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Understanding Racial Segregation: What is known about the Effect of Housing Discrimination

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Abstract

A central purpose of this chapter is to assess whether the available empirical evidence supports the view that current levels of housing discrimination are a significant contributor to residential segregation in U.S. cities and metropolitan areas. Through the course of this chapter, the reader will find that the empirical patterns of racial segregation in the U.S. are often inconsistent the available evidence on housing discrimination. Admittedly, strong evidence exists that both housing discrimination exists today and that housing discrimination throughout much of the Twentieth Century was central to creating the high levels of segregation that we observe in U.S. metropolitan areas today, but the appropriate policy responses may differ dramatically depending upon how these two phenomena are currently interrelated.

Journal of Economic Literature Classification: J7, L85, R21, R30

Keywords: Housing Discrimination, Residential Segregation, Neighborhood Quality

My research experience in the area of housing discrimination began as a graduate student working on data from the 1989 Housing Discrimination Study (HDS 1989) and expanded dramatically when I had the opportunity to work as the lead researcher on the team that conducted the 2000 Housing Discrimination Study (HDS 2000). Since the completion of HDS 2000, I have had numerous opportunities to speak about the findings of the study at public events often presenting as part of broader panels that contain fair housing advocates and officers of community groups that are involved in fair housing enforcement. Such individuals usually give presentations that provide compelling evidence concerning the existence of discrimination in housing markets and illustrate the real harm experienced by minority home seekers.

However, the compelling evidence on housing discrimination and its impacts is invariably followed by the assertion "and of course housing discrimination causes residential segregation and segregation causes …" Such assertions are assumed to be self-evident, and challenges to this conventional wisdom are received skeptically at best and often with disbelief. I believe that our society's ability to craft policies that seriously address racial segregation is limited by the adherence to the view that current housing discrimination must be a key factor behind the persistence of racial segregation.

Therefore, a central purpose of this chapter is to consider the empirical evidence available and assess whether the evidence supports the view that current housing discrimination is a significant contributor to residential segregation in U.S. cities and metropolitan areas. Through the course of this chapter, the reader will find that the empirical patterns of racial segregation in the U.S. are often inconsistent the available

evidence on housing discrimination. Further, this review offers evidence in support of alternative theories for why segregation persists today especially emphasizing the important role of racial and neighborhood stereotypes that were created and maintained by residential segregation itself.

Admittedly, strong evidence exists that both housing discrimination exists today and that housing discrimination throughout much of the Twentieth Century was central to creating the high levels of segregation that we observe in U.S. metropolitan areas, but the appropriate policy responses may differ dramatically depending upon how these two phenomena are interrelated.

History of Racial Segregation

One of the major demographic events in the Twentieth Century was the great migration of African-Americans primarily from the rural south to cities in the northeast and Midwest. Cutler, Glaeser, and Vigdor (1999) demonstrate the strong empirical correlation between this migration and the patterns of segregation in U.S. cities. In 1890, the population of African-Americans in U.S. cities was quite small – under a million, but grew rapidly between 1890 and 1970 to almost four million in the same set of cities. During this same period, segregation grew steadily from initially moderate levels, near a dissimilarity index of 0.50, to an index between 0.70 and 0.80.[1]

These increases in segregation appear to be the result of quite rigid neighborhood barriers that were developed in the early twentieth century (Fischer, 2007) and explicitly maintained by real estate agents (Yinger, 1995). As the African-American population

[1] The dissimilarity index is a measure of segregation that captures what percentage of the population would need to be moved in order to obtain perfect integration. The high levels of segregation were accompanied by the concentration of African-Americans into central cities. Colling and Margo (2001) document that this concentration depressed the homeownership rates of African-Americans between 1940 and 1960.

increased, densities and housing prices in the limited number of African-American neighborhoods increased substantially. Little decentralization of African-American households occurred prior to 1940 in spite of the fact that African-Americans paid a substantial premia for housing over the price of housing in surrounding, predominantly white neighborhoods and towns. These price premia in African-American neighborhoods and high levels of segregation remained through 1970 in spite of the increasing decentralization and expansion of African-American neighborhoods (Cutler, Glaeser, and Vigdor, 1999).

Further, such expansions were by no means benign. During the 1960's, real estate agents actively exploited the price difference between white and African-American neighborhoods using an approach commonly referred to a "Block Busting". For example, Yinger (1995) describes the process by which real estate agents conspired to sell one home in the Mattapan neighborhood of Boston to an African-American family and then encouraged panic selling among whites in that neighborhood. The same real estate agents bought these homes at deep discounts only to later sell those homes at a substantial premium to African-American families. In this way, a predominantly white neighborhood or block was busted creating room for new, racially segregated neighborhoods.

Recent Evidence on Racial Segregation in America

The last few decades represent a period of gradual improvements for minorities in U.S housing markets. Segregation has declined moderately for African-Americans while the lower levels of segregation faced by Asians and Hispanics remained steady or only increased slightly (Iceland, 2004), levels which might have been expected to increase

substantially due to the large increases in the total Asian and Hispanic populations (Massey, 2001). In fact, Clapp and Ross (2004) find that Hispanic segregation in Connecticut would have declined substantially if the size of the Hispanic population had not increased. In addition, Bostic and Martin (2005) find a substantial shift of African-American homeowners in the 1980s away from central city neighborhoods towards higher income suburban neighborhoods, while no such shift occurred for white households during this period.

Meanwhile, attitudes concerning integration with African-Americans have also improved substantially during the last few decades (Schuman, Steeh, Bobo, and Krysan, 1997; Farley and Frey, 1994) suggesting that white aversion to African-American neighbors may play a decreasing role in housing segregation (Patterson, 1997; Thernstrom and Thernstrom, 1997). In fact, Card, Mas, and Rothstein (2008, In Press) empirically examine a tipping point model of African-American segregation based on white prejudice. In tipping point models, neighborhoods with low minority shares will be attractive to whites, but above some level of minority representation (the tipping point) whites will be replaced by minorities and the neighborhood will tip towards being a predominantly minority neighborhood. They find evidence that African-American tipping points have been increasing in U.S. metropolitan areas over the last three decades with the largest increases occurring in metropolitan areas that had the largest gains in the Hispanic population.

Bobo (2001) observes, however, that negative racial stereotypes persist and may have substantial negative impacts on African-Americans in spite of broad improvements

in the general attitudes of whites concerning racial equality.[2] Farley, Steeh, Krysan, Jackson, and Reeves (1994), Zubrinski and Bobo (1996), and Krysan (2002) find that the holding of negative stereotypes was a strong predictor of unwillingness to live with African Americans. In addition, Chai, and Yancy (2001) find that a neighborhood's share of African-American residents influences the willingness of whites to live in that neighborhood even after controlling for school quality, crime, and housing prices. They find no such effect from the presence of Hispanics or Asians in a neighborhood. Alternatively, Ellen (2000) observes that white willingness to move into a neighborhood is affected by the presence of African-Americans, but white willingness to remain in their current neighborhood is unaffected by African Americans moving to the neighborhood. She concludes that whites must be using racial composition to stereotype neighborhoods as opposed to having preferences for residing in all white neighborhoods.[3]

Further, several authors question the significance of observed declines in racial segregation. Iceland (2004) finds that a substantial fraction of the decline in African-American segregation appears related to increased exposure to Hispanics, and Fischer (2007) argues that much of the decline in segregation from whites is attributable to improvements in central cities with suburban segregation being much more persistent. Further, Farley and Squires (2005) suggest that national declines in the average level of

[2] For example, Sniderman and Piazza (1993) find that half of whites surveyed endorse some negative stereotypes of African-Americans and over one in five hold uniformly negative views. Similarly, Bobo and Kluegel (1997) find that over half of whites surveyed rated African-Americans relatively lower than whites on intelligence and laziness and higher on violent tendencies, and over three-quarters rate African-Americans as relatively more likely to prefer living off welfare.

[3] Similarly for Hispanics, Baugh (2007) finds that individuals with Chicano or Mexican dialects faced substantial stereotyping being assessed to have lower intelligence than whites, and Charles (2000) and Bobo and Zubrinsky (1996) suggest that white preferences for segregation limit the housing market opportunities of Hispanic households.

segregation may hide very persistent segregation in large, northeastern and midwestern cities.

Finally, many studies have examined whether housing segregation can be explained by economic factors. Massey and Denton (1993), Rosenbaum (1996), Bayer, McMillen, and Rueben (2004), and Ihlanfeldt and Scafidi (2004) all find that the majority of segregation faced by African-Americans cannot be explained by racial differences in household characteristics. The empirical results concerning Hispanics and Asians are less clear. While Rosenbaum (1996) finds the segregation of Hispanics in New York City cannot be entirely explained by demographic and economic differences, Bayer, McMillen, and Rueben (2004) find that 95 percent of Hispanic and Asian segregation in San Francisco can be explained by income, education, language and immigration, and Borjas (1995) documents substantial declines among Hispanics' and Asians' exposure to their own ethnic subgroups between the first and third immigrant generations. In general, Hispanics and Asians face much lower levels of segregation than African-Americans, and a large share of the segregation faced by Hispanics and Asians can be explained by economic factors and the slow assimilation of immigrant groups.

Evidence on Housing Discrimination

Indirect Evidence from Housing Prices

Naturally, if African-American segregation cannot be explained by economic and demographic factors and attitudes are improving more quickly than segregation is declining, a reasonable question to ask is whether housing discrimination plays a significant role in maintaining the level of racial segregation in U.S. metropolitan areas.

The traditional approach for answering this question is based on the premise that housing discrimination will only influence racial segregation if it limits and constrains the residential location decisions of African-Americans and that the effect of these constraints can be seen in housing prices. Specifically, if a substantial fraction of African Americans are forced or even persuaded to limit their housing search to specific neighborhoods, the concentration of housing demand in that limited set of neighborhoods will drive up the price of housing paid by African-American in what are or will become predominantly African American neighborhoods

A large number of studies have examined whether African-Americans pay more for housing than whites in U.S. cities and metropolitan areas. Studies from the 1960's tend to find evidence that African-Americans pay more for equivalent housing (King and Mieszkowski, 1973, Yinger, 1978), while studies from the 1970's (Schnare, 1976, Follain and Malpezzie, 1981) tend to find little or no evidence of a housing price premium. Cutler, Glaeser, and Vigdor (1999) confirm this pattern finding a large African-American rent premium in the first half of this century that fell substantially between 1950 and 1970 and had reversed entirely by 1990. They conclude that the high prices today in predominantly white neighborhoods are consistent with “a decentralized racism” where whites pay a premium to live in segregated neighborhoods.

While Schafer (1979), Chambers (1992), and Kiel and Zabel (1996) all argue that studies from the 70’s and later may fail to find an African-American price premium because that work does not control for neighborhood quality or housing submarkets, it is hard to imagine how the dramatic reversal in the African-American housing price premium could have occurred without substantial increases in the number and breadth of

neighborhoods being opened up to African-American households. In fact, Kiel and Zabel (1996) exploit detailed spatial and neighborhood information in a confidential version of the American Housing Survey to control for neighborhood quality and housing submarkets and only find a significant African-American price premium in only one of the many metropolitan areas examined in their study.

Of course, the decline in the African-American price premium could have arisen because the neighborhoods available to African-Americans were expanded while effective barriers were maintained for other predominantly white neighborhoods. The 1970's marked the beginning of the end for the great migration of African-Americans to northern cities, and after that time expansions of predominantly African-American neighborhoods might have allowed the price paid by African-Americans to fall. As mentioned earlier, there is historical precedent for such actions in the blockbusting tactics used by real estate agents during the 1960's. Further, the large price premium paid by African Americans in the 60's created strong financial incentives for such activities.

Clapp and Ross (2004), however, examine housing sales in Connecticut during the 1990's, a period when there was a large in-migration of Hispanics, as well as substantial losses of white population. They find no evidence of any price premia associated with these demographic changes. In their sample, housing prices appear to adjust fairly quickly (over only one or two years) and rise uniformly for all housing units throughout the affected metropolitan areas. One would expect to find price premia in Hispanic neighborhoods if the growing population had their residential options artificially constrained. The rapid speed of adjustment found by Clapp and Ross (2004) is

suggestive of a fairly free market for housing rather than a market that is characterized by rigid barriers.

Direct Evidence on Housing Discrimination

The second significant approach for examining housing discrimination is essentially an experimental examination of the behavior of real estate and rental agents. Specifically, two testers, one white and one minority, are sent to the same agency or apartment complex to inquire about available housing following a common protocol or script. After visiting an agency, the testers fill out detailed surveys recording their treatment on factors such as whether the unit advertised in the newspapers was available, whether they were able to visit or inspect the housing unit, whether they were shown additional housing units, and the address of the housing units recommended or visited. If the unit was available to or inspected by the white tester, but not for the minority tester, the test is coded on that treatment as being a white favored test, while tests where the minority received positive treatment and the white did not are coded as minority favored. Typically, if the experiment or testing effort finds more white favored than minority favored tests on a particular treatment (a net difference in treatment), this finding is interpreted as direct evidence of discrimination by real estate or rental agents.

Three major paired testing studies of housing discrimination were conducted in 1977, 1989 and 2000. The first major study in 1977 performed a national set of tests for African-American and white pairs and piloted tests involving Anglo-Hispanic pairs. Both the 1989 and 2000 studies conducted full-scale national testing programs for both African-Americans and Hispanics. Phase I of the 2000 study piloted tests for Asian and Native Americans, and phase II, which was conducted in 2001, included a national study

of discrimination against Asian Americans. Finally, phases III and IV conducted more limited analyses of the treatment experienced by Native Americans and by the disabled.[4]

All three studies found evidence of housing discrimination in both rental and sales markets. The 1989 study found high levels of adverse treatment discrimination against African-American and Hispanic homebuyers and renters across a variety of measures of treatment intended to capture availability of housing, access to housing for inspections, encouragement, price and terms in rental, and financing assistance in sales (Yinger, 1995). The 2000 study continued to find statistically significant levels of discrimination against both African-Americans and Hispanics in both markets.

However, in comparing the results from the 1989 and 2000, we found that the levels of discrimination had declined substantially over the decade for both groups in one or both markets.[5] For example, the overall net difference between the fraction of white and African-American favored tests was 13.4 percentage points in 1989 and 8.1 in 2000 for rental tests and 19.9 in 1989 and 6.7 in 2000 for sales tests using a composite of a broad set of treatment measures.[6] Similarly, adverse treatment against Hispanics fell from 16.8 percentage points in 1989 to 4.3 in 2000 in the sales market (Turner, Ross, Galster, and Yinger, 2002; Ross and Turner, 2005). These declines in discrimination

[4] The national studies are constructed as two stage samples of tests in which first a set of representative metropolitan areas are chosen based on the distribution of the minority population across metropolitan areas, and in each selected site tests are conducted based on a random sample of advertisements from the major metropolitan newspaper. Also see Yinger (1993), Smith (1993), and Boggs, Sellers, and Bendick (1993) for histories of testing in the housing market.

[5] A direct comparison cannot be made between the 1977 and 1989 studies because they were conducted in different markets and used different methodologies, but the levels of adverse treatment in the 1989 study appeared comparable to 1977 (Yinger, 1995).

[6] The composite results presented here are based on a hierarchy of 14 treatment variables where availability of the advertised unit is first and followed by ability to inspect the advertised unit, see Turner, Ross, Galster, and Yinger (2002) for details.

appeared to be most pronounced in metropolitan areas that had stable or slowly growing Hispanic populations (Galster and Ross, 2007).[7]

Two major exceptions existed to the general improvement between 1989 and 2000 in the treatment observed in the rental and owner-occupied housing markets. Most significantly, net adverse treatment against Hispanics in the rental market was high and persistent rising from 13.4 to 15.6 percentage points. Second, the frequency of racial steering of African-Americans homebuyers increased over the decade. Racial steering occurs when African-Americans are more likely than whites to be shown units in neighborhoods that have a substantial African-American population. The net measure of adverse treatment on racial steering increased from African-Americans being six percentage points less likely to see units in integrated or minority neighborhoods to being five percentage points more likely to see units in those neighborhoods. This change appeared to be associated with an overall increase in the number of units in minority neighborhoods being shown by real estate agents (Turner, Ross, Galster, and Yinger, 2002; Ross and Turner, 2005).[8]

Later phases of HDS 2000 examined discrimination against previously untested groups.[9] In phase II, the national estimates of overall adverse treatment discrimination

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[7] This finding suggests that discrimination should have risen based on current trends and that the decline in discrimination is likely associated with broad changes in racial attitudes and in the structure of the real estate industry (Ross and Turner, 2005).

[8] A third significant change arose because real estate agents substantially increased the amount of financial assistance being offered to prospective homebuyers. This increase was substantially smaller for Hispanic testers than for white or African-American testers and so adverse treatment of Hispanic testers increased markedly on the financial assistance measures (Turner, Ross, Galster, and Yinger, 2002; Ross and Turner, 2005).

[9] Phase II and beyond used a sampling protocol that rotated between the various sources available to homebuyers and renters, such as the internet, weekly newspapers, and local homebuyer or rental guides that cover a region of the metropolitan area. A comparison of tests based on advertisements drawn from major metropolitan newspapers, which were used in 1989 and phase I of HDS 2000, to tests based on alternative sources did not yield a consistent or strong pattern of differences across advertisement sources, see Turner, Ross, Galster, and Yinger (2002) and Turner and Ross (2003b) for a detailed discussion of these

for Asians is 4.3 and 19.6 percentage points for rental and sales markets, respectively, suggesting much higher levels of adverse treatment against Asian-Americans in the sales market than seen with other minority groups (Turner and Ross, 2003a). Phase III examined the treatment of Native Americans primarily focusing on the rental market and finding net differences of 7.7, 21.3, and 19.0 percentage points in the states of Montana, Minnesota, and New Mexico (Turner and Ross, 2004).[10]

It is important to place these results in context with the recent report issued by the National Fair Housing Alliance (NFHA, 2006). The NFHA report describes high levels of discrimination in the sales market against both African-Americans and Hispanics. The first thing to realize is that NFHA is focusing their efforts on real estate agencies and markets where a variety of sources including HDS 2000 identified unusually high levels of adverse treatment. Therefore, while their findings document the existence of discrimination, they are likely to overstate the average incidence of discrimination among real estate agents in the U.S.[11] In addition, many of the results presented by NFHA represent the frequency of white favored tests (gross measure) rather than the net difference in treatment. A comparison of gross measures from NFHA and HDS 2000 yield fairly similar results,[12] and the gross measures presented by NFHA can dramatically

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comparisons. See Ross (2002) for a discussion of this and other methodological issues arising when paired testing approaches are used to measure the incidence of discrimination.

[10] Phase IV examined the relative treatment of individuals who are deaf attempting to obtain information about available housing over the telephone via a TTY system and individuals in a wheel chair attempting to visit and inspect available rental housing. In both scenarios, disabled testers faced very high levels of discrimination with many net measures falling between 15 and 30 percent (Turner, Herbig, Kaye, Fenderson, and Levy, 2005).

[11] The NFHA report does explicitly acknowledge that their measures of discrimination do not capture the national incidence of discrimination.

[12] For example, NFHA finds that African-Americans and Hispanics were denied access or given limited information in 20 percent of tests, but this finding is broadly comparable to findings in HDS 2000 that approximately 15 percent of white, black, and Hispanic testers were told that the advertised unit was not available when their partner was told that the unit was available suggesting net measures of adverse treatment near zero. The NFHA report does present net measures for number of units inspected with

overestimate discrimination because sometimes a minority tester is treated disfavorably for reasons that have nothing to do with race.[13]

In the case of steering, however, the NFHA report and the results from HDS 2000 are far less consistent with the NFHA report finding that steering takes place in 87 percent of tests when testers were given an opportunity to see homes. One explanation may again arise from the reliance of NFHA on gross measures of adverse treatment combined with the fact that the NFHA report never mentions requiring that differences in neighborhood composition exceed a reasonable threshold in order to count as steering. Without a threshold, the gross measure in the presence of no steering is likely to be near 50 percent just do to random variation.

Another important area of discrimination is the role of agent editorializing concerning neighborhoods, schools, and communities. While HDS 2000 found only low levels of steering based on units recommended and inspected, the black-white tests in HDS 2000 indicated much larger differences in the comments made by real estate agents with agents being 12-14 percent more likely to editorialize about neighborhoods in ways that would encourage segregation of African-Americans rather than reduce segregation (Galster and Godfrey, 2005). Further, Galster and Godfrey (2005) found that agents offer more comments to whites and that 70 percent of those comments provide information

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African-Americans and Hispanics seeing about three units less than whites, but HDS 2000 also identified substantial differentials on number of units inspected for African-Americans.

[13] Admittedly, the net measure may underestimate discrimination because sometimes minorities are favored for systematic reasons, such as a white not being shown the requested unit because it is located in a minority neighborhood. In phase II of HDS 2000, tests with three testers, two of the same race, were conducted in two sites. These tests provide a same race comparison allowing the elimination of random differences in treatment without the problems associated with the traditional net measure. The revised net measure based on the same race comparison yielded very similar results to the traditional net measure favoring the use of the net measure for studying discrimination (Turner and Ross, 2003b).

about the racial or ethnic make-up of the neighborhood.[14] The HDS 2000 methodology, which instructs testers to focus on inspecting the advertised and similar units, quite likely reduces the influence of agent commentary on the type of units observed relative to either the NFHA testers or typical homebuyers.

Does Current Housing Discrimination Cause Residential Segregation?

The Author's Evaluation of the Evidence

While I am convinced that housing discrimination exists and does substantial harm to minority renters and homebuyers, I do not believe that housing market discrimination by real estate and rental agents is a major factor behind the persistent racial segregation found in U.S. metropolitan areas today. First, the pattern of housing prices in U.S. metropolitan areas is not consistent with the existence of major barriers to the neighborhood choices of one or more large minority populations. Second, the pattern of racial segregation observed in U.S. metropolitan areas is quite inconsistent with the direct evidence on housing discrimination from paired testing studies.

While Cutler, Glaeser, and Vigdor (1999) provide a compelling story of growing segregation during the 1900's based on the increasing urbanization of African-Americans and fairly rigid discriminatory barriers in housing markets, they also document a dramatic decline and reversal of the price premium paid by African-Americans between 1950 and 1990, and conclude that by 1990 segregation was the result of the preferences of white homeowners rather than housing discrimination. In fact, not a single study has found evidence that African American's paid more for housing during the 1980's or 1990's. Similarly, Clapp and Ross (2002) find that housing prices adjust fairly quickly across

[14] The NFHA study (2006) found that comments about schools were a very important component of racial steering, but Galster and Godfrey (2005) found that only five percent of comments were related to schools.

communities and prices are found to increase across all Connecticut towns in growing urban areas even though the population increases were driven entirely by in migration of Hispanics who tended to settle in predominantly Hispanics communities. These findings suggest that the rigid barriers to minority neighborhood choice that were once enforced by real estate agents are no longer in place.

The evidence discussed earlier also implies that the racial segregation experienced by African-Americans is different and dramatically more severe than the segregation experienced by either Asians or Hispanics. African-Americans are exposed too much higher levels of segregation than the other two groups, and unlike Asians and Hispanics the vast majority of African-American segregation cannot be explained by economic factors. Meanwhile, HDS 2000 documents substantially higher levels of discrimination against Asians in sales markets and Hispanics in rental markets than against African-Americans.

Further, the declines in segregation over the last few decades are not consistent with the observed declines in housing discrimination in terms of either the timing or location of those declines. African-American homeowners in the 1980s moved away from central city neighborhoods towards higher income suburban neighborhoods (Bostic and Martin, 2005).[15] This shift and the accompanying declines in racial segregation during the 1970's and 80's occurred in spite of the high levels of discrimination documented by the national paired testing studies conducted in 1977 and 1989. Meanwhile, the pace of improvements in racial segregation did not change appreciably

[15] Bostic and Martin (2005) argue that these declines are attributable to the Fair Housing Act because they correlate with proxies for enforcement of that act during 1970s and 80s. In general, I agree that that Fair Housing Act likely played a very important role in eliminating barriers to the suburbanization of African-American families, but this conclusion does not shed light on whether current discrimination against African-Americans contributes to and maintains current residential segregation by race.

during the 1990's (Iceland, 2004), a period in which housing market discrimination against African Americans declined markedly. Further, Galster and Ross (2007) found that that the declines in discrimination against African-Americans was largest in metropolitan areas with the smallest increases in the Hispanic populations, while Card, Mas, and Rothstein (2008, In Press) find that racial tipping points increased, and therefore segregation decreased, the most in metropolitan areas with growing Hispanic populations.

Countervailing Views

Naturally, the arguments above reflect my interpretation of the evidence, and other scholars read the evidence differently arguing that housing discrimination is still an important factor behind the high levels of racial segregation in the U.S. Below, I present the three most common arguments made to support the idea that housing discrimination contributes to racial segregation today: previous work from the 1989 Housing Discrimination Study (HDS) found a relationship between housing discrimination and segregation, HDS 2000 found high levels of rental discrimination against Hispanics and likely understated rental discrimination against African-Americans, and finally HDS 2000 and recent tests conducted by NFHA found evidence of racial steering by real estate agents.

Using data from HDS 1989, Galster (1991) examines the relationship between housing discrimination against African-Americans and both the centralization and residential segregation of the African-American population in selected U.S. metropolitan areas. Galster (1991) finds that African-Americans have much higher levels of centralization and segregation in metropolitan areas where he predicts high levels of

discrimination in the sales market. However, Galster finds a negative relationship between rental market discrimination and African-American centralization and segregation raising questions about how to interpret these results.[16] Further, Galster and Ross (2007) examine changes in racial segregation between 1990 and 2000 and housing discrimination between HDS 1989 and 2000 finding little evidence of any correlation between these changes for either the sales or rental markets.

Secondly, discrimination in rental markets is still a very serious problem. HDS 2000 finds high levels of discrimination in rental housing against Hispanics and Native Americans. Further, the declines in discrimination against African-Americans in the rental market may not represent meaningful increases in opportunities. The reader needs to remember that the key service provided by a rental agent is the provision of rental housing while paired testing can only assess the amount and nature of information provided to the testers during their initial in-person inquiry about the advertised rental unit. It is impossible to know whether discrimination against African-Americans has declined or has been moved to other stages of the transaction that are not captured by traditional testing efforts. For example, Massey and Lundy (2001) find that testers who speak "Black English" are less likely to be able to make an appointment to see available rental housing over the phone, and Galster and Ross (2007) find that local Department of Housing and Urban Development funded enforcement activities are associated with a decline in adverse treatment against African-Americans in the rental market, possibly

[16] Galster faces the very difficult task of testing for the influence of discrimination on segregation or centralization when in fact segregation and centralization can influence discrimination, and that difficult problem is compounded by the fact that all three variables are products of the same metropolitan environment and therefore likely all heavily influenced by unobserved cultural and historical factors.

because landlords shift discrimination until later in the rental process in order to avoid detection.[17]

Naturally, the first response to concerns about discrimination in rental market is to note that HDS 2000 did capture substantial discrimination against Hispanics in the rental market, and yet Hispanics experience substantially lower levels of segregation than African-Americans and a large fraction of Hispanic segregation can be explained by differences in economic resources and immigration. In addition, racial discrimination in the sales market fell between 1989 and 2000. Over 70 percent of U.S. households reside in owner-occupied housing,, and this share is even higher in suburban areas. As noted by Fischer (2007), most of the decline in racial segregation has occurred in central cities, where rental markets are a larger share of the housing market. These facts suggest that major discriminatory barriers to further integration of the African-American population must be found either in the market for owner-occupied housing or in other markets that are crucial to the transition to homeownership, such as the home mortgage market.[18]

The declines in sales market discrimination identified by HDS 2000 appear quite compelling. Unlike rental agents who might withhold housing until later stages of the transaction, real estate agents in the sales market provide services that are easily observed during testing, and the remaining discrimination against African-Americans and Hispanics in this segment of the market appears quite low. The job of a real estate agent is to provide information on homes that are available for purchase, as well as to provide homeseekers with physical access to those properties. The sales tests directly examine

[17] Further, Galster and Ross (2007) did not find any evidence that enforcement lowered rental market discrimination against Hispanics, which is consistent with the fact that Hispanic targeted enforcement activity was only one-fifth the level of African-American targeted activities.

[18] See Ross, Turnery, Godfrey, and Smith (2008), Ross (2006), and Ross and Yinger (2002) for discussions of the evidence on racial discrimination in mortgage markets.

these treatments and allow for both a follow-up visit by the tester and follow-up contact by the real estate agent. Substantial declines were observed for both African-Americans and Hispanics. Further, Galster and Ross (2007) did not find any evidence that these declines in sales market discrimination were associated with fair housing enforcement activities suggesting that real estate agents did not need to hide discriminatory activities.

Finally, many advocates point to the substantial evidence of racial steering by real estate agents during HDS 2000 and in the NFHA study. As discussed above, steering rose between 1989 and 2000 for the metropolitan areas studied in HDS 2000. Further, the NFHA study and Galster and Godfrey (2005) found evidence of extensive commentary by real estate agents. Even if minorities are shown units in white neighborhoods, segregation might be reinforced and maintained if African-Americans and whites are consistently pushed towards selecting houses in racially homogeneous neighborhoods.

However, while steering against African-Americans did increase during the 1990's, racial differences in steering based on units recommended or shown were approximately five percentage points in HDS 2000, which is comparable to the low levels of disparate treatment observed for African-Americans in the sales markets on most treatments in 2000 and statistically indistinguishable from steering against Hispanics. In fact, the increase in racial steering may in part be due to a number of factors that represent improvements in the housing market. First, the opportunity to steer increased because mainstream real estate agencies increased their representation and advertising of units located in minority neighborhoods between 1989 and 2000 indicating greater willingness of real estate agents to market such units.

Further, the real estate industry has consolidated substantially reducing the incentives for agents to practice discrimination based on the prejudice of their potential customers.[19] In fact, Galster and Godfrey (2005) found that the majority of commentary was aimed at whites rather than African-American homebuyers. Rather than exclusion from neighborhoods, which may create substantial price premiums, real estate agents today appear to practice a less restrictive form of steering where they provide homebuyers with information on racial and ethnic composition of neighborhoods that in some cases disparages integrated neighborhoods to white homebuyers. This behavior might reinforce the type of "white racism" referred to by Culter, Glaeser, and Vidgor, but such comments may also be a reflection of the perceived preferences of typical white homebuyers as opposed to systematic action by real estate agents that shape white preferences.[20]

Stereotypes and the Role of Past Discrimination and Segregation

In my opinion, however, it is not appropriate to simply end the conversation having described a limited role for current real estate agents. Cutler, Glaeser, and Vigdor (1999) and the work of many others clearly demonstrate that discrimination played a very

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[19] Ross and Turner (2005) argue that the counter-intuitive steering of African-Americans towards white neighborhoods in 1989 may arise from customer based discrimination where agents act to protect potentially vulnerable neighborhoods and are more likely to exclude minorities from neighborhoods that already have some minority residents than from all white neighborhoods (Yinger, 1995). Multivariate analyses of the 1989 HDS and earlier testing efforts have generated numerous findings consistent with discrimination based on customer prejudice, such as Yinger (1986, 1995), Roychoudhury and Goodman (1992), and Page's (1995) finding that minority couples face more discrimination when they have children, Yinger's (1986) finding that discrimination was high in integrated neighborhoods that were not experiencing an influx of African-Americans, and Ondrich, Ross, and Yinger's (2002) finding that discrimination decreases with the distance between the housing unit and the real estate agent's office.

[20] The steering observed in 2000 may be the result of statistical discrimination where real estate agents believe the likelihood of a sale is increased by steering homebuyers towards or away from minority neighborhoods (Ondrich, Ross and Yinger, 2003). For HDS 2000, Zhao, Ondrich, and Yinger (2006) in sales and Choi, Ondrich, and Yinger (2005) in rental find substantial evidence of neighborhood exclusion based on minority composition and income, which would appear to be consistent with statistical discrimination.

important role in creating the highly segregated metropolitan areas that exist today. The finding that whites pay higher prices for housing is consistent with whites paying a premium to avoid living in integrated neighborhoods, but does nothing to identify why those whites are willing to pay this premium today. In a similar vein, would the typical white homeowner have any preference for segregation or would the typical real estate agent have any economic incentive to discourage whites from visiting housing units in predominantly African-American neighborhoods if the U.S. metropolitan environment had not been so terribly distorted by a legacy of very high levels of housing discrimination?[21]

For example, Galster (1991) develops a descriptive model where housing discrimination leads to racial segregation, and the resulting racial segregation contributes to negative outcomes for African-Americans in terms of education outcomes, family structure, and the labor market. Cutler and Glaeser (1997). Collins and Margo (2000), and Card and Rothstein (2007) all document the negative impact of residential segregation on the African-American population. In addition, Collins and Margo (2001) document the historical influence of segregation on homeownership and housing values, which may have limited the wealth accumulation of African-American families (Charles and Hurst, 2000). In Galster's model, racial segregation is reinforced and maintained by the racial differences in poverty, unemployment, and single parenthood that arise in part

[21] As an illustration, Bayer, McMillen, and Rueben (2005) estimate a structural model of residential location choice. This analysis shows that the neighborhood choices available in current metropolitan areas dramatically limits the options of upper and middle income African-Americans causing them to consume much lower levels of neighborhood amenities than would otherwise have been expected. Specifically, high income and education neighborhoods with substantial African-American populations simply do not exist. This concentration of African-Americans of all income levels into potentially lower amenity neighborhoods would naturally limit the willingness of whites to live in integrated neighborhoods.

from segregation, and once established high levels of racial segregation can persist even if housing discrimination has been completely eliminated.

Survey data has consistently demonstrated white unwillingness to live in neighborhoods with substantial African-American populations. Not surprisingly, this unwillingnesss to live near African-Americans is largest among whites that hold negative stereotypes about African-Americans (Farley, Steeh, Krysan, Jackson, and Reeves, 1994; Zubrinski and Bobo, 1996; Krysan, 2002). Further, while whites appear to have no aversion to sharing neighborhoods with Hispanics and Asians after controlling for school quality, crime, and housing prices, whites still show a substantial unwillingness to live in African-American neighborhoods after controlling for these factors (Emerson, Chai, and Yancy, 2001).

Similarly, whites may use the racial composition of a neighborhood to infer neighborhood or school quality, in effect stereotyping neighborhoods based on racial composition. Ellen (2000) explicitly tests this hypothesis by examining the mobility decisions of whites in response to racial composition. Specifically, she finds that white are no more likely to exit neighborhoods when African-Americans move in, but when a white leaves a neighborhood that has experienced an increase in share African-American regardless of the reason whites are less likely to move into that vacated unit. In a similar vein, Clapp, Nanda, and Ross (2008) find evidence that increases in percent Hispanic students within the school district is associated with declines in property values within that district. However, the effect of Hispanic students on prices is falling substantially over time being replaced by a strengthening effect of test scores on housing prices. This shift may be occurring because ethnicity was used as a signal of school quality during the

1990s, but this signal is being replaced by standardized test scores as test scores become more easily available and more salient with the adoption of No Child Left Behind.

Finally, the research of Card, Mas, and Rothstein (In Press) and Ferreira (In Press) in this volume might be considered in the light of stereotypes that are propagated and maintained by residential segregation. Card, Mas, and Rothstein (In Press) find evidence of what they refer to as one sided tipping where neighborhoods that cross a threshold share of African American residents start moving towards becoming predominantly African-American neighborhoods, while neighborhoods below that threshold exhibit substantial stability in terms of African-American population share as opposed to tipping towards becoming all white neighborhoods. Another explanation for this phenomenon involves racial composition being used as a signal for neighborhood quality. When racial composition is below the threshold, the signal conveys no information about neighborhood quality and therefore does not have any systematic affect on future changes in racial composition.[22]

Ferriera (In Press) describes research in Ferreira and Saiz (2008) that examines the influence of changing neighborhood ethnic composition on housing prices. Specifically, they estimate the impact of a Hispanic household moving into a neighborhood and find that this move decreases property values in predominantly white neighborhoods and increases property values in predominantly Hispanic neighborhoods. They interpret these findings as evidence of tastes for self-segregation among both whites and Hispanics. An alternative explanation, however, arises if one considers that the entrance of a Hispanic household provides information about both the direct change in

[22] Signaling models especially when the signal is noisy often give rise to non-linear thresholds where the signal only takes on meaning if it crosses a threshold much like the tipping points identified by Card, Mas, and Rothstein (In Press).

neighborhood composition and the ethnicity of the typical person who is demanding housing in this neighborhood, i.e. the ethnicity of the typical person who is negotiating for and helping to set the price of housing in this neighborhood.[23]

In both cases, phenomena that are in part ascribed to preferences concerning racial or ethnic composition may be explained by racial or ethnic differences in preferences for neighborhood quality and potentially by asymmetric information concerning neighborhood quality. Especially in the case of one-sided tipping, the empirical regularities uncovered appear very consistent with the notion of neighborhood stereotyping or using race as a noisy signal for neighborhood quality. Such stereotypes clearly can be maintained by the existing high levels of racial segregation in U.S. metropolitan areas and the negative impacts of that segregation on the African-American population.

Summary and Conclusions

The willingness of whites to live in integrated neighborhoods has improved steadily. The incidence of housing discrimination is down substantially with the exception of discrimination against Hispanics in the rental market, and the observed pattern of prices and outcomes in the housing market suggests that discrimination by real estate agents does not significantly constrain the neighborhood choices of minorities. And yet, residential segregation of African-American persists at levels far above the level experienced by other minority groups in this country. Improvements in residential

[23] Instead of an empirical analysis that examines the effect of adding an Hispanic to a white or Hispanic neighborhood, the empirical exercise may effectively be thought of involving a large change in the ethnic composition (from white to Hispanic) and the associated neighborhood unobservables for a white neighborhood that is attracting new Hispanic homebuyers. Alternatively, Hispanics may simply have a lower willingness to pay for unobserved (from the researcher's perspective) neighborhood attributes that correlate with ethnic composition or possibly are less able to evaluate neighborhood quality in a predominantly white neighborhood. This phenomenon would lead falling prices relative to levels that might have been established when whites formed a larger share of potential homebuyers.

segregation have been modest since the 1970's, and there is no evidence of an acceleration in desegregation as discrimination fell during the 1990s. This combination of empirical evidence strongly suggests that the elimination of housing discrimination (while a major accomplishment for other reasons) would do little to mitigate the high levels of racial segregation experienced by many African-Americans in our country.

On the other hand, the legacy of past housing discrimination is almost certainly the central factor in explaining the high levels of residential segregation that developed during the last century and likely heavily influences the segregation experienced by African-Americans today. While middle income African-Americans have suburbanized over the last two decades, this suburbanization has taken place in a cultural environment distorted by high levels racial segregation, and accordingly the resulting pattern of African-American suburbanization also involves high levels of segregation mirroring that earlier environment.

Building on earlier work by Galster (1991) and Ellen (1999), I have suggested in this chapter that the history of African-American residential segregation may be a central force for developing and maintaining the attitudes about individuals and neighborhoods that reinforce and maintain the high levels of racial segregation observed in U.S. metropolitan areas. White households may stereotype African-Americans as neighbors and predominantly African-American neighborhoods in terms of both the quality of the neighborhood environment based on the segregated urban environment that arises from such attitudes. The frequency and severity of such stereotyping may be exacerbated because whites may have difficulty evaluating neighborhood quality in predominantly minority neighborhoods due to cultural differences. In my opinion, information

asymmetry concerning neighborhood quality has been under studied in research on racial segregation and may be especially important for explaining why racial segregation in housing has been so persistent as general attitudes have improved and housing discrimination has declined.

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