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EMPLOYMENT IN BLACK URBAN LABOR MARKETS: PROBLEMS AND SOLUTIONS

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ABSTRACT

Blacks in the United States are poorer than whites and have much lower employment rates. "Place-based" policies seek to improve the labor markets in which blacks – especially low-income urban blacks – tend to reside. We first review the literature on spatial mismatch, which provides much of the basis for place-based policies. New evidence demonstrates an important racial dimension to spatial mismatch, and this "racial mismatch" suggests that simply creating more jobs where blacks live, or moving blacks to where jobs are located, is unlikely to make a major dent in black employment problems. We also discuss new evidence of labor market networks that are to some extent stratified by race, which may help explain racial mismatch. We then turn to evidence on place-based policies. Many of these, such as enterprise zones and Moving to Opportunity (MTO), are largely ineffective in increasing employment, likely because spatial mismatch is not the core problem facing urban blacks, and because, in the case of MTO, the role of labor market networks was weakened. Finally, we discuss policies focused on place that also target incentives and other expenditures on the residents of the targeted locations, which may do more to take advantage of labor market networks.

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I. Introduction

Poverty rates for blacks are higher, and employment rates are lower, than for other demographic groups in the United States. In 2008, the poverty rate for whites was 9.5 percent, compared with 23.7 percent for blacks, and the employment-to-population ratio for those aged 25-54 was 80.1 percent for whites, versus 73.9 percent for blacks. The employment differential is driven by men; the white male 25-54 employment rate is 87.5 percent for whites, versus 76.1 percent for blacks, compared with corresponding rates of 72.6 and 72.0 percent for women. The list of possible explanations for these phenomena and the menu of policy responses are extensive. Possible explanations include school quality, discrimination, and family background. Policy responses include educational reform, affirmative action, and early childhood interventions. These policy responses generally emphasize leveling the playing field for blacks and others via increasing human capital acquisition by blacks and improving the treatment of blacks in the labor market.

Because racial differences in employment rates play a large role in racial differences in poverty, much of the policy discussion focuses on employment. Moreover, a number of factors have led to an emphasis on "place-based" policies focused on urban blacks in particular (e.g., Ladd, 1994) that seek to improve employment (and other labor market outcomes) by directly improving the labor markets in which urban blacks tend to reside. These factors include persistent (although declining) residential concentration of the black population in urban areas in general and in ghettos in particular (Cutler et al., 1999; Iceland and Weinberg, 2002; Massey and

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¹ http://www.census.gov/hhes/www/cpstables/032009/pov/new02_100_02.htm and http://www.census.gov/hhes/www/cpstables/032009/pov/new02_100_05.htm (viewed January 11, 2010). These numbers are for whites and blacks "alone or in combination," in families.

² http://www.bls.gov/cps/cpsaat5.pdf (viewed January 11, 2010).

³ See, for example, Clotfelter et al. (2005) and Cullen et al. (2005) on school quality; Carneiro and Heckman (2003) on family background and early childhood intervention; and Leonard (1990) on affirmative action.

Denton, 1989); a strong urban concentration of poverty (e.g., Kingsley and Pettit, 2003);⁴ a constellation of potentially mutually-reinforcing adverse influences and outcomes in those urban areas (e.g., Massey, 1990; Wilson, 1987), attributed in large part to employment problems and poverty; and the urban concentration of blacks in areas where employment prospects are bleak (Kain, 1968; Wilson, 1987).⁵

Place-based policies may target well the population of interest given the concentration of low-income blacks in particular urban areas, especially in contrast to policies that do not focus on place and target blacks broadly. In addition, given the multitude and possible interrelatedness of social problems in many urban black areas, and the potential for peer influences, the concentration of policy efforts on increasing employment in problematic areas may generate positive multiplier effects. Direct forms of place-based policies seek to strengthen labor markets where blacks currently live, while indirect forms seek to increase access of blacks to places where labor markets are stronger. In this chapter, we focus on the three most prominent place-based policies: enterprise zones, which often create incentives aimed at strengthening labor markets in inner-city areas; Gautreaux and Moving to Opportunity, which aim to alter the residential distribution of blacks so as to improve the labor markets that are local to them; and increased transportation access to jobs outside of the urban cores where blacks tend to reside.

⁴ This has declined somewhat in recent years, but is still prevalent and striking. There is a phenomenon of rural concentrations of poverty as well (Partridge and Rickman, 2006), which we do not address.

⁵ Capturing this last problem in a striking manner, Dickens (1999) notes that in 1990 Census data, the population was 13 percent black, but in urban Census tracts with the worst employment rates (the 10 percent of tracts with the lowest employment rates in the 10 largest metropolitan areas), the population was two-thirds black and 18 percent other minorities).

⁶ For example, affirmative action has been criticized as helping middle- and upper-class blacks more (Malamud, 1997).

⁷ See the review and discussion in Dietz (2002). Of course it is difficult to identify peer effects from which we might infer the existence of multiplier effects (Manski, 1993).

⁸ We do not mean to imply that these policies only target blacks or only target inner-city areas. Rather, we emphasize in this chapter the effects of these policies for blacks in urban areas, who are a major intended beneficiary of such policies.

It is typically the direct forms of place-based policies (like enterprise zones) that have been referred to as "place-based policies" in the research literature (e.g., Ladd, 1994). Our approach is broader – to consider policies that emphasize geography rather than solely individual characteristics – and we therefore also consider policies that seek to address employment issues by altering the geographic distribution of workers and families. Part of the motivation for this broader perspective is the well-known criticisms of direct place-based policies, which note that these policies can discourage the migration of the disadvantaged to areas with better economic opportunities (Glaeser, 2005 and 2007), and that many of the benefits may go to commuters and new residents who have the skills to take advantage of newly-created employment opportunities, rather than to the disadvantaged residents who are the intended beneficiaries (Peters and Fisher, 2002). In addition, one of our goals is to discuss some issues involved in thinking about place-based policies that are informed by new research, in large part focusing on the role of labor market networks, and it seems best, in light of this new perspective, to cast a wide net in thinking about place-based policies.

We begin by presenting some of the basic facts on black urban labor market problems with respect to employment. We then review evidence on the explanations for these facts, with an eye towards understanding the potential contributions of place-based policies to ameliorating these problems. We first establish that the problem is not entirely one of individual skills. We also review the literature on spatial mismatch, which provides the intellectual basis for place-based policies. Although some of the core facts are consistent with spatial mismatch, we argue that new evidence establishes an important racial dimension to spatial mismatch – which we have termed "racial mismatch"; this, in turn, suggests that simply creating more jobs where blacks live, or moving blacks to where jobs are located, is unlikely to make a major contribution

to increasing black employment. We then go further and discuss new evidence on the importance of labor market networks that are to some extent stratified by race. We regard these networks as a likely explanation of our racial mismatch finding.

We then review evidence on place-based policies intended to address black urban labor market problems. Many of these, such as enterprise zones and Moving to Opportunity (MTO), appear to be largely ineffective in increasing employment, which we suggest reflects the fact that spatial mismatch is not the core problem facing blacks in urban labor markets, and, in the case of MTO, that the policy not only fails to exploit but indeed weakens the impact of labor market networks. We then discuss some newer policies that have attempted to blend place-based policies with targeting of incentives and other expenditures on the people residing in the targeted locations. There is some evidence that these policies may have been more effective at increasing employment, and one reason may be that they moved beyond a pure focus on location and in so doing took advantage of labor market networks, although the case remains hard to make. We conclude by discussing the potential implications of this evidence for thinking about policies to do more to reduce black urban labor market problems, as well as for addressing similar problems faced by other minority groups – including immigrants – in both the United States and other countries. Throughout, our goal is not to provide an exhaustive review, but rather to highlight some connections between these topics highlighted by recent research, including our own, and to suggest how further progress might be made by continued research exploring these connections.

II. Black Urban Employment Problems

To illustrate some basic facts about racial differences in outcomes, we extracted data from the 2005-2009 ACS Public-Use Microdata Sample (PUMS) on (non-Hispanic) blacks and whites between the ages of 16-64 living in metropolitan areas, who were not enrolled in school

and are not in the military. In this sample, 82.1 percent of white men reported working, versus only 63.2 percent of black men. Among women, the gap is smaller but still present: 70.0 percent of white women were working compared to 65.9 percent of black women.

Individual differences between blacks and whites do not appear to explain these employment differences. Using the data just described, we estimated separate linear probability regressions by sex of employment on marital status, five-year categorical age variables, six categorical variables measuring educational attainment, and additionally, for women, indicators for number of children in the household, and number of children under age five. The employment gaps do fall, to 13.3 percentage points for men and 2.8 percentage points for women, but the gap for men remains substantial.

As highlighted originally by Kain (1968), neither race per se, nor individual differences between blacks and whites, is sufficient to capture important features of labor market differences between blacks and whites. Geography is also important, and one of the most important facets of the geography that is relevant to race differences in economic outcomes is residential location. In particular, there are observable differences in employment for blacks depending on whether they live in the center city of a metropolitan area, as well as the racial composition of the areas where they live.

Kain's (1968) seminal article studied residential segregation and black employment in Chicago and Detroit, and highlighted the importance of urban areas generally and the concentration of blacks within urban areas specifically in determining variation in labor market outcomes *among* black workers. His analysis led to three conclusions: (i) the black/white employment ratio is lower in areas with lower shares of black residents⁹ (perhaps due to

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⁹ This result is often interpreted as implying that blacks are less likely to be employed in areas with lower shares of black residents; in fact, that conclusion does not follow directly from Kain's regression results, but rather only from

customer discrimination); (ii) black employment would be considerably higher if there were less racial segregation in housing; and (iii) jobs had moved from central city areas to suburban areas between 1950 and 1960, which combined with segregation of blacks in central city areas to depress further black employment prospects. Although Kain's study is quite dated, some of the key observations – poor black economic outcomes in urban areas, and relationships between where blacks live within urban areas and their economic outcomes – persist.

To provide more recent evidence, we estimated employment regressions like those described above for only the black men in our sample and expanding the list of covariates to include a dummy variable indicating residence in the center city. Unconditionally, there is a ten percentage point employment gap between blacks in center cities and those elsewhere; the gap falls when we also condition on age, marital status, and education, but employment of central city blacks remains five percentage points lower.

Of course, measuring the causal impact of residential location on outcomes is not as straightforward as suggested by these regressions. There may still be unobservable differences in skill levels between blacks who live in the center city and those who do not. Negative selection on unobserved skill among those living in central cities would generate upward biases in the measurement of the importance of residential neighborhood in determining outcomes. On the other hand, there may be important biases in the opposite direction, when data are used on within-metropolitan area variation in outcomes as a function of neighborhood characteristics. A dearth of jobs for blacks living in predominantly black neighborhoods, perhaps because of employer relocation to the suburbs, should generate downward pressure on employment rates and wages in these neighborhoods. But if blacks can move to (or work in) the suburbs, the utility

these results coupled with some auxiliary analyses.

of black residents of the different areas should equalize. Then, aside from any effects arising from the differential valuation of urban versus suburban amenities and the effects of commuting costs on labor market outcomes, employment rates and wages for blacks will eventually equalize across these neighborhoods. This would lead to underestimates of the importance of place in generating outcomes, since the impact of neighborhoods on outcomes has general equilibrium effects. At the time when Kain was writing, constraints on black residential mobility due to housing segregation (both formal and informal) were substantial enough to prevent equalization of labor market outcomes across locations for blacks, but such an argument is not as clear today.

To address this second issue, some researchers instead assess the impact of neighborhoods on outcomes using variation across metropolitan areas. For example, Cutler and Glaeser (1997) use 1990 Decennial Census data to examine whether residential segregation by race is good or bad for blacks (and whites), by relating individual economic outcomes to an index of residential segregation at the metropolitan level. To account for reverse causality, and the potential for unobservable factors at the metropolitan level to explain the results, they instrument for the segregation index with measures of geopolitical aspects of neighborhood borders. Cutler and Glaeser find evidence that residential segregation hurts black economic outcomes (with little effect on whites). They explore the importance of non-racial aspects of segregation, including income segregation, education segregation, average commute times, and family background of adults, but while these measures account for some of the effect of residential segregation, they do not eliminate it. Rather, it appears that at the metropolitan level as well, blacks fare worse when they live in areas with higher levels of residential segregation by race.

III. Potential Explanations

People-based explanations

Racial differences in labor outcomes associated with geography within and across urban areas could reflect person-specific unobservables that vary between blacks and whites and that are difficult to measure in large-scale data. In examining racial wage gaps, Neal and Johnson (1996) estimate that all of the black-white wage gap for women and about 70 percent of the wage gap for men can be attributed to ability or skill differences that are not well measured in large-scale data sets like the Census. Urzua (2008) argues that Neal and Johnson overestimate the importance of unobserved skill in explaining racial outcomes, but he still finds that half of the black-white wage difference for men in these data can be explained by unobserved skill differences. This evidence pertains to the earnings gap rather than the employment gap.

Regardless, it helps illustrate that whether estimated racial gaps in labor market outcomes could be entirely eliminated with an exhaustive set of individual-level controls is unlikely ever to be answered definitively given the fundamental problem that individual skills are only ever partially observable.

Place-based explanations

Nonetheless, in our view the weight of the evidence indicates that there is a role in labor market outcomes of blacks for factors that vary at a more aggregate level than that of the individual him or herself, including factors related to spatial location within urban areas. That is, "people-based" explanations alone are insufficient to explain black labor market problems, and considerations of "place-based" explanations are required.

The core place-based explanation is the spatial mismatch hypothesis, which argues that lower black employment rates are in part attributable to there being "fewer jobs per worker in or

near black areas than white areas" (Ihlanfeldt and Sjoquist, 1998, p. 851) because of exogenous residential segregation by race and other frictions. As a result of the segregation of blacks in areas with fewer jobs, the net wage (defined as the wage minus commuting costs) for blacks is more likely to be below their reservation wage. As a result, fewer residents of black areas will choose to work. This will be truer of lower-skilled blacks, for whom commuting costs represent a larger share of earnings. Spatial mismatch requires frictions that prevent labor markets from reaching an equilibrium in which employment rates are largely equalized across neighborhoods. The literature attributes this disequilibrium to the continuing movement of jobs out of central city areas, discrimination in housing that prevents mobility of blacks to where jobs are located, customer discrimination against blacks (which might also reduce black employment prospects in white areas), employer discrimination that deters employers from moving to urban black areas where wages are lower, and poor information about jobs in other areas (Ihlanfeldt and Sjoquist, 1998).

Since Kain's work, researchers have tested this hypothesis in a number of ways. Some look at employment (or earnings) differences associated with residence in the central city versus elsewhere in the metropolitan area, based on the argument that job access for blacks versus whites differs sharply along central city-suburban lines (Holzer, 1991). The evidence from this approach is mixed (Harrison, 1972; Vrooman and Greenfield, 1980; Price and Mills, 1985). One problem with the central city "test" is that lower employment of central-city blacks may also reflect unmeasured differences between blacks residing in central city areas and blacks (or whites) residing elsewhere (as discussed in the previous subsection), arising from endogenous

¹⁰ The Ihlanfeldt and Sjoquist study, as well as others referenced below, provide thorough overviews of the literature on spatial mismatch. We therefore do not provide a comprehensive survey, but instead touch on key issues related to other points we discuss in this chapter. For a recent review emphasizing theoretical models and hypotheses regarding spatial mismatch, see Gobillon et al. (2007).

location decisions in which those with jobs and therefore higher income choose to live in suburban areas, creating a bias toward a finding of spatial mismatch (Ellwood, 1986; Ihlanfeldt and Sjoquist, 1998). A second problem is that job opportunities vary within central city and suburban areas.

Consequently, other work on spatial mismatch has tried to incorporate more direct information on access to jobs that is related to either travel time or the extent of nearby jobs (e.g., Ellwood, 1986; Ihlanfeldt and Sjoquist, 1990), which are inter-related. These studies tend to show that blacks live in places with fewer jobs per person, and that this lower job access implies that blacks face longer commute times to jobs – although the differences may not be large and could conceivably be overcome relatively easily (Ellwood, 1986; Dickens, 1999). However, potential biases from endogenous location also arise in estimating the link between job access and employment among blacks. In particular, if blacks with jobs and therefore higher incomes choose to live in areas with less job access (e.g., consuming suburban amenities), this generates a bias toward zero in the estimated relationship between job access and employment (Ihlanfeldt, 1992). Moreover, even compelling evidence of longer commute times for blacks does not point to spatial mismatch per se, as simple employment discrimination against blacks can imply fewer job offers and hence on average longer commute times for blacks even if blacks and whites live in the same place.

Two recent studies use across-city variation in the spatial distribution of jobs to test for spatial mismatch. Weinberg (2000) finds a strong negative relationship between the concentration of black residents in central cities and black employment rates. A follow-up paper (Weinberg, 2004) explores how the concentration of jobs in central cities affects black employment rates relative to whites; instrumenting with industrial composition (on the argument

that certain types of industries are more likely to be located in central city areas), he finds the "centralization" of jobs reduces the black-white employment gap. The idea underlying the crosscity approach is that neighborhood selection is less of an issue across cities than across neighborhoods, paralleling the Cutler and Glaeser (1997) analysis of segregation. Of course individuals may also sort across cities (and between cities and suburbs), but it may be easier to posit valid instruments for analyses at this higher level of aggregation.

Questioning spatial mismatch

There is a good deal of evidence consistent with the spatial mismatch hypothesis, and two widely-cited reviews of the literature (Holzer, 1991; Ihlanfeldt and Sjoquist, 1998) concur. In contrast, Jencks and Mayer (1990) provide a more negative assessment, concluding that there is "no direct support for the hypothesis that residential segregation affects the aggregate level of demand for black workers," and that there is "some support for the idea that job proximity increases the supply of black workers, but the support is so mixed that no prudent policy analyst should rely on it" (pp. 218-9). Based on this reading of the evidence, they write: "Those who argue that moving blacks to the suburbs would improve their job prospects, or that improving public transportation to the suburbs would reduce unemployment in the central-city ghetto, must recognize that there is as much evidence against such claims as for them" (Jencks and Mayer 1990, pp. 218-19). Kain (1992, pp. 375-86), however, asserts that this conclusion is based on a very selective reading of the evidence, and disputes some of the evidence emphasized by Jencks and Mayer.

The pure spatial mismatch hypothesis implies that it is only the location of jobs, irrespective of whether they are held by blacks or whites, which affects employment prospects. But if discrimination, or labor market networks or neighborhood effects in which race matters,

play important roles, then the distribution of jobs held by members of one's own race may be a more important determinant of employment status. Given that urban areas with large concentrations of black residents may also be areas into which whites tend to commute to work, it is possible that the employment problems of low-skilled inner-city blacks may not reflect simply an absence of jobs where they live, even at appropriate skill levels, but rather that the jobs that do exist are more likely to be available to and hence held by whites.

This possibility motivates our recent work (Hellerstein et al., 2008) studying whether the relationship between job access and employment of blacks is driven solely by the spatial distribution of jobs, or whether the racial composition of those jobs is also important in explaining black employment. Our evidence suggests that the spatial distribution of jobs, alone, is not an important determinant of black urban employment, but rather it is the interaction of the spatial distribution of jobs combined with a racial dimension in hiring, or what we term "racial mismatch," that matters. In particular, we find that even if blacks reside in areas that are dense in jobs at their skill level, if these jobs tend to be held by whites, black residents are less likely to be employed. In other words, high *white* job density does little to boost local black employment, while high *black* job density increases it quite a bit. Moreover, the density of jobs where blacks live is in fact quite high, even at low skill levels. That fact alone suggests that there may not be a predominant role for frictions that prevent employers from locating near where urban blacks live, but instead that there are important mechanisms by which one racial group is more likely to get hired than another.

Our analysis parallels spatial mismatch studies using measures of job access. We are interested in how the distribution of jobs across local labor markets affects employment, and hence we construct measures of job access at a disaggregated level, using confidential Census

information on place of work. In particular, we define local labor markets as the zip code in which a person resides, plus all contiguous zip codes, based on evidence that about one-third of people work in these areas. Because we have a very large sample, we are able to construct job access measures by skill (jobs at a skill level per resident at that same skill level in areas where blacks live), which may provide a good characterization of spatial mismatch facing particular groups of individuals.

The point of departure from the previous literature is that we introduce the idea of racial mismatch and test for it. We construct measures of job density not only by location and skill, but also by race. That is, we also construct measures of local jobs held by blacks per local black resident, and local jobs held by whites per local black resident (sometimes by skill). We then estimate whether black employment is more sensitive to the spatial distribution of jobs held by blacks than to job density measured without regard to race. Note that if racial mismatch is important but one simply estimates models of the effects of overall (or skill-specific) job density on black employment, one can still find evidence suggesting that job density matters, consistent with the spatial mismatch hypothesis. Indeed we show that black employment is significantly positively related to overall job density, and – as the spatial mismatch model would also predict – that this relationship is stronger at the low end of the skill distribution. 11

However, the evidence is far more consistent with racial mismatch than with simple spatial mismatch. Black job density (the ratio of local jobs held by blacks to *black* residents) strongly affects black employment, whereas white job density (the ratio of local jobs held by *whites* to *black* residents) does not.¹² And the former relationship is stronger at low skill levels.

¹¹ This is true whether we look at the skill of workers for whom we estimate the effects of job density, or the skill level of the jobs for which we define density. And indeed the relationship is strongest for the effect of the density of low-skilled jobs on low-skilled individuals.

¹² We define white job density as local jobs held by whites per local black resident to capture the potential

Another way we characterize this result is to show that, based on our model estimates, redistributing low-skilled blacks so that they would face the same overall density of low-skilled jobs as is faced by low-skilled whites would have a trivial impact on the black-white employment gap for low-skilled individuals.¹³ Although this redistribution would lead blacks (not surprisingly) to live in places with higher *white* job density (white jobs per black resident), the overall effect on black employment is very small because the effect of white job density on blacks' probability of employment is very small.

The implications of the alternative hypotheses are significant, because only the spatial mismatch hypothesis implies that black employment would be increased by improving access of blacks to areas with more jobs (at the appropriate skill level) – or bringing more jobs to areas where blacks live – without regard to the racial composition of employment in those jobs. In contrast, the evidence of racial mismatch implies that making a significant dent in black urban labor market problems likely will involve confronting racial issues head on. Thus, although Jencks and Mayer's conclusion, quoted above, about the futility of efforts to improve black employment by moving them to the suburbs or improving transportation may or may not follow from earlier evidence on spatial mismatch, it is supported by our evidence that spatial mismatch is really racial mismatch.

In ensuing sections of this chapter we discuss evidence that bears on these same points. In Section IV we discuss the efficacy of policies focused on transportation and changing the

availability of jobs, held by whites, to black residents. The finding that black employment tends to be higher when black job density is high is not tautological. The job density measure captures jobs located in an area divided by residents of that area, not the employment rate of residents. And we always estimate the model at the individual level omitting the individual from the density calculation.

¹³ Ellwood (1986, p. 176) looks at teenagers only, but finds results that have the same "flavor" of racial rather than spatial mismatch. In particular, he finds that the effect of the percent black in a Census tract on the race difference in employment rates is as large within neighborhoods (which are larger than tracts) as across neighborhoods. In other words, black-white (teen) employment rates differ as much based on within-Census tract variation – for which the pure spatial distribution of jobs is the same regardless of one's race – as based on across-Census tract variation – where blacks and whites can face a quite different spatial distribution of jobs.

residential locations of blacks, which should help according to the spatial mismatch hypothesis, but may do little benefit given that the mismatch is racial. We also discuss (beginning in the next subsection) evidence on labor market networks, as one potential source of racial mismatch – in particular, that an area dense in white jobs does little to boost black employment because labor market networks are racially stratified.

Race and place

The evidence reviewed thus far indicates that black urban labor market problems are not fully explained by the characteristics of the people in those labor markets – people-based explanations – nor are they explained well by spatial mismatch – place-based explanations.

These findings have led us to study the interaction of place-based factors with race – i.e., explanations that have a spatial dimension, but also require an explicit racial dimension.

We do not believe that discrimination as traditionally considered has explicit and interdependent spatial and racial dimensions. There is certainly a good deal of evidence indicative of race discrimination in labor markets.¹⁴ However, our sense is that the literature on discrimination has neither focused on discrimination against blacks in urban (versus suburban) labor markets, nor established that racial discrimination is worse in urban markets. Nonetheless, there is some evidence that is perhaps consistent with interaction between race and place, such as the adverse effects of stigma regarding job applicants who have received welfare and especially those who have criminal records (e.g., Holzer et al., 2006). Moss and Tilly (2001) argue, based on extensive interview evidence, that employers hold negative stereotypes about inner-city residents that are tied to "a variety of perceived urban ills such as crime, family breakdown,

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¹⁴ The literature is vast, but among the more compelling recent studies are the correspondence-study evidence in Bertrand and Mullainathan (2004), and the evidence on the relationships between discriminatory attitudes and labor market outcomes in Charles and Gurvan (2008).

welfare dependency, and inadequate education" (p. 207). However, our focus is not on these factors.

An important channel by which race and space can interact to disadvantage urban blacks is through labor market networks, defined – broadly speaking – as the informal and usually interpersonal channels through which information about jobs flows in ways that affect who gets jobs and where they work. It seems likely, although it is not necessary, that networks have a spatial dimension – for example, connecting neighbors.

Theoretical models of labor market networks can formalize the link between residential segregation and labor market outcomes. Underlying all network models is some form of information imperfection that networks serve to partially mitigate. In Montgomery (1991), the information imperfection is on the employer side. Firms with vacancies cannot observe the underlying ability of a potential worker, but firms can infer something about this ability if the firm currently employs individuals from that worker's social network, and social networks are partly stratified by ability. Hence, networks act at the establishment level to reduce employer search costs. In equilibrium, individuals are more likely to receive and accept wage offers from firms that employ others in their social network. In this framework, if social networks are racially (or ethnically) stratified – potentially as the result of residential segregation – and white workers are initially employed at higher rates than other groups, then the existence of a larger network of white workers will lead to more job referrals at high wages for whites searching for jobs, creating disparities in labor market outcomes between whites and other groups.

15

A large body of evidence, reviewed by Ioannides and Datcher Loury (2004), is consistent with labor market networks, although much of this evidence is in the form of survey evidence

¹⁵ Calvó-Armengol and Jackson (2007) derive this result for wages. Although Montgomery's model does not build in a reservation wage, having an option for remaining out of the labor market would, in his framework, lead to employment differentials across groups as well.

indicating widespread reliance on friends, relatives, and acquaintances to find jobs. The evidence points to little difference between blacks and whites in the use of informal contacts in job search, higher rates of use of informal contacts among low-educated workers, and substantially higher rates of use of informal contacts among Hispanics. Subsequent work has noted the potential for labor market networks to be race- (or ethnic-) based so that, for example, reliance on informal referrals in a predominantly white labor market benefits whites at the expense of other groups (Kmec, 2007).¹⁶

Turning more specifically to the spatial dimension of networks, Bayer et al. (2008) move beyond survey evidence and look for evidence of network effects among neighbors using confidential Census data on Boston-area workers. They find that two individuals living on the same census block are one-third more likely to work on the same census block than are two individuals living in the same block group but not on the same block. As long as informal networks are stronger within blocks than within block groups, but unobserved differences are similar with blocks and block groups, this evidence suggests that residence-based labor market networks affect hiring.

In recent work (Hellerstein et al., forthcoming[a]), we assess evidence on the importance of labor market networks among neighbors, and how they might explain our racial mismatch results. Any study of networks that uses observational data has to specify the channels along which network connections may flow. Given our focus on space, we are interested in network connections among neighbors. Neighbors may interact in a variety of ways that result in the exchange of labor market information, as the Bayer et al. evidence also suggests. Our evidence

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¹⁶ Kasinitz and Rosenberg (1996) provide case study evidence of ethnic-based networks. They study the Red Hook section of Brooklyn, an area of high unemployment that is populated largely by low-income blacks (and to some extent Hispanics), but with a large number of local jobs in the shipping industry. Many local employers hire workers almost exclusively from outside of Red Hook, recruiting employees via social networks within specific (non-black) ethnic groups.

offers some advantages relative to existing work because it looks explicitly at who works at which establishment. Because we focus on network connections among workers in the same establishment, these connections can be interpreted as potentially reducing the type of employer search costs or frictions just described. In addition, our approach allows us to address whether networks are racially stratified, which is central to the discussion of the interaction between race and place.¹⁷

We test for the importance of residence-based labor market networks in determining the establishments at which people work, using matched employer-employee data at the establishment level, based on a large-scale data set covering most of the U.S. economy (the 2000 DEED, described in detail in Hellerstein and Neumark, 2003). These employer-employee matches enable us to study directly whether workers employed in the same establishment are likely to live in the same neighborhoods. Our measure of labor market networks captures the extent to which employees of a business establishment come disproportionately from the same sets of residential neighborhoods (defined as Census tracts), relative to the residential locations of other employees working in the same Census tract but in different establishments. We measure the importance of network effects for groups broken out by race (black and white), Hispanic ethnicity, and various measures of skill (education, English language proficiency, and immigrant status). Finally, we provide evidence on the stratification of networks, asking whether the networks we study are race-based, operating more strongly within than across races.

We first identify all establishments within each Census tract in our sample. Because we have matched employer-employee data, we have a sample of workers in each establishment, and

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¹⁷ New research explores network connections along other dimensions. Laschever (2009) studies the employment experiences of Veterans who served together in World War I, and finds a positive correlation between employment (and unemployment) of those who served together. Cingano and Rosolia (2009) study the re-employment experiences of workers displaced from the same firm who previously worked together; they find similar evidence of correlated experiences.

we know the Census tracts in which they live. We compute the share of an individual's coworkers who are his or her residential neighbors, relative to the share that would result if the establishment hired workers randomly from the geographic areas where *all* individuals who work in the Census tract reside. Residence-based networks would predict that the share of neighbors among a worker's co-workers would be higher – and possibly much higher – than would result from the random hiring process.

While random hiring represents a reasonable lower-bound baseline for the sorting of workers by neighborhoods across establishments, we also consider what the upper bound would be. In particular, if establishments are larger than networks, perfect sorting by residence-based networks across establishments cannot occur. We therefore operationalize our measure of the importance of residential labor market networks by calculating what fraction of the difference between the lower bound and upper bounds of the extent to which a worker can work with neighbors is actually observed in the data. Because we measure the fraction of the difference between the lower bound and the maximum possible sorting that could occur, the magnitude of our network measure can be compared across various sub-populations. We also consider influences other than networks that could give rise to the observed patterns of sorting across establishments by residential location that we observe in the data, such as skill differences across both establishments and neighborhoods.

Overall, we find that residence-based labor market networks play an important role in hiring. For the full samples of both blacks and whites, about 10 percent of the maximum amount

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¹⁸ Implicit in this analysis is that place of residence is predetermined, and in turn potentially influences place of work. We show that this is a reasonable assumption, because we get similar results in an analysis restricted to people who have lived at the same location for five or more years but have worked at their current employer for fewer than five years.

¹⁹ The reason is because, when we consider alternative assignments of individuals to establishments, even if all individuals in a neighborhood (i.e., a residence-based network) are assigned to the establishment, additional workers from other neighborhoods must be assigned to "fill" the establishment.

to which residential networks (at the Census tract level) *could* contribute to the sorting of workers by establishment *is* actually reflected in the sorting of workers into establishments.²⁰ However, in part because of the sample construction, blacks and whites work in very differently-sized establishments, and because we find that networks are more important in smaller establishments,²¹ when we look at much more homogeneous samples by race with respect to establishment size, the effective network isolation index for blacks is nearly double that for whites. We also find that networks are more important for less-skilled workers. These results might be anticipated if we are detecting labor market networks among neighbors. Network connections among neighbors must be more important for local labor markets, and labor markets for less-skilled workers are surely more local.

For Hispanics, residence-based networks are considerably more important; the grouping of workers from the same neighborhoods in the same business establishments is about 22 percent of the maximum, and as much as twice as high for Hispanic immigrants and those with poor English skills.²² The results for Hispanics give credence to the idea that informal labor market networks may be particularly important for those workers who are not as well-integrated into the labor market, and for whom employers may have less reliable information.

Most relevant to this chapter is the question of whether labor market networks are racially stratified. The simple fact that residence-based networks are important points to racially-stratified networks. After all, given pervasive racial residential segregation in the United States (Iceland and Weinberg, 2002), networks that are predicated on residential "connectedness" have

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²⁰ This is the simplest statement of how to interpret our measure of the importance of networks. We refer readers to Hellerstein et al. (forthcoming[a]) for details of the calculation.

²¹ Small establishments are less likely to have human resources departments that might themselves reduce search frictions, and are also less likely to have concerns that network-based hiring could lead to workforce composition that might suggest racial or ethnic discrimination in hiring, given that small employers (fewer than 15 employees) are exempt from Title VII.

²² For additional evidence indicating the importance of networks for Hispanics, see Hellerstein et al. (forthcoming[b]).

to be partially race-based. However, we consider whether there is racial stratification of networks even *within* neighborhoods, with labor market information (especially job referrals) less likely to flow between black and white co-residents than between co-residents of the same race.

To assess whether networks are race-based, we modify our analysis, treating the relevant set of a black worker's neighbors and co-workers to include either blacks *or* whites. Thus, in this analysis we measure the extent to which black workers are clustered in establishments with black or white co-workers who are their neighbors – not just with black co-workers who are their neighbors. If networks among co-residents are racially stratified, then the measure of network strength that results when we measure how likely it is that a black works with a neighbor regardless of race should be smaller than when we measure how likely it is that a black works with a black neighbor.²³ The evidence does in fact point to weaker network connections between black and white neighbors than among black neighbors. Specifically, the empirical importance of networks as we measure it falls by more than 40 percent.

The two findings from this research – that labor market networks are important, and that these networks are racially stratified – can potentially explain our evidence of racial mismatch, i.e., that higher local job density for one's own race affects employment probabilities, but higher job density for the other race does not. An area rich in jobs held by members of a group that is not networked strongly with residents may do little to boost employment of the latter. Moreover, the existence of labor market networks that are stratified along racial or ethnic lines is consistent

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²³ We should point out that we cannot separate the existence of networks connections from their productivity. That is, weaker evidence of network connections between blacks and whites than just among blacks could arise if whites and blacks within a neighborhood share information on job openings as much as blacks do among themselves, but the information is more productive for blacks in matching blacks to establishments when the information serves to link a black neighbor to a job in an establishment held by another black neighbor. Thus, we cannot tell whether network connections between black and white neighbors are fewer in number or less productive; all we can do is characterize the relative importance of these network connections.

with other evidence on the role of race and ethnicity in the work place, such as the establishment-level segregation by race and ethnicity that we document in Hellerstein and Neumark (2008). And perhaps most importantly, the importance of networks generally, and their racial stratification, can help explain the apparent failure of some of the policies that have been used to try to improve black urban labor market outcomes, as we discuss later in this chapter.

We also want to highlight some unanswered research questions related to networks.

First, the work discussed above points to the existence of network connections and highlights their structure. It does not, however, establish that these networks are productive, in the sense of explaining why the absence of network connections implies lower likelihood of employment, lower wages, etc., nor does it provide any information on how networks form organically, or how they operate.

Second, we would like to know whether the effects of networks are likely to be particularly important (and problematic) for urban blacks. It is conceivable that the racial stratification of labor market networks is worse in heavily racially-segregated urban areas, but there is no evidence on this question. And even without reference to racial stratification of networks, if network connections to the labor market are important, there may be adverse "multiplier effects" from any factor that might have contributed to lower urban black employment in the first place, such as the movements of industrial jobs out of cities that are emphasized by the spatial mismatch literature. If one worker helps connect other workers to jobs, then one worker becoming non-employed can lead to the destruction of multiple network connections. Dickens (1999) sketches out a model that captures this story.

And third, is there scope for policy to take advantage of networks? If networks are productive, what can policymakers do to try to encourage the formation of networks? Can policy

foster the kinds of institutions that lead to stronger networks among people in areas where these connections are lacking? Our policy discussion in the next section turns to some limited evidence on this point.

IV. Place-Based Policies

Bringing jobs to black urban labor markets

One of the principal tools used by national and state policymakers to bring jobs to poor, minority urban areas, is the establishment of enterprise zones. Enterprise zones are viewed as "place-based" policies, in contrast with "people-based" policies that offer benefits to individuals regardless of their location. Enterprise zone programs establish incentives for businesses in specific, typically urban locations, with goals of raising employment and reducing poverty and unemployment and raising incomes in target areas.²⁴ For example, in California – where enterprise zones have been studied extensively – the key incentive built into the program is a large state tax credit for hiring a "disadvantaged" employee, 25 initially covering 50% of wages up to 150% of the minimum wage, which falls by 10 percentage points each year until reaching zero. This tax credit can result in substantial reductions in the cost of hiring low-skill labor. In general, incentives are fairly common across enterprise zone programs in different states.²⁶ And the federal programs differ by including block grants aimed at reducing poverty and improving local infrastructure (Busso and Kline, 2007).

Most existing research evaluating the effects of enterprise zones assesses their effects on

²⁴ The incentives sometimes target zone residents, and sometimes target zone businesses (or both). For example, in California businesses in an enterprise zone primarily earn hiring credits for employees living in targeted employment areas (TEAs), which are low-income Census tracts that need not be coincident with the enterprise zone. In contrast, the federal programs target residents.

²⁵ See e.g., Neumark and Kolko (2010); Ham et al. (2009); Elvery (2009); Bostic and Prohofsky (2006); and O'Keefe (2004). Workers qualify as "disadvantaged" if they are unemployed for a sufficient duration or for certain other reasons – for example, if they have sufficiently low income, if they belong to one of several "eligibility groups" (veteran, enrolled in welfare-to-work, etc.), or if they live in a targeted employment area. ²⁶ See, e.g., National Conference of State Legislatures (2005) and Engberg and Greenbaum (1999). There are,

however, some notable differences; for example, in Ohio the hiring credit is only \$300 per worker.

jobs, businesses, or zone residents, comparing outcomes like employment (e.g., Bondonio and Engberg, 2000; O'Keefe, 2004) or number of establishments (Dabney, 1991) across enterprise zones and comparable regions where zone incentives do not apply. This research generally fails to find positive employment effects of enterprise zones; Lynch and Zax (2008) and Elvery (2009) provide recent reviews.²⁷ For example, although Lynch and Zax (2008) discuss a few studies that find positive employment effects (Papke, 1994; O'Keefe, 2004; Busso and Kline, 2007; and a limited amount of evidence in Billings, 2009), they describe these findings as "anomalous" (p. 5) relative to a much larger number of studies finding no employment effects.²⁸

Because it is difficult to obtain reliable evidence on the effects of enterprise zones, this conclusion might be overly pessimistic. One major challenge is to identify geographic areas that precisely reflect enterprise zone boundaries for which outcomes of interest – such as employment – can be measured. In California and many other places, enterprise zones boundaries do not follow those of Census tracts, zip codes, or other standard geographic designations.²⁹ Thus, studies have used data on zip codes (Dowall, 1996; Bondonio and Greenbaum, 2007) or Census tracts (O'Keefe, 2004; Ham et al., 2009) which only approximate the boundaries of enterprise zones. These approximations, however, introduce substantial measurement error by incorrectly assigning areas (and the workers or businesses in them) as inside or outside enterprise zones (Papke, 1993; Elvery, 2009), which will tend to bias the evidence against finding an effect of enterprise zones.

Neumark and Kolko (2010) address this problem in a recent study of California's

²⁷ Both papers also present new evidence that is similarly pessimistic on the ability of enterprise zones to create jobs.

²⁸ An earlier review by Wilder and Rubin (1996) is more positive regarding the effects of enterprise zones.

However, much of the evidence in this earlier review is hardly definitive when it comes to establishing causal effects of enterprise zones – being based, for example, on perceptions of program participants (e.g., U.S. Department of Housing and Urban Development, 1986).

²⁹ Federal zones do follow Census tract boundaries.

enterprise zone program, precisely identifying zone boundaries by digitally mapping California's enterprise zones street-by-street rather than approximating with Census tracts, zip codes, etc.

They use the National Establishment Time-Series (NETS) database, which includes employment and address information on nearly all business establishments in California. By geocoding establishments in the NETS, the authors can precisely map whether business establishments are inside or outside of enterprise zones.

A second challenge is selecting appropriate control groups for enterprise zones. A broad range of strategies have been pursued, including matching estimators (O'Keefe, 2004; Elvery, 2009); spatial discontinuity methods (Billings, 2009); and comparisons of Census tracts that became part of federal empowerment zones with tracts that submitted unsuccessful applications for zone designation (Busso and Kline, 2007; Hanson, 2009).³⁰ Neumark and Kolko (2010) exploit the spatial mapping of enterprise zones and all business establishments in the state to construct a narrow buffer just outside the enterprise zone as a control group, as well as using areas that were added to enterprise zones at different times as California's enterprise zones expanded. They argue that the latter areas provide the most reliable controls, because it has been demonstrated through the policy process that these control areas were appropriate for enterprise zone designation.³¹ Neumark and Kolko's estimates are consistent with the research that fails to find that enterprise zones boost employment.³²

Busso and Kline (2007), however, challenge the generally pessimistic conclusions regarding enterprise zones, finding significant reductions in poverty from federal enterprise zone

³⁰ Hanson also instruments for zone applicant success using measures of the political influence of the zone's Congressional representative.

³¹ In that sense, they might be viewed as even more comparable to zones than areas that applied for enterprise zone status but were rejected.

³² Ham et al. (2009) present some findings that are partially contradictory; Neumark and Kolko discuss a variety of potential problems with their analysis and findings.

programs. As noted earlier, the federal programs entail other interventions including large block grants aimed at poverty reduction. If the beneficial effects of federal programs hold up in further research, then it will be important to reconcile the contrast in results between the federal and state programs.

One weakness of the enterprise zone literature with respect to our focus in this chapter is that there is scarcely any work that looks directly at the disadvantaged in general or black workers in particular. One exception is Bostic and Prohofsky (2006), who report evidence of positive wage and income effects for those hired under California's enterprise zone program.³³ And to some extent the studies that focus on poverty rates (Busso and Kline, 2007; Ham et al., 2009) address this issue. Although we are under no illusion that the empirical challenges get any easier, trying to learn more about how enterprise zone programs affect particular populations of interest – including black urban residents – is a high priority. That said, the findings from our research on spatial and racial mismatch caution strongly against the idea that simply creating jobs near urban areas where blacks live will necessarily increase their employment prospects. One important factor in determining the effects of such efforts would be who gets hired as a result of program incentives. For example, existing businesses that expand may rely on networks that do not include local residents, in which case program effectiveness might be increased by doing more to encourage hiring among narrowly-targeted local residents.

Relocating people to jobs

An alternative place-based policy response is to move people to live nearer to jobs, exactly the policy that was implemented in two well-known programs, the Gautreaux Relocation

³³ However, they compare the outcomes of those hired under the program to those who are otherwise similar (including zip code of residence) but were not hired. As a result, it is not clear that this reflects the program effect of enterprise zones, or instead simply heterogeneity in outcomes between those who get hired and those who do not get hired.

Housing Project and, more recently, Moving to Opportunity (MTO). Both programs relocated disadvantaged families (predominantly families headed by single mothers) from residential neighborhoods characterized by high poverty, and in the case of Gautreaux in particular, extreme housing segregation, to new neighborhoods. While the first results from the Gautreaux project suggested marked positive labor market effects, more recent longer-term follow-ups, using arguably better data, do not demonstrate large effects. And while MTO has found positive effects of the program on non-labor market outcomes (e.g., mental health), the results of MTO have not yielded measurable positive effects on employment, earnings, or public assistance receipt.³⁴

We do not provide a detailed examination of Gautreaux and MTO, but rather summarize the programs and the findings to date on labor market outcomes, and suggest possible explanations as to why the impacts of the programs on labor market outcomes are modest (at best). We note at the outset that moving people to new residential neighborhoods with potentially better labor market outcomes is more multi-faceted than policies that try to move jobs near to where people live, because more changes than just local labor market conditions. In addition, both programs, by focusing on low-income families in public housing, targeted adults who are largely single female household heads with children; thus, the effects (or lack thereof) are primarily effects for these women or their children.

Rather than a randomized experiment conducted by social scientists, Gautreaux stemmed from a court-ordered desegregation plan in response to class-action lawsuits filed against the Chicago Housing Authority and the U.S. Department of Housing and Urban Development, charging deliberate segregation of black families in public housing. Part of the settlement

³⁴ There are many excellent summaries of the details of both the Gautreaux and MTO program designs, and a number of comprehensive reviews of findings of studies of either or both programs; see, e.g., Rosenbaum and Zuberi (2010) and Duncan and Zuberi (2006).

involved moving 7,000 black families who were living in (or waitlisted for) public housing to new neighborhoods, between 1976 and 1998. Program participants were offered housing vouchers and were quasi-randomized into moving either to a predominantly white suburb (fewer than 30 percent black residents) or, as it turned out, to mostly black and lower-income urban neighborhoods. There was no control group of non-movers, so evaluations of Gautreaux generally focus on comparing those who were moved to the suburbs with those who moved to urban neighborhoods. This is an important limitation because both groups were treated (by a residential move), and to the extent that moving itself has employment impacts – for example, by severing one's labor market network – the effects of moving may be obscured. This limitation notwithstanding, Gautreaux remains a benchmark for much of what is claimed to be known about policies that move people out of very poor and highly-segregated neighborhoods.

In an influential early review of Gautreaux findings, Rosenbaum (1995) reports that in results comparing a sample of women who moved to the suburbs with a sample who moved elsewhere in the City of Chicago, as of 1989 "suburban movers were more than 25 percent more likely to have a job than urban movers," (p. 237) although he reports no significant effects on hours or wages. A separate sample of children was interviewed in 1982 and again in 1989, when their average age was 18, allowing meaningful measurement of labor market (and other) outcomes for these children. Among the suburban movers, Rosenbaum (1995) reports significantly higher employment rates in full-time jobs, as well as higher wages, for those not enrolled in school. These positive labor market effects reflect the combined treatment of exposure to schooling in suburban versus urban schools and exposure to potentially different neighborhood-based labor markets, and therefore do not necessarily generalize to policies that move young males with completed schooling, in particular, to new neighborhoods. In any case,

the conventional wisdom from the early studies of Gautreaux was that they had largely positive effects on labor market outcomes.

Longer-term studies of Gautreaux yield weaker and more nuanced findings. Using administrative data from 1995-1999, Mendenhall et al. (2006) examine the impact of the program on employment and welfare receipt for women. In contrast to Rosenbaum (1995), they find *no* suburban/urban differences in outcomes. When they disaggregate the data by geography at a level that is finer than a simple suburban/urban distinction, they do find lower employment rates and earnings for one specific category of women relative to all others: women who were moved to neighborhoods that were both extremely low-income and disproportionately black. However, even these differences are much more modest than the suburban/urban differences reported in Rosenbaum (1995), leading some researchers (see, e.g., Duncan and Zuberi, 2006) to be much more cautious in drawing positive conclusions, at least for labor market outcomes, from the Gautreaux results. Critiques of the evaluations of Gautreaux also focus on the fact that it was not a randomized experiment, and on non-trivial non-response rates in some of the influential studies of its effects.³⁵

Because MTO was a randomized experiment, evaluation is easier. There also are substantive programmatic differences. MTO was conducted by the U.S. Department of Housing and Urban Development, studying 4,600 participants in five cities.³⁶ Between 1994 and 1998, program participants, who were low-income families (mostly headed by black or Hispanic unmarried mothers) living in public or Section 8 housing in low-income Census tracts, were

³⁵ For example, the response rate in Rosenbaum (1995) was 67 percent. Others have criticized the results as representing a non-random population of low-income individuals, since there were various criteria by which eligible families were not allowed to enroll in the program (Rosenbaum and Popkin, 1991). Yet others have found that there are statistically significant observable differences between families that moved to the suburbs and those that moved within Chicago (Mendenhall et al., 2006).

³⁶ The cities were Baltimore, Boston, Chicago, Los Angeles, and New York. For an overview of MTO, see http://www.nber.org/mtopublic/ (viewed April 26, 2010).

randomly assigned to one of three groups. One group was not offered any housing assistance, and therefore serves as a true control group. The second group was offered a voucher for Section 8 housing and standard assistance. The third group – the treatment group of main policy interest – was offered Section 8 vouchers that could be used only in neighborhoods with poverty rates below 10 percent in 1990, as well as counseling and help in finding qualified housing.

MTO's participants were followed and surveyed in 2002, four to seven years following their enrollment. Evaluations of these follow-up surveys have concluded that MTO had no measurable impacts on labor market outcomes,³⁷ as families that were given vouchers to relocate to low-poverty areas were no more likely than the control families to have found employment, nor were earnings any higher.

There are many reasons why MTO may not have succeeded in improving labor market outcomes. First, MTO (unlike Gautreaux) was implemented during a period with a remarkably strong labor market and when reforms to the welfare system potentially increased labor force participation rates substantially. Rosenbaum and Zuberi (2010) speculate that the lack of a treatment effect of MTO may simply be a function of the fact that essentially anyone who wanted a job could find one. Indeed, as reported in Orr et al. (2003), the control group in MTO experienced huge increases in employment – on the order of 100 percent. Second, MTO (again, unlike Gautreaux) allowed those in the treatment group flexibility in the neighborhoods into which they were allowed to move, as long as the neighborhood met the poverty-rate criterion. As a result, MTO families did not move as far as Gautreaux families who moved to the suburbs, and there is some suggestion that even within the neighborhoods to which they moved, Gautreaux families were less likely to end up living in a small enclave (like a specific housing

 $^{^{37}}$ See, e.g., Orr et al. (2003) and Kling et al. (2007).

unit) within a Census tract that was disproportionately black or low-income (Rosenbaum and Zuberi, 2010). Finally, many families in the MTO treatment group, who signed year-long leases initially, moved again after their leases were up, and on average to areas that were closer both geographically and demographically to their pre-treatment neighborhoods.

In the end, perhaps the key lesson that can be learned from programs that have moved individuals to neighborhoods characterized by much lower rates of poverty is that the labor market problems faced by individuals are not simply problems of residential location.³⁸ Another way to put this is that the evidence is inconsistent with the spatial mismatch hypothesis alone. In our view, one the most compelling alternative explanations for these outcomes is the role of labor market networks.

There is substantial qualitative evidence from MTO that is consistent with the conclusion that these programs did not improve outcomes by reducing spatial mismatch, and that networks may be important. Turney et al. (2006) describe evidence from qualitative interviews of a small random sample of MTO participants at the Baltimore site. They report that both treatment and control interviewees report transportation access as hindering employment outcomes, with those in the treatment group seeming to have more issues with transportation access. About half of the employed treatment interviewees worked in a health care job or in another job in a hospital, so Turney et al. map the locations of their jobs, and the locations of all other hospitals and nursing homes in the area, and show that the majority of these potential employers are actually located closer to the original neighborhoods from which the treatments moved. Thus, spatial mismatch does not appear to have been a problem that was ameliorated by MTO.

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³⁸ Similar negative findings emerge from studies of Section 8 rental vouchers, which aim to move eligible families to better neighborhoods (Carlson et al., 2010). With these programs, there is some evidence of a negative earnings effect owing to work disincentives that arise because the value of the housing voucher falls with income.

Turney et al. discuss numerous qualitative results regarding the use of social networks in determining labor market outcomes. They report that 68 percent of currently-employed interviewees in the treatment group reported using networks, predominantly characterized by weak ties, to find their current job. Yet strikingly, not one of them reported finding their current job through a neighbor. They do report that respondents indicated that positive role-modeling or encouragement of neighbors was helpful to their job searches, but this kind of neighbor support and role modeling did not lead to higher employment rates. Moreover, the qualitative evidence suggests how difficult it is for the treatment group to develop new networks.

The interviewees from the control group had similar rates of using network contacts to find their current job. But importantly, the controls found it "easier to use these (network) connections, because sheer proximity brings them into contact with such individuals more often. The low-poverty move limits access to individuals working in occupations similar to the ones the respondents usually seek" (p. 161). Interestingly, though, like the treatment interviewees, none of the control interviewees report finding their current job through a neighbor either, although the authors attribute this to a different reason – that too few of the controls' neighbors were working.

The lessons from the qualitative interviews are consistent with what we know from other evidence. First, program participants rely heavily on networks to find employment. Second, while neighbors may be one important source of information about jobs, they have to be the

³⁹ They report that one interviewee found a previous job through a neighbor. Based on detailed qualitative interviews with 25 Gautreaux participants, Mendenhall (2004) reports some productive use of neighbors for finding employment among both suburban and urban women she interviewed, but she concludes that other non-neighbor networks were more productive. Because Gautreaux moved all participants to new neighborhoods, it is impossible to really evaluate how network contacts were affected by the residential moves.

"right" neighbors – neighbors whose skill levels match those of the job seekers, and neighbors who themselves are employed. 40

Improving transportation access

Improving transportation access for blacks seems to make sense in light of the evidence that location is part of the source of black urban labor market problems. Moreover, transportation access differs by race: for example, fewer blacks than whites own cars (Holzer et al., 1994; Raphael and Rice, 2002); employed blacks have longer commutes to work than employed whites (Gabriel and Rosenthal, 1996); and public transportation may be better suited to suburbanites coming to work in urban cores rather than the other way around. In this subsection we summarize some research that looks at this question.

The discussion in preceding sections suggests that that improving transportation access is unlikely to contribute markedly to improvements in labor market outcomes for urban blacks. Perhaps reflecting this, the direct evidence on the role of transportation is inconclusive at best. Part of the reason for this may be because it is so difficult to find plausibly exogenous sources of variation in transportation. The other likely explanation is simply that although transportation access is a compelling a priori explanation for employment differences between blacks and whites, it is only likely to be valid if spatial mismatch in its simple form is fundamentally important, and we have argued that it is not.

We discuss two well-conceived studies that take very different approaches to trying to estimate the causal impact of transportation on employment outcomes: Raphael and Rice (2002) and Holzer et al. (2003). Using data from the Survey of Income and Program Participation,

⁴⁰ Turney et al. do not discuss the role of race in job seeking. Presumably this is because at the time of their survey, households assigned to the treatment group and households assigned to the control group lived in heavily African-American Census tracts (79% and 84% respectively).

⁴¹ See King (1968), cited in Sanchez (1999).

Raphael and Rice (2002) regress employment, hours, and wages for individuals on a variety of controls (including race) and an indicator for car ownership. Addressing the likely endogeneity of car ownership, the authors instrument for car ownership with state-level information on average car insurance premiums and gas taxes. Despite including in the regressions variables that may go some way toward reducing concerns about the validity of the instruments, the authors still suggest that the instruments may be particularly problematic in the wage regressions because they may be correlated with factors related to the local cost of living, and caution against reading too much into the wage results, especially since their instrumental variables results suggest a negative impact of car ownership on wages. On the other hand, they are less skeptical of the validity of the instruments in the employment and hours specifications, because the instrumental variables results indicate positive effects of car ownership on hours. It is not clear, however, why the instruments would be valid for employment and hours equations but not for wage equations since anything that shifts the real wage should also affect employment and hours decisions. Moreover, the study does not present separate regressions by race, which suggests that the results are driven largely by whites. Given that job access may differ by race, the impacts of car ownership could differ for blacks, so their results may not be informative about how car ownership affects labor market outcomes for blacks.

Holzer et al. (2003) study the effect on the relative employment of blacks and Hispanics of a 1997 expansion of San Francisco's rail system, where, along an existing line that ran through heavily minority and low-income neighborhoods (including Oakland), two new stops were added to the east in more suburban areas (one in Castro Valley and one in Dublin/Pleasanton). One common issue in estimating the impact on employment of proximity to public transportation is that proximity (of firms or workers) may be endogenous. Firms may

choose to locate near public transportation in order to make it easier to hire workers, and employed workers may choose to live near public transportation to lower commuting costs.

Because Holzer et al. collected longitudinal data on employment in establishments before and after new rail stations opened, they argue that they have exogenous variation in workers' access to establishments near the rail stations. In particular, they explain that the new rail line was opened primarily to ease the commutes of suburban residents into San Francisco, rather than to provide transportation access for individuals seeking employment in the suburbs.

The authors conducted telephone surveys of establishments at varying distances from the new stations right before they opened and then a year later, collecting information on the race and ethnicity of the most recent hire. Based on difference-in differences methods, they find that establishments located near the newly-opened stations hired more Hispanics after the opening relative to establishments farther away, but that the increased transportation access had no positive effect on hiring of blacks.

Hiring patterns of establishments in their survey before the rail stations opened may help explain their results. Specifically, Hispanics were about twice as likely as blacks to be hired in these establishments before the stations opened. If labor market networks influence hiring, then the opening of the rail station may have helped Hispanics and not blacks because while it lowered potential commute costs for both groups, it only led to productive hiring for the group that already had a toehold in those establishments. Indeed, Holzer et al. note (p. 435) that 84 percent of employers reported using employee referrals in the hire of the last worker. Holzer et al. correctly – in our view – highlight the need for more specific research examining the interaction of information embodied in networks with increased public transportation access.

Policies that account for network effects

Finally, we turn to policies that are place-based, like enterprise zones, but also target the community, and in particular the networks in them that can help with labor market success. Ladd (1994) refers to "place-based people strategies," which target both places and the people living in them. In her taxonomy, these strategies refer to policies that aim to "preserve and strengthen community institutions," recognizing "the social isolation of many residents in distressed areas" that "results in incomplete knowledge of the labor market and limited exposure to people in the labor market who may serve as the informal contacts needed for successful job searches" (p. 196). In this subsection, we discuss policies (or constellations thereof) that fit this description, in that they to some extent recognize and try to exploit the potential role of networks in labor markets.

Dickens (1999, p. 414) poses what we think is a fundamentally interesting question that, based on the research summarized thus far, motivates this inquiry. "[C]an network failures explain the large differences in employment rates between neighborhoods and can programs that aim to improve network functions hope to substantially improve conditions in distressed neighborhoods?" More constructively, is there evidence that policies that try to exploit or strengthen labor market networks are more successful than some of the policies we have discussed thus far?

Dickens (1999) claims that "the potential to aid people in finding jobs by replacing failed network functions is suggested by the characteristics of successful employment programs" (p. 410). As should be apparent, we are sympathetic to this perspective; however, we are less convinced by the evidence he cites. First, Dickens refers to the efficacy of job search assistance programs (p. 410). However, evidence that *information* matters in labor markets does not imply

that *networks* are important. Although networks *can* be important sources of information, an absence of network connections is not the only reason an individual might lack labor market information.

Second, Dickens suggests that "America Works," a "privately operated job placement service for welfare recipients" (p. 411), is very successful at placing people in jobs that last, and that the program has important network components. However, as Dickens acknowledges, America Works has not been subject to a rigorous evaluation. Moreover, the "network content" of America Works is unclear. The program provides a course in job finding and behavioral skills, as well as counseling in interviewing, much of which could be viewed, instead, as providing non-cognitive skills – although Dickens believes that networks are an important means by which individuals acquire these non-cognitive skills (pp. 406-7).⁴² On the other hand, America Works also apparently builds relationships with employers, and lets employers try out workers, which might be viewed as a kind of substitute for the more traditional network connections that economists and sociologists describe. One problem – presaging the discussion that comes later – is that it is hard to establish whether the network component of the program mattered. In the case of America Works, it is possible that the employment effects stemmed from requirements that participants work or train (and chose to work) in order to receive welfare payments.

Is there more evidence from other programs? Perhaps the program that best fits the bill – and has been documented and evaluated most thoroughly – is Jobs-Plus, a multi-pronged

⁴² Dickens also makes similar arguments about the Center for Employment Training (CET), which provides training but is distinguished by engaging local employers in the design and execution of training programs. It seems perfectly sensible that training programs using this approach would be more successful than other training programs, but the connection to networks seems even weaker. Blank's (1999) comment on Dickens' chapter also notes that he uses "networks" a bit too broadly, but emphasizes instead that some of what he means by networks is "social capital."

program aimed at public housing residents. Jobs-Plus incorporated employment-related activities and services such as job search, training, and assistance with child care and transportation.⁴³ It also created enhanced financial incentives to work by reducing the rent increases in public housing that would otherwise have accompanied increases in earnings.

Most interestingly in light of our emphasis on labor market networks, Jobs-Plus attempted to create what it calls "community support for work," which included fostering sharing of work-related information and building network connections between job developers working on behalf of housing development residents and local employers. This component of Jobs-Plus is based on the assumption that in public housing projects, and in other high-poverty neighborhoods, people are "likely to be isolated from the kinds of informal job information and referral networks through which other members of society learn about and get access to employment opportunities" (Riccio, 1999, p. 52).

A baseline survey of participants documented differences in labor market connections, although it did not draw strong conclusions about differences in network connections. On the one hand, residents with recent full-time employment were more likely than those who had not worked in the past 12 months to report relatives or friends living outside of the developments who were employed, had worked full-time in the past year, or who were good sources of labor market information (Martinez, 2002, p. 32). The differences for each of these categories were each around 12 percentage points relative to those who had worked in a full-time job in the more distant past, and stronger relative to those who had never worked. On the other hand, the differences were smaller (and not statistically significant) with regard to close acquaintances *inside* the development. As a result, Martinez concluded that "Although there are some

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⁴³ Details of the program and its implementation are provided in Riccio (1999) and Kato et al. (2003).

interesting associations between social networks and employment subgroups – in particular, having relatives or friends outside the housing development who have some connection to the labor market – overall there are no striking findings" (p. 46). We view the evidence differently. The contacts *inside* the developments may represent the "strong ties" that, according to research on networks, are less productive of useful labor market information than are weak ties that are more likely with those living outside the development (Granovetter, 1973; and consistent with Turney et al., 2006, discussed above).

Regardless of the baseline evidence, Jobs-Plus endeavored to encourage the formation of labor market networks, or to provide functions similar to those supplied by networks. Most sites had "job developers" on staff whose responsibilities included providing outreach to local employers, cultivating relationships with them in an effort to place Jobs-Plus participants in employment (Kato et al., 2003). Perhaps more explicitly mimicking the role of networks, the program attempted to bring this kind of network effort to the community level, by employing residents as "court captains" or "building captains" who maintained contact with other participants, including sharing information about employment opportunities.⁴⁴

Jobs-Plus also attempted to transform the community by using a saturation strategy that targeted all non-disabled working-age residents of these projects, rather than just trying to change individual behavior. This is based on the theory that saturation can lead to "tipping points," creating a critical mass of employed residents who succeed in the workforce and "signal to others the feasibility and benefits of working, elevate and strengthen social norms that

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All Riccio notes that there are other such programs (sponsored by foundations). He describes a common set of features of these programs, including "local control; collaborative decision making; resident empowerment; building on residents' and communities' existing physical, economic, and social assets; and strengthening the capacity of residents and local institutions to promote and sustain positive changes in their communities" and using a "longer-term approach that builds community institutions, social networks, and residents' self-reliance" (p. 10). But only Jobs-Plus has been systematically evaluated.

encourage work, foster the growth of work-supporting social networks, and, ultimately, contribute to still more residents getting and keeping jobs" (Riccio, 1999, p. 13). This aspect of the program, too, can be interpreted as trying to exploit network effects. Here, though, the network effects are not simply those that help provide information about job availability, but that provide more general role-modeling, changing norms regarding work, etc.⁴⁵

The Jobs-Plus program has been evaluated thoroughly regarding both implementation (Riccio 1999; Kato 2003) and estimation of its effects (Bloom et al. 2005). There is fairly clear evidence that the program delivered economic benefits. It is difficult, however, to draw firm conclusions about the value-added of specific efforts to build labor market network connections due to two problems: first, implementation of the network component of Jobs-Plus was spotty and encountered unanticipated difficulties; and second, it is hard to tell which components of the Jobs-Plus program delivered economic gains to its participants.

First, the reports describing the implementation of Jobs-Plus are replete with discussions of the problems encountered regarding building and strengthening networks. For example, Riccio (p. 53) notes that the concept underlying the "community support for work" component of the program was imprecise (in contrast, say, to rent incentives). Kato et al. (2003) note that community support for work was the slowest component to develop (p. iii), and one site (Chattanooga) never developed it (p. 3). Bloom et al. (2005) note, with regard to community support for work, that "[a]lthough many of these kinds of activities were tried at some points during the demonstration ... most did not take root. What did take root – and grow – was the

⁴⁵ Although we tend to utilize a narrow view of labor market networks as channels for providing information about jobs, some researchers use a more expansive view in which networks also transmit the flow of information about the labor market more generally, and note that low-income communities are lacking these channels as well. For example, Dickens (1999) appears to consider network effects to encompass not only the flow of information about jobs, but also, for example, youths learning by example from employed parents and relatives about "what is expected of people who want to get good jobs" (p. 407).

idea of using a small group of residents as extension agents of Jobs-Plus" (p. 48). And although one function of the agents (the "captains" mentioned to earlier) was to disseminate information about job openings, they were not particularly focused on this component of Jobs-Plus, but rather on informing participants about all aspects of the program.

Issues also arose regarding difficulties in doing outreach owing to high levels of illicit activity in some developments, and the constraints this imposed on "getting into another's business" (Kato et al., 2003, p. 35). Similarly, as reported in Kato et al. (2004), residents interested in working sometimes reported that a desire to stay out of trouble, combined with criminal activity among residents, "discouraged them from interacting with other residents, for fear that their neighbors might be complicit" (p. 30). More to the point with regard to the difficulties in establishing labor market networks, there was a concern that someone you might refer could reflect badly on you. Kato et al. quote an operations site representative at the Baltimore site: "A lot of times you don't talk to your neighbor, because your neighbor may be a crack addict. So you don't want to tell your neighbor about the job, because you don't want to talk to your neighbor. And then, too, you wouldn't want them working or coming to your job" (p. 30). 46

Despite these difficulties, however, the description of implementation reveals numerous cases of job developers and sometimes captains developing means of linking residents to employment opportunities, likely providing labor market contacts that many of the participants were lacking.

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⁴⁶ This parallels findings from more systematic research by Smith (2005), who, based on in-depth interviews of low-income blacks, concludes as follows: "Over 80% of respondents in my sample expressed concern that job seekers in their networks were too unmotivated to accept assistance, required great expenditures of time and emotional energy, or acted too irresponsibly on the job, thereby jeopardizing contacts' own reputations in the eyes of employers and negatively affecting their already-tenuous labor market prospects. Consequently, they were generally reluctant to provide the type of assistance that best facilitates job acquisition in low-wage labor markets where employers rely heavily on informal referrals for recruitment and screening" (p. 3).

Second, it is difficult to attribute the gains from the Jobs-Plus program to the network efforts. To be fair, this is not a criticism of the evaluations of Jobs-Plus, which focused more on evaluating the overall success of the program, and did not attempt to parse out the effects of the separate components.⁴⁷ Rather, this assessment is based on our own reading of the evidence that tried to ascertain what we could conclude about the network-related components of the Jobs-Plus program.

The evaluation of the effects of the program focuses primarily on its overall effects (Bloom et al., 2005). This evaluation reveals strong and widespread (across the sites) effects on earnings of participants measured over a four-year follow-up period after rollout was completed (about 14 percent per year, and 20 percent by the fourth year). ⁴⁸ The evidence on employment effects is less clear, although there is stronger evidence of positive effects at sites where the authors deem the implementation of the program to have been stronger. Moreover, although the target population was predominantly female, given the population of public housing projects (Riccio, p. 23), there some evidence of striking positive and significant earnings effects for men, in particular for Hispanic men at the Los Angeles sites, and Southeast Asian immigrant men at the St. Paul site; the employment effects were also strongly positive and significant for the first group (Table 4.5, Figure 4.8). There is some effort to parse out the different sites based on overall strength of implementation, and the strength of the rent incentives, and to explore how this variation is associated with estimated treatment effects. However, there is no such attempt with regard to the network components of the program – likely for the simple reason that these would have been difficult to quantify.

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⁴⁷ That would have been extraordinarily difficult, requiring multiple combinations of program components across numerous sites.

⁴⁸ One potential issue that is not explored in this evaluation is the direct hiring of residents by the Jobs-Plus program (e.g., Riccio, 1999, p. 52). It is not clear that one would want to count this hiring as a positive outcome of the program.

Thus, at the end of the day, it is difficult to point to the evidence from Jobs-Plus as confirming that policy efforts focusing on strengthening labor market network ties are productive. It is possible that much of the effect of Jobs-Plus came from the increased financial incentives to work generated by restructuring the effects of earnings increases on rent, and other components of the program that assisted with job readiness and challenges such as child care and transportation.

The discussion in this section thus far has focused on how network effects might be leveraged to *help* blacks (and others) in low-income, urban labor markets. There is, however, an alternative perspective, whereby networks can diminish the effectiveness of other policies. For example, as noted earlier with respect to enterprise zones, such policies may be ineffective at improving local labor markets because businesses may not hire locals in these neighborhoods. Dickens (1999) echoes this concern (p. 394), and cites some case study evidence that employers may even *prefer* to hire those who live farther away. For example, he cites interview evidence reported in Kasinitz and Rosenberg (1996) that employers were worried that locals would have trouble avoiding family problems at work, and could be pressured by locals to help burglarize them. Thus, networks can be a two-edged sword, reducing labor market search frictions by increasing the flow of information about jobs, but also potentially introducing rigidities by making continued hiring within a particular network lower cost than going outside the network, when the latter may be necessary to deliver benefits to particular groups of workers.

V. Conclusions

Based on the evidence we have reviewed in this chapter, the prognosis for place-based policies might be viewed as quite negative. We partly concur with this view, but we also think there are some important open questions that point to the need for further research. Place-based

policies that act by trying to relocate the urban poor to areas more rich in jobs or by trying to increase transportation access to the urban poor do not appear to have been successful in increasing employment. Similarly, perhaps the most widely-used place-based policy – enterprise zones, which try to bring jobs to poor urban areas – has a fairly negative record, with little evidence of beneficial effects. We think the explanation for the lack of success of these policies is that they are premised on the importance of spatial mismatch, which we think is overstated. At the same time, some of the newest evidence on federal zones is more positive, and it is important to understand whether these programs have different or additional elements that make them more successful.

We have argued that labor market networks, and how well and for whom they function in different areas, may play a key role in black urban labor market problems. This suggests that effective policies may have to focus on trying to strengthen these networks (and similarly avoid the pitfalls posed by reliance on existing networks), although we readily acknowledge that it is not obvious how to accomplish this goal. There is to this point only limited evidence on the effectiveness of policies and programs that emphasize labor market networks. And it is difficult to draw strong conclusions, in part because of a lack of rigorous research, and in part because, in the case of the most prominent such example – Jobs-Plus – the effort to strengthen networks was combined with many other incentives that could have accounted for changes in behavior. Thus, we view it as an important, difficult, but potentially promising research challenge to think about how public policy can increase and then leverage strengthened labor market networks in trying to improve outcomes for blacks in urban labor markets.

We want to emphasize, also, that this chapter has focused on place-based policies, based on the view that black urban labor market problems are *partly* place-based. But policies exist

that attempt to address the problem of poor labor markets generally, such as the federal and state EITC, which have been broadly implemented, and new programs such as New Hope (Duncan et al. 2008).⁴⁹ There is ample evidence that these policies increase employment and earnings of low-income adults, although an important limitation is that these programs – exemplified by the EITC – largely focus on women. Interestingly, though, New Hope offered supplements to single men as well, and it generally produced positive effects on employment, earnings, and family income of men, even up to five years after the program, although many of the estimated effects are not significant (Duncan et al., 2008); evidence like this has prompted some calls for expanding the EITC for single men (beyond its current paltry level for those without children) (Berlin 2007). Just because black urban labor market problems are partly place-based does not imply that policies like these would not have many beneficial effects in poor, black urban areas. However, as noted by Neumark (2009), we have to recognize that these kinds of interventions to increase employment of black men may increase competition in low-wage labor markets and hence adversely affect the low-skilled women whose employment we have been trying to encourage through the EITC, as suggested (in reverse) by evidence in Rothstein (2007).

The evidence we have discussed in this chapter refers only to blacks in U.S. urban labor markets. But that reflects in part space limitations, and, in larger part, the fact that the lion's share of the literature focuses on this population. However, the findings may well carry over to other populations with poor economic performance, both in the United States and elsewhere. First, in the United States, although white poverty is lower than black poverty, it is still serious, and there are of course pockets of high white poverty. Some of our evidence for blacks on both spatial and racial mismatch, and labor market networks, pertains to whites as well. In particular,

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⁴⁹ And we remind the reader that it is entirely possible that the beneficial effects of Jobs-Plus stemmed from the financial incentives regarding reducing the penalty associated with rising earnings for public housing rent.

we find evidence of racial mismatch for whites as well, with white employment boosted by white job density but not non-white job density (Hellerstein et al., 2008), and we find that labor market networks are important for whites (Hellerstein et al., 2008b). However, there are two important qualifications. First, there is some evidence that networks are more important for blacks.

Second, racial mismatch, and racially-stratified labor market networks, almost surely pose more serious problems for blacks because of their smaller numbers and their greater tendency to live in racially-segregated areas where employment opportunities are generally inferior. All of these influences suggest that blacks might have fewer productive labor market network connections, a lower probability of living near an area dense in black jobs, etc. With that said, there may well be white sub-populations, in particular areas, for which these factors are as important as for blacks.

Second, the United States has a rapidly growing Hispanic population, and the residential segregation of Hispanics (Iceland and Weinberg, 2002) suggests that they may face similar spatial problems as do blacks. Indeed, our evidence suggests that there is a similar form of racial (or ethnic) mismatch faced by Hispanics, with Hispanic employment in urban areas boosted by Hispanic but not by white job density in their local labor market (Hellerstein et al., forthcoming [b]). Moreover, both our evidence and a good deal of other evidence (e.g., Massey et al., 1987; Munshi, 2003) indicates labor market networks are very important for Hispanics. Of course networks may also be a source of employment advantage for Hispanics – especially immigrants – and it strikes us as important research question to try to study separately the interactions of space and employment for different Hispanic sub-populations and areas.

Finally, issues of residential segregation of minorities and immigrants are hardly limited to the United States, although we know less about this in other countries. Recent studies point to

a link between residential segregation and employment or unemployment in France (Gobillon and Selod, 2007), Belgium (Dujardin et al., 2008), Sweden (Zenou et al., 2006), and the United Kingdom (Fieldhouse, 1999). Given the basic correspondence between the new, emerging evidence consistent with spatial mismatch and European cities and the basic U.S. findings, it is more than conceivable that many of the other lessons learned from the U.S. literature about the links between location and employment, the disadvantages faced by segregated minority groups, and policy responses, would be informative about the European context.

Of course the differences in context – among them the geography of minority and immigrant residence, transportation infrastructure, housing policy, and the connections between immigrant groups and between immigrants and their home countries, – all imply that issues of space and employment require separate study in different countries and possibly for different groups within those countries, just as, even in the United States, there appear to be significant differences in the interaction of space and employment between blacks and Hispanics. At the same time, the parallels across countries in the economic disadvantage of geographically concentrated minority and immigrant groups suggest that the answer to reducing this economic disadvantage, in many or all of these countries, lies at least in part in reducing the adverse impacts of space.

As we have emphasized, however, spatial issues are unlikely to be the entire explanation of differences in outcomes between immigrants, natives, and other groups, and spatial policies alone may prove relatively ineffective at increasing employment, as they have in the United States. We do not know of explicit work on network-oriented policies in other countries; indeed, as our review indicates, such research is sparse in the U.S. context as well. At the same time,

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⁵⁰ Some studies for Europe have introduced new approaches to addressing the endogeneity of residential location in studying spatial mismatch (Houston, 2001; Zenou et al., 2006).

there is interesting new evidence that in Europe, like in the United States, labor market networks are important, especially for immigrants (e.g., Dustmann et al., 2010), suggesting that policies addressing employment problems among minority groups may also benefit from exploiting and strengthening labor market connections.

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