9. Racial and economic segregation in the US: overlapping and reinforcing dimensions

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9.1 INTRODUCTION

Robert Clifton Weaver was the first African-American to serve a US president as a cabinet secretary. In 1966, President Lyndon Johnson appointed him to lead the newly created Department of Health, Education, and Welfare (HEW). Weaver, an economist and renowned scholar of racial disparities in housing, had advised US presidents going back to Franklin Roosevelt. In 1948, he published a classic study of urban conditions, *The Negro Ghetto*. He argued that one of the key factors that perpetuated segregation in housing was "the acceptance by the mass of white persons of the attitudes and justifications of higher-income whites for restricting areas against colored occupancy" (Weaver, [1948] 1967, p. 359). In distinguishing between "the mass of white persons," on the one hand, and "higher-income whites," on the other hand, he presciently identified that class and race were deeply entwined in both the motivations for and the mechanisms explaining racial segregation in the United States. Whites, especially higher-income whites, sought to maintain desirable areas and protect their property values in the newly forming suburban rings. Working-class and lower-income whites, who could logically have made common cause with urban blacks in seeking more affordable housing in the suburbs, instead manned and protected the borderland between white and black areas.

Now, seven decades later, residential segregation in the United States still comprises race and class dimensions whose overlapping and reinforcing effects are not fully appreciated. As overt discrimination on the basis of race has become increasingly unacceptable, income segregation has become more prevalent in ways closely tied to historical racial settlement patterns. Higher-income whites continue to hoard the best neighborhoods not only by separating themselves from blacks and Hispanics, but increasingly from lower-income members of their own racial group. While race is still the primary dimension of residential segregation in the United States, the logic of segregation – hoarding of the best neighborhoods, resources, and opportunities – means that progress against racial segregation can be effectively offset by other mechanisms based in social class.

While there is no question that racial segregation in US workplaces has declined (Tomaskovic-Devey et al., 2006), residential segregation of blacks and whites remained stubbornly high into the 1980s and 1990s (Harrison and Weinberg, 1992; Massey and Denton, 1987). More recent analyses, however, identify a slow but steady downward trend (Jargowsky, 2018; Logan, 2013). But how significant is the decline? Two prominent economists, Edward Glaeser of Harvard University and Jacob Vigdor of Duke University, conducted a widely cited study of segregation over the last 120 years in the United States (2012). Their report, provocatively titled *The End of the Segregated Century*, documented the rapid rise in segregation from 1890 through 1970, as well as the "no less dramatic"

decline since 1970 (Glaeser and Vigdor, 2012, p. 3). They reported that by their measure US metropolitan areas were more integrated in 2010 than at any time since 1910.

Given that racial segregation had long been understood to be a linchpin of racial inequality (Massey and Denton, 1993; National Advisory Commission on Civil Disorders, 1968), Glaeser and Vigdor reasoned that such a massive decline should logically be associated with far better socioeconomic outcomes for African-Americans. Yet, they noted, "there has been only limited progress in closing racial achievement and employment gaps between blacks and whites." They concluded that the belief and hope that reducing segregation would facilitate progress toward racial equality was misguided; "forty years later," they argued, "we know that this dream was a myth" (Glaeser and Vigdor, 2012, p. 10).

In this chapter, I argue that their optimism about racial segregation's decline and their pessimism about the potential benefits of reducing racial segregation were incorrect on several counts.[1] First, while there has been progress in reducing segregation by race in US metropolitan areas, Glaeser and Vigdor's measurement strategy led them to vastly overstate the extent of the decline. Second, they failed to account for changes in economic segregation, which interacts with and reinforces the impact of racial segregation; in particular, economic segregation has been increasing in ways that negate some of the progress in racial segregation per se. Third, they did not address the changing geographic basis of racial segregation. Because it is increasingly structured by municipal boundaries, rather than just neighborhoods, segregation today more effectively limits the access of African-Americans and Hispanics to important public amenities, notably high-quality public education. Fourth, they did not address life-cycle issues, specifically that children enrolled in school are more segregated than adults, a cause for concern because they are the age group most susceptible to segregation's negative effects. Given that public education is organized geographically, the higher segregation of children renders the decline in segregation less meaningful in terms of access to opportunity than it appears from looking at the overall numbers. Thus, the facts on the ground are bleaker than suggested in Glaeser and Vigdor's analysis and, as a result, they were too quick to dismiss the potential benefit of racial integration to reduce social and economic disparities.

9.2 RACIAL SEGREGATION

Residential segregation is defined as the separation of distinct groups – usually racial or ethnic groups – into separate neighborhoods. If segregation is separation, then its opposite is an even distribution of groups across the neighborhoods in a larger area that represents a housing market, such as a city or metropolitan area. There are many ways to measure segregation, but by far the most common is the Index of Dissimilarity, which equals zero when the distribution of two groups is perfectly even and 100 if the two groups are completely separated. While the Index of Dissimilarity has been criticized on various methodological grounds (Winship, 1977), in practice it is highly correlated with other measures that focus on the evenness of the distribution of groups across neighborhoods (Massey and Denton, 1988). The value of the Index may be interpreted as the proportion of one group that would have to move to achieve complete integration. In general, segregation levels of 30 or below are considered low, 30 to 60 are considered moderate, and values above 60 are considered high (Kantrowitz, 1973).

For neighborhoods, I follow the common practice, as do Glaeser and Vigdor, of using census tracts; these are small geographic units defined by the US Census Bureau for data collection purposes that average about 4,000 residents (United States Bureau of the Census, 1994). For the housing market, I use metropolitan areas – which are defined as cities of 50,000 or more, the county in which the central city is located, and surrounding counties that are closely tied to the central county by commuting patterns and other factors (Office of Management and Budget, 2010). For 1990 and 2000, the data are drawn from the "long-form" data from the US Census for those years. For 2010 and 2015, because the long-form survey was discontinued, I use the American Community Survey files that span 2008–2012 and 2013–2017, data collection periods centered on 2010 and 2015 respectively.

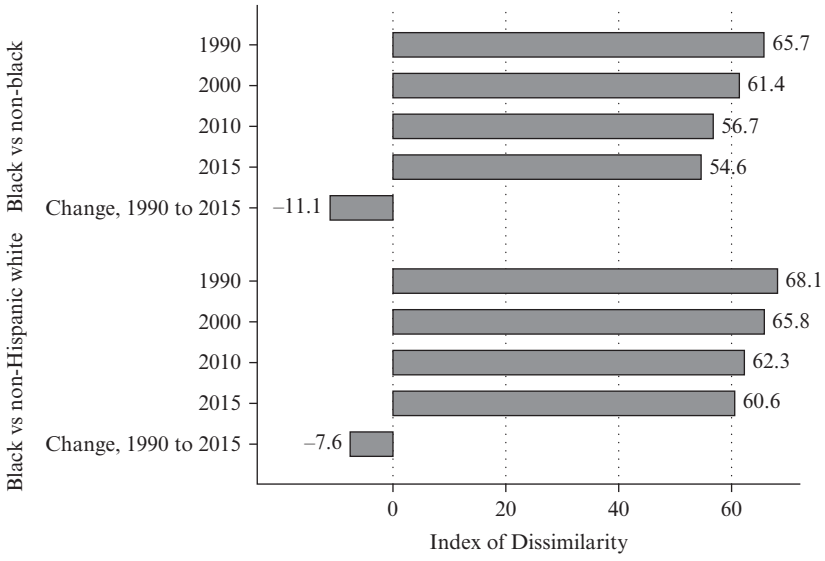
9.2.1 Defining the Groups

An important issue is how to define the two groups whose segregation is to be measured. Glaeser and Vigdor consider the segregation of blacks from all other persons, that is, blacks from non-blacks. This is a crucial and, I would argue, incorrect decision. The whole point of segregation studies is that a segregated group is excluded from contact with a powerful advantaged group and geographically isolated from the resources, housing, and public amenities that the advantaged group enjoys. Therefore, a conceptually valid measurement scheme should measure segregation of minority and disadvantaged groups from the majority group. If African-Americans more frequently reside with low-income Hispanic immigrants, that does not mean they have achieved better access to high-performing schools, safer streets, and quality housing. The more logical approach to segregation analysis is to calculate the segregation of minority groups from the advantaged majority group, in other words, from non-Hispanic whites.[2] The choice between black/non-black and black/white makes a large difference in the analysis, both in terms of the measured levels of segregation and the trends over time, as we see in the following section.[3]

It should be noted that the Index of Dissimilarity is sometimes criticized because it compares only two groups at a time. Some researchers argue that Theil's H, also known as Entropy, is preferable because it easily handles any number of groups (Reardon and Owens, 2014; Theil and Finizza, 1971). The measure is essentially based on the diversity of neighborhoods relative to the average diversity of the larger area. Yet this measure, like Gleaser and Vigdor's approach, treats the groups as interchangeable; increasing diversity at the parcel level has the same effect on the aggregate measure regardless of whether it is whites or Hispanics who are living in closer proximity to blacks.

9.2.2 Segregation by Race is Declining

Glaeser and Vigdor, consistent with past studies (Massey and Denton, 1993; Massey and Hajnal, 1995), show that black versus non-black segregation increased dramatically in the early decades of the 20th Century during the great migration of southern blacks to northern industrial cities. By their measure, the Index of Dissimilarity peaked at about 80 in 1970 (see their Figure 1). Since then, they find a dramatic decline to about 55 percent in 2010, the lowest level since 1910 – the basis of their declaring "the end of the segregated century."



Note: Average of 384 metropolitan areas rounded to the nearest tenth, weighted by metropolitan black population.

Sources: 1990, 2000 – US Census; 2010, 2015 – American Community Survey 2008–2012 and 2013–2017.

Figure 9.1 Index of Dissimilarity, 1990–2015, average of 384 metropolitan areas

However, a good part of decline they report is driven by their choice of racial groups. As Hispanic and Asian immigrants arrived, they typically settled in urban population centers in areas of low-cost housing – in other words, in and around historically black neighborhoods. Using a black/non-black metric, the mingling of blacks with other minority groups shows up as integration.

Figure 9.1 contrasts the Index of Dissimilarity based on comparing blacks to non-blacks, as Gleaser and Vigdor do, to the measure comparing blacks to non-Hispanic whites between 1990 and 2015.[4] Segregation of blacks from non-blacks dropped 11.1 points, from 65.7 to 54.6 between 1990 and 2015. In contrast, segregation of blacks from non-Hispanic whites started at a higher level in 1990 – 68.1 – and fell by a smaller amount – 7.6 points. The resulting level in 2015 was 60.6, meaning that six in ten blacks would still need to move to achieve an even distribution. During that period, the proportion of the population of the 384 metropolitan areas that was neither white nor black nearly tripled, rising from 10 percent in 1990 to 28 percent in 2017. Because blacks increasingly lived with Hispanic and other immigrant groups over this period, the level of and changes in segregation of the black population is a function of the choice of groups upon which to compute the Index. If segregation from the non-Hispanic whites is what matters for access to opportunity, the approach of Gleaser and Vigdor exaggerates the extent of the decline in segregation.

Table 9.1 shows the Index of Dissimilarity computed both ways for the 20 largest metropolitan areas in 1990 and 2015.[5] The Index of Dissimilarity computed between

Table 9.1 Comparison of black/non-black and black/white Indices of Dissimilarity, 20 largest metropolitan areas, 1990 and 2015

Metropolitan area	1990			2015			Change, 1990–2015	
	B/NB	B/W	Difference	B/NB	B/W	Difference	B/NB	B/W
New York–White Plains	70.7	82.5	11.8	64.3	78.3	14.1	−6.5	−4.2
Los Angeles–Long Beach	64.8	71.7	6.9	52.9	66.0	13.2	−12.0	−5.7
Chicago–Joliet–Naperville	82.7	84.8	2.1	72.6	76.0	3.5	−10.2	−8.8
Houston–Sugar Land	60.9	64.9	3.9	46.5	60.5	13.9	−14.4	−4.4
Atlanta–Sandy Springs	66.0	66.4	0.4	54.2	59.2	5.0	−11.8	−7.2
Washington–Arlington	67.0	68.5	1.4	58.5	64.2	5.8	−8.6	−4.2
Dallas–Plano–Irving	59.2	62.9	3.7	45.9	56.1	10.3	−13.4	−6.8
Phoenix–Mesa–Glendale	44.6	50.6	6.0	37.8	49.3	11.4	−6.8	−1.3
Riverside–San Bernardino	38.2	42.6	4.4	34.7	46.4	11.6	−3.4	3.8
Philadelphia	80.6	82.0	1.4	68.5	74.8	6.2	−12.1	−7.3
Minneapolis–St. Paul	62.4	62.7	0.4	50.3	55.3	5.0	−12.0	−7.4
San Diego–Carlsbad	50.2	55.9	5.7	40.6	52.8	12.3	−9.6	−3.0
Santa Ana–Anaheim–Irvine	34.3	39.4	5.2	39.7	47.0	7.3	5.4	7.5
Tampa–St. Petersburg	69.6	70.8	1.2	48.7	55.0	6.3	−20.9	−15.8
Seattle–Bellevue–Everett	56.1	56.4	0.3	47.4	54.1	6.6	−8.7	−2.4
Nassau–Suffolk	75.3	77.6	2.4	61.9	70.7	8.9	−13.4	−6.9
St. Louis	78.2	78.3	0.1	71.3	73.0	1.7	−6.9	−5.3
Denver–Aurora–Broomfield	64.8	65.2	0.4	56.3	62.2	5.9	−8.5	−3.0
Baltimore–Towson	71.6	71.8	0.2	60.8	64.4	3.6	−10.8	−7.4
Oakland–Fremont–Hayward	62.2	64.9	2.7	44.8	57.0	12.1	−17.4	−8.0
Average (unweighted)	63.0	66.0	3.0	52.9	61.1	8.2	−10.1	−4.9

Note: B = blacks, NB = non-blacks, W = non-Hispanic whites.

Sources: 1990 – US Census; 2015 – American Community Survey 2013–2017.

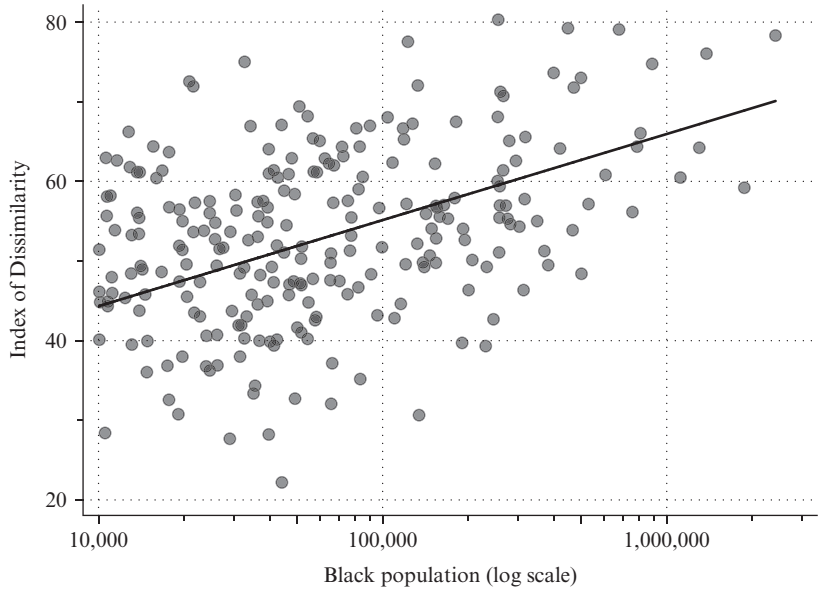
blacks and non-Hispanic whites is always larger than when it is computed between blacks and non-blacks; in fact, it cannot be less. In 1990, however, the differences were mostly small, with the exception of New York and Los Angeles. By 2015, the difference between the two measures was also greater than in 1990, sometimes dramatically so; it more than doubled in 15 of the 20 metropolitan areas, reflecting the increasing tendency of blacks to share neighborhoods with the growing numbers of Hispanic and Asian immigrants.

As a result, the apparent decline in racial segregation was larger using the Glaeser–Vigdor measure for all 20 metropolitan areas. In Houston, for example, the decline of 14.4 points in Dissimilarity of blacks versus non-blacks was only 4.4 points when comparing blacks and whites. In Philadelphia and Minneapolis, declines in segregation of about 12 points when comparing blacks to non-blacks are reduced to about 7 points when comparing blacks to non-Hispanic whites. Riverside–San Bernardino showed a

small decline by the black/non-black measure, but actually had an increase in segregation using the white/black measure. Santa Ana–Anaheim–Irvine bucked the trend by showing an increase on both measures, but the increase was larger when contrasting blacks and whites. In these large metropolitan areas, on average there was progress by both measures, but using the black/non-black Index of Dissimilarity greatly exaggerated the progress toward racial integration. While it is true that over this period blacks were less likely to live alone in neighborhoods, to a large extent this reflected an influx of immigrants rather than achieving access to non-Hispanic white neighborhoods and the resources and public amenities they possess. To better capture this reality, for the remainder of the chapter, racial segregation is measured by applying the Index of Dissimilarity to blacks as compared to non-Hispanic whites.

9.2.3 Segregation and Black Population Size

Segregation of blacks from non-Hispanic whites is substantially worse in metropolitan areas with larger black populations. Figure 9.2 shows the 2015 segregation levels of the 384 metropolitan areas graphed against the log of the number of black residents. The bivariate regression line, as shown in the figure, indicates that the Index of Dissimilarity increases by 0.5 points for every 10 percent increase in population ($t=13.6$, $p<0.001$). Metropolitan areas with lower segregation levels tend to have fewer than 100,000 black residents, but those areas with more than 500,000 black residents virtually all have high segregation levels. As a result, half of all metropolitan blacks lived in areas where the



Source: American Community Survey 2013–2017, calculations by the author.

Figure 9.2 Segregation between blacks and non-Hispanic whites by black population size (log), 2015

2015 Index of Dissimilarity was 60 or higher and 15 percent lived in areas where it was 75 or higher – including Chicago (76.0), New York (78.3), Detroit (79.1), Newark–Union (79.2), and Milwaukee (80.3).

Another indication of progress is the decline in cities with extreme levels of segregation. While 50 percent of blacks still lived in metropolitan areas with segregation levels of 60 or more in 2015, as noted earlier, this is down from 75 percent in 1990. And while 15 percent of metropolitan blacks lived in metropolitan areas with Dissimilarity of 75 or more in 2015, that figure was down from 33 percent in 1990. But at the pace of the decline in black/white segregation experienced over 1990 to 2015, it will be decades before it is reduced to levels comparable with other racial and ethnic minority groups today or the historical levels experienced by European immigrants at the peak of their segregation.

9.3 ECONOMIC SEGREGATION[6]

While race is the preeminent dimension of residential segregation in the United States, it is not the only one. Poor, middle-class, and affluent households tend to live in very different neighborhoods, separated by walls, highways, railroad tracks, and municipal boundaries. Metropolitan neighborhoods vary enormously in terms of residents' incomes, housing size and conditions, and public amenities – from sheet-rock mansions surrounded by green lawns in wealthy suburban enclaves to run-down row homes and housing projects in depopulated central-city ghettos and barrios. This phenomenon is known as economic segregation, and it serves to reinforce racial segregation and exacerbate its effects. Given that minority groups are poorer on average than non-Hispanic whites, economic and racial segregation interact with each other to create neighborhoods which are doubly isolated from the mainstream of American society.

Economic segregation, resulting in vastly unequal neighborhoods, is linked to many social and economic problems. Residents of high-poverty neighborhoods are systematically cut off from public resources in education, housing, and health care and simultaneously exposed to higher levels of crime, violence, and economic isolation (Sampson, 2012; Sharkey, 2013). High-poverty neighborhoods have significant long-term consequences for their residents, particularly young children who grow up in such places (Chetty et al., 2014; Chetty et al., 2015; Sharkey, 2008). While residents of high-poverty areas are harmed most directly, the costs of economic segregation are shared more broadly. Crime and violence incur substantial costs in terms of enhanced security, policing, court systems, and incarceration. Poor health outcomes among the uninsured and those with publicly funded insurance drive up health care expenses. The costs, financial and otherwise, of these outcomes are passed on to more privileged residents of metropolitan areas wherever they might reside (Acs et al., 2017; Dreier et al., 2014).

9.3.1 Measurement Issues

Segregation on the basis of household income presents a challenge in terms of measurement, because income is a continuous variable rather than a categorical one like race. The poverty line does define two groups, poor and non-poor, whose segregation from each other can be measured using the Index of Dissimilarity. However, much of the variation

in income is discarded by this approach, since a family of four with income slightly over the poverty line, say $26,000, is lumped together with multi-millionaires. Measurement of economic segregation requires a more sophisticated approach.

In previous work, Jeongdai Kim and I developed a class of measures of segregation based on ideas from information theory that are particularly useful for measuring segregation on a continuous variable (Jargowsky and Kim, 2009; Kim and Jargowsky, 2009). We argued that economic segregation may be measured by computing the ratio of neighborhood inequality to household inequality. The basic idea is that there is a certain amount of income inequality between *households*. These households are then grouped into *neighborhoods*. If there were perfect economic integration, all neighborhoods would be more or less equal; neighborhood inequality – the numerator in the ratio – would be zero, and therefore economic segregation would be zero as well. In contrast, if there were perfect economic segregation, there would be no mixing of households of different income levels within neighborhoods. The neighborhood and household inequality measures would then be the same, and thus the segregation measure formed by their ratio would be 1. While almost any measure of inequality can be used to form this ratio, the results presented below employ the well-known Gini coefficient (Gini, 1921; Piketty, 2015), which measures how unequally income is distributed across the household or neighborhood units.[7]

The next section describes the trends in household inequality, neighborhood inequality, and economic segregation. In addition to the data described above, this analysis includes information on household income from the US Censuses conducted in 1970 and 1980. Prior to the 1990 Census, census tracts had not been defined for the whole country. For that reason, it is not possible to calculate segregation measures going back to 1970 for all 384 metropolitan areas. These results use a set of 264 metropolitan areas that had sufficient data to track them over the whole period.

9.3.2 Trends in Household and Neighborhood Inequality

Income inequality increased dramatically in almost all US metropolitan areas between 1970 and 2010. Table 9.2 shows the average statistics on household income distributions

Table 9.2 Distribution of household income in the average metropolitan area

Year	Mean	Standard deviation	Income shares by quintile				
			First	Second	Third	Fourth	Fifth
1970	69,551	71,282	3.7	10.9	17.1	23.6	44.8
1980	71,162	62,484	4.1	10.4	16.8	24.1	44.6
1990	80,116	85,232	3.8	9.9	15.9	23.3	47.0
2000	87,269	98,389	3.7	9.5	15.2	22.6	49.0
2010	81,441	86,852	3.4	8.9	14.9	22.9	49.9
1970–2010 Chg (%)	17.1%	21.8%	−8.1%	−18.3%	−12.9%	−3.0%	11.4%

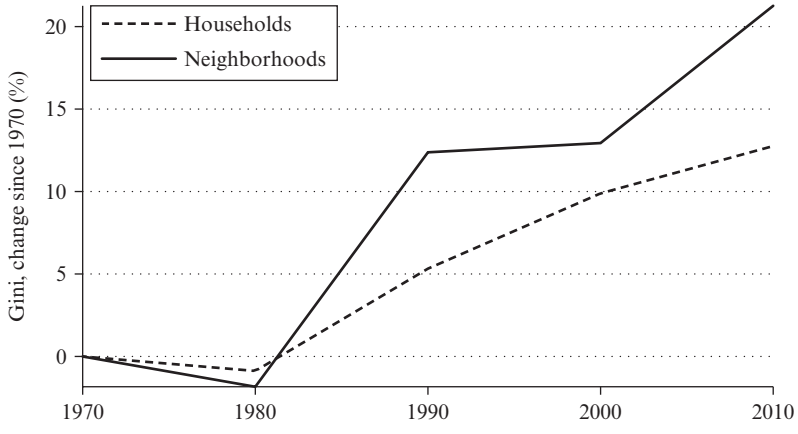
Note: Average of 264 metropolitan areas weighted by households; includes all counties in each decade.

Sources: 1970–2000 – US Census; 2010 – American Community Survey 2008–2012.

for 264 metropolitan areas. The average metropolitan area's mean income was little changed in the 1970s, but increased rapidly from 1980 to 2000, followed by a decline between 2000 and 2010, reflecting the financial crisis and the deep recession that followed. Despite that decline, real mean income rose 17 percent between 1970 and 2010. Incomes were also more variable; over the period, the standard deviation of household income increased by nearly 22 percent. The gains in household income were not widely shared, however. The first four quintiles of households – four-fifths of the population – actually experienced a decline in their share of total metropolitan income. The second quintile – a good approximation of the working class – declined the fastest, dropping over 18 percent. Meanwhile the top quintile saw its share of total income rise from 44.8 percent to 49.9 percent. The rising tide lifted only the largest boats, as the most affluent households claimed very nearly half of all metropolitan income.

Clearly, household income inequality was increasing over this period. Figure 9.3 shows the average Gini Index of Income Inequality for both households and neighborhoods relative to 1970 for the 264 metropolitan areas. Household inequality increased steadily starting in 1980, consistent with national and international trends showing that inequality began rising in the late 1970s. Neighborhood inequality rose faster than household inequality in the 1980s and 2000s; in the 1990s, household inequality grew faster. Over the whole period, however, neighborhood inequality in US metropolitan areas clearly outpaced household inequality.

Household inequality is a precondition for economic segregation, just as there can be no racial segregation unless there are different racial groups. Given a level of income inequality among households, economic segregation comes down to the question of how much inequality is *between* rather than *within* neighborhoods. As household income inequality has risen, if the division of that inequality within and between neighborhoods had remained the same, neighborhood inequality would have increased at the same rate



Note: Weighted average of 264 metropolitan areas including all available counties.

Sources: 1970–2000 – US Census; 2010 – American Community Survey 2008–2012.

Figure 9.3 Gini coefficients, household and neighborhood, relative to 1970

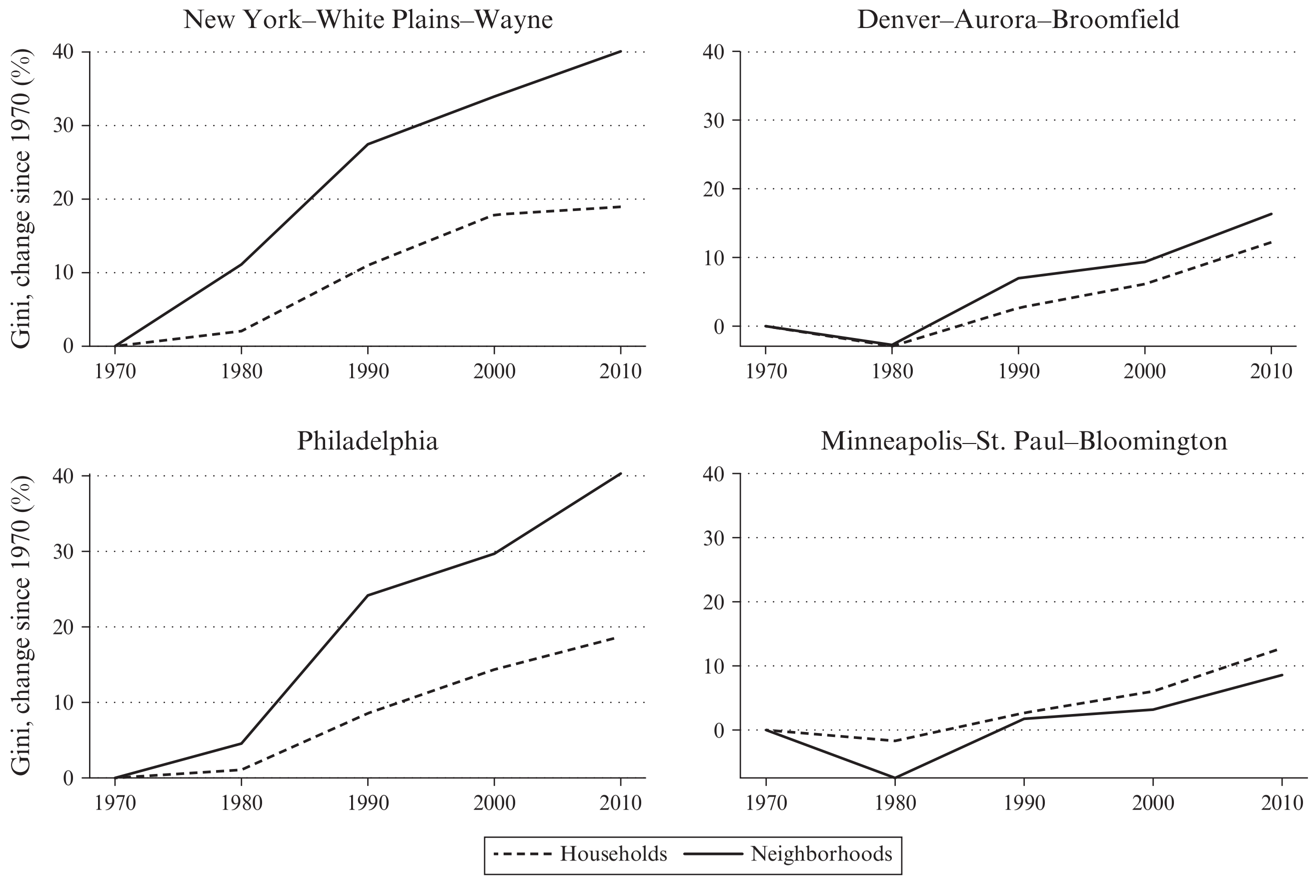
as household inequality. As the figure shows, however, neighborhood inequality grew faster. The implication is that neighborhoods became more unequal for two different reasons. First, there was simply a lot more inequality overall. Second, households sorted into neighborhoods in ways that led a greater proportion of household inequality to be between rather than within neighborhoods. In other words, economic segregation increased.[8]

While virtually every metropolitan area saw rising inequality of household income, not all of them had rising economic segregation. Figure 9.4 shows household and neighborhood inequality values relative to 1970 for specific metropolitan areas. New York and Philadelphia both experienced increases in income inequality. The Gini for neighborhoods, however, grew even faster, implying that economic segregation was increasing. Denver and Minneapolis also experienced increasing household income inequality, as did almost all US metropolitan areas. The neighborhood Gini increased in these areas as well, but only in proportion to the increase in the household Gini. In places like Denver and Minneapolis, there was more neighborhood inequality, but it was mainly due to the increase in household inequality; the degree of sorting of inequality within and between neighborhoods remained stable. Thus, in the United States, as in Europe (Musterd et al., 2017), local contextual factors mediated the global trend of rising household inequality.

This is an important difference. Household inequality was increasing everywhere, but that was mostly due to factors outside of local policymakers' control – globalization, returns to skill, the national economy, and so on. In addition, some places made things worse by having more residential sorting of households by income – New York, for example, but not Minneapolis. Much of that could be due to suburban sprawl, zoning, school assignment policies, and the construction and spatial distribution of different types of housing. Richard Rothstein (2017) has powerfully described the role of law and policy in creating and sustaining racial segregation. Likewise, law and policy contribute to – indeed, often require – economic segregation by requiring that economic segregation is built into the housing stock (Dwyer, 2007; Editorial Board, 2015; Jargowsky, 2015; Lens and Monkkonen, 2016; Rothwell and Massey, 2010; Trounstine, 2018). Further, because of the unusual structure of the US government, the national government has a much reduced role in local housing, growth, and development decisions than most developed nations. Thus, state and local policymakers have great latitude to either resist or exacerbate local preferences for racial and economic segregation (Hirt, 2014; Levine, 2005).

Economic disparities between minority groups and the majority are frequently a motivation for the latter to separate themselves from the former. To paraphrase one of the earliest scholars of segregation, Robert Park (1926), groups try to convert social distance to physical distance. There are exceptions, such as seems to be the case in Southern Europe (Arbaci, 2019). But in the United States, disadvantaged minority groups often face segregation, sometimes quite extreme, on both the racial/ethnic and the economic dimensions. They cannot be viewed in isolation, nor can their implications be fully appreciated without taking into account rising income inequality (Iceland and Wilkes, 2006; Massey et al., 2009; Quillian, 2012).

In fact, increasing income inequality and economic segregation has undercut the potential beneficial effects of the recent decreases in racial segregation discussed in the section 9.2. Because black incomes are so much lower on average than white incomes, segregation by race also means that black neighborhoods will be far poorer than white



Sources: 1970–2000 – US Census; 2010 – American Community Survey 2008–2012.

Figure 9.4 Household and neighborhood inequality in four metropolitan areas

neighborhoods at any given level of economic segregation. Because there is so much inequality among households, economic segregation results in greater inequality among neighborhoods at any given level of racial segregation. Because there is so much racial segregation, economic segregation among blacks produces much poorer neighborhoods than if blacks were interspersed with the much less poor white population. Thus, it is misguided to declare the "end of the segregated century" due to a decline in racial segregation when, at the same time, both household income inequality and economic segregation have both been increasing. Surely, the decline in racial segregation since the 1970s is evidence of progress in both social and legal terms. However, other things are not equal. The racial segregation that stubbornly persists plays out in a very different context; its negative effects are exacerbated by substantially higher levels of income inequality and economic segregation.

9.4 METROPOLITAN GEOGRAPHY

Racial segregation has undergone geographic restructuring. At the turn of the 20th Century, most blacks resided in rural areas and small towns in the South whereas the white population was predominantly northern and urban. After the Great Migration, however, regional segregation subsided and neighborhood-level segregation exploded (Massey and Hajnal, 1995). Douglas Massey notes that starting in about 1950, blacks and whites became more segregated across municipal boundaries: "After 1950 . . . Blacks and Whites came to reside in wholly different towns and cities" (Massey, 2001, p. 398). This process was driven by white flight and suburban sprawl, as new suburbs used land-use policies and exclusionary zoning to effectively protect suburban whites from having lower-income and minority neighbors (Jargowsky, 2002; Massey and Rothwell, 2009). Perhaps equally important, white parents were able to send their children to predominantly white schools if they could afford the entry fees: the down payment, property taxes, and monthly mortgage on a large suburban home. As Supreme Court Justice Ruth Bader Ginsburg has noted, "even though the days of state enforced segregation are gone, segregation because of geographical boundaries remains" (Carmon, 2015).

The proliferation of suburban jurisdictions, particularly after 1970, facilitated white flight. While blacks have suburbanized, in many cases they have moved to older inner-ring suburbs whose white populations have moved to newer, more remote suburbs (Anacker et al., 2017; Hanlon, 2008); Ferguson, Missouri, is a case in point. Newer suburbs in which the majority of housing units were built after 1970 still tend to be disproportionately white and affluent (Jargowsky et al., 2014). To a large extent, racial segregation is driven by jurisdictional boundaries. In research with Deborah Rog and Kathryn Henderson, I computed the Index of Dissimilarity using city and suburban jurisdictions rather than census tracts as the neighborhood unit. This figure represents how much segregation would remain if there was complete integration within jurisdictional boundaries. For example, in the Philadelphia metropolitan area, it would be as if every neighborhood in Philadelphia had the same share of whites and blacks as the city as a whole, and the same for the several hundred suburbs in the metropolitan area. On average, across 384 metropolitan areas, the level of segregation calculated using municipal jurisdictions is three-fourths of the figures discussed above using census tracts (Jargowsky et al., 2014,

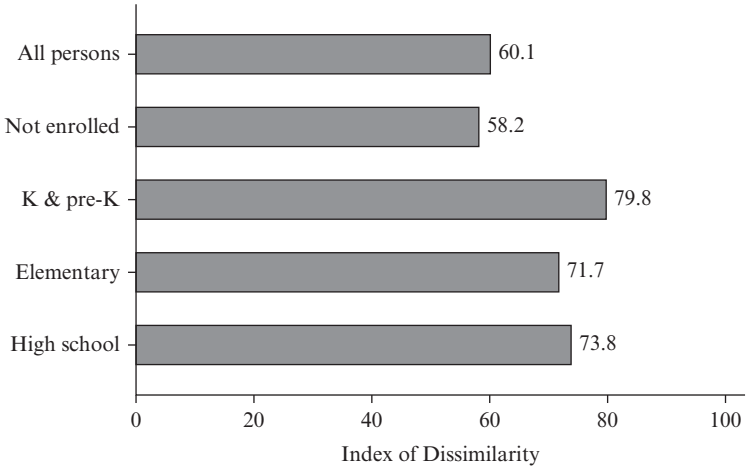
pp. 9–11, Figure 6). In other words, even if segregation could be completely eliminated within cities and towns, three-fourths of segregation would still remain because of segregation between metropolitan jurisdictions.

To the extent that reductions in racial segregation have played out in large central cities, the benefits of these reductions may be limited if they occurred within fiscally strapped central cities or within aging, deteriorating suburbs. Although there are a bewildering variety of governance structures and divisions of power between cities, towns, villages, school districts, counties, special-purpose districts, and state governments, in no metropolitan area is the collection of taxes and the provision of public amenities equal across all the subareas that comprise it (Burns, 1994; Jackson, 1985). Hence, in terms of access to resources and public amenities such as quality public schools, the increasing fragmentation of metropolitan areas since 1970 effectively undercuts progress in segregation at the neighborhood level.

9.5 SEGREGATION, CHILDREN, AND ACCESS TO OPPORTUNITY

Powerful research by Stanford economist Ray Chetty and his colleagues demonstrates that the effects of living in segregated and impoverished neighborhoods is particularly important for young children (Chetty et al., 2014; 2015). The longer-term benefits of reductions in segregation, therefore, are tied to reducing segregation as it affects the neighborhoods where children live and in turn the schools they attend. Residential decisions are made by adults, but they are affected by the presence and age of children (Clark and Onaka, 1983; Rossi, 1955). Those adults with children are often motivated to seek safe neighborhoods and better schools if they have the financial means to do so (Lareau and Goyette, 2014). To the extent that some whites have moved back to central cities in recent years, they are likely to be childless young adults and "empty nesters" (Ellen et al., 2013).

These life-cycle considerations often led to different levels of segregation between white and black children compared to white and black adults. Figure 9.5 shows the average level of segregation of black and white children enrolled in school by education level.[9] Segregation of children enrolled in school is substantially higher than in the corresponding non-enrolled populations. For example, the Index of Dissimilarity for whites and blacks not attending primary or secondary school is 0.582, whereas black and white children enrolled in elementary school have an Index of Dissimilarity of 0.717, 23 percent higher. White and black high school students are even more segregated, with a segregation score of 0.738. The residential segregation of children enrolled in kindergarten and pre-kindergarten is influenced both by the segregation of families with children in that age range and by the choices families make about enrolling those children, since these schooling levels are for the most part not compulsory. Apparently, families exercise their choices in ways that further increase segregation: children enrolled in kindergarten and pre-kindergarten have the highest black–white segregation, measured at 0.798 (37 percent higher than those not enrolled) – reminiscent of the peak segregation levels of 1970. To be clear, this extreme figure is not based on a few highly segregated metropolitan areas, but rather is the nationwide average of all 384 metropolitan areas.



Note: Average of 384 metropolitan areas weighted by population.

Sources: Jargowsky (2014), based on data from the American Community Survey 2007–2011.

Figure 9.5 White/black segregation by school enrollment

Because of the residential decisions of parents with children and other life-cycle considerations, the declines in racial segregation have left children behind.[10] Declines in segregation that skip over children are less likely to have beneficial effects on social and economic outcomes. The point is that to evaluate how much progress there has been against segregation, we must pay attention to how and why segregation has its negative effects. We must get under the hood of the overall segregation levels and investigate who remains segregated and how that is likely to affect racial inequality.

9.6 CONCLUSION

Edward Glaeser and Jacob Vigdor are two highly acclaimed economists and rightly so.[11] They have published prolifically on a variety of topics and their work is widely cited. However, I respectfully disagree with their conclusion that the regime of racial segregation of African-Americans that began in the early 20th Century has ended. Further, I argue that they have failed to show that the "dream" that racial disparities in achievement and employment could be ameliorated by reducing racial segregation "is a myth." However, my point in framing this discussion around Glaeser and Vigdor's article is not to attack them, since different scholars will always weigh evidence in different ways. Rather, my point is to argue that racial segregation is not a phenomenon that can be understood in isolation; it is embedded in a broader set of spatial factors that, operating together, limit access to opportunity for segregated groups.

To borrow a concept from economics, Glaeser and Vigdor did a comparative statics analysis of segregation. That is, they looked at the changes in racial segregation as if other things were being held constant, and noted that though segregation declined there had

been "only limited progress" in improving the educational and labor market equilibria. Beyond the problem of overstating the decline in segregation due to their measurement strategy, they did not take into account the interaction of racial segregation with growing economic segregation, itself driven in part by white flight to the suburbs to escape attempts to desegregate schools and housing in the central cities. They also failed to appreciate the way that the impact of racial segregation is magnified by growing income inequality and the changing spatial structure of metropolitan areas. Further, by not thinking critically about the mechanisms through which racial segregation's harms propagate, they did not investigate the extent to which children and therefore schools remain segregated at levels more common in the 1970s, at the height of the segregated century.

The preponderance of the evidence is that racial segregation is still with us and continues to hold back African-Americans, particularly those living in racially and economically isolated neighborhoods. But it is not just African-Americans who suffer, because the costs of segregation are borne by the nation as a whole (Acs et al., 2017). "Racial polarization stemming from our separateness," argues Richard Rothstein in *The Color of Law*, "has corrupted our politics, permitting leaders who ignore the interests of white working-class voters to mobilize them with racial appeals" (2017, p. 195). I opened this chapter with Weaver's argument in his 1948 book that segregation depended on the "mass of whites" aligning themselves with higher-income whites, choosing racial identity over shared interests based on class. It is a fair indication of the lack of progress that, while there have been changes at the margins and in some of the particular geographic and institutional arrangements, essentially the same analysis of segregation holds after 70 years.

NOTES

1. This section draws heavily on Jargowsky (2018).
2. Another measurement issue is that residents of group quarters should be excluded from the analysis. Residents of jails and nursing homes do interact in the same way with other residents of a neighborhood. When a minority group member is arrested in New York City and sent "upstate," this does not advance the cause of integration. I have excluded them in my calculations, but I am not sure how Glaeser and Vigdor handled the issue. Fortunately, the number of group quarters residents is small in most tracts and the effect on the numbers is negligible.
3. It should also be noted that race is self-identified and that starting in the 2000 Census, individuals could select more than one race (Farley, 2002). However, very few individuals chose to do so, and all analyses here are based on people who identified as white alone or black alone, excluding those who identified as Hispanic.
4. The segregation values in this bar chart, as well as all calculations reported in the figures and text below that are not attributed to another source, were calculated by the author from the census data described above.
5. The figures for 2010 differ slightly for some metropolitan areas from those shown in Table 1 of Glaeser and Vigor (2012) due to differences in data sources and geographic concepts.
6. This section draws heavily on Paul A. Jargowsky and Christopher A. Wheeler, "Economic Segregation in US Metropolitan Areas, 1970–2010" (21st Century Initiative, Johns Hopkins University, November 2017).
7. Other inequality measures, such as the Theil Index, could equally well be used. An example is the Neighborhood Sorting Index, which is the ratio of the standard deviation of household income to the standard deviation of neighborhood income (Jargowsky, Paul A. "Take the Money and Run: Economic Segregation in U.S. Metropolitan Areas." *American Sociological Review* 61 (1996): 984–998).
8. Other approaches to measuring economic segregation reach the same conclusion. See (Owens, 2016; Reardon and Bischoff, 2011; Watson, 2009).
9. The figure and the analysis of this paragraph are based on the 2007–2011 American Community Survey and are adapted from Jargowsky (2014).

10. Similarly, the increases in economic segregation are driven largely by families with children. The economic segregation of childless families has not increased to any appreciable degree (Owens, 2016).
11. Glaeser is the Fred and Eleanor Glimp Professor of Economics at Harvard University and Vigdor is the Daniel J. Evans Professor of Public Policy and Governance at the Evans School of Public Policy and Governance at the University of Washington.

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