Datcher (1982), Corcoran and Adams (1999), Corcoran et al. (1992), Holloway and Mulherin (2004), and Vartanian (1999) reported conditional associations between neighborhood economic status and adult outcomes related to employment and income. Aaronson (1997) and Vartanian and Buck (2005) exploited variation in childhood neighborhood conditions experienced by siblings within families and found significant effects of neighborhood economic status on adult educational and economic outcomes. However, Plotnick and Hoffman (1999) conducted a similar analysis with a sample of sisters in the PSID in order to study outcomes related to welfare receipt and fertility, and found null effects of childhood neighborhood conditions when using family fixed effects specifications.

Although few studies specifically focus on economic outcomes, a much larger literature examines how neighborhoods affect some of the key mechanisms influencing later economic outcomes such as academic success, cognitive skills, and educational attainment. Several of these studies have found a strong association between different compositional characteristics of children's neighborhoods, such as the level of neighborhood poverty, the presence of affluent neighbors, and rates of residential mobility, and individual outcomes like dropping out of high school or scores on assessments of cognitive skills (for reviews see Leventhal and Brooks-Gunn 2000; Sastry 2012). David Harding's (2003) study of the effect of neighborhood poverty on high school dropout is one example of a carefully designed observational study that analyzed matched pairs of children who look extremely similar in every aspect of their lives other than their neighborhood. Harding estimated that living in a high-poverty neighborhood during adolescence doubles the likelihood that a child will drop out of high school relative to living in a low-poverty neighborhood among both blacks and whites. His findings were found to be highly robust to a conservative sensitivity analysis.

Harding's study also was unique because he measured neighborhood conditions of children over an extended duration of childhood. Several descriptive studies have documented the persistence of neighborhood advantage and disadvantage over long period of time and across generations, suggesting the need for a greater focus on the temporal dimensions of exposure to neighborhood poverty (Briggs and Keys 2009; Quillian 2003; Sharkey 2008; South et al. 2005; Timberlake 2007).

A set of recent studies has used methods that adjust for time-varying confounders to estimate the cumulative consequences of exposure to neighborhood disadvantage on academic and cognitive outcomes. Sampson et al. (2008) found that exposure to concentrated disadvantage

altered the cognitive growth of African American children in Chicago, with consequences that persist years after exposure to neighborhood disadvantage. Wodtke et al. (2011) found that exposure to concentrated disadvantage over the course of childhood reduces the probability of high school graduation by 20 percentage points for black youth, and 10 percentage points for all other youth. Sharkey and Elwert (2011) used a similar approach but looked back further into families' histories, and found that exposure to neighborhood poverty over consecutive generations reduces children's performance on tests of cognitive skills by between 8 and 9 points, more than half of a standard deviation. A formal sensitivity analysis demonstrated that the effect of multigenerational neighborhood poverty is robust to high levels of potential bias arising from unobserved selection processes. Together, the common conclusion reached by these studies is that the effect of neighborhood disadvantage on cognitive and academic outcomes is more severe if disadvantage is persistent, experienced over long periods of a family's history.

Evidence from housing mobility programs

A second strand of evidence comes from studies that exploit quasi-experimental or experimental changes in families' neighborhoods and schools arising from low-income housing assistance programs.[1] Among the many residential mobility programs that have been studied in the literature, the two most prominent examples are the Gautreaux Assisted Housing Program in Chicago and the recent Moving to Opportunity program, which was conducted in five US cities.

Gautreaux was the result of a settlement that required the Chicago Housing Authority to provide housing to eligible families in neighborhoods across the entire Chicago metropolitan area. Specific units were identified across a range of neighborhoods that included the affluent and predominantly white suburbs surrounding Chicago, and families were offered units at least

[1] For reviews see Briggs (1997) and DeLuca and Drayton (2009).

partly on the basis of their position on the waitlist for housing. Early studies based on samples of families that moved in the Gautreaux program found that families moving outside of Chicago's city limits experienced remarkable changes in adults' economic outcomes and children's educational attainment (Kaufman and Rosenbaum 1992; Rosenbaum and Popkin 1991; Rubinowitz and Rosenbaum 2000). However, subsequent research has questioned whether the changes in neighborhood conditions induced by the program should be thought of as exogenous. Votruba and Kling (2009) documented a correlation between Gautreaux families' origin neighborhoods and their destination neighborhoods, suggesting that families' preferences played at least some role in determining the neighborhoods to which they were assigned. More recent studies of families in the Gautreaux program have adjusted for observed differences between families and has found that families benefited substantially when they left the deeply segregated, high-poverty neighborhoods of Chicago and moved to more integrated, less-poor communities across the metropolitan area (Mendenhall, DeLuca, and Duncan 2006; Votruba and Kling 2009).

Motivated in part by the strong findings from Gautreaux, the Moving to Opportunity Program (MTO) was a social experiment conducted in five cities (Baltimore, Boston, Chicago, Los Angeles and New York) that was designed to test whether moving into low-poverty neighborhoods affected the social and economic outcomes of families living in areas of concentrated poverty.[2] In each of the five cities, families in designated public housing developments that volunteered for the program were randomized into one of three groups: an experimental group that received housing vouchers that could only be used to rent in low-poverty neighborhoods; a group that received standard Section 8 vouchers without requirements on where the voucher could be used; and a control group that received no voucher at all.

[2] See Briggs et al. 2010 and Goering and Feins 2003 for details on the intervention and its history.

The results from MTO are complex and difficult to summarize. The most recent reports have found that ten to fifteen years after the initial random assignment, adults that were provided vouchers that could only be used in low-poverty neighborhoods experienced substantial improvements in mental and physical health and overall subjective wellbeing, but no improvements in economic outcomes related to labor force participation or income (Ludwig et al. 2012). The impact of the program on children varied substantially by gender. Girls in the experimental group experienced improved mental health and were less likely to participate in some risky behaviors, but boys experienced few changes in their lives as a result of the program, with increases in some risky behaviors (Sanbonmatsu et al. 2011).

This crude summary of results from MTO obscures an even more complex set of findings that has emerged in the five different sites at different points of time following the implementation of the program. A review of studies that report outcomes related to cognitive and academic skills reveals an erratic set of findings that vary across the five cities and across subgroups within the cities. To begin with, analyses that have pooled together all children across the five cities found no effects on cognitive skills either four to seven years after the program began or ten to fifteen years after implementation (Sanbonmatsu et al. 2006; Sanbonmatsu et al. 2011). However, across the five cities African American children in the experimental group showed positive effects on reading scores four to seven years after implementation (Sanbonmatsu et al. 2006). Further, among families that remained in low-poverty neighborhoods for a longer duration of time, Turner et al. (2012) found positive effects of moving to low-poverty neighborhoods on both reading and math scores for boys and girls.

Studies focusing attention on samples of families from specific cities have generated even more divergent findings. In the New York site, Leventhal and Brooks-Gunn (2004) found no

overall effects of the program after three years following implementation, but positive effects on assessments of cognitive skills for boys. Subsequent research on the New York City sample found negative effects of moving to low-poverty neighborhoods ten to fifteen years after the program implementation (Sanbonmatsu et al. 2011). Research on the Baltimore sample found strong effects on children's test scores four to seven years after random assignment that were no longer present ten to fifteen years after the program was implemented (Burdick-Will et al. 2011; Ludwig et al. 2001; Sanbonmatsu et al. 2011). Research on the Chicago site, on the other hand, documented similarly strong effects on children's test scores four to seven years after random assignment, and smaller effects that persisted through the latter follow-up ten to fifteen years after the program was implemented (Burdick-Will et al. 2011; Sanbonmatsu et al. 2011).

Making sense of these conflicting findings is challenging because of the nature of the MTO experiment and the variation in its implementation and impact across the five cities (Briggs et al. 2010). Research examining where families moved has demonstrated that in some cities families in the experimental group moved into areas of the city that were close in proximity to the communities of families who received no vouchers and were in the control groups (Sampson 2008). In other cities, families assigned to the experimental group experienced much more substantial changes in their residential environments, but these changes were short-lived (Clark 2008). In the latest follow-up 10 to 15 years after random assignment, families in the experimental group lived in neighborhoods with poverty rates just 3 percentage points lower than families in the control group (Ludwig et al. 2012). Further, the intervention was implemented at an extremely unique moment in the history of the nation's central cities, a time when employment opportunities were expanding most rapidly in high-poverty communities, when welfare reform was being implemented and public housing was being demolished in many cities

around the country, and when violent crime was just beginning to decline after several decades of rising violence in central cities (Sharkey 2013). None of these observations make MTO any less useful for understanding the effects of a policy designed to move families into lower-poverty communities, but it is important to consider MTO in the historical context of its time, and to consider results from MTO alongside those from Gautreaux and the many other housing mobility programs that have been implemented and studied over time.

As an example, Cutsinger et al. (2011) analyzed data from Denver County's "Dispersed Housing Program," in which low-income families who reached the top of a housing assistance waiting list were offered specific housing units based on their family type and what was available when the family reached the top of the list. The authors argued that the unique nature of this housing assignment process created exogenous variation in the locations of units offered to families. They found that children from families moving to neighborhoods with higher crime, lower homeownership rates and lower levels of social capital had lower rates of high school graduation years later.

Ludwig et al. (2010) analyzed data from housing assistance recipients in Chicago who were randomly assigned a position on a wait list when the local housing authority opened this wait list for the first time in years. Exploiting variation in the timing of when families were offered housing in lower-poverty neighborhoods, the researchers found that moving into lower-poverty neighborhoods resulted in substantively large improvements in children's performance on reading and math assessments.

Douglas Massey and a team of researchers analyzed the outcomes of families who were able to move into a new housing development in the Philadelphia suburb of Mt. Laurel, NJ. Matching families that moved into the new housing development with families on the waiting list

who were not offered housing, Massey et al. (2013) found that those who moved had higher earnings and employment rates than those who did not, although there was no effect on welfare receipt.

Whereas these studies focus on variation in neighborhood conditions, other research has exploited exogenous variation in school quality arising from natural experiments in order to identify how the school setting affects academic success. Heather Schwartz (2010) analyzed data on test performance among low-income students in Montgomery County, MD, one of the wealthiest urban school districts in the nation. Montgomery County is unique not only because of the quality of its public schools, but also because the county features the nation's oldest and most extensive inclusionary zoning program. As part of its zoning policy, the county's housing authority is able to purchase up to one third of the units set aside by developers to be rented or sold at below market rates. The housing authority randomly assigns families selected for housing assistance to these units, which are scattered across all neighborhoods and school attendance zones throughout the county.

Exploiting the random assignment of low-income families to housing units, Schwartz estimated the effect of attending elementary schools with relatively low levels of student poverty versus moderate levels of poverty. The study tracked academic performance among 850 low-income students over five to seven years, and found that students in low-poverty elementary schools performed substantially better than students assigned to moderate poverty elementary schools, with the improvements in performance accumulating over the course their elementary school career. By the end of elementary school, the gap between low-income students assigned to low-poverty schools and their peers in the larger student body had been cut by half for math and by a third for English.

A second study conducted by Dobbie and Fryer (2009) analyzed the effect on academic performance of attending a charter school run by the Harlem Children's Zone (HCZ). The HCZ is a well-known community organization targeting a roughly 100-block area of Harlem with high-quality social services, schools, and programs for youth and families. In order to identify the effect of attending a HCZ school, Dobbie and Fryer (2009) exploited the fact that attendance at the HCZ Promise Academy Schools was based on a lottery among all applicants. As a second identification strategy, the researchers used variation in the probability of attending HCZ schools derived from the interaction of the student's address and their birth cohort. The study found that both older and younger students who were able to attend a Promise Academy experienced substantial improvements in English and math performance, and were less likely to be absent from school. Effect sizes ranged from one quarter to four-fifths of a standard deviation improvement in standardized test performance, with larger gains in the math assessments. The effect sizes found were, for some estimates, as large as the gap in reading and math performance between white and black students.

In considering this evidence, it is important to be clear about what it reveals and what it does not. These two studies focusing on school quality do not indicate that schools are the sole mechanism underlying neighborhood effects, nor do they indicate that simply offering alternatives to poor-performing public schools will sever the link between neighborhood disadvantage and academic inequality. Analyzing data on student performance derived from 36 charter schools that used attendance lotteries, Gleason et al. (2010) found that, overall, there were no detectable effects of attending a charter school on academic or behavioral outcomes. Some schools showed strong positive impacts on student performance, particularly those that served more disadvantaged student populations. Other schools produced null or negative

impacts. These results suggest that the findings from a specific program or school, such as the Promise Academies within the Harlem Children's Zone or other programs that offer their own unique and effective approaches,[3] do not necessarily generalize to other schools or programs that may differ in quality, approach, or in the skill of teachers and administrators.

The evidence from the studies of school quality does reveal that when low-income students living in highly disadvantaged residential settings are able to attend high-quality schools, their academic performance improves substantially. The studies offer tangible evidence that the explanations for persistence at the bottom of the academic distribution do not lie fully within low-income individuals or families. Instead, aspects of the residential environment surrounding such families, such as schools, can play an important role in facilitating, or impeding, economic mobility.

Evidence on the effects of community change

A third strand of evidence analyzes how change in the neighborhood or local labor market that occurs around individuals affects individual economic trajectories. Sharkey (2012a) compared matched pairs of African American children who lived in neighborhoods that had similar economic and demographic composition but began to change in different ways as the children aged into early adulthood. Conditional on initial neighborhood conditions and the trajectory of change in the past, Sharkey argues that it is plausible to think of subsequent neighborhood change as exogenous and to assume any impacts of neighborhood change are causal. The study found that African American children in neighborhoods where the level of concentrated disadvantage declined over time had substantially higher earnings and family

[3] See, for instance, Curto and Fryer's (2011) evaluation of the SEED charter school program, which is the only charter school that provides boarding for low-income students.

income in adulthood. This finding appears to have been driven by economic opportunities, as there was no effect on other outcomes such as educational attainment or marital status.

Other studies have exploited local economic shocks to identify the effect of changes in economic opportunities around individuals and families. As an example, Ananat et al. (2011) used factory plant closings in North Carolina counties to identify the effect of local job losses on aggregate measures of children's academic performance. Changes in local economic conditions arising from plant closings were found to have large effects on children's reading and math scores in North Carolina, with larger impacts for older students in the eighth grade compared to fourth graders.

Another example comes from the experience of American Indian tribes in the aftermath of the 1988 law that allowed for the development of large-scale gaming facilities on reservation land (Wolfe et al. 2012). Several researchers have used variation in the timing at which gaming facilities have opened on reservation land to identify the effect of an influx of income and economic opportunities into highly disadvantaged areas. These studies have found substantial effects on educational attainment, on median income and employment, and on physical and mental health, including mortality (Copeland and Costello 2010; Costello et al. 2003; Wolfe et al. 2012). Although the establishment of casino gaming is a very unique form of change in the local economic environment and one that may come with serious social consequences, the evidence from American Indian reservations does indicate that large-scale transformations of local economic opportunities can generate substantial economic benefits for the residents of the area.[4]

Summary and conclusions

[4] See also Kline and Moretti (2013) on the impact of the Tennessee Valley Authority.

Several conclusions can be made from the range of empirical work summarized in this section, some of which stand on firmer ground than others. First, evidence from observational studies typically documents an association between child neighborhood conditions and adult economic outcomes, although this relationship is not found in all studies that have been conducted. A much larger literature has examined the relationship between neighborhood conditions and local school quality and outcomes related to educational attainment and academic performance. This strand of research has generated fairly consistent evidence that growing up in disadvantaged residential environments and attending low-quality schools impedes children's academic trajectories. Recent contributions to this literature have made improvements in modeling selection into high-poverty neighborhoods over time, and have shown that the consequences of cumulative consequences of long-term exposure to disadvantaged environments appear to be cumulative, with more harmful effects arising from sustained or multigenerational exposure to neighborhood disadvantage.

Evidence derived from housing mobility programs is much more difficult to interpret. Research on several quasi-experimental and experimental studies has produced strong evidence that moving out of concentrated disadvantage can have substantial benefits for the developmental trajectories of youth and for parents' wellbeing, but these findings are contingent on the nature of the housing mobility program and the types of moves that families make. This evidence is more useful for evaluating the impact of specific policies implemented in unique locations and times, as opposed to making general conclusions about the relationship between neighborhoods and social and economic mobility.

Lastly, several studies focusing on shocks in local labor market opportunities have documented strong impacts on adults' labor market outcomes and children's academic outcomes.

These studies confirm the intuitive idea that the presence or absence of opportunities in the residential environment can play important roles in affecting prospects for economic success, with impacts that extend across generations.

How do cities and metro areas affect economic mobility?

Geographic variation in economic mobility

Virtually all of the research on intergenerational economic mobility in the United States describes the level of mobility in the nation as a whole. Whereas early estimates suggested that there was only a weak relationship between the economic status of parents and their children, more recent research that corrects for methodological problems in the original studies has found much lower levels of economic mobility (Mazumder 2005a; Mazumder 2005b; Solon 1992). Recent estimates of the intergenerational elasticity of family income in the US, measured as the strength of the relationship between the natural logarithm of total family income measured at the same age across successive generations, range from around .40 up to as high as .60. The former estimate can be interpreted to mean that if a parent's income is roughly twice as high as the national average, then the child's adult income would be expected to be about 40 percent higher than the national average. In other words, economic advantages and disadvantages fade away over generations, but they fade away slowly.

A more refined interpretation of what these figures mean is possible by comparing them to estimates from other developed nations. This type of comparison reveals that the United States is unique among developed nations in its lack of economic mobility, meaning there is much greater persistence of income and earnings across generations of Americans than there is in other European nations or Canada (Smeeding et al. 2011).

The new perspective on economic mobility in America brings with it a new urgency to understand the processes by which parents' economic status is passed on to their children. Recent studies of economic mobility have looked to national policy as a way of explaining the uniquely low level of economic mobility in the U.S., but this approach overlooks the potential to explore variation within the nation to begin to understand what drives intergenerational economic mobility. Considering America's tremendous diversity in population characteristics, regional and local economies, politics, and culture, there are good reasons to expect substantial variation in levels of economic mobility. Several recent studies confirm this expectation.

An analysis published by the Pew Charitable Trusts Economic Mobility Project (Economic Mobility Project 2012) generated estimates of intergenerational economic mobility across the states, identifying a pocket of states in the northeast that feature high levels of economic mobility, and another pocket of southern states with much lower levels of mobility. Chetty et al. (2014) used data from the Internal Revenue Service to create several measures of relative and absolute income mobility across the nation's commuting zones, which are sets of contiguous counties that surround central cities and cover the entire nation. The authors found substantial variation in levels of economic mobility, with some commuting zones with levels of mobility equal to the most mobile nations in Western Europe and others with levels of mobility lower than any of the developed nations. Graham and Sharkey (2014) used data from three national surveys and documented substantial variation in levels of economic mobility across urban areas.

Mechanisms explaining geographic variation in economic mobility

All of these studies indicate that national measures of intergenerational economic mobility obscure substantial geographic variation in levels of mobility across urban areas, commuting zones, states, and regions of the country. Less progress has been made in explaining geographic variation in economic mobility.

Chetty et al. (2014) analyzed the correlations between a range of social, demographic, and economic characteristics of commuting zones and the level of economic mobility, focusing primary attention on the probability of upward mobility from the bottom of the income distribution. The level of upward mobility in a commuting zone was most strongly associated with the degree of racial and economic segregation in the commuting zone, with the rate of high school dropouts and single parents, with the level of violent crime and measures of social capital, and with the level of economic inequality in the commuting zone. This descriptive analysis provides several suggestive conclusions about the types of commuting zones with high and low levels of economic mobility, but the analysis was exploratory in nature and was not designed to generate convincing causal evidence.

Chetty and Hendren (2014) have conducted separate analyses that provide more persuasive evidence indicating that places do have a causal effect on economic mobility. This evidence is based on data tracking economic mobility among individuals who spend part of their childhoods in areas with high levels of economic mobility and part of their childhoods in areas with low economic mobility. The researchers document that economic mobility varies directly with the length of time spent in high and low mobility commuting zones, suggesting that variation in levels of economic mobility is driven more by types of places as opposed to types of people who end up in more or less mobile areas.

Graham and Sharkey (2014) focused specifically on the connection between economic segregation, defined as the proportion of overall variance in income within a metropolitan area that lies between neighborhoods, and levels of economic mobility. This focus was motivated by a theoretical model in which transmission of parents' economic status is driven by both family-level mechanisms and place-based mechanisms such as the quality of local schools and other institutions, property values, crime, and other aspects of the residential environment. This model predicts that in urban areas where the rich live in separate neighborhoods from the poor, the benefits of economic resources and the costs of poverty are exacerbated because of the tight connection between family economic status and neighborhood economic status. As a result, family economic status is transmitted more easily to the next generation.[5] An association between economic segregation and economic mobility was found in three different datasets, and also was found in analyses that examine change in economic segregation and change in mobility within urban areas. Similar to the study by Chetty et al. (2014), the analysis conducted by Graham and Sharkey (2014) provides suggestive evidence linking economic segregation with variation in levels of mobility, but does not provide evidence that allows for strong causal claims.

Two summary conclusions are possible on the basis of these studies. First, there is substantial geographic variation in levels of economic mobility within the United States. This observation means that national estimates of income mobility, while informative, pool together data from places that have widely divergent patterns of both absolute and relative mobility. Perhaps the most notable geographic pattern is found in maps presented by Chetty et al. (2014), which document a large swath of the southeastern part of the country that features extremely low levels of mobility. This striking pattern reveals that there is a large swath of the country where

[5] Similar propositions have been put forth in work by Loury (1977) and Durlauf (1996).

upward mobility is rare, and suggests the need for more empirical research to explain regional variation in economic mobility. Second, some evidence has been generated on the characteristics of places that are associated with economic mobility, but minimal progress has been made in providing evidence that allows for causal claims. Graham and Sharkey (2014) have provided a strong theoretical motivation for the focus on economic segregation, and Chetty et al. (2014) have documented correlations between economic mobility and a range of characteristics of commuting zones. Ongoing research on economic mobility among movers across commuting zones provides a promising example of research that may allow for stronger claims about the effects of places on mobility. As a whole, however, the research explaining geographic variation in economic mobility remains at a very early stage.

What are the implications for social policy?

Two broad approaches are commonly proposed to reduce neighborhood inequality and its consequences. The first approach confronts neighborhood inequality with investments in communities, or families within them, that are designed to weaken the link between growing up in a disadvantaged neighborhood and its consequences for children's economic trajectories. The second approach confronts neighborhood inequality directly by attempting to alter the distribution of neighborhoods occupied by different segments of the population. The most common policy tool used to implement the latter approach is residential mobility or housing assistance programs for low-income populations. In addition to such mobility programs, however, there are a set of more basic changes in housing and urban policy that represent alternative approaches to compressing the distribution of neighborhood advantage and disadvantage. I conclude the article by discussing these alternative approaches.

Place-based investment

There are several examples of investments and initiatives that have been designed to target disadvantaged places or the individuals and families within them. The New Hope program, implemented in Milwaukee in the mid-1990s, offered extensive work supports, wage supplements, and temporary guaranteed jobs for individuals willing to work at least 30 hours per week (Duncan et al. 2009). Certain features of the program distinguished this program from many other welfare-to-work programs being implemented during the same period, one of which was that New Hope targeted low-income families living in low-income neighborhoods of Milwaukee. New Hope thus serves as an example of a "place-conscious" (Pastor and Turner 2010) program that directs resources and supports toward individuals and families within disadvantaged areas. Applicants to the program were randomly assigned to a treatment and control group, and several studies have tracked the outcomes of participants over an extended period of time. Results show that the treatment group had higher rates of employment, a finding that appeared to have been driven largely by the guarantee of community service employment for participants unable to find a job in the private market (Huston et al. 2003). The program reduced family poverty among participating families, and multiple studies have documented improvements in academic performance and behavior among the children of families in the program's treatment group (Duncan et al. 2009; Huston et al. 2001; Huston et al. 2003).

Another place-conscious intervention focusing on individuals' prospects in the labor market was the Jobs-Plus program implemented in the 1990s by the federal Department of Housing and Urban Development in five very different cities: Baltimore, Chattanooga, Dayton, Los Angeles, and St. Paul. Jobs-Plus saturated public housing developments with services

designed to enhance individuals' capacity to obtain and retain employment over time, along with rent incentives designed to encourage work. Over the course of the program, resident employment and income rose steadily in three of the sites that implemented the full package of services and incentives offered through the program (Bloom et al. 2005).

Whereas New Hope and Jobs-Plus targeted individuals within high-poverty areas, an alternative set of interventions attempt to create greater demand for labor through incentives designed to encourage firms to invest and to hire local residents. The most notable example is the Empowerment Zones/Enterprise Communities (EZ/EC) program that began in the mid-1990s.[6] This federal program provided tax incentives for firms in dozens of communities that were designed to encourage expansion, investment, and employment of local residents. The most persuasive evidence demonstrating positive effects of the EC/EZ program comes from Busso et al. (2013), who estimated the effect of the program by comparing the selected sites with other sites that applied and were rejected or sites that were later accepted. The researchers found that residents in Empowerment Zones showed substantial improvements in employment and earnings. This study's findings stand in contrast to other empirical research that has found minimal effects of the program in different sites (e.g., see Oakley and Tsao 1996). Further, several commentators have raised doubts that any spatially targeted economic development program can generate cost-effective, positive effects on residents in the absence of supplemental investments (Glaeser and Gottlieb 2008; Ladd 1994).

The interventions discussed to this point in the section focus on reducing poverty, improving prospects in the labor market, and creating job opportunities for individuals in disadvantaged neighborhoods. However, the presence or absence of economic opportunities is only one of several mechanisms through which neighborhood inequality may be linked with

[6] Some states also implemented similar programs under the title of "Enterprise Zones."

economic mobility. A range of community-based interventions have been conducted over time to improve the quality of schooling, reduce violent crime, or improve community health (see, for instance: Braga 2005; Dobbie and Fryer 2009; Papachristos et al. 2007). This type of place-based or setting-based intervention may indirectly affect levels of economic mobility through exposure to violence, school quality, health, or the many additional mechanisms by which neighborhood advantage and disadvantage are linked with economic mobility.

The recognition that economic disadvantage tends to be concentrated in areas that face a range of associated challenges is the motivation for a set of interventions that have come to be identified as Community Change Initiatives (CCIs). CCIs are efforts focused on comprehensive neighborhood revitalization that are designed to flood an area with resources focused on economic development, institutional support, physical infrastructure, and social services (Kubisch et al. 2010). As Kubisch notes in a report describing how CCIs have been implemented over time, in practice most Community Change Initiatives have not received the level of sustained resources that would be necessary to generate transformative community change. Reviews of the field have identified other challenges faced by any effort to implement comprehensive community change, including the coordination of services and supports, building institutional capacity, and engaging residents and other important local actors in the effort (Chaskin et al. 1997; Kubisch et al. 2010). Like many other efforts to revitalize communities through place-based investment, the impact of CCIs is difficult to assess because programs rarely have been designed in ways that allow for a clear assessment of program impact, and because these types of programs typically are not implemented at a scale that could generate tangible change that is sustained over time (O'Connor 1995; O'Connor 1999; Sharkey 2013).

Although interventions designed to generate neighborhood change have not demonstrated a clear track record of success, empirical work on large-scale changes in local economic opportunities provide "proof-of-concept" evidence suggesting that major investments that alter the local economic environment in a fundamental way can have substantial, long-term effects on residents. As discussed previously, research on large-scale transformation of local economic opportunities that occurred through the federal investment in the Tennessee Valley Authority or the introduction of casino gaming to American Indian reservations provides suggestive evidence that large-scale transformations of local economic opportunities can generate substantial economic benefits for the residents of the area (Kline and Moretti 2013; Copeland and Costello 2010; Wolfe et al. 2012). How to turn this example into public policy targeting disadvantaged communities is a much more challenging question.

Expanding residential mobility and reducing neighborhood inequality

The alternative approach to confronting neighborhood inequality is to implement new policies or revise existing policies in order to alter directly, or compress, the distribution of neighborhood advantage and disadvantage. One method of moving toward this goal is through residential mobility programs for recipients of housing assistance.

I have already discussed results from various housing mobility programs that have been implemented and evaluated over time. A more basic consideration is whether such programs are effective mechanisms to generate meaningful changes in families' residential environments. Research from the most well-known residential mobility program, the Moving to Opportunity experiment, has demonstrated that families in the experimental group did experience changes in exposure to neighborhood poverty but were highly likely to move into communities that were

close in proximity, and similar in racial/ethnic composition and school quality, to their origin neighborhoods (Clark 2008; Sampson 2008). Over time, the change in neighborhood poverty induced by the program faded away (Ludwig et al. 2012).

This pattern of findings reflects the challenges that families face in navigating a highly stratified urban landscape, but it also reflects the "psychological constraints" (Shroder 2002) that condition the choices made by different groups of families in urban housing markets. As an example, one of the primary predictors of whether families in the MTO experiment were able to "lease up" in a new apartment was their uncertainty about whether they would like their new neighborhood if they were to move (Shroder 2002). This type of uncertainty arises from unfamiliarity with communities around an urban area (Krysan and Bader 2009), from concerns about how families would be treated in new communities (Thompson 2001), and from a very real historical legacy of discrimination and violence. As a result, residential moves made by families receiving housing assistance and navigating the private rental market often are found to reinforce, rather than disrupt, patterns of urban inequality.

A few housing assistance programs have been more successful in generating transformative changes in families' neighborhood contexts. One common feature of these programs is that they take a more active role in expanding the choice set of families deciding where to relocate. For example, many housing experts have called for more intensive counseling for recipients of housing assistance and some have argued for efforts to alter the choice architecture of families as they begin their search for housing. Briggs et al. (2010) suggest providing families with a "default" set of two or three units that are available in different communities within the city. An extreme version of this approach can be found in the Gautreaux Assisted Housing Program in Chicago, where families participating in this program were offered

specific units located throughout the Chicago metropolitan area based on their position on a waitlist (Rubinowitz and Rosenbaum 2000). Unlike most residential mobility programs, the residential moves that arose from Gautreaux took families across the entire Chicago metropolitan area and brought about a change in families' neighborhood environments that persisted over time (Keels et al. 2005).

A few current housing assistance programs, such as the Baltimore Housing Mobility Program, follow a similar approach by providing extensive information, support, and resources necessary to allow families to make the kind of residential moves that bring them into entirely new sections of the metropolitan areas in which they live. The Baltimore Housing Mobility Program also arose from a settlement with the federal Department of Housing and Urban Development, and features intensive counseling designed to bring families into new, racially diverse communities with low rates of poverty and abundant economic opportunities (Darrah and DeLuca 2014). This active approach is necessary to allow families to make the kinds of moves that disrupt the structure of residential stratification within the metropolitan area, and that are rare among low-income families navigating the rental market on their own.

However, providing vouchers that allow low-income families to move is not the sole mechanism to expand residential options for low-income families or members of racial and ethnic minority groups. An alternative approach involves taking active steps to break down barriers that serve to limit housing choice. Pastor and Turner (2010) review an extensive list of options to reduce neighborhood inequality that include expanding the supply of affordable housing, confronting exclusionary zoning policies, promoting and enforcing fair-share housing plans, taking active steps to reduce residential discrimination by race and ethnicity, and developing coordinated metropolitan-wide plans for transportation, housing, education, and

economic development (see also: Goering 2007; Katz and Turner, 2001; Katz, 1999; 2000; Rusk, 1999; Quigley, 2011; Quigley and Raphael, 2004; Turner and Ross 2005).

These proposed policy shifts reinforce the point that to weaken the connection between neighborhood inequality and economic mobility it is not always necessary to implement new interventions, programs, or initiatives with substantial costs attached to them. Whereas some federal housing policy is designed to reduce neighborhood inequality, other policies exacerbate inequality. Neighborhood inequality is, in part, the result of active intervention into the housing market through law and public policy. Rigid zoning places restrictions on development that allow localities to limit the type of housing that can be built and to exclude unwanted populations, thus solidifying economic inequality in space. The nation's largest housing program is the home mortgage interest deduction, which is a regressive intervention into the housing market that redistributes tax dollars to the wealthiest homeowners and the wealthiest communities across the country.

It is certainly true that promising new programs and reforms of existing housing assistance programs can be effective in reducing the consequences of neighborhood disadvantage. However, another approach to confront neighborhood inequality is to change the way the nation invests in places by altering existing policies in basic ways that are designed to compress the distribution of neighborhood economic status and to reduce the consequences of neighborhood disadvantage.

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