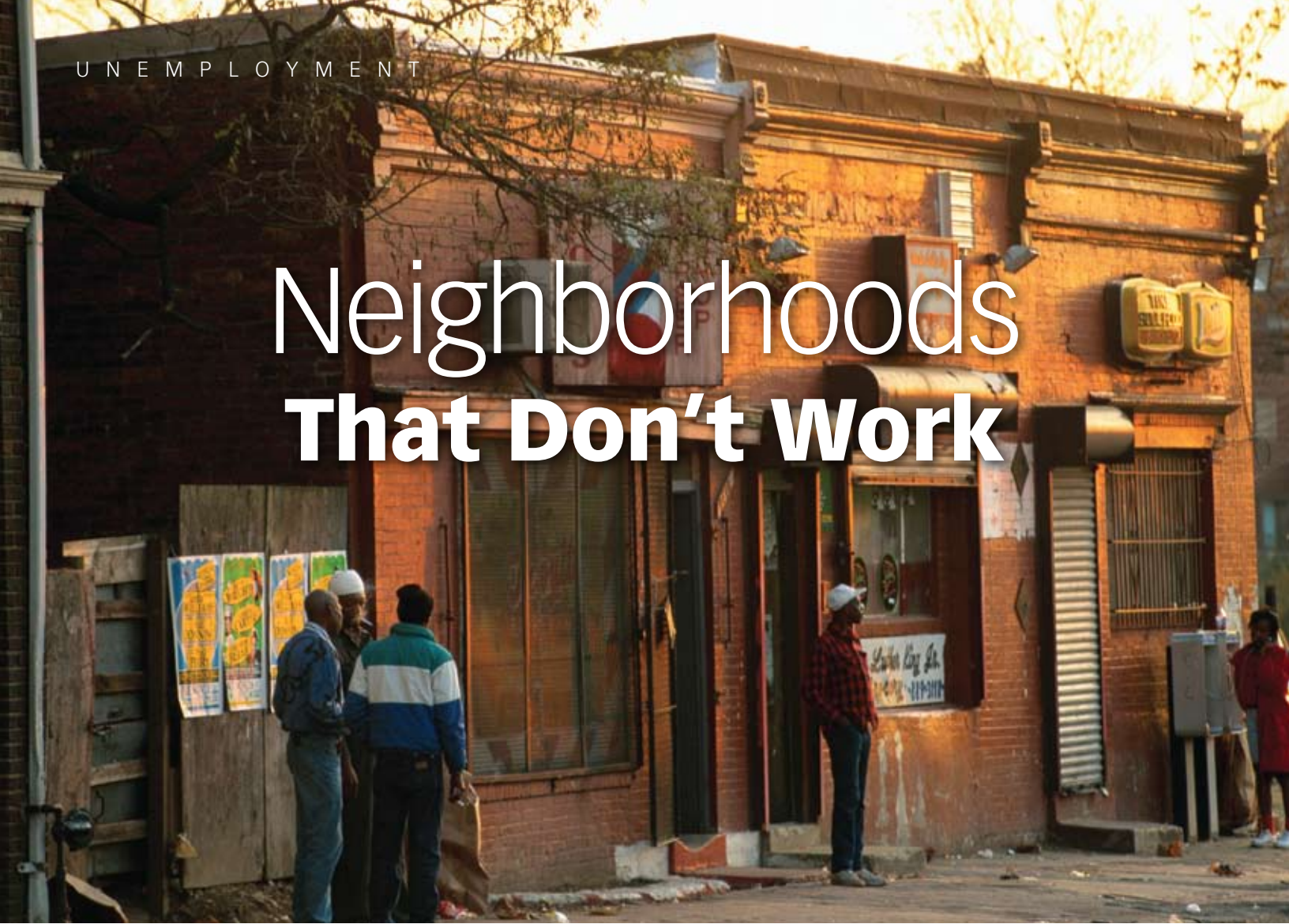


Neighborhoods That Don't Work



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By Allison K. Rodean and Christopher H. Wheeler

In a poor part of the Anacostia neighborhood in Washington, D.C., working-age people hang out on the streets.

Within any metropolitan area in the United States, there are vast differences in the economic well-being of individuals residing in different neighborhoods. Some areas tend to be populated by individuals with high incomes and levels of education; others, by those who are substantially less well-off.

Unemployment also varies substantially from one residential area to another. For instance, among the 6,100 “block groups” (neighborhoods consisting of approximately 500 households and 0.33 square miles of land, on average) that make up the St. Louis metropolitan area, the unemployment rate in the year 2000 ranged from 0 percent in one neighborhood to 100 percent in another.

Although it is hardly surprising that unemployment rates differ across neighborhoods within a metropolitan area, the variation in neighborhood-level unemployment between 1980 and 2000 is striking. Over this period, rates of joblessness among block groups with the lowest levels of unemployment dropped even further, whereas rates of unemployment among neighborhoods with the highest levels tended to grow larger. In other words, the unemployed within the nation's metropolitan areas became increasingly concentrated within relatively few residential areas between 1980 and 2000.

Why should this rise in the concentration of unemployment within relatively few neighborhoods concern us? The answer relates to the idea that we are all influenced by our immediate surroundings.

For decades, economists and sociologists have argued that the characteristics of an individual's residential area greatly influence his or her economic outcomes, and a fair amount of evidence supports this notion. Economists Anne Case and Lawrence Katz, for instance, looked at a sample of residential areas in Boston and found evidence of strong peer effects characterizing a variety of behaviors, including criminal activity, drug and alcohol use, schooling and employment status.¹ Giorgio Topa, an economist at the Federal Reserve Bank of New York, found evidence of local spillovers in unemployment across neighborhoods in Chicago; high levels of unemployment within a residential area tend to have a negative influence on the employment prospects of individuals residing within or near that neighborhood, he said.²

The rise in the concentration of unemployment, therefore, may be creating poverty traps from which people will find it increasingly difficult to escape.

Determining the reasons for this trend, therefore, are important from the perspective of policymakers interested in combating unemployment. Three possible reasons for the trend are: urban decentralization (i.e., the movement of individuals from dense city cores into less dense suburban fringes), industrial and institutional changes in the labor market, and increases in the extent of segregation of individuals across neighborhoods by income and education.

The Trend in Residential Unemployment

Based on data from the decennial U.S. census covering more than 165,000 block groups located in 361 metropolitan areas, neighborhoods became increasingly divided into high- and low-unemployment areas between 1980 and 2000. Rates of unemployment tended to fall in neighborhoods that already had low rates of unemployment in 1980, while they tended to rise in neighborhoods that had relatively high rates of unemployment in 1980. People without a job, therefore, were more likely to come from one of a handful of high-unemployment neighborhoods in 2000 than two decades earlier.

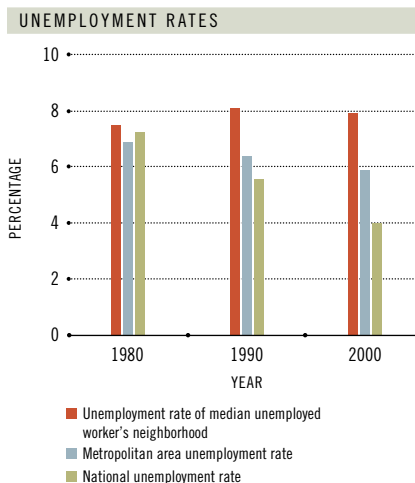
To see this, consider the unemployment rate of the neighborhood in which the "average" unemployed person resides.³ In 1980, this individual lived in a block group with an unemployment rate of 7.5 percent. Two decades later, this person lived in a block group with an unemployment rate of 7.9 percent. This trend is particularly striking in light of the fact that the national unemployment rate and the average metropolitan area unemployment rate both declined over this period, suggesting that labor market conditions throughout the U.S. improved over this period. These differences are depicted in Figure 1.

The degree to which unemployment is geographically concentrated can also be quantified by looking at the 90th, 50th and 10th percentiles of the block group unemployment distribution within each metropolitan area. These percentiles are intended to represent neighborhoods with high (90th), medium (50th) and low (10th) rates of joblessness. Figure 2 plots each one over the years 1980, 1990 and 2000. In 1980, the average difference between the neighborhood at the 90th percentile of the unemployment distribution and the neighborhood at the 10th percentile was 7.3 percentage points (a difference between an unemployment rate of 11 percent and one of 3.7 percent). Two decades later, the difference was 11.2 percentage points.

Where Do the Unemployed Live?

In looking for explanations for these patterns, it is instructive to look at some basic characteristics of neighborhoods with high (and low) rates of unemployment. To begin,

FIGURE 1



The figure shows selected unemployment rates over the years 1980, 1990 and 2000. The average neighborhood unemployment rate of the median unemployed worker has increased roughly 0.5 percentage points over this period, despite the national unemployment rate and the average metropolitan area unemployment rate declining roughly three and one percentage points, respectively.

One Possible Solution: Move the Unemployed to Workers' Neighborhoods

Seeking to help individuals find work are a number of public and private programs, including unemployment insurance, job training and employment agencies. For the most part, these programs are aimed at assisting people who do not have jobs either by trying to connect them with employers who have vacancies or by helping those jobless people acquire skills that employers require.

Yet, because research indicates that a worker's ability to find and maintain employment may be influenced by the extent of joblessness in his or her neighborhood, this process may have become increasingly difficult for workers residing in high-unemployment areas. Consequently, policymakers interested in the reduction of unemployment within a metropolitan area may wish to investigate strategies that attempt to reduce the extent to which the unemployed are residentially isolated. Although it is difficult to influence where people with different levels of education and income choose to reside, programs that attempt to achieve greater heterogeneity within residential areas could certainly help to prevent areas of extreme unemployment and poverty from forming.

Revitalizing downtowns, for example, might help to draw high-income, highly educated residents to areas that currently suffer from high unem-

ployment. Doing so may also help the unemployed find work by providing greater numbers of jobs nearby. Recall, although population density did not show a significant association with unemployment concentration, a neighborhood's unemployment rate is strongly tied to the average commute times of its residents.

In addition, programs aimed at helping individuals living in impoverished areas to relocate to more economically successful neighborhoods might help. Policies that encourage mixed-income housing—that is, policies that set aside certain fractions of new housing units for low- to moderate-income households—may also assist individuals who face a high risk of unemployment with finding and maintaining employment.

These, of course, are just a few hypothetical strategies, and they require a great deal more research before any formal policy recommendations could be made. However, the notion that the residential concentration of unemployment probably represents a significant aspect of the unemployment problem in the United States is one to which policymakers should give some serious consideration. The fact that this problem seems to have grown worse in recent decades suggests that the costs of not doing so are rising.

the rate of joblessness in a neighborhood tends to be strongly tied to the level of education and income of its residents. Neighborhoods with higher average levels of income, not surprisingly, tend to see lower unemployment rates, which can be interpreted in at least two ways. First, employed households tend to receive more income than unemployed households because only the former receive earnings from a job. Second, individuals with high incomes tend to be relatively successful in the labor market because they are highly skilled or highly educated (or both). These types of individuals have a much lower incidence of unemployment.

In terms of demographic characteristics, neighborhoods with larger fractions of foreign-born, female, nonwhite and nonmarried households tend to be associated with higher rates of unemployment. Individuals belonging to these groups tend to have less successful labor market outcomes, particularly with respect to earnings.

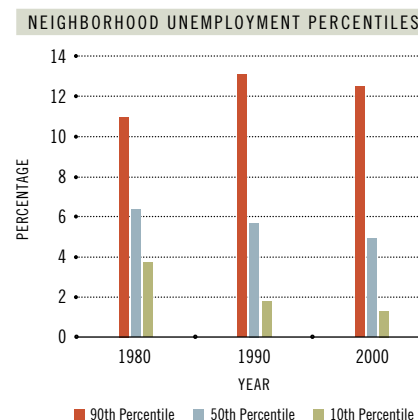
The census data also show that neighborhoods with fewer workers under 25 tend to exhibit lower rates of unemployment, consistent with the idea that individuals between 25 and 64, the so-called prime

working years, are especially likely to have a job. The lower unemployment rate may also reflect the result that, beyond age 65, many individuals are considered retired and, therefore, would not be counted among the unemployed.

Block groups with high rates of unemployment also tend to have relatively large fractions of their working households facing longer commute times to work. In particular, the data reveal a strong, positive association between unemployment and the percentage of individuals with a one-way commute time in excess of 45 minutes.

Finally, there is some evidence that a neighborhood's rate of unemployment is connected to the industries in which its working residents are employed. In particular, larger fractions of workers in construction, wholesale trade, finance-insurance-real estate (FIRE) and education services tend to have lower rates of unemployment. In the case of FIRE and education services—sectors that employ relatively well-educated individuals—this result is quite sensible. The results for construction and wholesale trade, on the other hand, may simply be related to the strong growth of these industries between

FIGURE 2



The figure shows the 90th, 50th and 10th percentiles of the block group unemployment distribution within each metropolitan area, representing neighborhoods with high, medium and low rates of joblessness, over the years 1980, 1990 and 2000. A greater difference between the percentiles indicates a greater unemployment distribution. The majority of the widening took place between 1980 and 1990 when the average 90th percentile rose while the 50th and 10th percentiles decreased. Between 1990 and 2000, all three percentiles actually decreased by similar amounts, leaving the three differentials mostly unchanged between 1990 and 2000.

1980 and 2000. On the other hand, larger fractions of employment in manufacturing tend to be associated with higher rates of unemployment in a neighborhood, a result that is likely driven by the decline of this sector within the U.S. in recent decades.

Some Explanations

Sprawl

One of the most significant ideas to emerge from the field of urban economics over the past half century holds that the

individuals and employers moving from dense cores toward less-populated suburban peripheries. Such measures include the fraction of a metropolitan area's population or employment located in a central city, the fraction within certain distances of the historical city center and overall metropolitan area density.

Urban decentralization within a metropolitan area can be quantified using population density, which is constructed as an average of block group-level densities, taking into account each block group's share of

employment declined from 22 percent to 14 percent across the metropolitan areas studied for this article, whereas the fraction of workers employed in education and in health services rose from 17 percent to 20 percent. Rates of unionization decreased from an average of 24 percent in 1980 to 14 percent in 2000.

How might these changes influence the geographic distribution of unemployment within a metropolitan area? If workers in certain neighborhoods tend to be employed in similar types of industries, or if unionization is relatively concentrated among the residents of certain neighborhoods, these changes may have produced different rates of unemployment across different areas within a city. In other words, rather than there having been a change in the way that residents of an area sort themselves across neighborhoods, it may simply be that changes in the labor market have differently influenced workers of different neighborhoods.

For example, larger fractions of workers within a neighborhood who are employed in manufacturing tend to be associated with higher unemployment rates. Larger fractions of workers in finance-insurance-real estate, by contrast, correspond to lower unemployment rates. The change in the industrial makeup of a metro area's economy, then, might help to explain the trend in neighborhood unemployment.

Segregation by Income and Education

The rise in the concentration of unemployment may, on the other hand, be the product of greater segregation of individuals by income and education. Unemployment shows a very strong association with both income and education. If the way individuals sort themselves into residential areas has created neighborhoods with concentrations of either high- or low-skill individuals, increasing disparity between the unemployment rates of different neighborhoods should be seen. Low-skill individuals, after all, tend to experience higher rates of unemployment than high-skill individuals.⁶

On the surface, this explanation seems related to the urban decentralization hypothesis. Indeed, previous work has suggested that as city populations spread

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movement of population and employment away from city centers toward suburban locales has created an underclass of unemployed workers in central cities. This idea is known widely as the spatial mismatch hypothesis.⁴

As city populations and employers move away from traditional central business districts, finding and securing jobs becomes more difficult for workers who choose to remain in those central cities. Increased spatial isolation from employment opportunities, presumably, increases commuting costs and makes the job search process more difficult. In addition, increased distance may limit access to information about available jobs or create negative attitudes about central city workers among employers. As employers move farther away, therefore, locating and maintaining a job becomes less likely for the residents of historical city centers. In addition, one of the characteristics of high-unemployment neighborhoods is the prevalence of relatively long commutes to work among residents who have jobs.

In order to evaluate whether sprawl has influenced the residential concentration of unemployment, it must be measured. Unfortunately, quantifying sprawl tends to be difficult because the term does not have a precise definition. A variety of measures attempt to capture the basic concept:

total metropolitan area population. Hence, a metropolitan area's density is taken to be the density of the block group in which the average resident lives. Because suburban locales tend to have much lower residential densities than urban cores, lower levels of population density ought to be associated with more extensive sprawl.⁵

Between 1980 and 2000, the average metropolitan area saw its population density decrease from 3,080 residents per square mile to 3,004 residents per square mile. Although average density did increase slightly during the 1980s, it dropped during the 1990s, leaving the residential density faced by a typical metropolitan resident lower in 2000 than two decades earlier. This pattern follows the long-standing trend over the past century for U.S. populations to spread out geographically.

Industrial Shifts and Unionization

Over the past several decades, the U.S. economy has seen a decrease in the employment of certain sectors, but increasing employment in others. Manufacturing employment has decreased, while service employment has increased. In addition, rates of unionization have fallen substantially.

Between 1980 and 2000, the average share of manufacturing in total



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Three women walk past a billboard reading “Say no to poverty, get an education” in Gary, Ind. High crime levels and poverty have been major problems for residents of Gary.

out, households become increasingly sorted into high- and low-income neighborhoods.⁷ Recent research, however, finds little association between the extent to which urban populations spread out and the income differentials they exhibit across block groups.⁸

We quantify income segregation by calculating the variance of average income across neighborhoods. As high- and low-income people move into separate areas, of course, this measure increases. To quantify the segregation of households by education, we compute an index describing the extent to which individuals with at least a bachelor’s degree live in the same neighborhoods as those with less formal schooling.

On average, the amount of income variation between neighborhoods nearly doubled over this period, although essentially all of the increase took place during the decade of the 1980s. The educational segregation measure rose by more than 17 percent during the 1980s, but remained relatively constant during the 1990s.

The Findings

Results from the statistical analysis of these patterns indicate that, of these three possible explanations, rising segregation of individuals by income and education is the most likely culprit.⁹ After controlling for a

number of characteristics that may influence the residential distribution of unemployment, including the basic demographic make-up of each metropolitan area, the findings indicate that there is essentially no correlation between rising unemployment concentration and any of the following three quantities: population density (a measure of urban decentralization), the industrial composition of a metropolitan area and the extent of unionization among the local workforce. In contrast, there is a significantly positive association between unemployment concentration and the extent to which neighborhoods are segregated by income and educational attainment. 

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ENDNOTES

- ¹ See Case and Katz (1991).
- ² See Topa (2001).
- ³ Some workers live in high-unemployment neighborhoods; others live in low-unemployment neighborhoods. The “average” worker is found by finding the median of this distribution.
- ⁴ See Kain (1968).
- ⁵ In the year 2000, the average central city population density was 2,716 residents per square mile. Suburban densities that year averaged 208 residents per square mile. See Hobbs and Stoops (2002).
- ⁶ For example, the Bureau of Labor Statistics reports that the average rate of unemployment tends to decrease with education attainment. See www.bls.gov/news.release/empsit.t04.htm.
- ⁷ See Glaeser and Kahn (2004).
- ⁸ See Wheeler (2006).
- ⁹ The analysis is based on regressions of unemployment concentration, given by differences between the 90th, 50th, and 10th percentiles of each metropolitan area’s block group unemployment distribution, on numerous metropolitan area-level characteristics.

REFERENCES

- Case, Anne C.; and Katz, Lawrence F. “The Company You Keep: The Effects of Family and Neighborhood on Disadvantaged Youths.” NBER Working Paper 3705, National Bureau of Economic Research, May 1991.
- Glaeser, Edward; and Kahn, Matthew. “Sprawl and Urban Growth,” in J. Vernon Henderson and Jacques-Francois Thisse, eds., *Handbook of Regional and Urban Economics*. Vol. 4, pp. 2,481-527. Amsterdam: Elsevier, 2004.
- Hobbs, Frank; and Stoops, Nicole. “Demographic Trends in the 20th Century.” U.S. Census Bureau, Census 2000 Special Reports, Series CENSR-4. Washington, D.C.: U.S. Government Printing Office, November 2002.
- Kain, John F. “Housing Segregation, Negro Employment, and Metropolitan Decentralization.” *Quarterly Journal of Economics*, May 1968, Vol. 82, No. 2, pp. 175-97.
- Topa, Giorgio. “Social Interactions, Local Spillovers and Unemployment.” *Review of Economic Studies*, April 2001, Vol. 68, No. 2, pp. 261-95.
- Wheeler, Christopher H. “Urban Decentralization and Income Inequality: Is Sprawl Associated with Rising Income Segregation Across Neighborhoods?” Working Paper No. 2006-037B, Federal Reserve Bank of St. Louis, 2006.