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Renting under racial capitalism: residential segregation and rent exploitation in the United States

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ABSTRACT

This purpose of this study is to understand the nature of rent exploitation, or the cost burden that marginalized renters bear in an unequal housing market. I ask how rent exploitation is related to neighborhood characteristics and facilitated by residential segregation, and is further associated with housing problems including rent burden and eviction. Using the American Community Survey, I analyze rent exploitation and rent burden in neighborhoods by how they relate to neighborhood characteristics and residential segregation. I also use eviction records for a case study of Harris County, TX to analyze how rent exploitation impacts eviction rates. I find that neighborhoods with higher percentages of racially minoritized households and households below the poverty line experience higher levels of rent exploitation. Furthermore I find residential segregation is associated with more unequal levels of rent exploitation. Regression and GIS analysis together reveal that Black, Latinx, and poorer neighborhoods experience the highest levels of rent exploitation and eviction in Harris County. These findings reveal the conditions under which renters are more vulnerable to rent exploitation. Residential segregation is a mechanism of racial capitalism that makes inequality durable at the expense of Black and Latinx renters and renters below the poverty line.

Introduction

"The undeniable fact that most Philadelphia white people prefer not to live near Negroes limits the Negro very seriously in his choice of a home and especially in the choice of a cheap home. Moreover, real estate agents knowing the limited supply usually raise the rent a dollar or two for Negro tenants" (Du Bois [1899]1996:295).

In his pathbreaking urban sociological study, The Philadelphia Negro, W.E.B. Du Bois made this poignant observation that racial residential segregation and housing discrimination facilitated rent exploitation, which Desmond and Wilmers (2019) define as tenants being overcharged in rent relative to the value of the home. Black residents faced limited locational options for housing in Philadelphia due to the explicit racism pervasive throughout society and as a result were primarily living in areas where they would have to pay more in rent for poorer quality housing. As a consequence, Du Bois found that Black families paid anywhere from a quarter to three-quarters of their income on rent and were at risk of falling behind on rent, being food insecure, and experiencing housing instability (Du Bois [1899]1996).

Today the dual housing market, or the empirical reality that there are different housing opportunities for different racial groups, appears to be less trenchant. But evidence remains that people of color and people affected by poverty bear the consequences of unequal housing opportunities and burdens (Howell and Korver-Glenn 2021; Quillian, Lee, and Honoré 2020; Turner et al. 2013). And as with other social problems that disproportionately affected Black people, Du Bois understood that housing availability and affordability were more than just an economic equation—they were determined according to a dual housing market shaped by racial capitalism. Although a precise definition is debated, a focus on how racial capitalism functions results in a definition by Jenkins and Leroy (2021) that racial capitalism is "the process by which the key dynamics of capitalism ... become articulated through race" (3).

The housing affordability crisis today is the subject of a large body of literature and public conversation that addresses both root causes and social and individual consequences. Root causes are understood as both economic and sociological, with housing shortages, zoning regulations, and depressed wages commonly identified as being responsible for the major gaps between financial resources and housing costs (US Department of Housing and Urban Development 2019). A legacy of housing discrimination and residential segregation is also sometimes acknowledged for shaping patterns of unequal housing access and affordability so that Black, Indigenous, and other racially minoritized renters in addition to other socially and economically marginalized groups experience the worst housing outcomes including rent burden, eviction, and poor housing quality. While the fact of these inequalities is apparent, the discussion around dynamics associated with those inequalities is deserving of the theoretical critiques leveled by Desmond and Wilmers (2019), which is that not enough attention is given to the relational aspect of inequality, or in other words, the agency of those who benefit from these inequalities and seek to protect their advantages.

The purpose of this study is to contribute to our developing understanding of housing cost burdens and insecurity through a relational inequality lens (Tilly 1998; Tomaskovic-Devey and Avent-Holt 2019) by building on the work of Desmond and Wilmers (2019) and further exploring rent exploitation and its relationship with neighborhood contexts and residential segregation. Understanding rental housing costs from the perspective of relational inequality was first given major attention by Desmond (2016) and Desmond and Wilmers (2019), who found that even though property values were lower in poorer neighborhoods, rents were not necessarily lower, as landlords anticipated higher risks to owning and renting out property in these neighborhoods. Desmond and Wilmers (2019) concluded that, ultimately, this practice generates profit for landlords. The authors also found that exploitation intensified in higher poverty neighborhoods, implicating the potential role of segregation in facilitating exploitative practices in the rental market (Desmond 2016; Massey 2007).

With this study I add to the theoretical and empirical contributions made by Desmond and Wilmers (2019) by conducting both a national-level analysis of residential segregation and rental market exploitation using the American Community Survey in addition to a case study analysis using eviction data in Harris County, TX to illustrate how relational inequalities and racial capitalism have affected the housing costs borne by racially and economically marginalized communities. Specifically, I address three research questions in this study: (1) How does rent exploitation, defined as the ratio of median rents to median property taxes, vary by neighborhoods and at different levels of residential segregation?; (2) How is rent burden related to rent exploitation, neighborhood characteristics, and residential segregation?; and (3) How does rent exploitation affect eviction rates?

By working through a theory of relational inequality (Tilly 1998; Tomaskovic-Devey and Avent-Holt 2019), as Desmond and Wilmers (2019) also did, while also drawing on a framework of racial capitalism, the burden on tenants to pay relatively higher rents in areas where the cost of ownership is lower is understood as an exploitative relationship. Even if landlords are compensating for higher risks of ownership, low-income tenants still bear the cost. If, as Desmond and Wilmers (2019) found evidence of, greater profits are extracted from renters of color and renters living below the poverty line, then this would demonstrate that landlords benefit from racial

residential segregation and a capitalist housing structure that together enable the exploitation of renters living below the poverty line and renters of color, which in turn maintains these structures and the positions within them.

The immediate purpose of these questions is to determine if there are unequal levels of rent exploitation occurring across neighborhoods, what the role of segregation is in shaping that outcome, and what consequences for renters are associated with rent exploitation. If racial and economic disparities in experiences with rent exploitation are occurring and are also associated with material consequences including rent burden and eviction, then this issue should be recognized in the complex conversations about the racial and economic disparities of the housing crisis. Sociologically, this finding would also further develop our understanding of the social inequalities associated with racial capitalism which bear implications for the myriad other outcomes that are directly affected by housing and the cost of housing.

Background and literature

The challenges of renting in the United States

The COVID-19 pandemic threw into sharp relief the precarity of being a renter in the United States as local, state, and federal policies were haphazardly put in place to prevent mass evictions that would have been triggered by sudden skyrocketing unemployment and lost wages. The typical renter in the United States is only one emergency away from being behind on rent (National Low Income Housing Coalition 2021). These problems are exacerbated by the rising cost of housing, with the most recent Out of Reach report by the National Low Income Housing Coalition showing that rents across the United States have continued to outpace workers' stagnant wages. In 2021, they reported that the hourly wage needed to afford a two-bedroom rental home was \$24.90 while the federal minimum hourly wage remains at \$7.25. The organization estimates that in 2021, the rent affordable to a full-time worker making the average renter wage was \$977 while the fair market rent was \$1,061 for a one-bedroom unit and \$1,295 for a two-bedroom unit. For a family of four with income at the poverty level the gap is even larger, with the organization estimating that these households could only afford a rent amount of \$663 (National Low Income Housing Coalition 2021). While housing stock is part of the problem, Gilderbloom and Appelbaum (1987) argue that limited housing stock is not solely responsible for rising rents and instead point to the commodification of housing combined with the professionalization of the rental housing market which renders the market noncompetitive.

One result of this gap between wages and the cost of rental housing is that an estimated 46% of renter households across the United States are rent-burdened (American Community Survey 2019 5-year estimates), a term defined by the Department of Housing and Urban Development (HUD) as a household that is spending 30% or more of its income on housing costs. The share of rent-burdened households has increased since the early 2000s, marking the growth of the gap between wages and rent. Furthermore, half of these households are severely rent-burdened, which means that they spend 50% or more of their income on housing costs. Thus, just over 20 million renter households in the United States are spending significant portions of their income on housing, leaving fewer financial resources to meet other essential needs (American Community Survey 2019 5-year estimates).

The rising unaffordability of rent combined with the legal, economic, and political power afforded to property-owners make evictions commonplace across the United States with approximately 1,000,000 households evicted in a typical year (Desmond 2016; Eviction Lab 2018). Many more families face eviction filings and sometimes even multiple eviction filings in a short period of time. Indeed, research has found that eviction is often used as a rent-collecting mechanism rather than as a last resort. Landlords rely on the eviction legal process to collect rent by filing an

eviction as soon as a tenant misses rent in order to force the tenant into paying under the threat of a formal eviction. This is especially common among landlords who have large portfolios (Immergluck et al. 2020; Leung, Hepburn, and Desmond 2021). This means many low-income renters, especially those renting from corporate landlords, face not only financial catastrophe but also the threat of eviction proceedings that bear psychological, physical, and social costs (Desmond 2012, 2016; Desmond and Tolbert Kimbro 2015). The cost of an eviction, even an eviction filing (regardless of how the case is decided), can be harmful to families in countless ways.

First, even if the renter is not formally evicted by the court, they may vacate the unit anyway because they know they do not have the money to pay the outstanding rent or would rather keep the money to find new housing (Desmond 2016). An eviction can then do long-term damage to the financial, emotional, physical, and social outcomes of families. Desmond and Tolbert Kimbro (2015) found that mothers and children face physical and emotional challenges for years after an eviction with mothers still reporting stress and depression up to two years after being evicted with their children. Other research has demonstrated how housing stability affects children's development and academic outcomes (Desmond et al. 2013), while more have found that housing instability can impact labor outcomes, the ability to escape poverty, and the chances of obtaining new housing (Desmond 2012, 2016; Desmond, Gershenson, and Kiviat 2015). Eviction also has more widespread impacts because it can destabilize communities and social ties (Desmond 2012, 2016; Desmond and Shollenberger 2015).

While there is no question that the unaffordability of rental housing for low-income families is widespread, the consequences are shaped by more than just economic forces. National survey data in addition to research using eviction records show that housing precarity, including rent burden and risk of eviction, is both gendered and racialized (Desmond 2016; Desmond and Bell 2015; Hepburn, Louis, and Desmond 2020). American Community Survey estimates show that among renters, Black and Latinx renters are more likely to be rent-burdened than other groups (American Community Survey 2019 5-year estimates). The worst possible outcome for a renter also disproportionately impacts Black and Latinx households. Hepburn, Louis, and Desmond (2020) have produced the largest study to date of eviction court records which conclusively substantiates what smaller scale quantitative and qualitative eviction research has shown (Desmond 2012, 2016), which is that Black and Latinx tenants are significantly more likely to experience eviction and the threat of eviction as one more demonstration of how the rental housing market is shaped by and reproduces racism.

Relational inequality and racial capitalism

The present study is largely influenced by Desmond and Wilmers' (2019) research which situated rent disparities within a relational inequality framework and drew out the role of exploitation in landlord-tenant relationships, where tenants are charged more in rent relative to the cost of owning the property in higher poverty areas with low-income tenants. While these practices are in part to mitigate anticipated losses from owning properties that are deemed to be in riskier areas, the researchers found that even after accounting for these costs as well as property appreciation over time, landlords who operate in poor neighborhoods net more gains than landlords whose properties are located in nonpoor neighborhoods (Desmond and Wilmers 2019). Other work by Desmond and Perkins (2016) also support this argument by finding that landlords are more likely to overcharge families on housing assistance, particularly in low-income neighborhoods. This is an important sociological contribution to our understanding of the economic dynamics and inequalities of the rental market and clearly identify the role of exploitation within rental markets, which is a key element of the relational inequality framework. Furthermore, the dual housing market creates the potential for greater profits from rents in neighborhoods that are

predominately Black and Latinx, as racist home appraisal practices continue to result in lower home values in Black and Latinx neighborhoods, which lowers the cost of ownership for landlords who do not necessarily lower the rents proportionately (Howell and Korver-Glenn 2021; Perry, Rothwell, and Harshbarger 2018).

As part of their updated theory of relational inequality, Tomaskovic-Devey and Avent-Holt (2019) extend the definition of exploitation to be "when one group uses its power to appropriate income (or some other scarce resource) from another either within organizations or between them" (2019:54) and later more simply define it as when "a more powerful group gains income over time at the expense of a less powerful group" (2019:55). Within their framework, which builds on Tilly's (1998) original theory of relational inequality, they emphasize social relationships and socially constructed categories as the "building blocks" of inequality, exploitation and social closure as the processes of inequality, and claims-making as the way that exploitation occurs. In rental markets, the tenant-landlord relationship illustrated in sociological research is characterized by clearly defined social groups (landlords and tenants) and exploitative social relations (Desmond 2016; Wright 2000), making it fit within the organizational relational inequality model theorized by Tomaskovic-Devey and Avent-Holt (2019). Claims-making, which Tomaskovic-Devey and Avent-Holt (2019) define as the more powerful group's ability to justify why they deserve more organizational resources than others, is situated within the legal, cultural, and social privileges afforded to property-owners over the property-less in a capitalist society. The law in particular is on the side of landlords and their business endeavors, as argued by Desmond and Wilmers who write, "the law binds together housing policy and landlord profit" (2019:1120).

If racial inequalities are evident in the rental market and landlords are more likely to turn a profit off low-income renters, this manifestation of relational inequality may even be better understood through a racial capitalism framework. The private rental market in the United States has become inherently capitalist in nature, with Patillo (2013) describing the commodification of housing as a feature of modern capitalism. The practice of owning and renting a property is treated as a business venture with the expectation of wealth accumulation for the property owner, as evident by how transactions are defined and in how policies around rental units and tenantlandlord relationships are constructed (Desmond and Bell 2015; Patillo 2013). The privilege afforded to property owners in turn places renters at a significant social disadvantage (Dreier 1982; Patillo 2013). In describing the invisibility of tenants and their social experiences in sociological analysis 40 years ago, Dreier stated, "Tenants are the objects of pervasive patterns of discrimination in the economic, political, and social institutions of U.S. society" (1982:184). Others have written about the negative stigma and stereotypes of renters that undermine their social status and political power in communities (Goetz 2007; Patillo 2013). These observations reflect the dynamics of a capitalist society where propertied owners hold every legal, social, and economic advantage over the property-less, setting the stage for rent exploitation and evictions to occur with relative ease (Desmond 2016; Desmond and Bell 2015; Dreier 1982; Patillo 2013). The implications go further in a capitalist society that functions through structural racism.

As Jenkins and Leroy (2021) and Rucks-Ahidiana (2021) argue, racial capitalism is not some variation of capitalism, but rather capitalism is inherently racial even when it appears to operate in race-neutral ways. Thus, these exploitative tenant-landlord relationships should be understood not as purely economic in nature, but also racialized so that the ability to reinforce the social categories of "tenant" and "landlord" and enable exploitation also reinforces White wealth accumulation and propertied power. In theorizing about the development of capitalism in Western societies and defining racial capitalism, Robinson stated in his foundational work that the "development, organization, and expansion of capitalist society pursued essentially racial directions ... As a material force, then, it could be expected that racialism would inevitably permeate the social structures emergent from capitalism" (Robinson 1983:2). Racial capitalism contextualizes these unequal transactional and exploitative relationships within a rental market that is defined by a capitalist structure developed in "racial directions" (Robinson 1983:2). Dantzler (2021) further extends the racial capitalism framework to urban processes and housing by focusing on how dispossession and displacement serve as forms of capitalist production that operate to create "social separateness and differentiation" (121) through processes including segregation and eviction or foreclosure that disproportionately impact Black renters' (and homeowners) housing opportunities, limit their property rights, and enable capital extraction from both "people and places" (124).

In one application of racial capitalism to the rental market, Bonds (2019) sought to draw out the relationship between property and the carceral state by using this theory to understand the "centrality" (Bonds 2019:576) of property within systems of racialized and gendered oppression. She states, "Property is reproduced through racialized and gendered social relations, enshrined in capitalist markets..." (Bonds 2019:577) and describes the reproduction of White propertied power by defining how the racialized housing crisis reinforces the carceral state by denying Black communities access to stable housing and neighborhoods and then criminalizing these same communities. More directly related to the questions at hand, in conceptualizing the "racial wage" and explaining how racism creates unequal markets and racial disparities in affordability, Robinson (2021) compares homeownership and renter rates between White and Black households and describes the overrepresentation of racialized minorities among renters as a form of "structural confinement" (Robinson 2021:322) driven by racism as it manifests through racial segregation and exclusion from housing markets that favor White elites. This very confinement, enclosed by social, cultural, economic, and spatial boundaries, not only permits White and elite opportunity hoarding, but also creates the conditions for racialized, gendered, and class exploitation of lowincome renters (Massey 2007). At a macro-level, these dynamics also hold implications for the racial wealth gap, as Robinson (2021) points out that renters bear heavier costs than homeowners and carry most of the housing cost burden.

Bringing forth the role of residential segregation

The present study adds more to this conversation by incorporating Massey's (2007) explanation of segregation as a mechanism for not only opportunity-hoarding but also exploitation, the two essential elements of social inequality according to Tilly (1998). This study specifically focuses on exploitation found in landlord-tenant relationships (Desmond and Wilmers 2019). This is not a new idea in housing research on rental markets, as Desmond (2016) incorporates the role of segregation in his ethnographic study of Milwaukee and describes how urban ghettos in the early twentieth century combined with institutionalized racism in the form of racial covenants and other *de jure* segregation tactics turned Black migrants to the north into a "captive tenant base" (Desmond 2016:251) for landlords who could neglect unit repairs and yield greater profits. But what remains to be understood is how central the role of segregation is in maintaining and reproducing relational inequalities by enabling racial capitalist processes in the rental market.

Residential segregation is a heavily studied social phenomenon and there is no shortage of literature that describes patterns of segregation, explains the causes and consequences of segregation, and predicts trajectories of segregation outcomes (Charles 2003). The underlying explanations for why residential segregation persists in the literature continue to point to ongoing discrimination and structural racism, individual preferences about who to live among, and group differences in socioeconomic and cultural characteristics (Charles 2003; Crowder and Krysan 2016; Massey and Denton 1993). Additionally, Krysan and Crowder (2017) point to the role of stratified information networks that affect the different choices that households make about what neighborhoods to look at for housing. The extensive research studies on immediate and long-term consequences of residential segregation find that racialized minorities and poor families who live in segregated neighborhoods are less likely to have access to resources and opportunities that

can affect their health, economic well-being, education, exposure to crime, and intergenerational wealth (Charles 2003; Galster 1979; Laster Pirtle, 2020; Sharkey 2013; Sharkey and Faber 2014).

Yet in understanding the social conditions that foster and reproduce inequality, Massey and Denton (1993) once referred to residential segregation as the "forgotten factor" (1993:16). Massey revisited this point nearly thirty years later when he wrote that "residential segregation acts as a kind of spatial glue" that maintains, reproduces, and strengthens inequality (Massey 2020:1). While the intensity of residential segregation has waned over the past half-century, Black households remain the most segregated from White households at moderate to high levels in most metropolitan areas, and in many areas Latinx households are also experiencing moderate levels of segregation that are holding more stable than one might expect for such a demographically dynamic and diverse population (Frey 2018; Iceland, Weinberg, and Steinmetz 2002; Massey 2020; Iceland, Weinberg, and Hughes 2014).

There is reason to argue that these persistent levels of racial residential segregation are not leftover artifacts from a time before fair housing laws and changing social norms, but rather actively maintained structural features of the social landscape that are necessary to uphold systems of racist oppression and exploitation (Massey 2020). Keeanga-Yamahtta Taylor drew out this connection between segregation and racist exploitation in housing markets when she wrote that "the impulse toward economic exploitation and residential segregation ensued because of the ways that racial discrimination continued to add value to racially exclusive suburbs" (Taylor 2017:7). In the rental market, ongoing housing discrimination tactics from relying on personally held stereotypes to using algorithms continue to limit the residential options of Black, Latinx, and lowincome renters (Rosen, Garboden, and Cossyleon 2021), sending them to the neighborhoods where they are potentially at greater risk of rent exploitation (Desmond 2012, 2016; Desmond and Wilmers 2019). Landlords also play a role in segregating families on housing assistance by recruiting and choosing voucher holders according to units they have available where voucher recipients will be more profitable tenants (Rosen 2014).

There is also evidence that segregation may be a factor in where evictions are more likely to occur. Rutan and Desmond (2021) found in their study of three metropolitan areas that the same neighborhoods contribute disproportionately to the eviction rate in the area repeatedly over time in a "durable" (76) pattern and evictions occurred more frequently in high poverty neighborhoods, although this pattern was largely driven by a few building owners who frequently evicted their tenants. This aspect, too, can be understood through racial capitalism because as Desmond (2016) argues, evictions are yet another mechanism for generating a profit, particularly for landlords who manage slum properties.

Given the direction of recent research on rental markets and eviction, which often incorporates discussion of neighborhood contexts and residential segregation, it is clear that we need to better understand the role of racial residential segregation in exacerbating housing inequalities and facilitating exploitation within rental markets. Furthermore, an analysis of the rental housing market that does not factor in the role of racial capitalism would be missing an essential defining feature of capitalist organizations in the United States (Jenkins and Leroy 2021). The goal of the present study is to draw these elements into the literature on the inequalities of housing affordability and displacement and better understand how residential segregation supports racial capitalism in the rental market, where relational inequalities advantage property owners while exploiting Black and Latinx renters and renters living below the poverty line.

Hypotheses, data, and methods

Conceptual and operational definitions of rent exploitation

As a conceptual definition, the term "rent exploitation" has been variously defined as the extent to which tenants are overcharged relative to the value and cost of the property, including the cost of property taxes, mortgage payments, property maintenance, and the unforeseen risks of renting out a property (Desmond and Wilmers 2019), and furthermore the extent to which tenants pay more in housing costs compared to owners dwelling in similar housing units (Weaver and Knight 2020). At the root of it, researchers have deployed this concept to capture how susceptible tenants are to exploitation in the housing market compared to owners through paying relatively higher housing costs. Operationalizing rent exploitation is challenging for a number of reasons. First, a comprehensive database that includes both contract rent and assessed property value for a single property would be needed to directly compare rents to property values. These data exist nationally in restricted-use environments and may be available publicly for specific communities, but neither are feasible for this study. Therefore, a more indirect measure of rent exploitation must be developed.

Second, other costs that owners incur and anticipate including the cost of upkeep and unfore-seen risks are not as well documented as property values and taxes. In their discussion on how to define rent exploitation, Desmond and Wilmers (2019) are cautious about this point. They explain that while they define exploitation as when rents are a higher proportion of the property value (formulated as a simple ratio), this does not automatically imply that landlords are turning a greater profit. Thus, this definition of exploitation centers the costs borne by the tenants rather than the profits accrued for the landlord. Desmond and Wilmers' (2019) definition informs the measure of exploitation used in this study, where rents across neighborhoods are analyzed in relation to levels of property taxes across neighborhoods by expressing it as a ratio.

This measure does not account for variations in landlord costs across neighborhoods, but rather focuses on the greater relative costs that tenants may face in neighborhoods with lower property values where they might otherwise expect lower housing costs (either due to the landlord extracting greater profits or putting more of the cost of ownership and upkeep on the tenant, or both). Another limitation of this measure is that it does not factor in the competing role of racial discrimination in property values, which may be depressing property values in Black and Latinx neighborhoods at the same time that racism is operating through the rental housing market to inflate rents. With these limitations, I will exercise caution in drawing conclusions about the associations I may find in the ensuing analyses and to what extent they support the theories that frame this study.

Hypotheses

To address the central research questions of this study, I present the following hypotheses about the relationships between rent exploitation, neighborhood composition, and residential segregation:

H1_a: Rent exploitation (i.e., the ratio of median rent to median property taxes paid) at the neighborhood level will vary depending on the racial and socioeconomic composition of the neighborhood.

H1_b: The level and variation of rent exploitation at the neighborhood level is affected by the level of residential segregation in the larger area (i.e., metropolitan or micropolitan area)

H2_a: Median rent burden at the neighborhood level is affected by the level of rent exploitation, with neighborhoods having higher rent burden when levels of rent exploitation are higher.

H2_b: The level and variation of rent burden at the neighborhood level is affected by the level of residential segregation in the larger area.

Additionally, I present a third set of hypotheses regarding the relationship between evictions, rent exploitation, and neighborhood composition:



H3: Eviction rates are positively correlated with levels of rent exploitation and rent burden at the neighborhood level.

H3_b: Eviction rates are related to the racial and socioeconomic composition of the neighborhood, with eviction rates being higher in poorer neighborhoods and Black and Latinx neighborhoods.

Analysis plan for Hypotheses 1a and 1b

For the first two sets of hypotheses, I draw from the 2019 American Community Survey 5-year estimates summarized at the census tract level. The American Community Survey (ACS) is an annual household survey conducted by the U.S. Census Bureau on an approximately 1% sample of the U.S. population and is pooled over and up to 5 years of data to produce a 5% sample. The survey asks both person- and household-based questions that collect demographic and socioeconomic information in addition to information about the housing unit. Some of the variables drawn from the ACS for these analyses include median renter costs, median property taxes paid on owner-occupied units, racial and ethnic composition, median household income, poverty rates, the percentage of renter-occupied units, and the median age of the housing units. The units of observation are census tracts nested within core-based statistical areas (CBSAs), which include metropolitan and micropolitan areas. A CBSA is constructed using county boundaries and must have a minimum urban core population of 10,000. Census tracts where less than 10% of the households are renter-occupied are excluded from analyses. Linear regression is used for all analyses and standard errors are clustered to account for census tracts being nested within CBSAs when appropriate.

The dependent variable for the first set of hypotheses is constructed by calculating the ratio of median renter costs (median gross rent) among renter-occupied units to median property taxes paid among owner-occupied units in each census tract, which I at times refer to as rent exploitation. While the ACS data does not permit a direct comparison of rent paid to property taxes paid on the same unit, the measure that is used here can still support an effective comparative analysis, where renter costs are compared across neighborhoods based on what owners in those neighborhoods typically pay in property taxes, which serves as an indicator of typical property values in the neighborhood. Tract-level covariates in these analyses include percent Black, percent Latinx, percent below the poverty line, and median household income. The models also control for median age of the housing units, percent owner-occupied units with a mortgage, percent renter-occupied units, and population size.

To understand the role of segregation in shaping disparities in levels of rent exploitation, I incorporate a measure of White-Black residential segregation known as the separation index as a level-2 variable with random effects. The separation index is a measure of evenness, which is defined as the condition when all census tracts in a given area (i.e., a city or a metropolitan area) "have the same relative number of minority and majority members as the city as a whole" (Massey and Denton 1988:284). Specifically, the separation index can be understood as a pairwise measure of group disparity in a residential outcome (Fossett 2017). Using the example of White-Black segregation, one would calculate the proportion White in the census tract for each White resident and again for each Black resident where only the two groups in question are included in the denominator (hence why it is referred to as a "pairwise" measure).

The difference in average neighborhood proportion White between the two groups is the separation index, which is ultimately a measure of racial group disparity in residential contact with White residents that ranges from 0 to 100 (when scaled). A high separation index score would indicate that this disparity is large and therefore the area is more racially segregated, where a score of 100 would be interpreted as a completely segregated area where Black residents live in neighborhoods with absolutely no White residents and White residents live in neighborhoods with only White residents. The separation index score is constructed using 2010 decennial census block-level data, capturing very fine-grained levels of segregation.

Analysis plan for Hypotheses 2a and 2b

The dependent variable for the second set of hypotheses is a measure of rent burden constructed by the U.S. Census Bureau and released in the summary file data. Rent burden is calculated as gross rent as a percentage of household income among renters and is summarized as the median gross rent as a percentage of household income in the census tract. This measure represents both housing affordability and the level of financial precarity that renters experience, as a higher level of rent burden means that households have fewer financial resources for other expenses and are at greater risk of missing rent. Independent variables include the median rent to median property tax ratio, percent Black, percent Latinx, percent below the poverty level, and median household income. In addition, median age of the housing units, percent owner-occupied units with a mortgage, percent renter-occupied units, and population size are again included as control variables and the level of residential segregation is included as a level-2 variable with random effects.

Analysis plan for Hypotheses 3a and 3b

For the third set of hypotheses on eviction and rent exploitation, I conduct a case study of Harris County, TX, which includes the major U.S. city of Houston, TX. I draw from data on evictions in Harris County in 2015 provided by Eviction Lab (Desmond et al. 2018). These records were aggregated to the census tract level by Eviction Lab to calculate neighborhood eviction rates. I merged these data with American Community Survey 5-year estimates to introduce neighborhood characteristics as covariates. The eviction rate, which is the dependent variable in these analyses, is calculated as the percentage of renters who were formally evicted in a census tract, with the estimate of renters in the census tract drawn from the American Community Survey. Independent variables included are the median rent to median tax ratio, median rent burden, percent Black, percent Latinx, percent of households below the poverty line, and median income. In these models, I again control for the median age of the housing units, the percent of households that are renter-occupied, the percent of owner-occupied households with a mortgage, and the size of the population.

In addition to modeling the effects of various neighborhood characteristics and experiences with housing costs and affordability on the eviction rates across census tracts in Harris County, I use GIS mapping to visualize overlapping dynamics. The greater Houston metropolitan area is highly segregated with a White-Black separation index score of 65.9 based on 2010 census data, which makes GIS useful for understanding how spatial boundaries in a segregated area can isolate marginalized communities and make them vulnerable to compounding disadvantages through opportunity hoarding and exploitation that benefits the neighborhoods where those who draw out advantages from these relationships are more likely to live. The census tract boundaries are created using the census tract shapefiles from NHGIS and they are joined with ACS data and Harris County eviction data summarized at the census tract level (Manson et al. 2021).

Accounting for spatial autocorrelation

As with any study that focuses on neighborhood effects where neighborhoods are defined by largely artificial boundaries, the question of spatial autocorrelation must be addressed. Spatial autocorrelation refers to statistically dependency across areas, which would mean that each area

contains information about itself and also the areas around it. This can become a problem when the boundaries drawn around areas are not necessarily socially meaningful (such as census tract boundaries). This issue bears important implications for how we interpret the effects and error terms of a neighborhood's characteristics on the same neighborhood's outcomes, as these effects are also potentially correlated with the effects of surrounding neighborhoods, which would violate the statistical assumption that observations are independent of one another. When there is some degree of segregation occurring in a metropolitan area, one can expect that neighborhood characteristics such as race, poverty, and housing costs will bear non-trivial similarities to surrounding neighborhoods.

A straightforward way to test for spatial autocorrelation is to merge the analysis data with spatial information on each neighborhood, generate a spatial contiguity weight matrix to identify the immediate neighboring census tracts of each census tract, and calculate a Moran's test for residual correlation after estimating each regression model described above. Because of the extensive computational resources needed to create the spatial contiguity weight matrix, I conduct this exercise only on a subsample of the 50 largest metropolitan areas in the analysis. The null hypothesis of this test is that the error terms are spatially independent. If the residuals are spatially dependent, then it would be necessary to estimate a spatial autoregressive model that incorporates spatial lags on the parameters of the model, allowing information from contiguous census tracts to affect what occurs in the focal census tract (known as "spillover" effects). For each set of hypotheses, the error terms were found to be correlated across areas and therefore spatial autoregressive models will also be estimated with spatial lags on the error term and dependent variable. These spatial autoregressive models are estimated using Stata 17's spregress procedure, specified with a generalized spatial two-stage least-squares estimator.

Results

Summary of rent exploitation, rent burden, and neighborhood characteristics

In Table 1, I present descriptive statistics for census tracts included in the analysis, which are census tracts within CBSAs where at least 10% of the households are renters. Overall there are 58,775 census tracts nested within 960 metropolitan and micropolitan statistical areas. In the typical census tract, 40% of the households are renters and in half of the census tracts 35% or less of the occupied housing units are occupied by renters. On average the median level of rent burden is 30.6 which means that the typical neighborhood is rent-burdened overall. However, only 1% of the census tracts have a median rent burden that would be classified as severe rent burden (over 50% of household income spent on housing costs). Rent exploitation, measured as the ratio of median rent to median property taxes of owner-occupied units, ranges from 3.2 at the 25th percentile to 7.0 at the 75th percentile with a median value of 4.7. To contextualize these findings, I also summarize rent exploitation for neighborhoods that are majority Black, neighborhoods where 15% or more of the households are below the poverty line, and neighborhoods where both conditions apply. Rent exploitation is higher at the mean and median for these neighborhoods with

Table 1. Descriptive statistics on renting, rent exploitation, and rent burden, census tracts.

Characteristic of census tracts	Mean	SD	25th percentile	50th percentile	75th percentile
Percent renters	39.7	21.1	21.0	35.6	54.2
Median rent burden	30.6	7.4	25.4	29.5	34.5
Median rent exploitation (all tracts)	5.8	4.2	3.2	4.7	7.0
Median rent exploitation (majority Black tracts)	8.1	6.0	4.4	6.4	9.8
Median rent exploitation (tracts where poverty >15%)	7.0	5.1	3.8	5.7	8.5
Median rent exploitation (majority Black tracts where poverty >15%)	8.7	6.3	4.7	6.9	10.8

Table 2. Nested linear regression models of median rent to median tax ratio.

		(1)			(2)			
Variable	b	SE	95% CI	b	SE	95% CI		
% Black	0.026***	0.007	(0.013, 0.039)	0.035***	0.007	(0.022, 0.048)		
% Latinx	0.001	0.006	(-0.010, 0.013)	0.009	0.005	(-0.002, 0.019)		
% below poverty line	0.007	0.007	(-0.007, 0.021)	0.016*	0.007	(0.001, 0.030)		
Median household income	-0.033***	0.003	(-0.039, -0.026)	-0.025***	0.003	(-0.031, -0.018)		
Median housing unit age				0.001***	0.000	(0.000, 0.001)		
% renters				-0.019***	0.003	(-0.025, -0.013)		
% owner-occupied w/ mortgage				-0.050***	0.006	(-0.063, -0.038)		
(In) Total population				0.207*	0.101	(0.008, 0.405)		
Constant	7.345*	0.338	(6.681, 8.009)	7.330***	0.895	(5.574, 9.085)		
N (census tracts)	58, 775			58,775				

Note: * = p < .05; *** = p < .001.

wider dispersion and higher values at the 75th percentile, suggesting that majority Black neighborhoods and neighborhoods with higher poverty experience more rent exploitation.

Rent exploitation, neighborhoods, and segregation

Table 2 shows nested linear regression models with clustered standard errors that test the statistical effects of neighborhood characteristics on the median rent to median property tax ratio across census tracts. Without any controls included in the model I find that percent Black is a significant and positive predictor of rent exploitation (i.e., the median rent to median property tax ratio) in the neighborhood, while median household income is negatively associated with rent exploitation. After introducing control variables, which include the median age of the housing units, the percent of renters, the percent of owner-occupied units with a mortgage, and population size, these variables remain significant predictors while percent below the poverty line also becomes a significant and positive predictor. The effect size of percent Black is larger in the full model, where each percentage point increase in percent Black increases the median rent to median property tax ratio by 0.04. This effect is larger than the effect of percent in poverty which increases the median rent to median property tax ratio by 0.02. Median household income also has a notably larger effect on levels of rent exploitation, reducing the median rent to median property tax ratio by 0.02. Overall it is clear that percent Black and percent in poverty are significant predictors of higher neighborhood-level rent exploitation.

All control variables also have interesting and significant effects on rent exploitation. For instance, the median age of the housing units in the neighborhood is a positive predictor of the median rent to median tax ratio, suggesting that renters pay more compared to the typical property value in older neighborhoods. Older homes will most likely require more maintenance which could account for higher relative rents, but this does not discount the potential for landlords to turn a profit, as Desmond and Wilmers (2019) found that landlords who owned properties in poorer neighborhoods yielded greater returns even after accounting for maintenance costs and other expenses. The percent owner-occupied homes with a mortgage is a negative predictor of rent exploitation, which works in tandem with other socioeconomic predictors given that housing units in poorer neighborhoods where median rent to median tax ratios are higher have lower assessed values and are more likely to be owned without a mortgage (Desmond and Wilmers 2019).

To account for the role of spatial autocorrelation, or the extent to which there are correlated errors and effects across neighborhood boundaries, I estimate the full model using spatial autoregression with lags on the dependent variable and the error term on a subset of the 50 largest metropolitan areas in Table 3. From this model there are two notable findings. First, all independent variables of interest have significant direct effects on the median rent to median tax

Table 3. Spatial autoregression analysis of median rent to median tax ratio (N = 31,662).

Average impacts	dy/dx	SE	95% CI
Direct impacts			
% Black	0.023***	0.001	(0.020, 0.025)
% Latinx	0.020***	0.001	(0.018, 0.023)
% below poverty line	-0.009**	0.003	(-0.015, -0.003)
Median household income	-0.012***	0.001	(-0.014, -0.011)
Median housing unit age	0.0002***	0.00003	(0.0001, 0.0003)
% renters	-0.010***	0.001	(-0.012, -0.008)
% owner-occupied w/ mortgage	-0.044***	0.002	(-0.047, -0.041)
(In) Total population	-0.049	0.039	(-0.126, 0.028)
Indirect Impacts			
% Black	0.0010***	0.0002	(0.0005, 0.0015)
% Latinx	0.0009***	0.0002	(0.0005, 0.0014)
% below poverty line	-0.0004**	0.0002	(-0.0007, -0.0001)
Median household income	-0.0006***	0.0001	(-0.0008, -0.0003)
Median housing unit age	0.00009**	0.000003	(0.000004, 0.000014)
% renters	-0.0005***	0.0001	(-0.0007, -0.0002)
% owner-occupied w/ mortgage	-0.0020***	0.0005	(-0.0030, -0.0010)
(ln) Total population	-0.0022	0.0019	(-0.0060, 0.0016)

Note: ** = p < .01; *** = p < .001.

Table 4. Mixed effects linear regression model of median rent to median tax ratio with random effects.

Variable	b	SE	95% CI
% Black	0.031***	0.001	(0.030, 0.033)
% Latinx	0.024***	0.001	(0.022, 0.026)
% below poverty line	0.008***	0.002	(0.004, 0.012)
Median household income	-0.013***	0.001	(-0.014, -0.011)
Median housing unit age	-0.000	0.000	(-0.000, 0.000)
% renters	-0.011***	0.001	(-0.013, -0.010)
% owner-occupied w/ mortgage	-0.054***	0.001	(-0.057, -0.052)
(In) Total population	-0.019	0.028	(-0.075, 0.036)
Constant	9.748***	0.254	(9.251, 10.245)
N (census tracts)	58, 775		
Random-effects parameters	Estimate	SE	95% CI
Separation index	0.004***	0.0005	(0.003, 0.005)
Constant	4.934	0.346	(4.301, 5.660)
N (CBSAs)	960		

Note: *** = p < .001.

ratio. Second, all these variables have significant indirect effects as well through the spillover effects of the median rent to median tax ratio, which refers to how the level of rent exploitation in one census tract affects levels of rent exploitation in neighboring (i.e., contiguous) census tracts. These indirect effects operate in the same direction as the direct effects to influence the median rent to median tax ratio, which in turn influences the median rent to median tax ratio in neighboring census tracts. However, the indirect effects are extremely small to be nearly zero, despite being statistically significant from zero. Nonetheless these findings hint at the need to consider residential segregation as a factor.

To test the second hypothesis about rent exploitation, which addresses the role of residential segregation as a mechanism of rent exploitation, I use a mixed effects linear model on the full sample that allows random effects for the level of White-Black segregation across the larger areas that census tracts are nested within (i.e., MSAs). In Table 4, I find that rent exploitation increases in neighborhoods as White-Black segregation increases, with significant random effects. In other words, the more segregated Black households are from White households, the more rent exploitation there is likely to be. Given the other effects that come through in this model, it is clear which neighborhoods bear the brunt of this relationship-predominately Black, Latinx, and poorer neighborhoods.

Table 5. Linear regression model of standard deviation rent exploitation within CBSAs.

Variable	b	SE	95% CI
% Black	0.013*	0.007	(-0.000, 0.026)
% Latinx	0.008**	0.003	(0.002, 0.015)
% below poverty line	0.038**	0.004	(0.015, 0.062)
Separation index	0.023***	0.004	(0.015, 0.030)
Constant	0.911***	0.171	(0.576, 1.246)
N (CBSAs)	960		

Note: * = p < .05; ** = p < .01, *** = p < .001.

Another way to understand the role of segregation in shaping patterns of rent exploitation is to frame it as a way to maintain and reproduce inequality. If median rent to median tax ratios are high everywhere in a more segregated MSA, we might not be able to conclude that segregation is a mechanism for inequality in this scenario because neighborhoods are uniformly experiencing inflated housing costs. However, as Massey (2007) argues, segregation is a key element to making inequality *durable* by enabling opportunity hoarding and exploitation across spatial boundaries, and therefore we should suspect that levels of rent exploitation are distributed more unequally in more segregated areas.

To explore this question, Table 5 presents a simple linear regression model where now the units of analysis are MSAs and the dependent variable is the standard deviation of the mean level of rent exploitation across census tracts within the MSA. The predictors in the model are percent Black, percent Latinx, and percent below the poverty line at the MSA-level in addition to the level of White-Black segregation in the MSA. The model results show that levels of rent exploitation are more varied across neighborhoods in MSAs with larger shares of Black and Latinx residents and higher levels of poverty, with percent in poverty having the largest effect and percent Black having the third largest effect. More importantly for the question at hand, levels of rent exploitation are more varied across neighborhoods as White-Black segregation increases, with the standard deviation increasing by 0.02 which is comparable to the effects of percent Black and percent poverty given that the separation index is also on a scale of 1–100. With the previous models suggesting that Black, Latinx, and poorer neighborhoods bear the highest levels of rent exploitation, this disparity can be expected to intensify in more segregated areas.

Rent burden, rent exploitation, and segregation

The second set of hypotheses address the question of rent burden and specifically how rent exploitation relates to unsustainable housing costs. Table 6 presents nested linear regression models where the unit of observation is the census tract, the dependent variable is the median rent burden in the census tract, and the independent variables are the level of rent exploitation in the census tract in addition to other neighborhood characteristics. The same control variables are used here as in the previous analyses, which include the median age of the housing units and the percent of renters in the neighborhood, among other variables. Finally, the model again estimates clustered standard errors to account for census tracts being nested within core-based statistical areas.

In the first model, rent exploitation is a significant and positive predictor of rent burden, which means that, without considering other explanatory factors, households typically spend more of their income on rent in neighborhoods where their rent is higher relative to the typical property taxes paid compared to households in other neighborhoods. After introducing racial and socioeconomic characteristics of the neighborhood, rent exploitation is no longer a significant predictor of rent burden. Instead, percent Black, percent Latinx, and the percent of households living below the poverty line are all significant and positive predictors of levels of rent burden in the neighborhood. These effects hold after including control variables, while the effect of rent

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Table 6.

		(1)			(2)			(3)	
	q	SE	95% CI	q	SE	95% CI	q	SE	95% CI
Median rent to median tax ratio	0.200***	0.038	(0.126, 0.275)	-0.001	0.026	(-0.052, 0.050)	0.008	0.027	(-0.045, 0.062)
% Black				0.049	0.004	(0.042, 0.057)	0.048	0.004	(0.039, 0.056)
% Latinx				0.053	0.008	(0.037, 0.069)	0.053	0.008	(0.038, 0.068)
% below poverty line				0.235	0.010	(0.215, 0.254)	0.280^{***}	0.011	(0.259, 0.301)
Median household income				0.004	0.005	(-0.007, 0.014)	-0.003	0.004	(-0.012, 0.005)
Median housing unit age							0.000	0.000	(-0.000, 0.000)
% renters							-0.028***	0.005	(-0.037, -0.018)
% owner-occupied w/mortgage							0.049	0.00	(0.031, 0.066)
(In) Total population							0.041	0.137	(-0.228, 0.310)
Constant	29.47	0.399	(28.68, 30.25)	25.290***	0.560	(24.19, 26.39)	22.58***	1.586	(19.46, 25.69)
N (census tracts)	58,775			58,775			58,775		
*** **********************************									

Table 7. Spatial autoregression analysis of rent burden across census tracts (N = 31,650).

Average impacts	dy/dx	SE	95% CI
Direct impacts			
Median rent to median tax ratio	0.046***	0.012	(0.021, 0.070)
% Black	0.026***	0.003	(0.020, 0.031)
% Latinx	0.042***	0.002	(0.037, 0.047)
% below poverty line	0.265***	0.007	(0.252, 0.279)
Median household income	-0.037***	0.002	(-0.041, -0.034)
Median housing unit age	0.000	0.000	(-0.000, 0.000)
% renters	-0.061***	0.002	(-0.066, -0.056)
% owner-occupied w/mortgage	0.013***	0.003	(0.006, 0.020)
(In) Total population	0.178*	0.090	(0.002, 0.354)
Indirect impacts			

All average indirect impacts were reported as 0 and not statistically significant from 0.

Note: * = p < .05; *** = p < .001.

Table 8. Mixed effects linear regression model of rent burden with random effects.

Variable	b	SE	95% CI
Median rent to median tax ratio	0.048***	0.008	(0.031, 0.064)
% Black	0.024***	0.002	(0.021, 0.028)
% Latinx	-0.007***	0.002	(-0.011, -0.004)
% households below poverty line	0.303***	0.004	(0.295, 0.311)
Median household income	-0.060***	0.002	(-0.063, -0.057)
Median housing unit age	0.0001*	0.000	(0.0000, 0.0002)
% renters	-0.071***	0.002	(-0.074, -0.068)
% owner-occupied w/ mortgage	0.034***	0.002	(0.030, 0.039)
(In) Total population	0.334***	0.059	(0.219, 0.448)
Constant	24.462***	0.508	(23.465, 25.458)
N (census tracts)	58, 775		
Random-effects parameters	Estimate	SE	95% CI
Separation index	0.001	0.0004	(0.0002, 0.0024)
Constant	8.100	0.602	(7.002, 9.370)
N (CBSAs)	960		

Note: * = p < .05; *** = p < .001.

exploitation remains statistically insignificant. It is possible to situate this finding in a racial capitalism framework and conclude that race and poverty are mediating factors that explain the relationship between rent burden and rent exploitation. The effects of percent Black and percent Latinx are roughly equal in size, while the effect of percent in poverty is fully five times larger than the effect of percent Black or percent Latinx, illustrating the obvious relationship between limited financial resources and financial distress.

Here again I conduct an exercise on a subsample of the 50 largest metropolitan areas to account for the role of spatial autocorrelation using spatial autoregression with spatial lags on the dependent variable and the error term, allowing the parameters of neighboring census tracts to have indirect effects on the outcomes of the focal census tract. In Table 7, I find that all the primary independent variables of interest have significant direct effects in the same direction with similar effect sizes as before. Interestingly, the direct effect of rent exploitation is also statistically significant in this subset analysis whereas it was not significant in the aspatial regression analysis with the full set of areas. Changes in the median rent to median tax ratio result in a 0.05% increase in rent burden for the census tract. While direct effects remain significant, the indirect effects of the independent variables on rent burden through how they influence the spillover effect of rent burden in neighboring tracts are all zero and not statistically significant from zero.

Next, I address the second hypothesis about rent burden, which is how residential segregation affects housing affordability. In Table 8, I present a mixed effects linear regression model which includes the full set of tract-level predictors in addition to the level of White-Black segregation with random effects as a level-2 predictor at the MSA-level. In this model, rent exploitation is

Table 9. Linear regression model of standard deviation in rent burden within CBSAs.

Variable	b	SE	95% CI
% Black	-0.008	0.008	(-0.023, 0.007)
% Latinx	-0.001	0.004	(-0.008, 0.007)
% below poverty line	0.075***	0.013	(0.049, 0.102)
Separation index	0.027***	0.004	(0.019, 0.036)
Constant	4.925	0.192	(4.549, 5.301)
N (CBSAs)	960		

Note: *** = p < .001.

again a significant and positive predictor of rent burden in addition to percent Black and the percent of households below the poverty line. White-Black segregation does not have a significant effect on rent burden overall, which seems consistent with the insignificant indirect effects found in the spatial analysis. However, similar to how I addressed the previous set of hypotheses, I also analyze more directly how segregation enables inequalities—here in terms of how communities may not be equally impacted by rent burden.

Thus in Table 9, I present a linear regression where the units of observations are MSAs, the dependent variable is the standard deviation of rent burden across the census tracts within the MSA, and the independent variables are percent Black, percent Latinx, the percent of households below the poverty line, and the level of White-Black segregation in the MSA. In this model, both the percent of households below the poverty line and the level of White-Black segregation in the MSA significantly increase the variation in rent burden across census tracts within the MSA. Increases in the separation index also increase the standard deviation by 0.03, while increases in poverty have a larger effect on the standard deviation with an increase of 0.08. These results indicate that once again residential segregation increases disparities in housing cost burden, which more likely has a greater impact on predominately Black, Latinx, and poorer communities based on the previous models.

Case study: evictions, rent exploitation, and rent burden

With these last analyses I test the third and final set of hypotheses, which address the relationship between rent exploitation, rent burden, and eviction rates using Harris County, TX as a case study. Harris County includes the city of Houston, which is the fourth largest city in the United States with a population of 2.3 million as of the 2020 census. The county overall, and Houston in particular, has incredible racial and ethnic diversity. Of the estimated 4.7 million individuals living in Harris County in 2015-2019, 29% were non-Hispanic White, 18.5% were non-Hispanic Black, 7% were non-Hispanic Asian, and 43% were Hispanic/Latinx. An estimated 45% of households in Harris County are renters and an estimated 47% of renters are rent-burdened (American Community Survey 2019 5-year estimates). According to the National Low Income Housing Coalition's 2021 Out of Reach report, the hourly wage needed to afford a two-bedroom unit at fair market rent in Harris County is \$22.62, while the minimum hourly wage in Texas is only \$7.25. According to Eviction Lab, Harris County had an eviction rate of 3.6% in 2015, which amounted to 25,496 evictions in a single year (Eviction Lab 2018). Finally, the Houston Metropolitan Area overall, which includes Harris County, has a separation index of 54 for White-Black segregation in 2010, which would be categorized as high segregation (Fossett 2017). Harris County serves as an ideal case study for understanding how the dynamics of rent exploitation, rent burden, and residential segregation have disparate impacts on neighborhood eviction rates (Table 10).

In Table 11, I present nested linear regression models where the units of observation are census tracts in Harris County, the dependent variable is the tract-level eviction rate, and the independent variables are characteristics of the census tract including the median rent to median tax

Table 10. Descriptive statistics of census tracts in Harris County, TX (N = 698).

Variable	Mean	SD
Percent renters	46.9	21.9
Median rent burden	31.1	6.9
Median rent exploitation (all tracts)	4.4	2.5
Percent Black	19.1	19.9
Percent Latinx	44.9	25.6
Percent White	28.0	23.9
Percent below the poverty line	16.5	10.6
Median household income	\$63537.6	32880.1

Table 11. Nested linear regression models of eviction rates in Harris County, TX.

		(1)		(2)			(3)		
	b	SE	95% CI	b	SE	95% CI	b	SE	95% CI
Median rent to median tax ratio	0.374***	0.052	(0.272, 0.477)	0.049	0.052	(-0.054, 0.151)	0.072	0.054	(-0.034, 0.179)
Median rent burden				-0.005	0.019	(-0.043, 0.033)	-0.028	0.020	(-0.067, 0.011)
% Black				0.094***	0.009	(0.077, 0.110)	0.087***	0.009	(0.070, 0.104)
% Latinx				0.025***	0.007	(0.011, 0.040)	0.016*	0.008	(0.0005, 0.031)
% households below poverty line				0.002	0.017	(-0.031, 0.035)	0.049**	0.020	(0.010, 0.088)
Median household income				-0.006	0.006	(-0.017, 0.006)	-0.017**	0.007	(-0.030, -0.004)
Median housing unit age							0.001	0.001	(-0.001, 0.002)
% renters							-0.024***	0.007	(-0.038, -0.011)
% owner-occupied w/mortgage							0.035***	0.010	(0.016, 0.054)
(In) Total population							-0.385	0.233	(-0.842, 0.072)
Constant	2.207***	0.265	(1.687, 2.278)	1.212	0.965	(-0.682, 3.106)	3.405	2.537	(-1.577, 8.387)
N (census tracts)	698			698			698		

Note: * = p < .05; ** = p < .01; *** = p < .001.

ratio, the median level of rent burden, percent Black, percent Latinx, percent of households below the poverty line, and median income. Only census tracts where at least 10% of the households are renter-occupied are included, leaving 698 census tracts in the analysis. Without any covariates in the model, rent exploitation is a significant and positive predictor of a neighborhood's eviction rate. However, this effect becomes insignificant after including other neighborhood characteristics, and only percent Black and percent Latinx show to be significant predictors of the eviction rate with percent Black having a much larger effect on the eviction rate than percent Latinx. It is quite possible that, as before, percent Black and percent Latinx are mediating the effects of rent exploitation as well as rent burden.

After introducing control variables, percent below the poverty line and median income become significant positive and negative predictors, respectively, of the eviction rate in the neighborhood. In the full model, percent Black has the largest effect compared to percent Latinx and percent below the poverty line, with percent below the poverty line having the second largest effect. These findings highlight the financial precarity of households at risk of eviction in addition to the limited financial resources of neighborhoods where evictions are more common. They also support the hypothesis that Black and Latinx households in particular are vulnerable to eviction. The relationship between evictions and rent exploitation is further illustrated and discussed later with GIS mapping.

Because of Harris County's level of segregation, spatial autocorrelation is likely an issue here as well. Indeed, a Moran's test reveals that there is statistical dependence between neighboring census tracts. Therefore, I also estimate a spatial autoregression model for Harris County with spatial lags on the dependent variable and the error term in Table 12. After accounting for these lag effects, I find no significant indirect effects. This means that changes to an eviction rate in a

Table 12. Spatial autoregression analysis of eviction rates in Harris County, TX (N = 698).

Average impacts	dy/dx	SE	95% CI
Direct impacts			
Median rent to median tax ratio	0.036	0.053	(-0.068, 0.140)
Median rent burden	-0.036	0.019	(-0.074, 0.002)
% Black	0.081***	0.010	(0.062, 0.100)
% Latinx	0.011	0.008	(-0.006, 0.027)
% households below poverty line	0.060**	0.020	(0.022, 0.099)
Median household income	-0.014*	0.007	(-0.027, -0.001)
Median housing unit age	0.001	0.001	(-0.001, 0.002)
% renters	-0.021**	0.007	(-0.035, -0.007)
% owner-occupied w/mortgage	0.032**	0.010	(0.012, 0.051)
(ln) Total population	-0.429	0.233	(-0.886, 0.028)
Indirect impacts			
Median rent to median tax ratio	0.005	0.008	(-0.010, 0.021)
Median rent burden	-0.005	0.004	(-0.013, 0.003)
% Black	0.011	0.006	(-0.001, 0.024)
% Latinx	0.001	0.001	(-0.001, 0.004)
% households below poverty line	0.008	0.006	(-0.003, 0.020)
Median household income	-0.002	0.001	(-0.005, 0.001)
Median housing unit age	0.000	0.000	(-0.000, 0.000)
% renters	-0.003	0.002	(-0.007, 0.001)
% owner-occupied w/mortgage	0.004	0.003	(-0.002, 0.010)
(ln) Total population	-0.060	0.052	(-0.162, 0.041)

Note: * = p < .05; ** = p < .01; *** = p < .001.

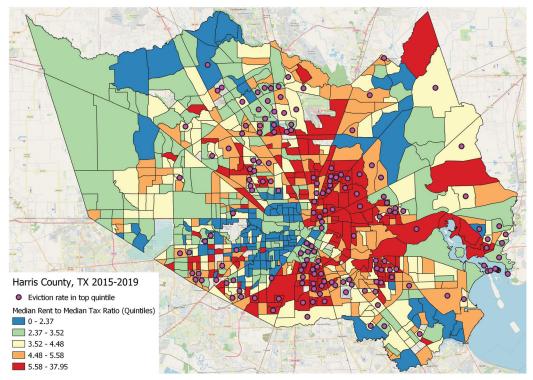


Figure 1. Median rent to median tax ratio and eviction rates, Harris County, TX, 2015.

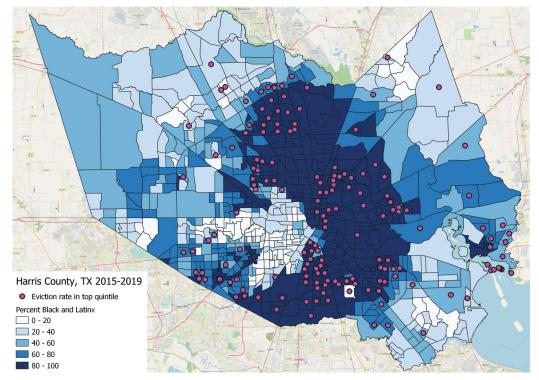


Figure 2. Percent Black and Latinx and eviction rates, Harris County, TX, 2015.

census tract brought on by characteristics of that census tract do not affect nearby census tracts. Meanwhile, percent Black, percent below the poverty line, median income, percent of renteroccupied units, and percent of owner-occupied units with mortgages have significant direct impacts. The direct and indirect impacts reported in Table 12 have straightforward interpretations, so that a percentage point increase in percent Black increases the eviction rate by 0.08%. Percent in poverty has a similarly sized direct impact with a percentage point increase in poverty increasing the eviction rate by 0.06%, while increases in median income reduce the eviction rate by 0.01%.

For this case study analysis, visualizations are especially helpful for understanding the overlapping dynamics of rent exploitation, eviction, and segregation in Harris County. I present GIS maps of percent Black and Latinx and the distribution of rent exploitation in Figures 1 and 2, with census tracts marked if they had eviction rates in the highest quintile. The patterns of racial segregation are immediately apparent, as is the fact that predominately Black and Latinx neighborhoods and neighborhoods with higher levels of rent exploitation, which visibly overlap, experience higher eviction rates. This is consistent with what I was able to conclude from the regression analyses and also supports the argument that percent Black and Latinx may be mediating the effect of rent exploitation. While there are many factors that affect the level of displacement in a neighborhood, what is clear from these maps is that the same neighborhoods in this moderately segregated metropolitan area that are more impacted by rent exploitation are also more impacted by eviction. These neighborhoods have more Black and Latinx households, showing a system of racial capitalism that shapes the rental market in this diverse county, with sometimes devastating consequences for families and neighborhoods.



Conclusions

The purpose of this study was to further develop our understanding of rent exploitation in rental markets and its association with consequences of housing cost burden and eviction through a relational inequality lens by applying a racial capitalism framework, with an emphasis on the role of racial residential segregation in facilitating exploitative practices that impact renters in predominately Black, Latinx, and poorer neighborhoods. With a national-level analysis, I found that rent exploitation, which focuses here on the elevated cost burden borne by tenants, is more likely to occur in neighborhoods where racially minoritized households reside. Higher levels of poverty were also associated with higher levels of rent exploitation, consistent with research done by Desmond and Wilmers (2019). Importantly, levels of White-Black segregation also increased rent exploitation at the neighborhood level. The role of residential segregation in specifically making rent exploitation more unequal across communities was highlighted as well, as I found that levels of rent exploitation were more varied across neighborhoods in more segregated metropolitan and micropolitan areas. Knowing that neighborhoods where racially minoritized households and households living below the poverty line predominate experience higher levels of rent exploitation in general, it can be concluded that residential segregation exacerbates these disparate impacts.

The question of rent exploitation is important for understanding the social structural dimensions of the rental market, where social categories are created and reinforced through exploitation and opportunity-hoarding and racial capitalism defines the market so that lowincome, racially minoritized households are held captive as renters and bear the brunt of this exploitation to the advantage of the property-owners. But to further understand what it means for the lives of those communities that are more exploited in the rental market, I also examined how rent exploitation affects rent burden and evictions, two grave and all too common issues experienced by low-income renters which can throw them into financial, physical, and social crisis. Ultimately, I found that neighborhoods with higher rent exploitation also had higher rent burden. Predominately Black and poorer neighborhoods also experienced higher levels of rent burden, and White-Black residential segregation increased the variation in levels of rent burden across neighborhoods. This again demonstrates how the rental market is shaped by racial capitalism, which is in turn facilitated by residential segregation that creates spatial boundaries that can reinforce relational inequalities which rely on exploitative processes (Massey 2007; Tomaskovic-Devey and Avent-Holt 2019).

A case study analysis of Harris County, TX further illustrated the relationship between rent exploitation and eviction rates. I found that eviction rates were higher in neighborhoods with higher percentages of Black and Latinx households and higher percentages of households below the poverty line. Despite not finding statistically significant relationships between rent exploitation or rent burden and evictions, GIS mapping showed that neighborhoods with higher percentages of Black and Latinx households also generally experienced more rent exploitation and were in the top quintile for eviction rates. The impact that these factors have on these neighborhoods very likely contributes to higher levels of poverty and rent burden, as evicted households bear tremendous financial burden from the cost of an eviction and often struggle to find decent, affordable housing elsewhere once they have an eviction on their tenant record (Desmond 2016).

There are certainly limitations to this study that bear mentioning. In particular, a precise measure of rent exploitation that would capture profits as well as cost burden was not used due to the lack of data on landlord costs. But ultimately, this empirical study contributes to our understanding of rental markets through the lens of relational inequality and racial capitalism by showing that this inequality is made more durable by residential segregation, which itself is the product of over a century of urban and suburban development infused with structural racism. Black, Latinx, and poorer renters in segregated areas are at greater risk of rent exploitation, rent burden, and eviction. These inequalities are reproduced and the advantages for property owners

are capitalized through rent exploitation of a segregated, "captive tenant base" (Desmond 2016:251), just as Du Bois observed over 120 years ago in urban Philadelphia in a much more conspicuous dual housing market (Du Bois [1899]1996). To understand and address the housing affordability crisis, we must contend with the empirical reality that racial capitalism complicates the notion that the rental market is freely competitive, or that housing affordability is only a matter of building more housing units, restructuring zoning laws, and raising wages. Structural racism, manifesting as residential segregation and rent exploitation, will undermine any efforts that do not recognize its centrality.

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References

Bonds, Anne. 2019. "Race and Ethnicity I: Property, Race, and the Carceral State." *Progress in Human Geography* 43 (3):574–83. doi:10.1177/0309132517751297.

Charles, Camille Zubrinsky. 2003. "The Dynamics of Racial Residential Segregation." *Annual Review of Sociology* 29 (1):167–207. doi:10.1146/annurev.soc.29.010202.100002.

Crowder, Kyle, and Maria Krysan. 2016. "Moving beyond the Big Three: A Call for New Approaches to Studying Racial Residential Segregation." City & Community 15 (1):18–22. doi:10.1111/cico.12148.

Dantzler, Prentiss. 2021. "The Urban Process under Racial Capitalism: Race, anti-Blackness, and Capital Accumulation." *Journal of Race, Ethnicity and the City* 2 (2):113–34. doi:10.1080/26884674.2021.1934201.

Desmond, Matthew. 2012. "Eviction and the Reproduction of Urban Poverty." *American Journal of Sociology* 118 (1):88–133. doi:10.1086/666082.

Desmond, Matthew. 2016. Evicted: Poverty and Profit in the American City. New York: Crown Publishers.

Desmond, Matthew, Ashley Gromis, Lavar Edmonds, James Hendrickson, Katie Krywokulski, Lillian Leung, and Adam Porton. 2018. Eviction Lab National Database: Version 1.0. Princeton University.

Desmond, Matthew, Weihau An, Richelle Winkler, and Thomas Ferriss. 2013. "Evicting Children." *Social Forces* 92 (1):303–27. doi:10.1093/sf/sot047.

Desmond, Matthew, and Monica Bell. 2015. "Housing, Poverty, and the Law." *Annual Review of Law and Social Science* 11 (1):15–35. doi:10.1146/annurev-lawsocsci-120814-121623.

Desmond, Matthew, Carl Gershenson, and Barbara Kiviat. 2015. "Forced Relocation and Residential Instability among Urban Renters." Social Service Review 89 (2):227–62. doi:10.1086/681091.

Desmond, Matthew, and Kristin L. Perkins. 2016. "Are Landlords Overcharging Housing Voucher Holders?" City & Community 15 (2):137–62. doi:10.1111/cico.12180.

Desmond, Matthew, and Tracey Shollenberger. 2015. "Forced Displacement from Rental Housing: Prevalence and Neighborhood Consequences." *Demography* 52 (5):1751–72. doi:10.1007/s13524-015-0419-9.

Desmond, Matthew, and Rachel Tolbert Kimbro. 2015. "Eviction's Fallout: Housing, Hardship, and Health." *Social Forces* 94 (1):295–324. doi:10.1093/sf/sov044.

Desmond, Matthew, and Nathan Wilmers. 2019. "Do the Poor Pay More for Housing? Exploitation, Profit, and Risk in Rental Markets." *American Journal of Sociology* 124 (4):1090–124. doi:10.1086/701697.

Dreier, Peter. 1982. "The Status of Tenants." Social Problems 30 (2):179-98. doi:10.2307/800517.

Du Bois, W. E. B. [1899]1996. The Philadelphia Negro: A Social Study. Reprint. Philadelphia: University of Pennsylvania Press.

Eviction Lab. 2018. "National Estimates: Eviction in America." Eviction Lab Updates, May 11.

Fossett, Mark. 2017. New Methods for Measuring and Investigating Residential Segregation. New York: Springer.



Frey, William H. 2018. Diversity Explosion: How New Racial Demographics Are Remaking America. Washington, DC: Brookings Institution.

Galster, George C. 1979. The Cost of Segregation Discrimination. Washington, DC: Policy Research Agenda on Fair Housing for HUD, US Department of Health, Education & Welfare, National Institute of Education.

Gilderbloom, John I., and Richard P. Appelbaum. 1987. "Toward a Sociology of Rent: Are Rental Housing Markets Competitive?" Social Problems 34 (3):261-76. doi:10.2307/800766.

Goetz, Edward G. 2007. "Is Housing Tenure the New Neighborhood Dividing Line? The Polarizing Politics of Homeownership." Pp. 96-110 in Chasing the American Dream, edited by William M. Rohe and Harry L. Watson. Ithaca, NY: Cornell University Press.

Hepburn, Peter, Renee Louis, and Matthew Desmond. 2020. "Racial and Gender Disparities among Evicted Americans." Sociological Science 7:649-62. doi:10.15195/v7.a27.

Howell, Junia, and Elizabeth Korver-Glenn. 2021. "The Increasing Effect of Neighborhood Racial Composition on Housing Values, 1980-2015." Social Problems 68 (4):1051-71. doi:10.1093/socpro/spaa033.

Iceland, John, Daniel Weinberg, and Lauren Hughes. 2014. "The Residential Segregation of Detailed Hispanic and Asian Groups in the United States: 1980-2010." Demographic Research 31:593-624. doi:10.4054/DemRes.2014.31.20.

Iceland, John, Daniel Weinberg, and Erika Steinmetz. 2002. Racial and Ethnic Residential Segregation in the United States: 1980-2002. Washington, DC: U.S. Government Printing Office.

Immergluck, Dan, Jeff Ernsthausen, Stephanie Earl, and Allison Powell. 2020. "Evictions, Large Owners, and Serial Filings: Findings from Atlanta." Housing Studies 35 (5):903-24. doi:10.1080/02673037.2019.1639635.

Jenkins, Destin, and Justin Leroy. 2021. Histories of Racial Capitalism. New York: Columbia University Press.

Krysan, Maria, and Kyle Crowder. 2017. Cycle of Segregation: Social Processes and Residential Segregation. New York: Russell Sage.

Laster Pirtle, Whitney N. 2020. "Racial Capitalism: A Fundamental Cause of Novel Coronavirus (COVID-19) Pandemic Inequities in the United States." Health Education & Behavior 47 (4):504-8. doi:10.1177/ 1090198120922942

Leung, Lillian, Peter Hepburn, and Matthew Desmond. 2021. "Serial Eviction Filing: Civil Courts, Property Management, and the Threat of Displacement." Social Forces 100 (1):316-44. doi:10.1093/sf/soaa089.

Manson, Steven, Jonathan Schroeder, David Van Riper, Tracy Kugler, and Steven Ruggles. 2021. IPUMS National Historical Geographic Information System: Version 16.0 [Dataset]. Minneapolis, MN: IPUMS.

Massey, Douglas. 2007. Categorically Unequal: The American Stratification System. New York: Russell Sage Foundation.

Massey, Douglas. 2020. "Still the Linchpin: Segregation and Stratification in the USA." Race and Social Problems 12 (1):1-12. doi:10.1007/s12552-019-09280-1.

Massey, Douglas, and Nancy Denton. 1988. "The Dimensions of Residential Segregation." Social Forces 67 (2): 281-315. doi:10.2307/2579183.

Massey, Douglas, and Nancy Denton. 1993. American Apartheid. Cambridge: Harvard.

National Low Income Housing Coalition. 2021. Out of Reach: The High Cost of Housing. Washington, DC: National Low Income Housing Coalition/LIHIS.

Patillo, Mary. 2013. "Housing: Commodity versus Right." Annual Review of Sociology 39:509-31.

Perry, Andre M., Jonathan Rothwell, and David Harshbarger. 2018. "The Devaluation of Assets in Black Neighborhoods: The Case of Residential Property." Report for the Metropolitan Policy Program at Brookings.

Quillian, Lincoln, John J. Lee, and Brandon Honoré. 2020. "Racial Discrimination in the U.S. Housing and Mortgage Lending Markets: A Quantitative Review of Trends, 1976-2016." Race and Social Problems 12 (1): 13-28. doi:10.1007/s12552-019-09276-x.

Robinson, John N. III, 2021. "Surviving Capitalism: Affordability as a Racial 'Wage' in Contemporary Housing Markets." Social Problems 68 (2):321-39. doi:10.1093/socpro/spaa078.

Robinson, Cedric J. 1983. Black Marxism: The Making of the Black Radical Tradition. London: Zed Press.

Rosen, Eva. 2014. "Rigging the Rules of the Game: How Landlords Geographically Sort Low-Income Renters." City & Community 13 (4):310-40. doi:10.1111/cico.12087.

Rosen, Eva, Philip M. E. Garboden, and Jennifer E. Cossyleon. 2021. "Racial Discrimination in Housing: How Landlords Use Algorithms and Home Visits to Screen Tenants." American Sociological Review 86 (5):787-822. doi:10.1177/00031224211029618.

Rucks-Ahidiana, Zawadi. 2021. "Theorizing Gentrification as a Process of Racial Capitalism." City & Community.doi:10.1177/15356841211054790.

Rutan, Devin Q., and Matthew Desmond. 2021. "The Concentrated Geography of Eviction." The Annals of the American Academy of Political and Social Science 693 (1):64-81. doi:10.1177/0002716221991458.

Sharkey, Patrick. 2013. Stuck in Place: Urban Neighborhoods and the End of Progress toward Racial Equality. Chicago: University of Chicago Press.



Sharkey, Patrick, and Jacob W. Faber. 2014. "Where, When, Why, and for Whom Do Residential Contexts Matter? Moving Away from the Dichotomous Understanding of Neighborhood Effects." Annual Review of Sociology 40 (1):559-79. doi:10.1146/annurev-soc-071913-043350.

Taylor, Keeanga-Yamahtta. 2017. Race for Profit: How Banks and the Real Estate Industry Undermined Black Homeownership. Chapel Hill, NC: University of North Carolina Press.

Tilly, Charles. 1998. Durable Inequality. Berkeley, CA: University of California Press.

Tomaskovic-Devey, Donald, and Dustin Avent-Holt. 2019. Relational Inequalities: An Organizational Approach. New York: Oxford University Press.

Turner, Margery Austin, Rob Santos, Diane K. Levy, Doug Wissoker, Claudia Aranda, and Rob Pitinglo. 2013. Housing Discrimination against Racial and Ethnic Minorities 2012. Washington: U.S. Department of Housing and Urban Development.

US Department of Housing and Urban Development. 2019. Addressing Housing Affordability in High-Cost Metropolitan Areas in the United States. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research.

Weaver, Russell, and Jason Knight. 2020. Advancing Housing Security: An Analysis of Renting, Rent Burden, and Tenant Exploitation in Erie County, NY. Report commissioned by The Erie County Poverty Committee.

Wright, Erik Olin. 2000. "Class, Exploitation, and Economic Rents: Reflections on Sørensen's 'Sounder Basis'." American Journal of Sociology 105 (6):1559-71. doi:10.1086/210464.