## RESIDENTIAL SEGREGATION

The Stanford Center on Poverty and Inequality

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#### **KEY FINDINGS**

- Although there are large differences in the sizes of minority populations in Europe and the U.S., there nevertheless is rather remarkable similarity in macro-segregation across countries in Europe and states in the U.S.
- The magnitude of minority segregation in new U.S. gateway cities is much greater than in European cities experiencing recent immigrant growth.
- Segregation often overlaps
  with many other place-based
  inequalities—poverty, unemployment, crime, and housing
  quality and overcrowding.
  These overlapping disadvantages are seemingly much
  more common in the U.S.
  than in European countries,
  where government efforts
  to promote integration (e.g.,
  social and mixed-income
  housing) provide a clear
  contrast to the market-driven
  solutions preferred in the U.S.
- Policy choices will affect whether segregation in ethnic communities or neighborhoods represents a way station or platform for full integration or a chronic or permanent social condition that institutionalizes majorityminority social and economic inequality.

he United States is a nation of immigrants. More than 1 million foreign-born U.S. residents each year become legal permanent residents, nearly 60 percent of whom eventually attain citizenship.1 In stark contrast, most European countries have had a long history of exporting population. During the 18th and early 19th centuries, the U.S. was a major destination for European émigrés from Ireland, Germany, Italy, Scandinavia, and elsewhere. Today, the U.S. remains the world's leading immigrant-receiving country, but the massive flow from Europe overall has ended, replaced by new arrivals from Asia, Latin America, and sub-Saharan Africa. The historical record in the U.S. not only highlights the ebb and flow of immigration but also reveals the cultural conflicts and political unrest created by new ethnic and racial divisions and uneven integration among new immigrant populations.

Indeed, immigration reform, affirmative action, ethnic profiling, and the new racial re-concentration of urban poverty (e.g., Ferguson, East Baltimore, and North Charleston) continue to be politically charged issues, as the 2016 presidential election tells us. Interestingly enough, in some ways Europe today is not unlike the U.S. a century ago or more. For much of Europe, the recent influx of immigrants, coupled with unprecedented labor mobility within the European Union (i.e., the Schengen Agreement), has raised new questions about national identity (and allegiance),

cultural unity, and assimilation.<sup>2</sup> Moreover, the current European refugee crisis caused by the massive population exodus from war-torn Syria is only the latest of several previous examples (e.g., Somalia, Kosovo). Some European countries, facing massive new immigration for the first time, have looked to the U.S. for answers, hoping to learn important lessons that might ease the difficulties associated with growing diversity and mounting ethnic and religious conflict.<sup>3</sup>

Here, we start with a straightforward assumption: The extent to which minority populations (including immigrants) share the same spatial and social spaces provides tangible, albeit indirect, evidence of integration or spatial assimilation. Specifically, we compare recent patterns of minority group segregation in the U.S. and Europe. At a minimum, declining residential segregation suggests that minority populations are increasingly able to afford to live in the same neighborhoods or communities as natives and that they are not limited by housing market discrimination. Perhaps most importantly, declines in segregation indicate that majority and minority populations may increasingly prefer (or are indifferent to) living together in the same communities or neighborhoods, where they increasingly share the same cultural values, national identity, and education, Residential integration suggests a breakdown or diminution of majority-minority social and economic boundaries.

Of course, country-to-country differences in data collection and measurement, including differences in ethnic and racial identification and geography, make strict comparisons of minority residential segregation difficult. We focus our attention on perhaps the most important axes of minority spatial differentiation; ethnoracial background in the U.S. and immigration (citizenship status and foreign origin are used) in Europe. In doing so, we identify the main group that is regarded as the "other" in each society and then compute segregation indices relative to the "other-nonother" distinction. Of course, current and past immigration and growing racial and ethnic diversity are highly interrelated, both in Europe and the U.S. For example, the large majority of American Asians and Hispanics are first- or second-generation immigrants; most arrived after 1965 with the enactment of the Immigration and Nationality Act of 1965 (sometimes known as the Hart-Celler Act). Moreover, racial minorities account for only about 20 percent of all third-generation Americans (i.e., native-born of native-born citizens).4

Our fundamental goal is to document patterns of U.S. ethnoracial segregation across all 50 states, 3,100 counties, and select metropolitan or big-city populations (i.e., those with recent influxes of new immigration and that are comparable to their European counterparts). These estimates are juxtaposed with patterns in Europe, where our analyses focus on the changing distribution of immigrant patterns in 26 countries (in the European Union), 1,396 county equivalents (so-called NUTS categories),<sup>5</sup> and several illustrative metropolitan immigrant gateways. We focus on Amsterdam, Rotterdam, Brussels, and London, but also draw on other recent case studies of neighborhood segregation in the United Kingdom, France, Germany, Spain, and Italy.

# Why Segregation in the U.S. and Europe May Be Different

Whether new racial and ethnic minority immigrants—both in the U.S. and Europe—will become fully integrated into majority society is far from clear. On the one hand, Europe's more generous social policy regime (e.g., integrated social housing and generous welfare programs) may provide a hedge against high rates of residential segregation while even promoting greater minority integration, unlike the market-driven housing in the U.S. Compared to those in the U.S., immigrant and racial and ethnic minority populations in Europe are typically much smaller in size (absolutely and relative) and less diverse, and are therefore perhaps less "threatening" to native populations. Europe arguably has fewer major immigrant "gateways," and each country, unlike the U.S., tends to be dominated by a comparatively small number of distinct national origin groups,

which presumably eases the integration process. Moreover, unlike the case in the U.S., where roughly one-quarter of all foreign-born residents are unauthorized (and highly segregated in minority communities), the immigrants in Europe are more often legal residents. More reliable, inexpensive, and extensive citywide systems of public transportation in Europe have had the effect of dispersing low-income and immigrant populations more widely throughout the metropolitan region and beyond.

On the other hand, the recent rise of nationalist political parties and the right-wing backlash against immigrant populations in France, the Netherlands, Hungary, and Sweden, among others, indicate perhaps even greater antipathy toward immigrants than in the U.S. Integrating non-Christian immigrant minorities—especially Muslims from Africa, the Middle East, and Southeast Asia—also sometimes represent a larger political problem and a different set of issues regarding integration and national identity than the case in the U.S., which has a long history of incorporating religious minorities and of extolling religious freedom.

#### **Residential Segregation: Some Empirical Results**

Our empirical approach differentiates between macro- and micro-segregation.<sup>6</sup> By macro-segregation, we mean the spatial concentration of minority populations over European countries and over U.S. states. Macro-segregation also is revealed empirically by the uneven distribution of minority populations over counties (or county-equivalent units) in each European country and each U.S. state. In contrast, microsegregation refers to differences in the spatial distribution of minority and majority population across neighborhoods in specific cities (i.e., census tracts in U.S. cities and districts within European cities). Estimates of macro- and micro-segregation are measured by D (i.e., the index of dissimilarly), which indicates the percentage of minorities that would have to move to another county (or neighborhood) in order to achieve similar percentages of minorities across all counties (or neighborhoods) in the country (or city). D varies from 0 (i.e., no segregation) to 100 (i.e., complete segregation of minorities). For additional details about data and measurement, see the Appendix "Measuring Segregation."

# Macro-Segregation: The Big Picture of Minority Population Concentration

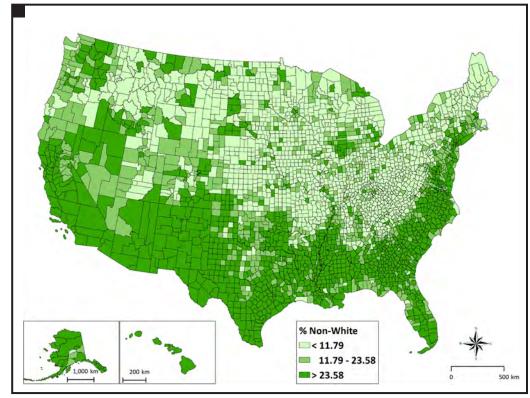
We begin by providing county-level maps of the ethnoracial and immigrant populations in the U.S. (Figure 1) and Europe (Figure 2), respectively. We distinguish counties by whether the percentage minority is above the U.S. and European averages, below one-half the average, or somewhere

in between. The mean state percentage of nonwhites across the U.S. is 23.58, while the mean percentage of immigrants in Europe is much lower at 5.88. This large U.S.-Europe difference reflects, first and foremost, the long history of minority immigration (including forced migration from slavery) in the U.S. In many parts of Europe, massive immigration, especially of minority (or nonwhite) populations, is a more recent phenomenon.

The data clearly illustrate the concentration of U.S. minority populations in the South (a legacy of slavery and indigenous native populations, including Indians and Mexicans), along the Atlantic and Pacific seaboard states, and in major metropolitan areas. Appalachia and the rural North Central and Northeast regions in the U.S. remain overwhelmingly white. In Europe, large parts of Eastern Europe are overwhelmingly native-born, as is the case in much of Finland. Although Italy, France, and the United Kingdom experienced substantial have recent immigration, the spatial distribution of immigrants is much more highly concentrated (e.g., in the London area in the United Kingdom, in the north of Italy, and in Paris, Lyon, and Marseille in France).

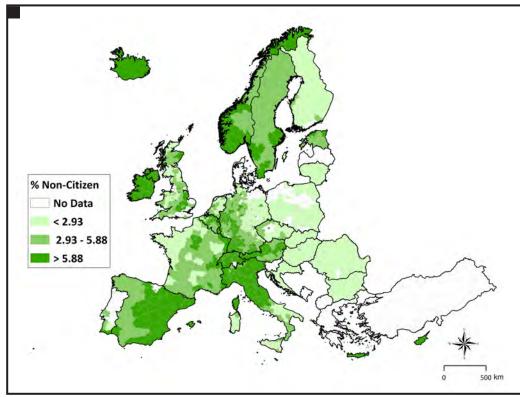
Tables 1 and 2 provide the cross-county segregation indices (*D*'s) for each U.S. state and European country. The overall *D* in the U.S. is 40.2, while it is 38 in all 26 European counties (and 40.8 if limited to EU countries). These estimates of segregation vary substantially across states and countries. In the U.S., segregation varies from a high of roughly 44 in New

FIGURE 1. Percent Non-White in U.S. Counties, 2010



Source: U.S. Census Bureau, 2010 Decennial Census.

FIGURE 2. Percent Non-Citizen in European Counties, Circa 2010



Source: Eurostat

TABLE 1. County White-Nonwhite Segregation Indices by State, U.S., 2010

States	All Ethnicities	Black, Asian, & Hispanic	Black	Asian	Hispanic
Alaska	25.3	28.4	34.6	35.8	19.5
Alabama	29.5	30.9	36.4	34.0	22.4
Arkansas	34.0	36.9	56.3	39.9	34.0
Arizona	8.8	9.1	14.3	13.8	9.7
California	20.1	21.0	33.4	29.1	24.9
Colorado	26.0	28.0	47.9	25.0	29.2
Connecticut	17.0	18.1	20.9	12.1	18.1
Delaware	9.9	10.9	12.3	24.8	7.5
lorida	34.6	35.6	32.4	27.3	44.4
Georgia	30.5	31.2	35.7	44.2	32.5
-lawaii	14.7	16.9	31.3	18.6	5.3
owa	28.5	30.7	40.4	38.9	33.4
daho	23.1	27.9	29.5	27.3	33.5
llinois	35.5	36.7	43.8	38.1	38.9
ndiana	38.3	40.7	51.3	36.7	37.3
Kansas	29.9	33.2	40.4	36.7	35.8
Kentucky	37.2	40.2	45.8	42.6	30.9
ouisiana	24.0	25.3	27.3	36.8	28.5
Massachusetts	20.4	23.1	32.7	32.7	33.2
Maryland	40.0	41.2	48.1	41.6	43.3
Maine	16.1	23.3	40.4	21.8	11.4
Michigan	32.3	35.2	44.2	36.5	26.1
Minnesota	30.2	34.2	43.8	38.4	27.4
Missouri	40.4	44.6	54.8	36.3	31.0
Mississippi	31.0	32.1	35.0	34.6	23.9
Montana	33.2	14.2	26.8	18.1	15.1
North Carolina	28.2	28.6	33.3	40.4	22.0
North Dakota	29.2	26.3	38.1	36.3	18.3
Nebraska	28.8	31.3	48.4	34.9	30.1
New Hampshire	19.9	23.9	25.4	20.9	29.0
New Jersey	30.4	31.1	37.7	34.6	34.2
New Mexico	15.0	15.0	23.8	25.6	15.1
Nevada	18.0	19.2	29.6	22.0	15.3
New York	44.2	45.4	43.8	49.1	45.8
Ohio	35.8	38.4	44.8	35.9	30.9
Oklahoma	17.5	30.2	39.5	33.8	28.0
Oregon	22.1	25.8	45.1	35.8	22.8
Pennsylvania	37.6	39.6	51.5	39.0	41.3
Rhode Island	33.8	35.8 23.0	35.8 28.2	23.8	38.6
South Carolina	22.1	27.3		21.0	16.1
South Dakota	37.7	46.9	42.7 54.3		25.2
Tennessee	44.5			40.7	31.8
exas	33.8	34.6	33.0	36.5	39.2
Jtah Grainia	17.5	19.1	25.9	28.3	17.5
/irginia	28.4	29.2	37.1	46.5	36.6
/ermont	14.8	21.5	29.2	31.5	11.4
Washington	20.5	23.6	35.9	33.4	27.3
Visconsin	39.5	43.8	63.3	33.0	36.6
West Virginia	29.3	33.7	38.9	34.2	27.7
Nyoming	21.7	22.0	37.3	25.1	20.9
Overall U.S.	40.2	42.2	47.2	50.1	50.9

Source: Authors' analyses of U.S. Census Bureau data.

York State and Tennessee to lows of less than 10 in Arizona and Delaware. In Europe, the *D*'s range in size from 40.1 in Estonia to lows in the island countries of Iceland (1.2) and Ireland (4.8). Although there are large differences in the sizes of minority populations in Europe and the U.S., there nevertheless is rather remarkable similarity in macro-segregation across countries in Europe and states in the U.S.

Of course, these U.S. and European estimates hide variation in segregation across different minority populations. In the U.S., the most segregated minorities (data not shown) originate from Central and South America (68.1) and Oceania (65.1), while these origins account for the least amount of minority

segregation in European countries in the EU (40.8). The range of overall *D*'s in the U.S. are much smaller. They range from a low of 42.2 among blacks to highs of 50.1 among Asians and 50.9 among Hispanics, differences that presumably reflect regional differences in minority population concentration (i.e., Asians in the West and Hispanics in the Southwest).

### Micro-Segregation: Segregation within Cities

Both in the U.S. and Europe, racial and ethnic minorities tend to settle in areas that are disproportionately composed of other minorities, often made up of their own ethnoracial background or nationality. In the U.S., previous studies show that racial neighborhood segregation between blacks and whites

TABLE 2. European County Equivalent Citizen-Noncitizen Segregation Indices, Circa 2010

Countries	All	European Union	Non-EU	Non-EU Europe	Africa	Central & South America	North America	Asia	Oceania
Austria	24.6	22.0	28.9	27.2	42.8	31.7	36.8	32.2	33.3
Belgium	31.0	32.6	34.4	27.4	42.9	43.9	49.2	31.9	44.2
Bulgaria	19.1	25.9	19.7	14.2	41.5	31.5	37.4	37.2	48.6
Croatia	19.1	25.0	19.0	18.3	49.0	37.5	28.2	36.2	41.4
Czech Republic	30.2	22.7	34.7	38.2	41.0	47.1	61.9	31.9	49.4
Estonia	40.1	17.1	40.9	41.0	35.2	35.3	24.3	30.9	40.1
Finland	16.8	19.2	17.5	24.8	25.0	23.6	21.0	17.1	19.8
France	26.7	23.5	31.5	36.8	32.6	45.5	37.9	35.3	42.8
Germany	27.2	27.4	28.7	28.9	40.2	30.2	39.7	29.7	39.8
Greece	16.5	21.0	16.3	13.2	39.6	30.9	29.3	31.9	27.5
Hungary	24.6	22.5	36.9	27.9	45.1	41.2	42.9	53.1	49.9
Iceland	1.2	0.9	8.9	1.3	10.0	10.5	12.3	11.5	14.7
Ireland	4.8	2.4	11.4	8.8	10.5	16.2	6.3	14.2	6.4
Italy	23.9	23.2	26.8	30.3	31.4	41.0	27.4	34.4	29.0
Lithuania	26.0	22.6	26.6	26.9	23.2	27.1	30.3	25.2	42.4
Netherlands	23.5	23.0	26.2	21.1	33.4	33.0	38.4	25.1	38.1
Norway	14.0	14.4	13.7	14.2	12.8	22.2	24.1	16.8	21.6
Poland	30.8	30.4	33.4	32.0	33.4	47.0	47.0	49.2	80.0
Portugal	35.6	31.7	37.7	30.2	52.5	35.2	29.5	31.1	29.3
Romania	39.4	35.4	44.1	34.2	58.6	48.7	42.0	55.8	78.1
Slovakia	13.5	15.2	15.1	18.5	19.4	24.0	20.5	21.3	25.1
Slovenia	14.4	16.6	14.3	14.1	24.9	20.8	26.9	23.0	25.0
Spain	23.7	27.8	24.3	28.2	31.6	23.5	26.3	33.0	29.6
Sweden	14.1	20.8	9.8	15.0	16.5	31.8	22.1	13.0	21.7
Switzerland	14.3	17.5	14.8	16.6	30.9	31.5	41.8	17.4	39.9
United Kingdom	38.9	35.8	36.9	39.0	42.1	50.6	40.2	37.8	45.9
Overall Europe	38.0	40.8	39.3	52.5	50.4	68.1	49.6	45.0	65.1

Source: Eurostat. Note: Noncitizens are considered as minorities in this analysis. All = All countries in the world other than the reporting country; European Union = Members of the European Union; Non-EU = All countries in the world except EU members; Non-EU Europeans = Countries of Europe that are not members of European Union.

is high (averaging roughly 60 across the largest U.S. cities in 2010), while Asian-white neighborhood segregation is comparatively low (D at roughly 40), with Hispanics occupying an intermediate position (D's centering around 50).7 Despite long-term declines, African Americans continue to face substantial residential segregation, along with its correlates of concentrated poverty, older dilapidated housing stock, and chronic joblessness. Previous studies also show that segregation among America's fastest-growing minority populations is now at a standstill or even increasing in some metropolitan areas, especially those with large numbers of Hispanic or Asian immigrant populations (e.g., Los Angeles). In Europe, there are many fewer ethnically diverse metropolitan cities, especially if levels of diversity are benchmarked against those in large cities in the U.S., where 58 of the largest 100 cities now have majority-minority populations.

To highlight comparative patterns of neighborhood segregation in Europe, we begin by mapping the distribution of immigrants across neighborhoods in Amsterdam and Rotterdam, which are distinguished from Brussels and London—two

of the most diverse cities in Europe, with large and growing immigrant populations.<sup>8</sup> In each case, these maps (Figure 3) reveal highly uneven patterns of minority concentration, with unusually large concentrations in the city centers and smaller concentrations at the periphery. The *D*'s in these cities (Table 3), however, are much lower than they are for previously published U.S. estimates of segregation of big-city ethnoracial minority and immigrant populations. *D*'s range in size from 19.21 in Brussels to 30.54 in Rotterdam (a city that is generally regarded as the most diverse city in the Netherlands, with a large immigrant population).

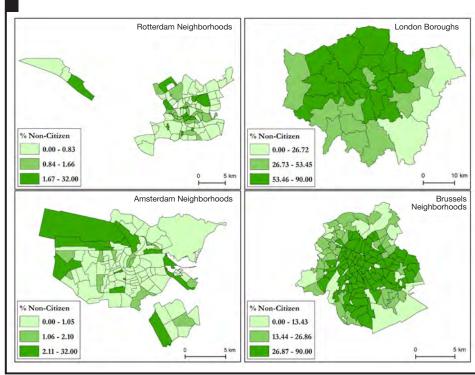
To be sure, it is no easy task to identify cities in the U.S. with comparable patterns of recent immigration and growing racial and ethnic diversity. For our purposes, we have mapped neighborhood racial composition (white-nonwhite) in U.S. cities that demographer Audrey Singer has recently identified as "post-WWII gateways" (Dallas, Houston, Los Angeles, Miami, Riverside, San Diego, and Washington, D.C.) and "major emerging gateways" (Atlanta, Austin, Charlotte, Las Vegas, Orlando, and Phoenix). These 13 cities are distinguished

TABLE 3. Citizen-Noncitizen Segregation in European Cities, Circa 2010

City	D
Amsterdam	23.00
Brussels	19.21
London	24.24
Rotterdam	30.54

Source: Central Bureau of Statistics (Amsterdam and Rotterdam), Statistics Belgium (Brussels), and Office for National Statistics (London).

FIGURE 3. Neighborhood Noncitizen Population in European Cities



Source: Eurostat, Statistics Netherlands Population Register, Statistics Belgium Census Data.

by their recent immigrant growth and therefore are arguably most closely matched to the contemporary immigrant experiences in the four European cities considered above, all of which experienced immigration in large numbers after World War II.

The maps shown in Figures 4 and 5 reveal highly centralized minority populations in the central (or principal) city and nearby older surrounding suburbs and much lower minority shares in the newer suburbs and peripheral or exurban areas, which typically are much less densely settled but within easy commuting distance to employment in the city. Although these segregation patterns are similar *in kind* to those found in Amsterdam, Rotterdam, Brussels, and London, the magnitude of minority segregation in these U.S. cities is much greater (see Table 4). For example, segregation within the city limits is often very high, a pattern of neighborhood exclusion that is evident in the maps (which highlight largely "white" neighborhoods). For example, in Atlanta, a major emerging immigrant gateway, our estimate of white-nonwhite segregation is 66.6, even as segregation for the entire metro region

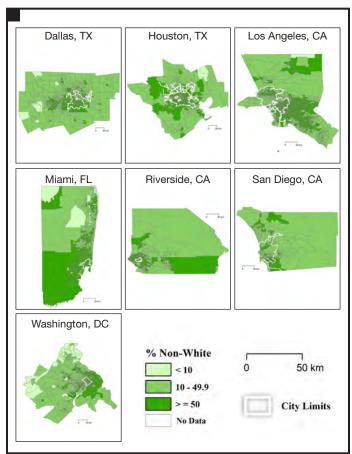
is much lower at 50.4. This lower estimate seemingly reflects the spatial spread of nonwhite minorities into nearby metropolitan suburbs.

Comparatively low segregation rates are found in the city of Las Vegas and its metro region overall (37.4 and 32.8), and in Riverside, California, where *D*'s for the city and metro area are 30.2 and 38.9, respectively. Riverside, along with Miami, were the only places where segregation in the city was lower than segregation throughout the entire metropolitan region, a finding that may suggest the relative concentration of whites in the city vis-à-vis suburban areas, perhaps providing some evidence of white gentrification. The bottom line is nevertheless clear: Levels of minority segregation within contemporary U.S. immigrant gateway cities far exceed segregation levels in Amsterdam, Rotterdam, Brussels, and London.

#### **Other Studies of Immigrant Segregation**

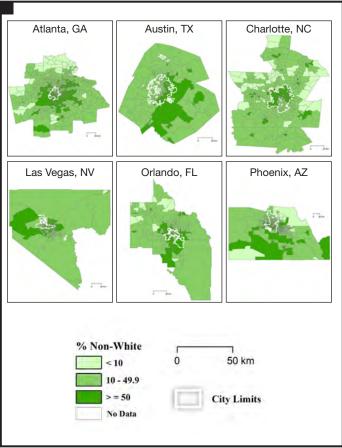
Our attempt at providing comparative empirical estimates of segregation (across alternative geographic scales) in the U.S. and Europe has arguably come at the expense of highlighting

FIGURE 4. U.S. Post-WWII Gateways, 2010



Source: U.S. Census Bureau, 2010 Decennial Census.

FIGURE 5. U.S. Emerging Gateways, 2010



Source: U.S. Census Bureau, 2010 Decennial Census.

the diversity of immigrant experiences across different national origin populations and the European continent. Recently published reviews by Richard Alba and Nancy Foner, John Iceland, and Douglas S. Massey have documented several case studies of segregation across many different European cities (see reference section for complete citations). These estimates are summarized in Figure 6.

These city-specific segregation estimates provide at least three generalizations. First, minority-majority segregation is less extreme among European (or EU) immigrants than it is among other new arrivals originating from non-Western continents (i.e., Asia, Africa, or South America). Second, neighborhood segregation from the native population (most white ethnicities) tends to be much higher among dark-skinned immigrants (e.g., Bangladeshis in UK, Ethopians and Somalians in Sweden, or Turks in France) than lighter-skinned immigrants, which is a pattern similar to the relatively high black-white segregation rates found historically in the U.S. Third, some national-origin groups, especially those with

TABLE 4. Non-Hispanic White-Nonwhite Segregation (*D*) in U.S. Major Emerging and Post-WWII Gateways, 2010

	City	Metro Area
Major Emerging Gateway		
Atlanta	66.56	50.38
Austin	43.34	38.48
Charlotte	48.50	46.07
Las Vegas	37.40	32.80
Orlando	42.32	38.24
Phoenix	52.35	43.46
Post-WWII Gateway		
Dallas	58.30	45.85
Houston	57.32	49.99
Los Angeles	58.44	54.54
Miami	49.42	54.15
Riverside	30.18	38.90
San Diego	47.26	42.70
Washington, D.C.	63.11	46.62

Source: U.S. Census Bureau, 2010 Decennial Census.

colonial histories, often are less segregated than more recent immigrant groups. This finding may suggest more cultural and economic integration among older immigrant groups than recently arrived groups. These groups would include, for example, Moroccans in Amsterdam or Milan, Turks in Frankfurt or Cologne, or Algerians in Marseille.

#### **Lessons Learned**

High rates of majority-minority segregation throughout the Western world present real social, cultural, and economic barriers to full integration and social inclusion. Indeed, if segregation is viewed as a proxy measure of "social distance" or cultural and economic integration between groups, the evidence presented here suggests that minorities in the U.S. are perhaps less spatially assimilated than their immigrant counterparts in Europe. Although we found that macro-segregation—the uneven minority distribution across counties—is remarkably similar in Europe and the U.S., micro-segregation (within cities) of minorities from whites is much higher on average in the U.S. than in most European countries.

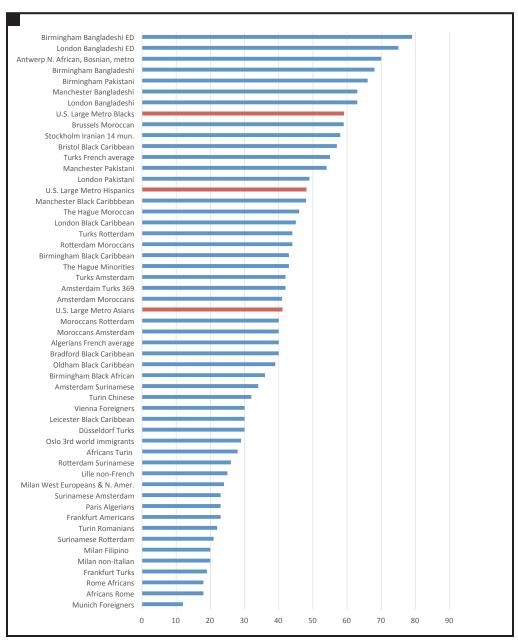
Of course, in the case of African Americans in the U.S., segregation clearly remains "exceptional" and continues to be shaped by past slavery and a history of social exclusion and discrimination in the job and housing markets. Segregation is seemingly passed down from generation to generation.<sup>10</sup> Although some observers claim that there is no parallel case in Europe, this remains a debatable point. A small but growing literature suggests that many Muslim populations (e.g., Bangladeshis in London or Arabs in Paris) experience exceptionally high rates of both macro- and micro-segregation. Still, compared with the size of the U.S. African-American population, these ethno-religious minorities are comparatively small in number or percentage. And there is little indication that today's European immigrant communities or neighborhoods will become similarly ghettoized anytime soon on the broad spatial scale observed in the U.S.11 The recent immigrant experiences in much of Europe may more closely parallel patterns of residential segregation among America's Asians and Hispanics.

Segregation reflects and reinforces economic inequality and therefore represents an important component of the stratification system, both in the U.S. and Europe. Indeed, segregation often overlaps with many other place-based inequalities—poverty, unemployment, crime, and housing quality and overcrowding. These overlapping disadvantages are seemingly much more common in the U.S. than in European countries, where government efforts to promote integration (e.g., social and mixed-income housing) provide

a clear contrast to the market-driven solutions preferred in the U.S.<sup>12</sup> Our analysis of contemporary patterns of minority segregation provides an empirical baseline for future research that explicitly links minority segregation to other place-based inequalities, to patterns of concentrated poverty, and to the specific social and demographic processes (e.g., native- or white-flight, self-segregation, and housing discrimination) that are responsible for minority segregation and spatial inequality.

An important unanswered question, of course, is whether current patterns of minority segregation—segregation of "the other"—will persist into the future. In the U.S., the law of the land applies equally to citizens and noncitizens, and the motivations to emigrate to the U.S. often involve the pursuit of the "American Dream." For those who come legally, America provides the opportunity for immigrants to develop a new national identity and to move up the socioeconomic ladder. Whether this is true for immigrants in Europe is less

FIGURE 6. Segregation Indices for Groups in Europe and the U.S., Circa 2010



Source: Adapted from Sako (2005), Iceland (2014), Alba and Foner (2015), Logan and Stults (2011), and Arbaci and Malheiros (2010).

clear; many new arrivals are refugees or lack a clear route to citizenship or economic integration. Indeed, institutional and legal accommodations in Europe may lag demographic realities. Residential segregation across European countries are often wide-ranging and differ sharply among different minority populations. Whether today's patterns will persist in the future is much less obvious in the aftermath of the current period of unprecedented international migration and ongoing economic globalization.<sup>13</sup> One concern is whether the growing anti-immigrant movement in Europe and in the U.S. will not only result in new restrictions on immigration, but also, perhaps more importantly, lead to cutbacks in government efforts to promote integration through social housing, cash assistance, or educational programs that directly or indirectly promote minority integration into society. Policy choices will affect whether segregation in ethnic communities or neighborhoods represents a way station or platform for full integration or a chronic or permanent social condition that institutionalizes majority-minority social and economic inequality.

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#### **Appendix: Measuring Segregation**

To compare recent patterns of residential segregation in Europe and the U.S. requires data that are similar in spatial scale (i.e., territorial size) and racial and ethnic (and immigrant) categories. Here we compare segregation across 26 countries in Europe and all 50 states in the U.S. Data for each European country, county (or county equivalent), and neighborhood (census tract or district) come from the most recent data available from Eurostat (circa 2010), while data from the U.S. come from the 2010 decennial census. Segregation is typically measured using the index of dissimilarity (*D*), which is defined as:

$$D_t = \frac{1}{2} \sum_{i=1}^{k} |m_{it} - w_{it}|$$

where  $m_{it}$  and  $w_{it}$  are the respective percentages of the minority and majority populations residing in neighborhood (or other geographical scale) i at time t. This index is based on pairwise comparisons, and varies from 0 (no segregation) to 100 (complete segregation). D indicates the percentage of minorities that would have to move to other neighborhoods in order to achieve parity between a minority population and whites in their percentage distributions across all neighborhoods.

### ADDITIONAL RESOURCES

Arbaci, Sonia and Jorge Malheiros. 2010. "De-Segregation, Peripheralisation and the Social Exclusion of Immigrants: Southern European Cities in the 1990s." Journal of Ethnic and Migration Studies 36, 227–255.

Frey, William H. 2015. *Diversity Explosion:*How New Racial Demographics Are Remaking
America. Washington, D.C.: Brookings
Institution.

Johnson, Kenneth M., Layton Field, and Dudley L. Poston. 2015. "More Deaths than Births: Subnational Natural Decrease in Europe and the United States." *Population and Development Review* 41(4), 651–680.

Lichter, Daniel T. 2013. "Integration or Fragmentation? Racial Diversity and the American Future." *Demography* 50, 359–391.

Musterd, Sako. 2005. "Social and Ethnic Desegregation in Europe: Levels, Causes, and Effects." *Journal of Urban Affairs* 27(3), 331–348.

#### **NOTES**

- 1. A comprehensive national portrait of immigration and integration is provided in the recently released report of the National Academy of Science: Waters, Mary C., and Marisa Gerstein Pineau. 2015. *The Integration of Immigrants into American Society.* Washington, D.C.: National Academies Press. One of the unexpected findings was the low rates of naturalization in the U.S. compared to those in most European countries with large immigrant influxes. The full report is available online at http://sites. nationalacademies.org/dbasse/cpop/integration\_of\_immigrants/.
- 2. Beginning with the Schengen Agreement in 1985, the free movement of Europeans throughout the continent has been made easier by eliminating or easing border checks and visa requirements while still imposing controls on movement into and out of much of Europe itself (i.e., the so-called Schengen Area). Incipient native depopulation and natural decrease, in turn, have created labor shortages and new demands for immigrant workers. Transnational migration also has accelerated globally. The European Union has been reshaped by an unprecedented south-to-north movement of workers due to guest worker programs (e.g., Turks in Germany or Moroccans in the Netherlands) and the rapid growth of new immigrant groups from former European colonies. For example, France (especially in the Paris region) is now home to immigrants from outside of Europe, often from ex-colonies in Northern Africa, West Africa, and Indochina. Since the late 1990s, net immigration in England has spiked upward, with large influxes of low-skill workers from Eastern Europe (e.g., Bulgaria and Romania) and of noncitizens from outside the EU. Europe has been on the frontline of refugee and displaced populations outside of Europe. Germany is on pace to accept more than 1 million new Syrian refugees in 2015 alone.
- 3. Of course, some European countries, such as Germany and Sweden, became new destinations much earlier after WWII than others (such as Finland or Eastern Europe), attracting new immigrants from Turkey, Italy, Spain, and elsewhere. For a useful comparative discussion of immigration and integration in North America and Europe, see Alba, Richard, and Nancy Foner. 2015. Stranger No More: Immigration and the Challenges of Integration in North America and Western Europe. Princeton, NJ: Princeton University Press.
- 4. A 2013 Pew report ("Second-Generation Americans: A Portrait of the Adult Children of Immigrants") based on the 2012 American Community Survey showed that America's immigrant stock—defined as first and second generations—is overwhelmingly composed of racial and ethnic minority populations.
- 5. We estimate minority concentration and segregation in Europe using the units defined by the Nomenclature of Territorial Units for Statistics (NUTS), which, according to Johnson et al. (2015:655), takes into account "existing geographic and political divisions in each European country to produce standard spatial units that permit cross-national comparisons." For our purposes we use NUTS3 units, which closely resemble counties as defined in the U.S.
- 6. For discussions of segregation at different scales of geography, see Lichter, Daniel T., Domenico Parisi, and Michael Taquino. 2015. "Toward a New Macro-Segregation? Decomposing Segregation Within and Between Metropolitan Cities and Suburbs," American Sociological Review, 80, 843-873; and Reardon, Sean F., Stephen A. Matthews, David O'Sullivan, Barrett A. Lee, Glenn Firebaugh, Chad R. Farrell, and Kendra Bischoff, 2008, "The Geographic Scale of Metropolitan Segregation." Demography, 45, 489-514. We recognize, of course, that the sizes of different accounting units (e.g., tracts or districts, counties or NUTS units) can affect estimates of D, a fact that argues for cautious interpretations.

- 7. See, for example, Logan, John R., and Brian J. Stults. 2011. *The Persistence of Segregation in the Metropolis: New Findings from the 2010 Census*. New York: Russell Sage Foundation and Brown University. This book provides the first set of estimates of segregation based on the 2010 decennial census. Segregation measures for metropolitan areas and big cities are available at http://www.s4.brown.edu/us2010/index.htm.
- 8. David Coleman has coined the term "Third Demographic Transition," which refers to the rapid ethnic transitions in many European countries and reflects native depopulation, coupled with high rates of immigration, along with above-replacement levels of fertility.

  See Coleman, David. 2006. "Immigration and Ethnic Change in Low-Fertility Countries: A Third Demographic Transition." Population and Development Review, 32(3), 401–446.
- 9. See the report titled *Metropolitan Immigrant Gateways Revisited*, 2014, which is available online at http://www.brookings.edu/research/papers/2015/12/01-metropolitan-immigrant-gateways-revisited-singer.
- 10. See Sharkey, Patrick. 2013. Stuck in Place: Urban Neighborhoods and the End of Progress Toward Racial Equality. Chicago, II: University of Chicago Press.
- 11. See Alba and Foner (2015).
- 12. See Alba and Foner (2015); Iceland, John. 2014. Residential Segregation: A Trans-Atlantic Analysis. Washington, D.C.: Migration Policy Institute; and Massey, Douglas S. 2016. "Segregation and the Perpetuation of Disadvantage." In The Oxford Handbook of Social Science and Poverty (David Brady and Linda M. Burton, eds.). New York: Oxford University Press, 369–393.
- 13. In fact, Douglas Massey (2016) suggests that segregation in Europe and the U.S. is now converging at "moderate" levels, a pattern he attributes to declining segregation in the U.S. (especially among blacks and immigrant populations) and to increasing segregation in Europe.