Vol. 34, No. 4 March 2019 ISSN: 0195–5705

Racial Residential Segregation

A history of residential segregation in the United States page 2

Segregation and subprime lending within and across metropolitan areas page 10

The two articles in this issue address the topic of racial residential segregation. The first article summarizes the May 2018 Robert J. Lampman Memorial Lecture given by Richard Rothstein. Rothstein presented a history of residential segregation in the United States, arguing that racial inequality is due in part to government policies from the 1930s to the 1960s that mandated residential segregation of African Americans. These and other race-based policies helped to create both income and wealth gaps between blacks and whites. The second article, by Jackelyn Hwang, Michael Hankinson, and Kreg Steven Brown, provides an in-depth quantitative analysis of the effects of racial residential segregation on subprime loans and the recent housing foreclosure crisis. The authors find that metropolitan areas with higher levels of segregation had higher concentrations of subprime loans in minority neighborhoods compared to less segregated metropolitan areas. In particular, subprime loans appear to have been targeted to relatively large, geographically concentrated minority areas within segregated metropolitan areas. This issue also includes a new feature, "Research to watch," providing a brief overview of a forthcoming paper by Jacob W. Faber, which suggests that racial residential segregation creates easily identifiable markets for "alternative" financial services such as payday lenders and check cashers.

March 2019 | Vol. 34, No. 4

A history of residential segregation in the United States

This article summarizes the May 2018 Robert J. Lampman Memorial Lecture, "The Color of Law: A Forgotten History of How Our Government Segregated America," given by Richard Rothstein at the University of Wisconsin—Madison.

Richard Rothstein is Distinguished Fellow of the Economic Policy Institute and Senior Fellow, emeritus, at the Thurgood Marshall Institute of the NAACP Legal Defense Fund.

TAKEAWAYS

Racial inequality in the United States is due in large part to government policies from the 1930s to the 1960s that mandated residential segregation of African Americans.

These government policies bear significant responsibility for a substantial black-white income gap, and an enormous black-white wealth gap that remains today.

While ameliorating residential segregation is more challenging than abolishing other types of racial segregation, it is possible, and Rothstein believes that it is incumbent upon Americans to remedy civil rights violations by demanding that these changes be made.



While civil rights efforts have worked to abolish segregation in

education and in public spaces from buses to lunch counters to swimming pools, some 50 years after the Civil Rights Movement residential segregation remains in virtually every metropolitan area in the United States. Richard Rothstein contends that housing segregation is in large part the result of government policies, for example: (1) public housing policy that disconnected African Americans from integrated neighborhoods, and (2) policies of the Federal Housing Administration, which facilitated the purchase of single-family suburban homes by white workingclass families, while explicitly preventing African American families from doing the same. Rothstein notes the wideranging effects of segregation on poverty, inequality, criminal justice policy, and health in the United States, and asserts the imperative to both acknowledge this history and to work to remediate its effects.¹

In his talk, Rothstein contends that the residential segregation of African Americans is not, as many believe, something that evolved informally, without government participation, but instead is largely the result of explicit government policies. He notes that this distinction has important implications for how to respond to segregation. If segregation had in fact been the result of personal choices, it could be unconstitutional to take racially explicit governmental action to desegregate neighborhoods. However, Rothstein argues that since housing segregation is largely the result of unconstitutional federal, state, and local government actions, the United States is in fact constitutionally compelled to desegregate through proactive government policies that open up wealth-building housing options closed to African Americans in the past.

Rothstein contends that the residential segregation of African Americans is largely the result of explicit government policies.

Urban housing patterns before the New Deal

In the early 1930s, many urban neighborhoods in the United States were populated by both white (largely immigrant) and black working-class families. At the time, factories were typically located in downtown, and their employees generally lived nearby and walked to work. Because of the diversity of men employed by the factories, these neighborhoods tended to be integrated. At the heart of many of these same cities and towns was a railroad station. Since railroads hired many African Americans as baggage handlers or porters, these men and their families also lived in downtown neighborhoods. For example, West Oakland, California, a mostly white neighborhood with a small African American population, was integrated because the Pullman Company employed only African Americans as sleeping car porters, and those porters needed to live near the Oakland station, the end of line for westbound cross-country trains.

How our government segregated America

President Franklin D. Roosevelt's New Deal programs, beginning in 1933, segregated some of these previously integrated urban neighborhoods. Although other factors contributed to this change, Rothstein contends that there were a number of government policies that ensured that African Americans and whites would not reside amongst each other, and that these policies were consistent and self-reinforcing on the federal, state, and local levels. This summary of his lecture highlights two such New Deal era federal policies: public housing, and Federal Housing Administration subsidies for suburban development.

In the early 1930s, many urban neighborhoods in the United States were populated by both white (largely immigrant) and black workingclass families.

President Franklin D. Roosevelt's New Deal programs, beginning in 1933, segregated some of these previously integrated urban neighborhoods.

Public housing

While public housing may bring to mind an image of concentrated poverty, Rothstein notes that this is not how public housing began in the United States. The first civilian public housing in the United States was constructed as part of the Roosevelt administration's New Deal at the start of the Great Depression. This housing was not for the 25 percent of the population that was unemployed at the time. Rather, this public housing was built for working-class families with employment who could not find housing during the Great Depression.

While public housing may bring to mind an image of concentrated poverty, Rothstein notes that this is not how public housing began in the United States.

The Public Works Administration was the first federal agency to address the housing shortage, while also providing construction jobs for those who were out of work. The Secretary of the Interior, Harold Ickes, who directed the government's housing efforts, was committed to providing housing not only for white families, but also for African Americans. Indeed, one-third of the new public housing units were occupied by African Americans; however all of the projects were segregated, either by project or by building. Ickes proposed a rule whereby federal housing projects would reflect the racial composition of the neighborhoods in which they were built, so that only neighborhoods that were already integrated could host projects housing both whites and blacks. However, this principle of respecting neighborhoods' prior racial makeup was not always followed. In many cases, the

new projects segregated neighborhoods that had previously been integrated, demolishing the previous housing stock to erect segregated housing projects. In these communities, the public housing created a pattern of residential segregation that would not otherwise have existed. For example, even Atlanta, Georgia, despite its segregated schools, water fountains, buses, and lunch counters, had an integrated downtown neighborhood, called the Flats, which was about half black and half white. The Public Works Administration demolished housing in that neighborhood and built a whites-only project, displacing African Americans who then had to double up with relatives, or find less adequate housing elsewhere.

The government's creation of segregated housing only increased during World War II, with the inflow of workers into cities for the many new war industry jobs that were created.

The government's creation of segregated housing only increased during World War II, with the inflow of workers into cities for the many new war industry jobs that were created. In many cases, the flood of workers was much greater than the pre-existing population, and certainly much greater than the available housing stock could accommodate. To ensure that the war work could be completed, the federal government had to provide housing. For example, during the war, the small city of Richmond, California, became home to the largest U.S. shipyard on the west coast, bringing 100,000 workers and their families into the white community of about 20,000. Government housing for white workers was built in the residential areas of the city, where white families already lived. African American workers, however, were housed in temporary buildings along the railroad tracks and in the industrial area. The projects extended south into Berkeley, accompanied by local officials' pronouncements that the black workers would have to leave the area after the war once the jobs disappeared. This pattern was repeated in many areas of the country.

After World War II ended, the country faced a serious housing shortage. In order to house the millions of returning veterans, President Harry Truman proposed a new public housing effort. Conservatives in Congress, believing that the government should not be in the business of providing housing, sought to block this legislation. In order to do this, they employed a "poison pill" strategy, attaching an amendment to the bill that they expected would have majority support, but that would then cause the bill as a whole to fail. Thus, conservatives proposed an amendment to the 1949 Housing Act requiring that all future public housing be operated on a non-discriminatory basis. Their expectation was that northern liberals would join them in voting for this amendment, creating a sufficient majority to attach the amendment to the bill, but when the final bill proposing a desegregated public housing program came up for a vote, the conservatives would join with southern Democrats to defeat the bill.

Instead, northern liberals, reasoning that segregated public housing was better than no public housing, voted against the integration amendment to save the bill. As a result, the 1949 Housing Act, which funded the creation of large high-rise public housing projects across the country, did so with explicit permission for the government to continue to segregate their occupants. For example, the Pruitt–Igoe project in Saint Louis consisted of one development for African Americans, and a separate development for whites. Rothstein emphasizes that none of this was hidden; the congressional debate had been public, and the resulting public housing projects were clearly designated by race.

Only a few years after the 1949 Housing Act was passed, local housing authorities opened all the projects, even those previously designated for whites only, to black families. This was in response to the emergence of large numbers of vacancies in the white projects, while there were long waiting lists for the black projects. As more and more whites left, public housing came to be occupied overwhelmingly by African Americans. Meanwhile, industry left the central cities as highways were constructed that allowed manufacturers to receive parts and ship final products by truck, rather than relying on nearby deep water ports or railroad terminals. As industry left, so did the better jobs, leaving the increasingly black population of urban housing projects with few options for well-paid employment. With tenants no longer having sufficient income for the full rental cost, public housing came to be subsidized, maintenance declined, and projects became the settings of concentrated poverty and disarray that we subsequently came to associate with public housing. However, Rothstein notes, this is neither how public housing began, nor how it needs to be.

As industry left, so did the better jobs, leaving the increasingly black population of urban housing projects with few options for well-paid employment.

The Federal Housing Administration

The Federal Housing Administration, established in 1934, the year after the establishment of the Public Works Administration, is the second major New Deal program that Rothstein cites as a source of government-mandated residential segregation. The high vacancy rates of white public housing units were the result, at least in part, of opportunities provided exclusively to white families by the Federal Housing Administration, which enabled them to move to single-family homes in all-white suburban neighborhoods. Beginning in the 1940s and continuing through the 1950s and into the 1960s, this agency undertook a program to move the white working-class population into single-family homes in all-white suburban neighborhoods.

Levittown, east of New York City, is a prominent example of these developments; it comprised 17,000 homes. Rothstein explains that the only way that William Levitt and other developers could come up with the capital needed for such large projects was to apply to the Federal Housing Administration for guarantees of bank loans for land acquisition and construction. This required submitting plans for approval, including specifying construction materials to be used, architectural designs, and street layouts, and making an explicit agreement that no homes would be sold to African Americans. The Federal Housing Administration also required that deeds to the homes include a prohibition against reselling or renting to African Americans. The underwriting manual prepared by the Federal Housing Administration and distributed to appraisers across the country even prohibited approval of white developments in the proximity of African American neighborhoods. This policy left black residents stranded in pockets of poverty far from neighborhoods with greater economic opportunity.

Although these federal prohibitions no longer exist and racial clauses in home deeds are no longer enforceable, Rothstein contends that the consequences of this policy remain with us to this day. The homes that were built in the mid-twentieth century and sold, by federal decree, only to white families, cost approximately \$8,000 to \$10,000 at the time, equivalent to about \$100,000 in current dollars. However, these same homes now sell for up to half a million dollars. When these developments were built, a white working-class family could move out of public housing and into a suburban home (with a mortgage insured by the Federal Housing Administration or guaranteed by the Veterans Administration) for a monthly cost that was often less than the rent that the family had been paying in public housing. Because they owned these homes, and the homes' values appreciated, these white families gained equity in their homes and wealth that could be used to send their children to college, buffer temporary income shocks such as unemployment or unexpected medical costs, and provide money to their children and grandchildren that allowed them to make down payments on their own homes.

Today, the median family income for African Americans is about 60 percent of that for whites, but the median net worth of black households is only 10 percent of that for white households. Rothstein argues that the huge disparity between a 60 percent income ratio and a 10 percent wealth ratio is almost entirely attributable to unconstitutional federal housing policy that was practiced in the midtwentieth century and has never been remedied.

African Americans, in contrast, were excluded by federal policy from participating in the move to suburban homeownership, and thus continued to rent in areas with diminishing job prospects, and gained none of the wealth accumulated by white homeowners. Today, the median family income for African Americans is about 60 percent of that for whites, but the median net worth of black households is only 10 percent of that for white households. Rothstein argues that the huge disparity between a 60 percent income ratio and a 10 percent wealth ratio is almost entirely attributable to unconstitutional federal housing policy that was practiced in the mid-twentieth century and has never been remedied.

The Fair Housing Act of 1968 was intended to address this disparity, but Rothstein views the promises of that act as nearly empty, given the scope of the problem. Although the Fair Housing Act was passed in 1968, enforcement mechanisms were not added until 1988. Further, while the act took away the restrictions on African Americans purchasing homes in suburban developments like Levittown, the suburbs were rapidly becoming unaffordable to working class families, as home prices rose precipitously during the intervening years. In the 1950s and 1960s, when many of these suburban white neighborhoods were built, the homes' \$100,000 cost was approximately twice the national median income, putting them within reach of working-class families. Today these same homes sell six to seven times the median income (or more), effectively pricing out working-class families of either race unless they have family wealth to help them. Rothstein argues that one need only look to the racial makeup of Levittown today to assess the effectiveness of the Fair Housing Act in rectifying the segregation imposed by the Federal Housing Administration. While the broader area around the development is 15 to 20 percent African American, the population of Levittown is only about 2 percent African American.

Nongovernmental causes of residential segregation

Rothstein notes that there are many other unconstitutional federal, state, and local governmental policies that created and enforced residential segregation, though public housing and the Federal Housing Administration's drive to suburbanize only whites were two primary ones. He observes that white prejudicial attitudes, which often led to violence,

supported residential segregation. Still, he claims that without government sponsorship, white prejudice could not have segregated this country. For example, if the federal government had built integrated public housing in Atlanta's Flats neighborhood, some white families might have refused to live in an integrated development but the pressure of the housing shortage would have led other white families eagerly to take their places. And if the Federal Housing Administration had provided similar opportunities to both white and black renters to buy homes at prices similar to or less than the rent they were paying, the United States would not have nearly the racial wealth gap that we have today.

Rothstein contends that the government-mandated racial segregation of neighborhoods underlies the most serious social problems we face in this country today.

Why residential segregation matters today

Rothstein contends that the government-mandated racial segregation of neighborhoods underlies the most serious social problems we face in this country today. It underlies the persistence of multi-generational poverty, as young African Americans live in segregated neighborhoods with little access to the formal economy, and little hope for improvement. Research has shown that African Americans who grow up in segregated neighborhoods are less likely to have middle-class incomes as adults than equally poor African American children who grow up in less segregated neighborhoods. Segregated neighborhoods predict differences in life expectancy and health between African Americans and whites. Segregation also certainly underlies the high incarceration rate among African American men, and the conflicts between police and young men in black neighborhoods.

Many of these inequalities are also tied to educational outcomes and, as Rothstein's prior research has shown, the achievement gap between African American and white children is caused primarily by the child's social and economic conditions. These conditions, including racial segregation, predict average achievement levels irrespective of teachers' expectations, school accountability, or the quality of instruction. For example, African American children in urban areas have asthma at four times the rate of white middle-class children, because of poor environmental conditions in the housing and in the broader lowincome neighborhoods in which they live. Children with asthma are more likely to come to school sleepless or drowsy, from having awakened at night, wheezing. Asthma is the most common cause of chronic school absenteeism in the United States. Considering two groups of children who are equal in every respect except that one group has a higher rate of asthma than the other, it stands to reason that the group with asthma will have lower average school achievement, simply because they attend school less alert and less often. The same story can be told regarding other conditions, such as exposure to lead, stress from parental economic insecurity, and homelessness. Rothstein notes that if every, or almost every child in a school has one (or more) of these disadvantages, it is inconceivable that the school could produce the same average level of achievement as a school attended by children without these disadvantages. He notes that schools where every child has such disadvantages are called "segregated schools"; the schools are segregated because the neighborhoods in which they are located are segregated. In fact, schools are more segregated today than they have been at any time in the last 45 years, and this is due to neighborhood segregation.

Rothstein says that as a nation we spend too much time worrying about the symptoms of segregation rather than dealing with the underlying cause of racial residential segregation, which we have convinced ourselves is something that happened by accident, not by public policy and therefore not a matter for governmental remediation.

Teaching the history of housing policy

Addressing the underlying causes of residential segregation is unlikely if Americans continue to believe that segregation happened primarily because of private discrimination. Rothstein argues that reforming how we understand history ourselves and teach it to middle and high school students, including the history of New Deal policies that played a pivotal role in creating contemporary segregation, is essential to making change. As part of his research on the history of residential segregation in the United States, Rothstein looked at how this history is being taught in American schools. After reviewing the most commonly used history textbooks, he concluded that this history is largely omitted, and what is taught is misrepresented. Therefore, he exhorted his audience to take up the issue of how this history is taught with teachers, principals, school board members, and school superintendents in their own local communities. He suggests that if the omission of the history of government-mandated segregation becomes an issue, then the conversation will spread into the larger community, and may help to build the type of new civil rights movement that will eventually be required to address what he believes to be a national crisis.

Addressing the underlying causes of residential segregation is unlikely if Americans continue to believe that segregation happened primarily because of private discrimination.

Addressing residential segregation through public policy

Rothstein concludes that if we can understand as a nation that government policy bears significant responsibility for residential segregation and that we thus have an obligation to address it, there are indeed policy interventions that could help to desegregate neighborhoods. He admits that these interventions would be much more complex than integrating public spaces like water fountains and swimming pools; he also notes that the political consensus to enact such policies is currently absent. Still, he offers several suggestions for policies that could ameliorate residential segregation in the United States.

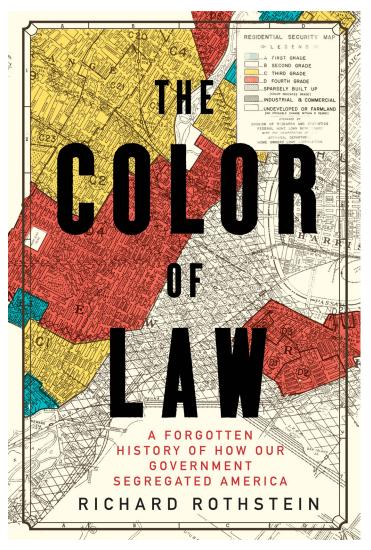
Two of the three current major federal housing programs, the Low Income Housing Tax Credit, and the Housing Choice Voucher Program (commonly referred to as Section 8), are designed to support housing for low-income families, and both could potentially be modified to reduce residential segregation. The Low Income Housing Tax Credit is a federal subsidy given to developers of low-income housing. Low-income housing tax credit developments are predominantly placed in already low-income, segregated neighborhoods, intensifying their segregation. The incentive structure for these credits could be changed to persuade developers to build in higher-opportunity neighborhoods, thus helping to integrate those neighborhoods.

The Section 8 voucher program that subsidizes the rents of low-income families also contributes to segregation, since a family with a low-income housing voucher is more likely to find housing in a segregated neighborhood. Again, the federal rules governing local

housing authorities could be changed to encourage tenants to use their vouchers in integrated, lowpoverty neighborhoods, and to require landlords in those neighborhoods to accept vouchers when presented.

The largest federal housing program, however, is the mortgage interest deduction. While the provisions of this deduction were changed in 2017, this program continues to offer a subsidy to single-family homeowners in predominantly middle-class communities. Rothstein suggests that while the political will to leverage this deduction to promote desegregation does not currently exist, it would potentially be possible to withhold the mortgage interest deduction from families living in suburbs that refuse to take steps toward racial and economic integration by, for example, repealing zoning ordinances that prohibit the construction of townhouses, or lowrise apartments, or even single-family homes on smaller lot sizes. These ordinances prevent lower- and middle-income families from living in affluent suburban neighborhoods. Though such reforms are not currently feasible on a national level, some progress could be made through state and local efforts. Rothstein concluded by stating that changing public policy to address segregation is achievable, and it is incumbent on Americans to demand that these changes be made.■

¹Detailed evidence for the claims made by Richard Rothstein in his Robert J. Lampman Memorial Lecture is available in R. Rothstein, *The Color of Law—A Forgotten History of How Our Government Segregated America* (New York: Liveright Publishing Corporation, 2017); R. Rothstein, *Class and Schools: Using Social, Economic, and Educational Reform to Close the Black-White Achievement Gap* (New York: Teachers College Press, 2004); and in other reports and articles found on the author's web page at https://www.epi.org/people/ richard-rothstein/



March 2019 | Vol. 34, No. 4

Segregation and subprime lending within and across metropolitan areas

Jackelyn Hwang, Michael Hankinson, and Kreg Steven Brown

Jackelyn Hwang is Assistant Professor of Sociology at Stanford University. Michael Hankinson is Assistant Professor of Political Science at Baruch College, City University of New York. Kreg Steven Brown is Research Associate in the Center on Labor, Human Services, and Population, and the Research to Action Lab at the Urban Institute.

TAKEAWAYS

More segregated metropolitan areas had higher concentrations of subprime loans in minority neighborhoods than less segregated metropolitan areas.

Subprime loans were targeted to relatively large, geographically concentrated minority areas within segregated metropolitan areas, rather than to individual minority neighborhoods interspersed with nonminority neighborhoods.

Segregation played a pivotal role in the housing crisis by creating relatively larger areas of concentrated minorities into which subprime loans could be efficiently and effectively channeled.



The recent housing foreclosure crisis was a key feature of the

Great Recession. The rapid growth of subprime lending and concomitant rise of foreclosures adversely affected the economy and millions of homeowners. (See text box on subprime lending and foreclosures.) African American and Hispanic borrowers were disproportionately likely to receive subprime loans and to lose their homes to foreclosure.¹ Existing evidence, though limited, suggests that residential segregation by race created distinct geographic markets that allowed subprime lending practices to flourish. However, past studies have not explicitly tested whether the concentration of subprime loans in minority neighborhoods varied by segregation levels. In the study described in this article, we fill in this research gap by integrating neighborhood-level data and measures of residential segregation to examine the relationship between segregation and subprime lending across the 100 largest metropolitan areas in the United States.²

Our research questions include:

- Across metropolitan areas, were subprime loans more concentrated in minority neighborhoods in highly segregated metropolitan areas than in less segregated metropolitan areas?
- Does the relationship between segregation and the concentration of subprime loans in minority neighborhoods vary if the neighborhoods are clustered together or scattered through a metropolitan area?
- Do subprime lending rates in minority neighborhoods vary between highly segregated and less segregated metropolitan areas after accounting for neighborhood socioeconomic characteristics?

Prior research on segregation and the housing crisis

In their 1993 book American Apartheid, Douglas Massey and Nancy A. Denton detailed the history and continuing effects of racial residential segregation in the United States.³ The authors write that segregation began with the Great Migration after World War I, when large numbers of African Americans moved from the rural South to the urban Northeast, Midwest, and West, to meet the need for labor generated by increasing industrialization. As working-class neighborhoods swelled with black migrants, whites moved to new neighborhoods, leaving room for more black residents to move into the neighborhoods whites had left. As white residents found their housing options becoming more limited, they used neighborhood associations, racially restrictive covenants, and violence, to prevent blacks from moving into their neighborhoods. In addition, the set of lending policies known as "redlining" identified neighborhoods with minority residents. Lenders would not lend money for the purchase of homes in red-lined neighborhoods, and realtors would not show properties in those neighborhoods to white prospective homeowners. Ultimately, middle-class whites fled

to the suburbs, leaving blacks as the majority residents of many urban neighborhoods, though still very restricted in their housing options. While white suburban homeowners built wealth through home equity, black families did not, contributing to large wealth gaps between blacks and whites.⁴

Although the Fair Housing Act of 1968 made practices like racially restrictive covenants and redlining illegal, subsequent studies have shown that: (1) whites still prefer to live in neighborhoods that are mostly white; (2) lenders are more likely to deny loans to black and Hispanic homebuyers than they are to equally qualified whites; and (3) that discrimination against both blacks and Hispanics in the housing market still exists.⁵

Although residential segregation peaked in the 1960s and has generally declined since, levels remain high.⁶ Subprime loans, once relatively uncommon (accounting for only 8 percent of U.S. housing loans in 2003), constituted one-fifth of all U.S. housing loans in 2005 and 2006, with much higher rates of subprime lending in some areas.⁷ This subprime lending boom brought with it new ways for racial residential segregation to have disproportionately negative effects on minorities. Since blacks and Hispanics had lower homeownership rates than whites and limited access to and information on other lending options, areas with high concentrations of minorities likely provided a ready market for subprime loans, as residents had limited access to other lending options.

Many studies have shown that blacks and Hispanics disproportionately received subprime loans and lost their homes due to foreclosure. For example, over the period of 2004 to 2008, African American and Hispanic borrowers were 1.6 times as likely as non-Hispanic white borrowers to receive a subprime loan.⁸ In addition, as of February 2012, 11 percent of African American borrowers and 14 percent of Hispanic borrowers had lost their homes due to foreclosure, compared to 6 percent of non-Hispanic whites.⁹ Some studies suggest that segregation played an important role in the housing crisis by providing an opportunity for subprime lenders and brokers to efficiently and effectively target minority neighborhoods, resulting in more subprime loans in segregated metropolitan areas. However, our study is the first to explicitly test this theory.

Methods

We use census-tract (neighborhood) level data on subprime loans and demographic characteristics for the 100 largest U.S. metropolitan areas, and we use Geographic Information Systems (GIS) software to determine the degree to which subprime loans were concentrated within metropolitan areas. We control for metropolitan-level factors that also influenced the housing crisis, such as population, median household income, and percentage of residents who were black or Hispanic. We also control for regional differences between housing markets, and for real estate market conditions by including measures of overbuilding and the housing-price boom.

Studies on segregation generally consider black-white and Hispanic-white segregation separately, but in our analyses, we combine blacks and Hispanics as a minority population. In the West and Southwest, neighborhoods

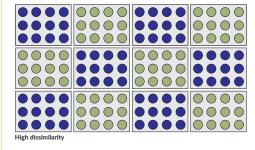
Subprime lending and foreclosures

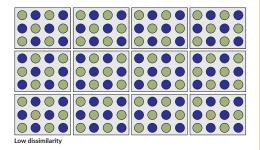
Subprime loans are offered to borrowers who are identified as being at greater risk of defaulting on the loan, because of poor credit histories or other factors such as unemployment, divorce, or large unexpected expenses, that suggest they might have trouble keeping up with loan payments. Subprime loans have terms that are less favorable to the borrower such as higher interest rates, adjustable interest rates that can be raised at some point in the future, or prepayment penalties that can preclude a borrower from converting to a lower-interest loan if they qualify for one in the future. Proponents touted subprime lending as a road to homeownership for those with poor credit or little savings. However, the large increase in people given mortgages led to a shortage in housing, an increase in housing prices, and thus an increase in the amount that new prospective homeowners needed to borrow. Lending to high-risk borrowers at high interest rates, along with the inflation of home prices, resulted in many borrowers who could not, in fact, make their monthly mortgage payments, resulting in a flood of defaulted loans and housing foreclosures. This housing foreclosure crisis had serious financial effects for both borrowers and lenders, and has negative and long-lasting economic consequences in the United States and beyond.

that were particularly susceptible to subprime lending were more likely to be Hispanic than black. In addition, as the Hispanic population has grown over the past two decades, blacks and disadvantaged Hispanics increasingly live in the same or neighboring areas, providing larger potential markets for subprime lending. While we recognize that there are important differences between the experiences of blacks and Hispanics in the housing crisis, we believe that combining the two groups for an analysis across a large number of metropolitan areas provides a more accurate portrait of vulnerable markets.

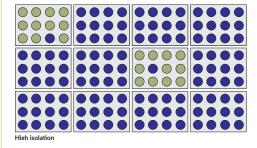
Measures of residential segregation

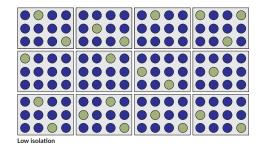
Evenness: The *dissimilarity index* measures the evenness between two groups by calculating the proportion of a group that would need to change residence in order for each neighborhood to have the same percentage of that group as the overall metropolitan area. This index will be high if individual neighborhoods have very different racial makeups than the metropolitan area as a whole.



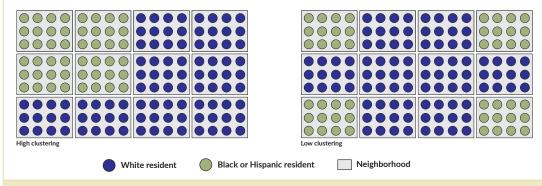


Exposure: The *isolation index* measures the extent to which members of a group are exposed only to other people in that group by calculating the percentage of people in a group within a neighborhood for the average person in that group. This index will be high if most blacks and Hispanics live in neighborhoods composed of mostly blacks and Hispanics.





Clustering: The *clustering index* measures the degree to which members of a group live near each other, forming contiguous geographic areas. This index will be high if blacks and Hispanics tend to live in adjoining neighborhoods, rather than in neighborhoods scattered across a metropolitan area.



Source: J. Iceland, D. H. Weinberg, and E. Steinmetz, "Racial and Ethnic Residential Segregation in the United States: 1980–2000," *Census 2000 Special Reports*, CENSR-3, U.S. Bureau of the Census, Washington, DC, 2002.

To measure the degree of segregation in each metropolitan area, we use three indices: (1) a dissimilarity index, which measures the evenness of different racial groups within neighborhoods; (2) an isolation index, which measures the exposure of one group to another within neighborhoods; and (3) a clustering index, which measures the degree to which minority neighborhoods are grouped together rather than scattered throughout a metropolitan area. See text box on measures of residential segregation for more information.

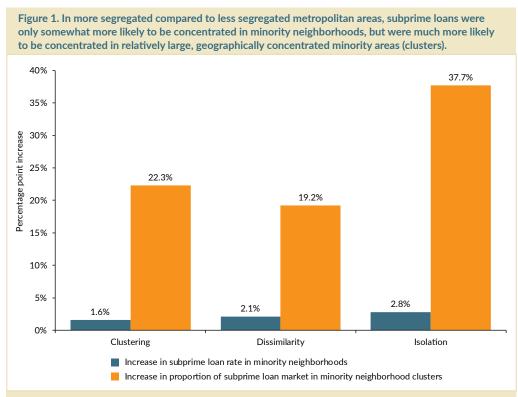
The relationship between segregation and subprime lending

Addressing each of our research questions in turn, we test whether minority neighborhoods in metropolitan areas with higher levels of segregation were particularly vulnerable to subprime lending.

Across metropolitan areas, were subprime loans more concentrated in minority neighborhoods in highly segregated metropolitan areas than in less segregated metropolitan areas?

Overall, as shown in Figure 1, we find that segregation does little to explain differences between metropolitan areas in the distribution of subprime loans between minority and non-minority neighborhoods. All three measures of segregation are positively but weakly associated with the share of metropolitan-area subprime loans in minority neighborhoods. For example, a one-standard-deviation increase in the isolation index increases the rate of subprime loans in minority neighborhoods by 2.8 percentage points.

These results are not surprising, given that (1) metropolitan areas with high proportions of blacks and Hispanics have a large number of minority neighborhoods, and (2)



Note: Figure shows percentage point increases associated with one standard deviation increase in the given segregation index.

Source: J. Hwang, M. Hankinson, and K. S. Brown, "Racial and Spatial Targeting: Segregation and Subprime Lending within and across Metropolitan Areas," Social Forces 93, No. 3 (March 2015): 1081–1108.

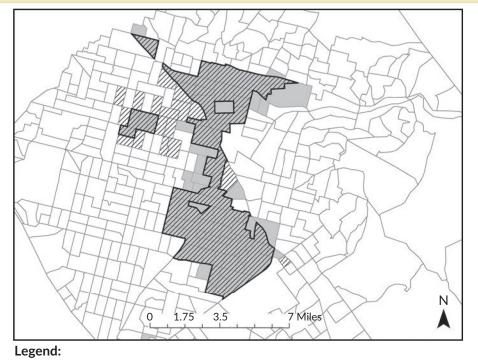
minorities were more likely overall to receive subprime loans. Thus, the degree of subprime lending in minority neighborhoods is explained more by the proportion of black and Hispanic residents in a given metropolitan area than by patterns of racial segregation.

Does the relationship between segregation and subprime loans in minority neighborhoods vary if the neighborhoods are clustered together or scattered through a metropolitan area?

We find a very different result when we consider the extent to which subprime loans are clustered in clusters of minority neighborhoods rather than spread throughout a metropolitan area. The large clusters of minority neighborhoods that segregation creates could provide markets to which lenders could efficiently target subprime loans. Therefore, rather than examining the proportion of a metropolitan area's subprime loans within minority neighborhoods, as in the analysis described above, we examine the degree of correspondence between clusters of subprime loans and clusters of minority neighborhoods.

Figure 1 also shows that when we take into account whether minority neighborhoods are clustered together or scattered across a metropolitan area, we find much stronger effects of segregation on subprime loans compared to the first analysis, which looked only at the relationship between segregation and subprime lending in minority neighborhoods. We find that in more segregated metropolitan areas, subprime loans were disproportionately concentrated in minority clusters. For example, an increase in the isolation index by one standard deviation is associated with a 37.7 percentage point increase in the proportion of the subprime loan market that is within clusters of minority neighborhoods. This finding means that in highly segregated metropolitan areas, there tends to be a high degree of overlap between clusters of subprime loans and clusters of minority neighborhoods. This is illustrated in Figure 2, which shows this overlap in the metropolitan area of Anaheim-Santa Ana, California.





Gray-filled tracts: Clustered minority tracts Stripe-filled tracts: Clustered subprime lending Bold-outlined tracts: Overlapping clusters

Source: J. Hwang, M. Hankinson, and K. S. Brown, "Racial and Spatial Targeting: Segregation and Subprime Lending within and across Metropolitan Areas," Social Forces 93, No. 3 (March 2015): 1081–1108.

The significant findings for clusters are consistent with a process in which subprime loans were channeled to relatively large, geographically concentrated, minority areas, rather than simply targeting minority neighborhoods. However, it is still possible that minority neighborhoods may be the primary targets of subprime loans due to socioeconomic differences, rather than racial differences. We address this possibility in the next section.

Do subprime lending rates in minority neighborhoods vary between highly segregated and less-segregated metropolitan areas after accounting for neighborhood socioeconomic characteristics?

In our third analysis, we compare subprime lending patterns across neighborhoods, accounting for neighborhood socioeconomic characteristics. We find that, while minority neighborhoods had subprime loan rates that average 14 percentage points higher than non-minority neighborhoods, this difference is even higher in highly segregated metropolitan areas. For example, in a metropolitan area with a clustering index that is one standard deviation higher than another, the difference in the subprime lending rate between minority and non-minority neighborhoods would be an additional 3.2 percentage points. These results show that even after taking into account neighborhood socioeconomic characteristics, minority neighborhoods in highly segregated metropolitan areas were more likely to receive subprime loans than similar minority neighborhoods in less segregated metropolitan areas.

Conclusions and policy implications

Prior research has identified segregation as a key factor in the housing crisis and has documented a relationship between segregation and higher subprime lending and foreclosure rates at the metropolitan level. These studies hypothesize that segregation created distinct geographic markets that enabled subprime lenders and brokers to leverage the spatial proximity of minorities to disproportionately target minority neighborhoods. Our study is the first to test this hypothesis by examining whether the patterns of subprime lending within metropolitan areas differ across metropolitan areas with different levels of segregation. We find that metropolitan areas with high levels of segregation are more likely than less segregated metropolitan areas to have had higher concentrations of subprime loans within clusters of minority neighborhoods. However, if we just consider the effect of segregation on the proportion of subprime loans in minority neighborhoods without looking at whether those neighborhoods are grouped together, we find a much weaker effect. This suggests that larger clusters of minorities may have provided markets to which subprime loans could be efficiently and effectively targeted. Residents of minority neighborhoods that are interspersed with more advantaged neighborhoods may be more likely than those living in large

Research to watch

A new study by Jacob W. Faber further supports the hypothesis that racial segregation creates markets into which expensive, low-quality financial products can be channeled. "Alternative" financial services—such as payday lenders and check cashers-have proliferated in low- and moderate-income communities. Because these services are more costly to end users than traditional banking, they constitute what some have called a "ghetto tax." Using a unique dataset comprising every alternative financial services provider in the United States in 2015, Faber finds that not only are alternative financial services significantly more common in non-white compared to white neighborhoods, but also that these differences are largest in the most segregated metropolitan areas. These findings suggest that racial segregation creates easily identifiable markets for alternative financial services providers to target, and for mainstream banking institutions to avoid. Faber also finds that although alternative financial services become less common as neighborhood income rises, the gap between black and white neighborhoods is widest among higher-income neighborhoods. That is, even affluent black neighborhoods are much more likely than affluent white neighborhoods to feature alternative financial services. Faber's study is detailed in a forthcoming Social Forces article, "Segregation and the Cost of Money: Race, Poverty, and the Prevalence of Alternative Financial Institutions."

geographic areas of concentrated disadvantage to learn about and be able to access mainstream lenders, or may be less easily targeted through strategies such as zip code-based marketing.

We also find that minority neighborhoods in metropolitan areas with higher levels of segregation have higher subprime lending rates than those in less segregated metropolitan areas, even when we consider the socioeconomic and housing characteristics of neighborhoods and metropolitan areas.

Although the worst of the housing crisis is behind us, it likely has continuing effects on neighborhoods with large concentrations of minority residents in highly segregated metropolitan areas. The disparity in lending patterns will likely have enduring consequences on wealth accumulation for blacks and Hispanics and the trajectory of black and Hispanic neighborhoods that will last well into the future.

Although the worst of the housing crisis is behind us, it likely has continuing effects on neighborhoods with large concentrations of minority residents in highly segregated metropolitan areas.

Although the greatly increased availability of home loans during the peak of subprime lending temporarily provided blacks and Hispanics with a path to homeownership and a way to build assets and wealth, the disproportionate concentrations and consequences of subprime loans in disadvantaged minority communities suggest that the housing crisis has only exacerbated racial and ethnic wealth inequality.

Minority neighborhoods, especially those in highly segregated metropolitan areas, are particularly in need of attention. Possible interventions could include introducing regulatory controls structured to prevent targeted predatory lending, increasing financial education, and promoting mainstream financial institutions. The onus also falls on financial institutions to assist blacks and Hispanics in rebuilding credit and wealth in order to mitigate the increased inequality that resulted from the housing crisis.

Finally, our results highlight the need to either decrease residential segregation or to provide increased opportunities and resources to those residing in minority neighborhoods in order to reduce the disproportionate effects of any future economic setbacks on minority neighborhoods. Policy efforts such as zoning for mixed-income housing and implementing regulations against housing discrimination could reduce racial inequality and poverty.

¹D. G. Bocian, D. Davis, S. Garrison, and B. Sermons, *The State of Lending and Its Impacts on U.S. Households*, Center for Responsible Lending, Washington, DC, 2012.

²This article draws on J. Hwang, M. Hankinson, and K. S. Brown, "Racial and Spatial Targeting: Segregation and Subprime Lending within and across Metropolitan Areas," *Social Forces* 93, No. 3 (March 2015): 1081–1108.

³D. S. Massey and N. A. Denton, *American Apartheid: Segregation and the Making of the Underclass*, (Cambridge: Harvard University Press, 1993).

⁴M. L. Oliver and T. M. Shapiro, *Black Wealth/White Wealth: A New Perspective on Racial Inequality* (New York: Routledge, 1997).

⁵For a review, see C. Z. Charles, "The Dynamics of Racial Residential Segregation," *Annual Review of Sociology* 29 (2003): 167–207.

⁶For example, in 2010, in 367 U.S. metropolitan areas, the typical white person lived in a neighborhood that was three-quarters white, while the typical black person lived in a neighborhood that was nearly half black and about one-third white, and the typical Hispanic person lived in a neighborhood that was nearly half Hispanic and about one-third white. J. R. Logan and B. J. Stults, "The Persistence of Segregation in the Metropolis: New Findings from the 2010 Census," Census Brief prepared for Project US2010, 2011.

⁷Joint Center for Housing Studies of Harvard University, *The State of the Nation's Housing*, 2008. Available at: http://www.jchs.harvard.edu/sites/ default/files/son2008.pdf

⁸Bocian et al. 2012, *The State of Lending in America & its Impact on U.S. Households.*

⁹Bocian et al. 2012, *The State of Lending in America & its Impact on U.S. Households.*

Type of analysis: Regression

Sources & Methods

Data source: 2006 census tract-level loan data from the Home Mortgage Disclosure Act report; tract-level data from the 2000 U.S. Census metropolitan-level 2005-2007, American Community Survey three-

year estimates, and metropolitan-level housing and foreclosure data obtained from Jacob Rugh and Douglas Massey for the 100 largest US metropolitan areas

Type of data: Administrative data

Unit of analysis: Metropolitan areas and neighborhoods (census tracts)

Sample definition: Loans that reached the final stage of origination in the 100 largest metropolitan areas.

Time frame: 2006

Limitations:

- We do not examine the specific mechanisms that led to the overlap between subprime loan markets and minority neighborhoods.
- Cross-sectional data, our limited sample size, and the complexity of segregation itself limit causal claims and precise causal estimates.
- Our study focuses on racial segregation, but economic segregation and the intersection of race and class in both segregation and the fallout of the housing crisis are important dimensions for future studies to consider.

Institute for Research on Poverty University of Wisconsin–Madison 3412 William H. Sewell Social Science Building 1180 Observatory Drive Madison, WI 53706

Focus is the flagship publication of the Institute for Research on Poverty.

1180 Observatory Drive 3412 Social Science Building University of Wisconsin–Madison Madison, Wisconsin 53706 (608) 262-6358

The Institute for Research on Poverty (IRP) is a nonprofit, nonpartisan, university-based research center. As such, it takes no stand on public policy issues. Any opinions expressed in its publications are those of the authors and should not be construed as representing the opinions of IRP.

Focus is free of charge and distills poverty research of interest for dissemination to a broader audience, with a specific focus on educators, policymakers, policy analysts, and state and federal officials.

Edited by Emma Caspar.

For permission to reproduce *Focus* articles, please send your requests to emma.caspar@wisc.edu.

Copyright © 2019 by the Regents of the University of Wisconsin System on behalf of the Institute for Research on Poverty. All rights reserved.

This publication was supported by Cooperative Agreement number AE000103 from the U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation to the Institute for Research on Poverty at the University of Wisconsin–Madison. The opinions and conclusions expressed herein are solely those of the author(s) and should not be construed as representing the opinions or policy of any agency of the Federal government.

