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Gentrifying Atlanta: Investor Purchases of Rental Housing, Evictions, and the Displacement of Black Residents

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ABSTRACT

Displacement of Black communities through gentrification is a major concern among policymakers, community groups, and advocates. This research investigates whether investor purchases of multifamily rental housing predict evictions and the displacement of Black residents from Atlanta, Georgia, between 2000 and 2016. In a series of quantitative analyses, we identify the financialization of rental housing and subsequent eviction-led displacement as key neighborhood-level processes in racial transition and the gentrification of Atlanta. We find that eviction judgments grew by 8% annually in the Atlanta region, and same-site apartment sale prices increased by an average of \$5.5 million. Investor purchases of rental housing in a neighborhood predict a spike in eviction judgments in the same year, and presage racial transition. Neighborhoods with investor purchases of apartment buildings lose 166 Black residents and gain 109 White residents over a 6-year period compared with adjacent neighborhoods with no investor purchases.

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gentrification;
financialization; race;
eviction

In this article we ask whether investors purchasing rental properties in Atlanta, Georgia, pursue a strategy that involves displacing current residents through evictions, and facilitate gentrification and neighborhood change, and link this process to racial transition and the loss of Black residents. We draw on Marcuse's (1986) conceptualization of the process of gentrification, as developed by Sims (2016), to describe the role of evictions in the physical displacement of marginalized communities through racialized real estate speculation. To understand why some investor strategies rely on physical displacement and neighborhood change, we draw on the literature on rent gaps and financialization (August, 2020; Fields & Uffer, 2016; Marcuse & Madden, 2016; Smith, 1987; Teresa, 2019). We then briefly examine the literature on racial transition, and the connections to real estate investment and physical displacement through evictions.

We perform several analyses to understand how investor purchases of rental housing in the Atlanta region result in physical displacement through evictions, and the loss of Black residents at the neighborhood scale. Using a logistic regression, we find that neighborhoods with investor purchases of multifamily residential properties have a 33% higher odds of an eviction spike in the same year. Over a 6-year time frame, these investor purchases of multifamily homes lead to demographic changes. We use a difference-in-differences model to compare adjacent neighborhoods with and without an investor purchase of a multifamily rental property. We find that neighborhoods where investors purchased properties have 166 fewer Black residents and 109 more White residents over a 6-year period than adjacent neighborhoods without such purchases.

This article has theoretical ramifications and policy implications. First, using a causal framework, we find that investor purchases of multifamily real estate predict both displacement through evictions in the short term and a loss of Black residents in a neighborhood in the longer term. This suggests that theories of gentrification that focus on real estate investment activity, such as the “strategic action of landlords” (Sims, 2016, p. 30) or Smith’s rent gap theory, are useful for providing early warning of displacement pressure. Cities, community advocates, and policymakers wishing to create early warning systems to predict displacement should focus on real estate transaction data such as sales, evictions, foreclosures, and rising prices, rather than relying extensively on census data regarding demographic transition. In addition to measuring events that provide an early warning of displacement pressures, real estate data can be obtained in real time. This immediacy is not found in commonly used data sources like the American Community Survey data, which is reported with a 2-year lag, and measures processes of demographic transition that unfold over longer time frames.

Literature Review

Gentrification and Eviction

In this research we mobilize theories of gentrification that center on neighborhood change through physical displacement, originating with Marcuse (1984) and extended to contemporary landscapes of eviction-driven displacement (Sims, 2016; Sims & Iverson, 2019). In conceptualizing displacement within gentrification, Marcuse created four categories. He described direct displacement occurring through programs like urban renewal or as a consequence of natural emergencies; physical displacement such as eviction or foreclosure; displacement through economic pressures, such as rising rents; and displacement through exclusionary processes (Marcuse, 1984).

Whereas Marcuse originally characterized evictions as an example of physical displacement within a broader process of gentrification and neighborhood change, empirical research complicates this relationship among evictions, displacement, and neighborhood change. A large number of eviction filings can be sign of a conflict between landlord and tenant without leading to displacement. And although eviction judgments lead to displacement from a building, they do not necessarily lead to displacement from a neighborhood, or to overall neighborhood change. Indeed, most empirical research on the relationship between eviction and neighborhood characteristics has found that evictions are associated with nongentrifying places characterized by racialized exclusion and extraction (Sims & Iverson, 2019).

An example of eviction without displacement is serial filing. Research into high levels of eviction filing have uncovered this common practice, in which a landlord repeatedly files for eviction of the same tenant, who remains in the rental housing. Serial filing is often associated not with displacement, but with predatory relationships between landlords and tenants. Garboden and Rosen (2019a) interrogate the profit strategy of landlords who repeatedly file for eviction against their tenants. They find that landlords file for eviction to convert the landlord–tenant relationship into a debtor–creditor relationship, increasing leverage over tenants, but not with the intention of displacing residents from their homes, and that through serial filings, landlords can demand tenants pay court fines and late fees. In research on Detroit, Michigan, Seymour and Akers (2019) investigate eviction filings in investor-acquired, tax-reverted properties between 2009 and 2017, finding that the practices of these predatory investor landlords, including renting homes that are barely habitable and demanding unsustainable financial terms, lead to higher eviction filing rates for a prolonged period.

Just as it is often found that eviction practices do not consistently result in displacement from a building, other research has found that evictions are not related to neighborhood change. Eviction activity often occurs within marginalized communities suffering from disinvestment that are not characterized by “revalorization or demographic change” (Sims, 2016, p. 30). Matthew Desmond (2016) describes tenants being repeatedly displaced within and between disinvested neighborhoods and trailer parks in Milwaukee, Wisconsin. Sims and Iverson (2019) research eviction filings in Dane

County, Wisconsin, and find that evictions are associated with what Marcuse termed chain displacement—repeated, regular physical displacement of tenants within and between instably depressed areas. Raymond, Duckworth, Miller, Lucas, and Pokharel (2016) use a cross-sectional analysis to evaluate whether measures of gentrification and neighborhood change predict eviction filings in the Atlanta region. They find no relationship between measures of neighborhood change and eviction filings, concluding instead that extremely high rates of eviction are found in predominantly Black low- and moderate-income areas in southwest Atlanta—in some locations of which nearly half of all households had an eviction filing and 16% were forcibly removed through the court system in a year.

Much of the empirical research described above relies on eviction filings, rather than eviction judgments, as a measure, and uses cross-sectional analyses emphasizing spatial variation to identify high rates of eviction activity. In the current study, we focus on eviction judgments. These judgments reflect a landlord's intention to remove a tenant, and may be thought to more clearly capture Marcuse's concept of physical displacement. Rather than comparing eviction judgments between neighborhoods, we look for processes of neighborhood change in temporal variations, looking for moments in which landlords use eviction for the purpose of physical displacement in the context of a long term process of neighborhood change.

Financialization of Multifamily Rental Properties

We place this idea of eviction-led displacement and neighborhood change in the context of research into the financialization of rental housing, and the rise of private equity firms and investors in this sector. Research has found that investor-owners often seek to maximize revenue not through minimizing costs on an existing income stream, but by transforming the land value and price appreciation, displacing existing tenants and communities, and marketing land to renters with higher income. In other words, extracting profit through rent gaps involves physical displacement and neighborhood gentrification. Smith (1987) describes the patterns of disinvestment and revalorization that are useful for investors who seek to capitalize on rent gaps. As land prices decline because of systemic disinvestment, the gap between the income from current land uses and that from potential land uses increases. This gap creates an opportunity for an investor to buy, and transform local land uses through displacement and gentrification pressures, so that through a process of displacement, land rents and owner revenues increase. This theorization is distinct from processes of gentrification that rely on more diffuse social forces that permeate individual decisions, exemplified by the emphasis that this form of gentrification is a return to the city "by capital, not people" (Smith, 1987).

There is a long history of gentrification through real estate investment; drawing on literature from the 1980s, Marcuse and Madden (2016, p. 42) describe corporate investors for whom "gentrification is the business plan. Firms purchase buildings on the assumption that rents can be doubled, tripled, or more." More recent empirical work from Teresa (2019), Sims (2016), and August (2020) depict gentrification as a process driven by real estate investment in the current moment of financialization. Separately, these three studies find that real estate investment in contemporary New York City, Los Angeles, California, and Toronto is predicated on the replacement of current low-income tenants with higher paying households. This research across several cities has shown that rising investor purchases of multifamily properties correspond with rising rents, physical displacement, and neighborhood change (Fields & Uffer, 2016; JCHS, 2019; Teresa, 2019). This pattern of investment is entwined with real estate finance as, nationally, cap rates for apartment buildings have been declining, indicating that prices have been rising relative to net operating income, that rents continue to rise, and that leverage continues to increase (JCHS, 2020).

The literature described above on the financialization of rental housing has not engaged comprehensively with the literature on racial transition. The literature on evictions has engaged with racial disparities, but has focused primarily on systematically disinvested areas, with less research

into eviction as a mechanism of displacement from an area, and as a contributor to processes of neighborhood change (Desmond, 2016; Sims & Iverson, 2019). In this research we ask whether the financialization of rental housing and eviction are related to dynamics of racial transition.

The existing research on gentrification and racial transition connects longer term change to private investment (Ravuri, 2019), and to events that lead to sudden shifts in racial composition (Sutton, 2020). Ravuri (2019) examines the association between gentrification and displacement of current residents. The author compares gentrifying census tracts in Cincinnati, Ohio, and finds that gentrifying areas with substantial private and public investment experienced displacement of the African American community. Sutton (2020) describes racial transition in the context of gentrification in New York City, finding that Black and Hispanic residents of all incomes are vulnerable to displacement. Sutton finds that the pace of gentrification is inversely related to the share of Black and Hispanic residents in a neighborhood, and describes a process by which an initial sharp reduction in the number of Black and Hispanic residents can be the starting point for racial transition and displacement over longer time frames. This finding is particularly relevant to our research, as we try to understand whether building purchases and an abrupt shift in the residents of an apartment complex might lead to longer term shifts in neighborhood racial composition. A nationwide study finds that socioeconomic growth in Black and Hispanic neighborhoods is typified by displacement of former residents and replacement by high-income White residents (Owens & Candipan, 2019). We look for this pattern linking private investment, physical displacement and racial transition in over a decade of neighborhood change in the historically Black city of Atlanta, Georgia.

Gentrification and the Displacement of Black Communities in Atlanta

The city of Atlanta has been a majority Black city since the civil rights era, hosts a cluster of historically Black institutions, and has been a seat of Black political power and academic and cultural production for two generations (Hobson, 2017). Yet from 2000 to 2010, Atlanta showed a marked decline in Black residents. Over that period, Black residents declined by 11.3%, whereas the White population grew by 16.5%. This shift corresponded with increasing suburbanization in the region. The city of Atlanta sits primarily in Fulton County, Georgia. Fulton County, which extends to the north and to the southwest of Atlanta, has an increasing number of Black residents, with the county growing in size overall by 14%, and the Black population growing by 13%, in the same period.

The decline in Black households in the city of Atlanta during the 2000s was driven in large part by forcible displacement related to the subprime and foreclosure crises in single-family, owner-occupied housing stock (Immergluck, 2011). Predatory subprime lending and the subsequent foreclosure crisis devastated historically Black neighborhoods in Atlanta, which had some of the highest foreclosure and vacancy rates in the nation, and a prolonged recovery period (Immergluck, 2011; Raymond, 2016, 2018). Increased Black homeownership in metro Atlanta relative to the rest of the United States was not enough to close the gap locally (Bullard, Johnson, and Torres, 2010). Furthermore, Black households displaced from Atlanta tended to relocate to the suburbs (Bullard, 2011).

Subsequent research on declining rental affordability in the 2010s documents rising rents and evictions that may have exacerbated the displacement of Black residents in the city of Atlanta and in Fulton County generally. Immergluck, Carpenter, and Lueders (2016) describe swiftly declining affordability in the Atlanta region. They find renter cost burden rose to 53% by 2014 overall, and rose to 83.5% for renters with incomes below \$35,000. The region lost 16% or 5,309 of its affordable rental units during this time.

Increased investor presence in the rental market in the Atlanta region has been linked to eviction-led displacement. Raymond, Duckworth, Miller, Lucas, and Pokharel (2018) connect displacement during the foreclosure crisis to subsequent eviction-led displacement in corporate-owned single-family rentals. They link corporate investment in single-family rentals to extremely high eviction rates, and document high rates of eviction-driven displacement in historically Black neighborhoods.

Immergluck, Ernsthausen, Earl, and Powell (2020) examine eviction records for the Atlanta metropolitan area and find that apartment sales are associated with increased evictions in the 3 years following a sale.

These sorts of real estate investment practices in the Atlanta context have been associated with racialization processes to rebrand neighborhood identity and consumer base. In an examination of Buckhead, a historically White and upper class enclave in Atlanta, Hankins, Cochran, and Derickson (2012, p. 388) point to the transformation of Buckhead Village from bars and “nuisance” land uses to upscale condos and boutiques. They assert that such a transition required a reconsolidation of Whiteness in the mid-2000s that washed out the hip-hop nightlife culture (and Black residents) of the 1990s to attract a global elite class of the hyperwealthy to the benefit of Buckhead’s existing landowners. This process can be traced in Atlanta’s urban history, going back to biracial coalitions of elites participating in the Atlanta Forward booster movement to promote Atlanta as a site for real estate investment and economic development (Hobson, 2017). However, there have been no contemporary analyses of investment in rental apartments, physical displacement through eviction, and racial transition in the city. In the next section we analyze patterns of real estate investment in multifamily apartments, and evictions, and examine whether physical displacement through eviction is leading to racial transition in the city of Atlanta.

Data and Methods

In the following, we empirically analyze two relationships. First, we look into the relationship between real estate investor activity in a neighborhood and evictions, and establish that real estate investment results in eviction-led displacement. Second, we look at whether real estate investor activity also causes longer-term racial transition and neighborhood change.

Key Questions

Q1: Do investor purchases of multifamily residential real estate result in eviction-led displacement within a neighborhood?

Q2: Do investor purchases of multifamily residential real estate cause racial transition within a neighborhood?

Data

Descriptions of concepts, variables, and data sources are displayed in [Tables 1](#) and [Tables 2](#). For our analyses, we combined data from three sources: the U.S. Census’ American Community Survey (ACS), evictions data from Princeton’s Eviction Lab, and deeds data from CoreLogic, aggregated at the

Table 1. Summary statistics.

Variable	No. obs.	Mean	SD	Min.	Max.
25% eviction judgment spike	8,789	0.278	0.448	0	1
25% eviction filing spike	8,789	0.059	0.235	0	1
Investor apartment purchase	8,789	0.234	0.918	0	31
Noninvestor apartment purchase	8,789	8.39	20.158	0	452
Garden-style apartment—investor sale	8,789	0.024	0.215	0	6
Garden-style apartment sale	8,789	0.334	1.23	0	35
Mid-rise apartment sale	8,789	0.057	0.794	0	54
High-rise apartment sale	8,789	0.003	0.062	0	3
Foreclosure sale indicator	8,789	7.05	11.403	0	165

SD = standard deviation.

Table 2. Summary statistics for difference-in-difference analysis.

Variable	No. obs.	Mean	SD	Min.	Max.
African American population	1,427	723	891	0	8,467
White population	1,427	691	682	0	3,473
Foreclosure sales	1,427	7	13	0	151
Total population	1,427	1,635	983	260	9,800

SD = standard deviation.

block-group level. [Table 1](#) displays data for the logistic regressions, which takes advantage of the annual real estate and evictions data. It includes yearly measurements of apartment purchases and evictions during our time frame for each residential block group in Fulton County.

[Table 2](#) displays summary statistics for the difference-in-differences analysis. This data set includes demographic data from the 5-year ACS, and is restricted to three years: 2004, 2010, and 2016. This data set is also restricted to block groups in census tracts with an investor purchase of an apartment complex.

To obtain measures of real estate transactions, we purchased Fulton County Deeds data from CoreLogic. We identified apartments using the County Deeds Description field, and coded transactions for apartment type (garden-style, low- to mid-rise, and high-rise). Using CoreLogic's transaction type field, we identified three different types of apartment transactions: sales, refinances, and renovations. We used CoreLogic's coding of investor-owners to separate investors from other owner types. We then calculated the number and type of apartment complex transactions per year per block group from 2000 to 2016.

Consistent with our focus on processes of physical displacement, our primary measure is eviction judgments as a measure of physical displacement, and we contrast this phenomenon with eviction filings. We confirm that these are distinct measures by performing a bivariate regression with neighborhood fixed effects, which results in a correlation of 0.162. We gathered counts of eviction judgments and filings from Princeton's Eviction Lab at the block-group level for each year from 2000 to 2016 for Fulton County. We defined an eviction spike as a year in which eviction judgments or filings were at least 25% higher than the neighborhood average between 2000 and 2016. Using this measure, the average number of evictions in a neighborhood in a nonspike year was three, and it was 40 in a year with an eviction spike.

To measure racial transition, we combine data on real estate transactions, evictions, and demographics to create a panel with three time periods (2004, 2010, and 2016) for all block groups in Fulton County. We use the 2004–2010 data to establish that the pretreatment trends are parallel, and evaluate a difference-in-differences model using 2010–2016 change over time.

Finally, we create a cluster analysis to show the geography of the phenomena that we describe. We map neighborhoods where racial transition and declining affordability are happening throughout the region. We rely on the ACS at the block-group level for several metrics of demographic and housing market change that inform the cluster analysis. These include population with a bachelor's degree, Black population, number of housing units renting for \$1,000 or less (affordable at 60% of Area Median Income (AMI)), and median rents.

Methods

Regression Analyses

We used two separate models to analyze our key questions. To look at whether investor purchases of multifamily residential real estate result in eviction-led displacement within a neighborhood, we use a fixed-effects logistic regression model. To look at whether investor purchases of multifamily residential real estate cause racial transition within a neighborhood, we use a difference-in-differences model.

Evictions and Investor Purchase of Multifamily Residential Real Estate. The first set of models utilizes annual data at the block-group level on eviction activity and on real estate transactions. We examine whether investor apartment sales predict eviction spikes, year on year, from 2000 to 2016. Eviction spikes are specified as a 1/0 indicator of whether, in that year, evictions were 25% higher than the 2000–2016 block-group average.

We use a fixed-effects logistic regression to estimate the relationship between investor purchases of multifamily properties and evictions. The fixed-effects design measures the effect of the change in the independent variables on the change in the dependent variables, controlling for all time-invariant characteristics at the neighborhood level. For this reason, we do not incorporate controls that are useful for understanding differences between neighborhoods, and only include those that might vary over time and explain change over time within neighborhoods. The most important variable that might affect both investor sales and eviction activity is the number of foreclosures. Our panel spans the foreclosure crisis, which induced more investor purchases in Atlanta, and also resulted in evictions when homeowners went through foreclosure and had tenants living in the property. To account for this activity, we include a measure of all foreclosure sales in this model.

To ensure that we are measuring eviction-driven displacement and not other aspects of eviction activity, we regress the same model on a measure of eviction filings. We expect that investor apartment sales will be associated with eviction judgments, but not with an increase in eviction filings. These filings are associated with serial moves within low-income neighborhoods, and are thought to indicate a contested or predatory landlord–tenant relationship, but are not as tightly associated with physical displacement from a given neighborhood.

$$Y_{ti} = \alpha + \beta_1 I_{ti} + \beta_2 X_{ti} + e_{ti}$$

Y = binary variable measuring an eviction spike, where 1 indicates the year in which the maximum number of evictions took place in that block group.

I = Investor apartment sales, indicating the number of investor apartment sales that took place in a block group in a given year.

X = The number of foreclosure sales that took place in a block group in a given year.

Racial Transition and Investor Apartment Sales. This set of models uses a difference-in-differences design to compare block groups in which investor purchases took place with neighboring block groups in the same census tract in which investors did not purchase apartments. We use this method to predict the effect of investor apartment sales on the Black population, and on the White population, at the neighborhood or block-group level.

Because we expect overall population size to affect both the number of residents in a given neighborhood and the number of apartment sales, we control for this factor. Additionally, because the foreclosure crisis affected the pace of sales as well as population movement within neighborhoods, we include a control for the foreclosure crisis. We tested the inclusion of tract fixed effects, but they did not substantially affect results, so for simplicity we omit reporting those models.

$$Y_{ti} = a_0 + a_1 * TREAT + POST + TREAT * POST + X_{ti}$$

Y = Black population, White population.

TREAT = 1, treatment: Block groups where an investor purchase took place;

0, control: Block groups within census tracts where an investor purchase took place, but that did not themselves have an investor apartment purchase.

POST = 1, posttreatment: Any point in time after an investor purchase took place in a given census tract;

0, pretreatment: Any point in time before an investor purchase took place in a given census tract.

X = Foreclosure sales, population.

t = Year.

i = Block group.

Cluster Analysis

To create a visualization of neighborhood change related to declining affordability and racial transition, we performed a cluster analysis using four metrics related to displacement, affordability, race, and class. We then mapped the results of that cluster analysis.

Our principal goal with this cluster analysis was to examine whether there are different trajectories for segments of Fulton County at the block-group level. A trajectory could describe the transition within each block group from 2013 to 2018. Each block group was considered across four variables: (1) the change in the raw number of affordable rental units, where affordability was defined as rent of less than \$999 per month¹; (2) the change in the number of bachelor's degrees; (3) the change in the number of Black households; and (4) the change in the number of households. Our data came from the 5-year ACS for 2009–2013 and 2014–2018. We independently scaled each variable so that the amount of change, rather than the raw values, would drive cluster membership.

Clustering was performed with K-means, with the number of clusters being determined using the elbow method described by Kodinariya and Makwana (2013). The elbow method presents a perspective on how well a given number of clusters describes the variation of the data within each cluster relative to the variation between clusters. The x-axis displays the number of clusters, and the y-axis shows the within-cluster sum of squares, a measure of how related the points are within a cluster. As the number of clusters increases for a given data set, the relatedness of the data within that cluster increases. However, a slope approaching zero indicates that each increase in the number of clusters accounts for an increasingly small difference between the clusters. And, as the number of clusters increases, the interpretability of the model declines, as it becomes increasingly challenging to differentiate among high numbers of clusters. Ideally, one wants to use the lowest number of clusters possible to accurately describe the data, and look to a point where the curve approaches zero to identify the minimum number of clusters that most meaningfully describes the data. In the case of this study, there were diminishing returns beyond four clusters, as shown in Figure 1.

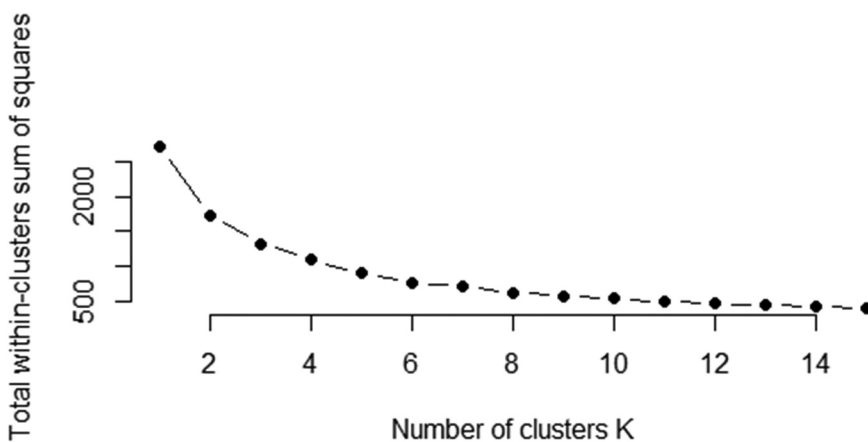


Figure 1. Determining the optimal number of clusters using an elbow plot.

Results

This article seeks to analyze the relationship between gentrification and displacement at the neighborhood level, on the one hand, and rising investor interest in multifamily residences since the real estate and financial crisis of the mid-2000s, on the other. In the following sections, we examine whether housing dynamics such as investor purchases and evictions are strong predictors of displacement. Our first measure of physical displacement is eviction judgments. Evictions have risen steeply in Fulton County over the last decade. [Figure 2](#) shows the number of eviction judgments and filings in Fulton County over time. Eviction judgments are associated with physical displacement. Eviction filings, by contrast, have been found to be associated with housing instability and predatory tactics, particularly when they are serial evictions (Garboden and Rosen 2019a, 2019b; Immergluck et al., 2020). In Fulton County, eviction judgments rose during the early years of the housing crisis, and dipped temporarily during the housing recovery period. Eviction filings have stayed relatively flat, at around 40,000 filings per year in both 2006 and 2016. In contrast, eviction judgments have exhibited a strong upward trend. The eviction judgments that are associated with physical displacement have more than doubled in Fulton County, rising from 4,406 in 2006 to 10,753 in 2016, a growth rate of 8% per year.

[Table 3](#) shows changes over time in apartment sale prices, as well as multifamily sales to investors. The first column shows overall increases in prices for repeat sales on the same parcel over time, with 2005 set as the index year. This table shows that relative to 2005, average prices for apartment complexes collapsed during the financial crisis, but rose swiftly and continuously from 2010 onward. Apartments in 2018 sold, on average, for approximately \$5.5 million more than a property on that same parcel in 2005. Garden-style apartments saw a similar increase in prices, with buildings selling for around \$3.5 million more in 2018 than a property on the same parcel in 2005.

[Figure 3](#) shows a map of eviction judgments and investor purchases in Fulton County between 2000 and 2016. Investor apartment purchases reflect resale deed transactions where the buyer is an investor. The categorization of investor buyers is a proprietary indicator from CoreLogic

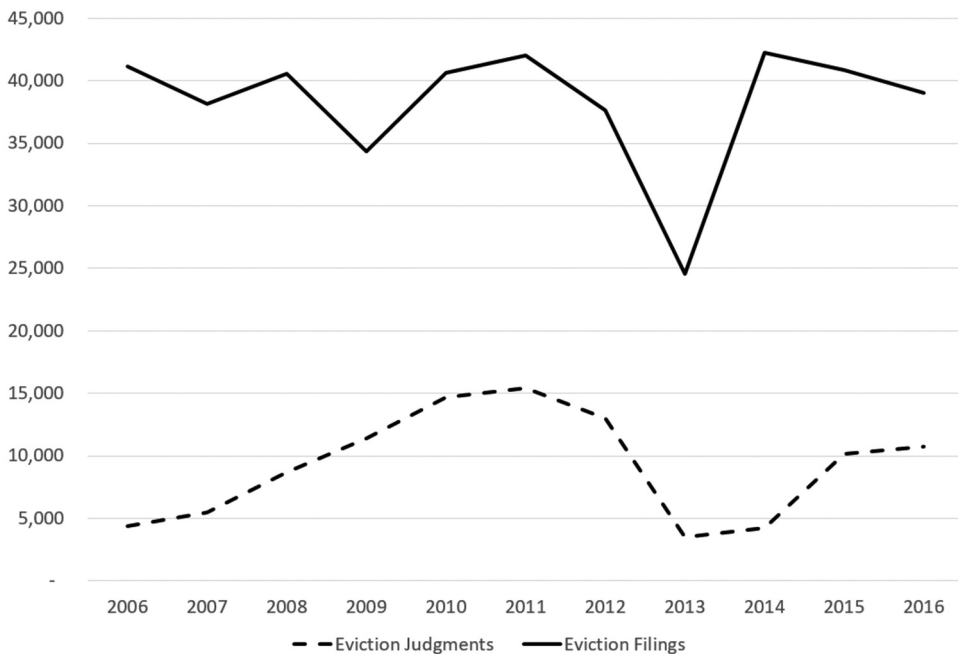


Figure 2. Eviction Judgments.

Table 3. Fulton County apartment sales and prices, 2005–2018.

	Repeat sales price ^a	Repeat sales price ^a (garden-style apartments)	No. of sales
2006	\$258,744	-\$108,300	285
2007	\$697,023	\$519,252	266
2008	\$781,611	\$564,756	227
2009	\$266,247	-\$198,247	191
2010	-\$363,496	-\$1,084,010	257
2011	-\$609,496	-\$1,202,341	193
2012	-\$318,012	-\$901,359	301
2013	-\$184,534	-\$127,158	259
2014	\$1,440,280	\$897,239	228
2015	\$1,971,372	\$1,058,990	274
2016	\$1,267,517	\$1,390,475	311
2017	\$3,383,125	\$2,917,702	276
2018	\$5,469,644	\$3,555,728	308

Note. ^aIndexed to 2005.

indicating that a property was purchased for investment purposes, which is confirmed by a review of the purchaser entities. An inspection of the buyer names with the most frequent purchases reveals a variety of financial instruments originated by large financial investment firms, including Bear Stearns (58 purchases), Morgan Stanley (35), Merrill Lynch (15), IndyMac (14), Deutsche Bank (14), JP Morgan (8), and Charles Schwab (8). Smaller investment funds are listed as well, such as Heartwood LLC (23), Stonefield Investment Fund (22), and Emerald Green Properties (16).

In Figure 3, we see that evictions are higher along a north–south spine that runs the length of Fulton County, and also are much higher in predominantly Black neighborhoods in south Atlanta and south Fulton County. On the right, we see that investor purchases are scattered throughout the county and follow a northeast–southwest spine of high economic activity and rental housing, but do not appear to be more heavily concentrated in the north or in the south.

Effect of Investor Apartment Purchases on Displacement and Racial Transition

Our next analyses estimate the effects of investor purchases of multifamily apartment buildings on evictions in the short term, and racial transition in the medium term. In these models, we ask whether

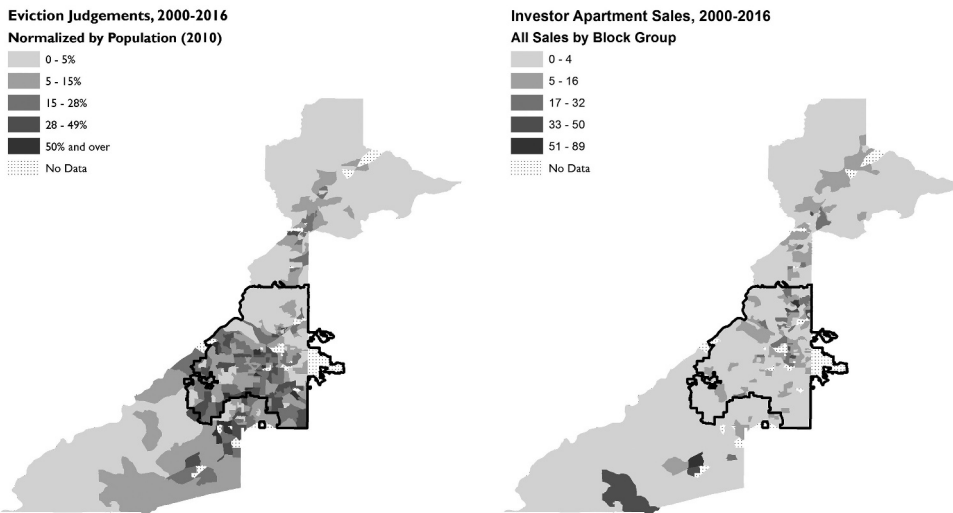


Figure 3. Map of eviction judgments and investor purchases of multifamily, 2000-2016.

Investor Apartment Purchases and Racial Transition

In this set of models, we ask what the effect of an investor purchase of a multifamily residence is on the racial composition of a neighborhood in the medium term. We answer this question by comparing similar neighborhoods that did or did not have an investor apartment purchase. We began by selecting census tracts that had an investor apartment purchase between 2010 and 2016. Within each census tract, we compare neighborhoods (block groups) that had an investor purchase with neighborhoods in that same census tract that did not have an investor purchase. We look at the effect on the change in the number of Black residents (Model 1), and the change in the number of White residents (Model 2).

In [Figure 4](#), we include the pretreatment trend and visually confirm that census block groups allocated to treatment and control groups were similar in trend prior to the real estate transactions that we measure in the 2010–2016 time frame. [Table 5](#) presents the results of the difference-in-differences analysis. We find that investor multifamily purchases result in 166 fewer Black residents and 109 additional White residents in a neighborhood compared with adjacent neighborhoods that did not have an investor purchase of an apartment. For context, these population changes occurred in block groups with an average population of 1,635 residents.

These results are statistically significant and meaningfully large, and employ a quasi-experimental model. They show that neighborhoods with investor purchases are associated with significant declines in the Black population and significant increases in the White population even when compared with neighboring areas that are otherwise similar.

Finally, to visualize the patterns of displacement and gentrification in the Atlanta region that is reflective of these findings, we perform a cluster analysis to generate a typology of neighborhood change. These clusters capture the most common trajectories of racial transition and shifts in the amount and cost of rental housing. Using four metrics that describe declining numbers and affordability of rental units, and metrics of race and of class, we analyze all block groups in Fulton county

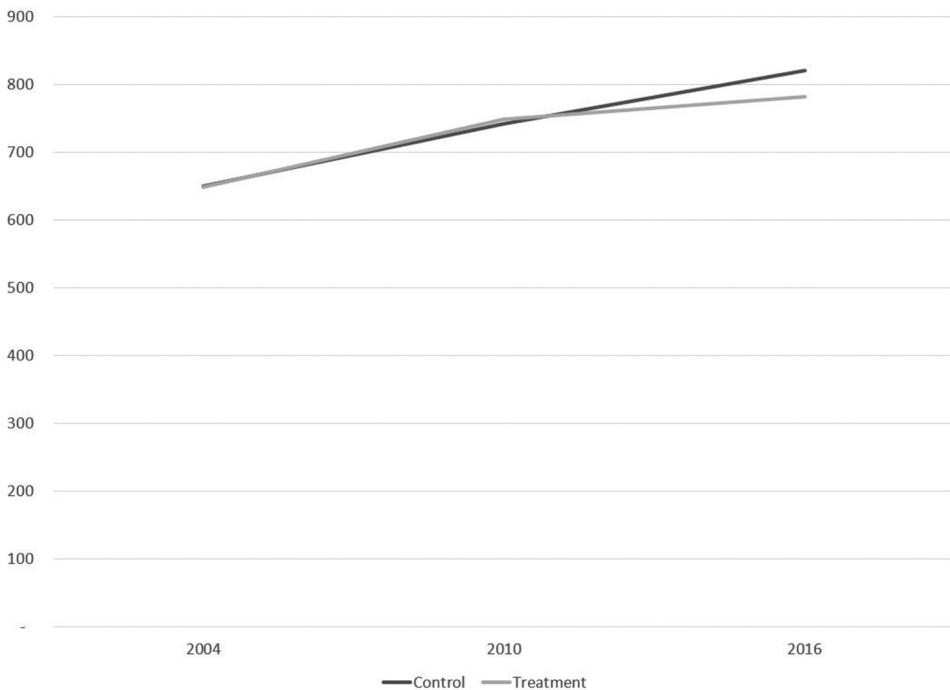


Figure 4. Confirming census block group pre-treatment trends for 2000-2016.

Table 5. Investor purchases of multifamily residences and racial transition at the neighborhood level.

Outcome variable:	Model (1)				Model (2)			
	African American	SE	t	P > t	White	SE	t	P > t
Before								
Control	- 41.529				130.521			
Treated	- 37.976				139.725			
Diff (T-C)	3.553	165.910	0.020	0.983	9.204	139.735	0.070	0.947
After								
Control	- 149.163				220.048			
Treated	- 311.615				338.359			
Diff (T-C)	- 162.452	51.707	3.140	0.002***	118.312	43.549	2.720	0.007***
Difference-in-differences	- 166.004	173.466	0.960	0.455	109.107	146.099	0.750	0.455
Variable(s)	Coeff.	SE	t	P > t	Coeff.	SE	t	P > t
Foreclosures	25.378	1.521	16.688	0.000	- 15.905	1.640	- 9.698	0.000
Population	0.400	0.020	20.514	0.000	0.305	0.020	15.321	0.000
Block group FE	No				No			
R ²	0.540				0.260			
n	786				786			

Note. SE = standard error. Means and standard errors are estimated by linear regression.

* $p < .1$. ** $p < .05$. *** $p < .01$.

with rental units from 2009 to 2018 using ACS 5-year survey data. We examine changes in the number of rental units, the number of affordable rental units at approximately 60% of AMI (defined as having rents of less than than \$1,000 a month), changes in the number of residents with bachelor's degrees, and changes in the number of Black residents. The use of rents of less than \$1,000 a month is an imprecise measure of affordability. A better measure of affordability would capture the relationships between income, housing size and type, and household size, as well as location. However, for technical reasons we have chosen the affordability benchmark, with the understanding that this measure is imprecise and does not fully capture all of the relevant dimensions of housing affordability.

The results are displayed in [Figure 5](#). Based upon the central tendencies of the clusters, we can describe the four clusters as follows:

Cluster 1: Rising Black middle class: Seven percent of block groups fell into this category. In these neighborhoods, the number of rental properties greatly increased, although the number of affordable units declined. The number of residents with bachelor's degrees greatly increased, and the Black population increased.

Cluster 2: Declining rentals and displacement: In 15% of block groups, the number of affordable units greatly decreased and the total number of rentals decreased. In this cluster, the Black population greatly decreased.

Cluster 3: Priced out: In more than half of all block groups (56%) the number of rentals stayed flat, but the number of affordable units decreased, as did the Black population.

Cluster 4: Rising affordability: In just over one fifth of block groups, we found rising rental affordability over the 10-year period. In these neighborhoods, the number of rental units greatly increased, the number of affordable rentals slightly increased, and there was a slight increase in the Black population.

These clusters suggest the granularity of the loss of affordability and of racial transition in the region. Much of the City of Atlanta falls into Cluster 3, (priced out), although areas of southwest and southeast Atlanta show rising affordability (Cluster 4) over the time period. Parts of southwest Atlanta and southwest Fulton County are home to several neighborhoods in Cluster 1 (rising Black

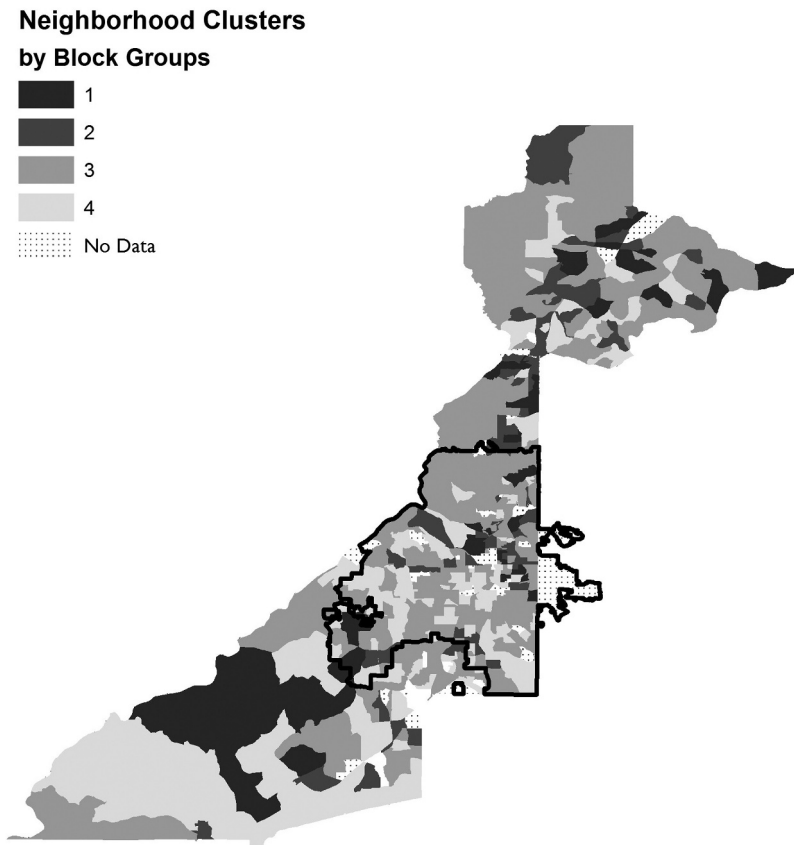


Figure 5. Gentrification and displacement typology of neighborhood change.

middle class), where rental affordability is declining, but the numbers of Black and college-educated residents are rising.

Finally, it is interesting to note that all four clusters are found scattered in North Fulton and in northeast Atlanta. This spatial distribution suggests that there are other drivers along with demographic composition that predict the loss or gain of affordable housing, and trajectories of displacement and racial transition.

Discussion and Conclusions

This research investigates gentrification, financialization, and eviction in the Atlanta region, and finds a strong and significant relationship between investor purchases of multifamily residences, physical displacement as measured through evictions, declining numbers of Black households, and increasing numbers of White households in a neighborhood. These empirical findings are in line with findings by Sutton (2020) and Ravuri (2019) that early events have long-term effects on gentrification and racial transition, but emphasize the importance of rental apartments and landlord type in generating these sorts of events.

Our cluster analysis of renter displacement and racial transition revealed a typology of neighborhood change in the region that does not correspond with the clearly defined North–South pattern of race and income segregation in the metropolitan region. This typology shows that rising rents and racial transition are happening at a very granular scale in a variety of neighborhoods. This finding suggests that the nature of gentrification in the Atlanta region is variegated and takes place in

response to small-scale neighborhood events such as apartment purchases. Therefore, it may be masked by tract- or zip-code-level analyses that use census data to uncover demographic transition.

In our regression analyses, we show that investor purchases of multifamily residences are associated with spikes in eviction-led displacement. Using a quasi-experimental difference-in-difference design, we find that these purchases of multifamily residences cause swift declines in the Black population, and increases in the White population over a 6-year period.

This research identifies a spatial granularity in the financialization of rental housing, and eviction-led displacement underlying the broader secular trends of gentrification and the loss of the city of Atlanta's Black population. This research has policy implications for the measurement of gentrification, and for policymakers' efforts to preserve affordability and prevent displacement. Increasingly, cities seek to understand, predict, and manage the process of gentrification, often creating data sets that can serve as early warning systems of processes of neighborhood change that lead to displacement and declining affordability (Chapple & Zuk, 2016; Goetz, Lewis, Damiano, & Calhoun, 2019; Howell, 2016). However, these prediction models are often geared toward measuring demographic transition, they rely on lagged demographic data from the ACS, and they use coarse-grained spatial data (Bates, 2013; Chapple & Zuk, 2016; Zuk, Bierbaum, Chapple, Gorska, & Loukaitou-Sideris, 2018). Neither the measures nor the data sets are suited for use as part of an early warning system to guide policymakers' decisions.

We recommend that policymakers and advocates designing prediction models incorporate in their decision-making process real estate transactions data, which include sales data, deeds data, and evictions data, similar to those used by O'Sullivan (2002) and Diappi and Bolchi (2013), as referenced by Zuk et al. (2015). These data sets can be obtained in close to real time at the parcel level, and, as shown by this study, can highlight the significant relationships between physical displacement and the decline in rental affordability that many community organizations and jurisdictions seek to manage and contain.

Note

1. We chose the threshold of \$999/month because it is close to the 60% AMI affordable rent for a family in the Atlanta metropolitan statistical area during the time frame. U.S. Department of Housing and Urban Development Income Limits Briefing Materials from 2004 and 2016 show that median family income in Atlanta did not change much from 2004 to 2016; it fell slightly, from \$69,000 to \$67,500. A rent of \$999 represents an affordable rent for families earning nearly 60% (more precisely, 59–58%) of median income during this period (U.S. Department of Housing and Urban Development, 2004, 2016).

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