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From Foreclosure to Eviction: Housing Insecurity in Corporate-Owned Single-Family Rentals

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Abstract

In this research, we examine evictions in post-foreclosure single-family rentals in Atlanta, GA, placing eviction-driven housing insecurity in the broader context of rising middle-class precarity and institutional change in housing markets.

To understand the evictions rate in Atlanta and investigate how corporate ownership relates to housing insecurity, we use a unique dataset: parcel-level eviction records scraped from the Fulton County Georgia Magistrate Court's website. We then matched these records with tax assessors and deeds data, as well as block group data on tenant characteristics from the American Community Survey. We document a high, spatially concentrated evictions rate. More than 20 percent of all rental households received an eviction notice in 2015, and 5.6 percent of tenants received a judgment or were forcibly removed from their homes. Evictions are spatially concentrated; in some zip codes, over 40 percent of all rental households received an eviction notice and over 15 percent of all households received a judgment or were forcibly removed.

We then examine the relationship between post-foreclosure single-family rentals, large corporate landlords that invested in bank-owned homes, and eviction rates. In a cross-sectional regression of single-family rentals, we find that overall, post-foreclosure homes are 58 percent more likely to have an eviction filing than single-family rentals with no foreclosure history. Foreclosure-driven housing insecurity of the late 2000s has been followed by eviction-driven housing insecurity. We find that large corporate owners

Abstract (Continued)

of single-family rentals, which we define as firms with more than 15 single-family rental homes in Fulton County, are 68 percent more likely than small landlords to file eviction notices even after controlling for past foreclosure status, property characteristics, tenant characteristics, and neighborhood.

We use dummy variables to identify large institutional investors in single-family rentals like Invitation Homes and American Homes 4 Rent and find that these firms have uniquely high eviction rates. Depending on the firm, institutional investors were between 11 percent and 205 percent more likely to file for eviction than mom-and-pop firms, even after controlling for property, tenant, and neighborhood characteristics.

Introduction

During the foreclosure crisis, around 5 to 6 percent of households in the United States exited homeownership, contributing to both the supply and demand for single-family rental homes. The foreclosure crisis was the culmination of a long period of institutional change in housing and mortgage markets, in which moderate- and middle-income households were exposed to increasing levels of housing precarity (Dwyer and Phillips Lassus, 2015). Broad changes in mortgage markets, including deregulation, technological change, innovation in product offerings, and the rising importance of non-bank mortgage lenders the 1990s and 2000s had the composite effect of shifting risk of foreclosure away from government institutions and financial firms and onto households. Homeowners that had previously been sheltered from precarity were exposed to increasing housing insecurity.[1] In this article, we examine the phenomena of evictions among single-family rentals, many of which were formerly foreclosed homes, as another episode in institutional change in housing markets, and another example of growing housing insecurity among moderate- and middle-income households.

Since the real estate and financial crisis of the early 2000s, homeownership has fallen to 62.9 percent, a 51-year low. More households are renting for a variety of reasons: home price instability; demographic shifts; changing tastes among millennials, delayed household formation and widening wealth and income inequality; and rapid change in the financial institutions that undergird mortgage markets, leading to the credit tightness that characterizes the post-crisis mortgage markets (Acolin, Goodman, and Wachter, 2016; Goodman, Pendall, and Zhu, 2015; Immergluck, 2018).

In response to the post-crisis decline in demand for homes and the glut of bank-owned properties, the government made some effort to stabilize neighborhoods and help struggling homeowners with neighborhood stabilization programs and direct governmental assistance around financial education and refinance and loan modification programs (Immergluck, 2011). Another part of

[1] The majority of subprime borrowers in the 1990s and 2000s were existing homeowners who obtained high-risk refinance loans that terminated in foreclosure; for example, 67.1 percent of subprime loans were refinances in 2004; 57.3 in 2006 (Immergluck, 2011). A sizable portion of subprime borrowers had prime credit but still received high-risk, high-price subprime loans, which were associated with high foreclosure rates in subsequent years (Foote, Gerardi, Goette, and Willen, 2008; Immergluck, 2011).

government response involved facilitating the shift of single family homes from owner-occupied into rental housing stock in the private real estate market. From 2009 to 2015, the number of single-family rentals grew by 2.8 million, from 11.8 million to 14.6 million; over two-thirds of these rentals were in the 50 largest metropolitan areas (Census, 2005-2009, 2011-2015; Immergluck, 2018). In part responding to encouragement by the government, private sector institutional investors realized an opportunity and poured cash into an illiquid housing market. From 2011 to 2013, institutional investors and hedge funds bought an estimated 350,000 bank-owned homes (Eisfeldt and Demers, 2014). Those purchases were focused on newer single-family homes in Sunbelt cities like Atlanta where increased demand during the housing bubble of the early 2000s had led to an explosion in new construction and where the long-term market outlook was rosy.

Investors bought with a variety of profit strategies that ultimately influenced property management decisions. Some bought to quickly resell; others to rent for the short term and resell; in other cases, to manage properties long term as scattered-site rental properties. Research in the last 5 years has tried to understand what sort of landlords these corporations would be (Eisfeldt and Demers, 2014; Fields, Kohli, and Schafran, 2016; Green Street Advisors, 2016; Immergluck, 2013; Immergluck and Law, 2014a; Lambie-Hanson, Herbert, Lew, and Sanchez-Moyano, 2015; Mallach, 2014). What sort of strategies would this new breed of landlord pursue, and would these strategies lead to safe, affordable housing, or would they further contribute to housing insecurity?

Housing insecurity, sometimes referred to as housing instability, describes the condition where a household or family has a residence, but faces uncertainty about their ability to retain that residence due to lack of tenure security, affordability, poor housing conditions, or threats of harassment (Cox, Henwood, Rice, and Wenzel, 2017). Families with high levels of housing insecurity may move frequently, suffer eviction, or otherwise be at increased risk of homelessness. In this research, we focus on rates of legal eviction filings as a key measure of housing insecurity, although housing insecurity typically refers more broadly to a household's overall lack of security about shelter.

Affordability is a key component of eviction and housing insecurity (Cox et al., 2017). As homeownership has declined and renting has increased, demand for rentals has caused urban rents to increase sharply (Desmond, 2018; Immergluck, Carpenter, and Lueders, 2017). The number of households that are cost burdened has climbed, rental housing insecurity has increased, and documentation of an ensuing high rate of evictions in U.S. cities is increasing, partly due to tenants' inability to afford higher rents (Desmond, 2016).

Eviction rates are concerning because residential displacement has been linked to a variety of adverse outcomes for individuals and neighborhoods. Evictions can result in forfeiture of property and lead to stays in homeless shelters, and is often quickly followed by subsequent moves. Eviction is associated with higher rates of depression, illness, and job loss. Eviction is also thought to lead to underperforming schools and poor student outcomes (Desmond, Gershenson, and Kiviat, 2015; Desmond and Kimbro, 2015; Desmond and Shollenberger, 2015). Even an eviction filing that is resolved can mar a tenant's credit record and bar them from renting elsewhere or accessing public assistance. At the neighborhood level, high eviction rates are associated with poor housing

conditions, high rates of school turnover, and neighborhood and community instability (Desmond, 2012; Desmond and Shollenberger, 2015).

Despite the importance of evictions as a cause of poor outcomes among tenants, evictions are still poorly understood. In part, this lack of insight is due to a lack of quantitative data on evictions. This research seeks to examine evictions in the frame of a shifting institutional context for housing, in which moderate- and middle-income households are renting at higher rates and face higher levels of housing insecurity in the wake of the foreclosure crisis (Dwyer and Phillips Lassus, 2015; Immergluck, 2011). We investigate the relationship between landlord characteristics and housing insecurity, asking whether institutional investors that bought post-foreclosure single-family homes are associated with higher housing insecurity.

To understand the prevalence of evictions and how corporate ownership relates to eviction rates, we use a unique data set: 2015 eviction court records scraped from the Fulton County, Georgia Magistrates Court website that the authors geocoded and matched with tax assessors and deeds data at the parcel level, as well as with American Community Survey block group data, to proxy for tenant socioeconomic status. With this data set, we are able to link ownership characteristics with eviction rates, while controlling for property, tenant, and neighborhood characteristics.

In our data, we find an alarmingly high, spatially concentrated evictions rate in Fulton County. In Fulton County, GA, in 2015, we found an average of 107 eviction notices filed each day, for a yearly total equal to 22 percent of all rental households (Census, 2011-2015). Eviction filings in Fulton County were concentrated in multifamily properties/tenants, with an eviction filing rate of around 28 percent. About 7 percent of single-family renters received an eviction filing in 2015. By contrast, according to Princeton's Eviction Lab dataset, the national eviction filing rate in 2015 was 6 percent (Desmond et al., 2018b). Overall, like several other Southeastern cities, Atlanta's eviction judgment rate was extremely high, but was not among the highest, ranking 38th in the nation. Within Georgia, Fulton County had the 10th highest eviction filing rate, which was nearly half that of neighboring Clayton County, GA, in which 44 percent of all households faced eviction in 2015 (Desmond et al., 2018b).

Using a logistic regression model to predict the probability of an eviction filing, we investigate the relationship between large landlords, institutional investors, and housing insecurity among single-family rentals. We observe strong and significant effects associated with landlord size and type that are robust to multiple model specifications. Large corporate owners in the single-family rental business are 68 percent more likely than small landlords to evict tenants, even after controlling for property, household, and neighborhood factors. Finally, we find that institutional investors like Colony American Homes[2] and American Homes 4 Rent were many times more likely to file evictions than small landlords, even after controlling for property, tenant, and neighborhood characteristics.

Although in some urban submarkets they have a large market share, institutional investors in single-family rentals remain a small percentage of the overall single-family rental market. Some

[2] Since 2015, the timeframe of this study, strong consolidation of institutional investor-backed corporate landlords resulted in Colony American Homes merging with Starwood Waypoint in 2016 to form Colony Starwood Homes, later rebranded as Starwood Waypoint Homes, which, in 2017, was absorbed by Blackstone's Invitation Homes.

industry experts argue that the innovation of securitization in single-family rental markets, as well as subsequent multi-borrower investment offerings, represent breakthroughs in this sector, allowing what was once a deconcentrated and local industry to efficiently access capital markets, allowing for future growth (Schwarz and Ferris, 2015). Estimates place the ultimate value of this market anywhere from $20 billion to $300 billion (Yalamanchili, 2016). Regardless of whether this sector grows or remains stable at this size, institutional investment in single-family rentals is a continuation of the financialization of mortgage and housing markets, in which deeper ties are established between capital markets and single-family rental homes (Fields, 2018). This research finds that institutional change in housing and mortgage markets—the segue of foreclosed homes from owner-occupied properties to corporate owned rentals, the entrance of institutional investors into this market, and the layering of finance through single family rental securitization offerings (SFRS)—have resulted in increasing housing insecurity and precarity for moderate- and middle-income renters.

Literature Review

Following the foreclosure crisis, around 5 percent of U.S. homeowners exited homeownership, and roughly 2 million homes that had previously been owner-occupied lay vacant, or became rentals. During the recovery, institutional investors invested in the single-family rental market, at first using their own equity, but ultimately drawing on a broader segment of financial market investors by securitizing single-family rentals and obtaining financing from Fannie Mae and, more recently, Freddie Mac.

The embrace of single-family rentals by global institutional investors, and incorporation into secondary mortgage markets through mortgage securitization and subsidy by the Government Sponsored Enterprises (GSEs) is part of a broader process of liberalization and institutional change in U.S. housing markets. Streeck and Thelen (2005) describe liberalization as the expansion of market relations within and between nation states, characterized by retrenchment and deregulation by government, the withdrawal of social safety nets, followed by growing market pressures and distributional conflict. Hacker (2008) describes this process of liberalization as one which transfers risk from societies to households and individuals. Hacker's "great risk shift" is a process of governmental deregulation and secular change in labor markets which leaves households increasingly responsible for providing social insurance around health, retirement, and unemployment.

In the housing sector, institutional change in mortgage markets during the 1990s and 2000s shifted the risk of foreclosure away from government institutions and financial firms and onto households. American families became accustomed to using leveraged homeownership as a stable strategy of procuring shelter and accumulating wealth (Pattillo, 2013). However, during the foreclosure crisis, homeowners were exposed to increased and unanticipated housing insecurity. The foreclosure crisis has been described as a culmination of rising housing insecurity, in which moderate- and middle-income households were exposed to unprecedented levels of housing precarity (Dwyer and Phillips Lassus, 2015). Governmental response to the foreclosure crisis has been characterized as "too little, too late" (Immergluck, 2013), and an important component of governmental policy involved the facilitation of private market response. Although the entrance of institutional

investors into single-family rental markets is relatively small in relation to the overall size of the rental housing market, the gradual withdrawal of governmental supports for homeowners and facilitation of a market response in the single-family rental sector is emblematic of liberalization of housing markets. Furthermore, institutional change under liberalization is a process which, though incremental, can be transformative. Small initial changes can lead to large effects (Streeck and Thelen, 2009; Streeck and Thelen, 2005).

In this article, we examine housing insecurity 10 years after the foreclosure crisis began, focusing on post-foreclosure single-family rentals and the eviction practices of landlords, large and small, who manage these properties.

The Rise of Institutional Investor Investment in Single-Family Rentals

Since the 1930s, homeownership has been a core institution in the United States, creating the basis for a property-owning society and stabilizing a system in which public goods like schools and access to services and jobs are allocated by location (Hays, 2012). Single-family homeownership in particular was the preferred structure type for policies promoting suburbanization, segregation, and homeownership from the 1940s onward (Jackson, 1987; Rothstein, 2017). However, the institution of single-family homeownership is changing. Currently, homeownership rates are at the low point of a volatile cycle, and the GSEs that underpin U.S. mortgage and housing markets are under pressure to reform and change. Leading up to the crisis, deregulation and technological innovation saw the rise of private label securitization, risk-based pricing, the growth of shadow banking, and rapid rises in homeownership (Newman, 2009). During the crisis, subprime mortgage lending and private label securitization ground to a halt; GSEs Fannie Mae (FNMA) and Freddie Mac (FHLMC) went into conservatorship; fiscal and monetary policies went into effect to help troubled homeowners and inject liquidity into secondary markets; and the passage of the Dodd-Frank Wall Street Reform and Consumer Protection Act created a new residential mortgage regulatory body, the Consumer Finance Protection Bureau (CFPB), and restructured the residential mortgage lending business (Immergluck, 2011).

In the decade following the foreclosure crisis, the GSEs, U.S. Treasury, and the Federal Reserve coordinated to innovate structured transactions that would connect capital markets to landlords who would convert foreclosed homes into single-family rentals. These structured transactions were designed to facilitate the transition of hundreds of thousands of bank-owned homes, also known as real estate owned (REO), from the GSEs and private financial institutions back into the hands of landlords and homeowners. In 2012, the Federal Housing Finance Agency (FHFA), conservator of the GSEs, issued a pilot program to develop structured transactions that could be used to sell its REO in bulk. The private market followed by developing and standardizing financial instruments to allow broader market investment into the process of converting foreclosed homes into single-family rentals (Fields et al., 2016; Schwarz and Ferris, 2015; Yalamanchili, 2016). Single-family rental housing, traditionally the purview of mom-and-pop landlords (Mallach, 2010), increasingly caught the attention of large financial firms, as did the potential for securitizing single-family rentals. Nationwide, institutional investors purchased an estimated 350,000 homes

from 2011 through 2013, and these were spatially concentrated in cities like Atlanta with high numbers of bank-owned homes and the prospect of future home price appreciation (Eisfeldt and Demers, 2014; Fields et al., 2016; Yalamanchili, 2016). Industry discussion about securitization of single-family rentals continued in the wake of the FHFA pilot structured transaction; Blackstone's Invitation Homes issued the first single-family rental securitization in 2013. GSE support of institutional investors in single-family rentals continues. In 2017, Fannie Mae guaranteed a 10-year, interest-only $1 billion loan to Blackstone's Invitation Homes. At the outset of 2018, Freddie Mac followed suit, investing $11 million of a $1 billion pilot program to back institutional investment in affordable single-family homes.

Sunbelt cities like Atlanta have been particularly attractive to institutional investors in single-family homes (Fields et al., 2016; Immergluck, 2013, 2018). In the late 2000s, Atlanta had a glut of residential mortgage foreclosures, which occur when a mortgage lender forecloses on a homeowner due to a delinquent residential mortgage. The Atlanta region also had a glut of construction foreclosures, which occurred when banks that had lent to construction firms foreclosed on newly built homes when the construction firm became delinquent (Raymond, 2017). Atlanta's residential mortgage and construction foreclosure crisis presented appealing investment opportunities for firms wishing to invest in residential real estate. The geography of the foreclosure crisis and the timing of home price rises and investor entry into the Atlanta market governed where large investors bought homes. Four local factors stand out as important: the glut of brand new homes in construction foreclosure concentrated in the suburbs; swaths of residential mortgage foreclosures concentrated in older, in-town neighborhoods; the expectation that Atlanta's long-term home prices and economic health were bright; and lastly, high levels of racial and income segregation that structured the housing market recovery (Immergluck, 2018; Raymond, Wang, and Immergluck, 2016).

This research contributes to the literature evaluating whether the entrance of institutional investors, and conversion of single-family owner-occupied homes to single-family rentals represents continuation of rising housing insecurity for moderate-income households during the recovery. The conversion of single-family homes from owner-occupied to rentals in moderate- and middle-income communities could improve access to desirable locations for renting households. Historically, the spatial concentration of owner-occupied housing stock in high-income neighborhoods has been a barrier to entry for many desirable neighborhoods. In some cities, the rise of investor-owned foreclosed homes has generated new opportunities for low-income renters. Pfeiffer and Lucio (2015) find that Section 8 voucher holders in Phoenix living in investor-owned homes are more likely to live in low-poverty neighborhoods when compared to other voucher holders. Conversely, Kim and Cho (2016) study the post-foreclosure trajectory of REO homes in Orange County, FL and find that post-REO properties are more likely to be renter occupied in high minority neighborhoods, presenting affordable rental opportunities but possibly also reinforcing racial and ethnic segregation.

Neighborhood characteristics contribute to household-level housing insecurity, and so the spatial distribution of landlord's rental properties may affect their average eviction rates. This analysis compares housing insecurity between institutional investor landlords and mom-and-pop landlords. In addition to controlling for neighborhood characteristics, it's important to understand whether institutional investor landlords were systematically investing in

disadvantaged neighborhoods in which eviction rates might be systematically higher. In the next section, we describe the spatial patterns of investment into Atlanta's REO homes by institutional investors and other investor-owners.

REO Investors in Fulton County, GA

During the early 2000s, Atlanta builders flooded the market with new homes as mortgage firms originated cheap prime purchase mortgages, subprime purchases, and cash out refinances (Fishbein and Bunce, 2000; Immergluck, 2013). As the foreclosure crisis unfolded, REO properties became spatially concentrated in the suburbs in Clayton, Gwinnett, and Henry Counties, alongside construction foreclosures in new developments in these more peripheral locations. These newly constructed, suburban properties were often favored by institutional investors (Fields et al., 2016). REO properties were also concentrated in historically Black neighborhoods in the southwest of the city (Immergluck, 2013).

Small investors were important buyers in early years, purchasing 40 percent of foreclosed properties from 2005 to 2009 (Immergluck, 2013). While small investors were a large proportion of buyers of REO homes from 2009 to 2012, it wasn't until the 2013 rise in home prices in other Sunbelt cities that large institutional investors began buying Atlanta properties in earnest or consolidating small investors' holdings by buying their portfolios (Herbert, Lew, and Sanchez-Moyano, 2013). Herbert et al. (2013) find few purchases by large investors prior to 2012. At that time, large investors' purchases were concentrated in moderate- to middle-income neighborhoods in the suburbs outside of Fulton County and the City of Atlanta. These buyers only made purchases in Fulton County after 2012.

The timing of the entry of large institutional investors into the REO purchases coincides with a shift in the price and neighborhood characteristics of the properties being sold. From 2005 to 2009, homes with the weakest home prices and highest risk loans went into foreclosure; those homes were concentrated in lower middle-income, high-minority areas. As the subprime crisis progressed into the foreclosure crisis from 2010 onwards, properties from less distressed and middle-income neighborhoods went into foreclosure (Immergluck and Law, 2014a, 2014b). From this, we would expect large corporate investors to have invested in less distressed, higher income neighborhoods than smaller purchasers. Studies of foreclosure sales in Fulton County and Los Angeles confirm that as time progressed, foreclosure sales became more dispersed and increasingly common in less distressed, racially segregated neighborhoods (Ellen, Madar, and Weselcouch, 2015; Molina, 2016).

Overall, because of the timing of entry into the REO-to-rental market and the preferences institutional investors had for new homes, we do not expect they will be more heavily invested in disadvantaged neighborhoods than small firms who bought in the 2009 to 2012 era.

Eviction and Housing Insecurity

What causes eviction? Often the cause is nonpayment of rent. This nonpayment can happen because of high housing cost burdens, in which tenants have moved into a property they have difficulty affording. The number of renters with high housing cost burdens has reached record

levels in the United States. Over 21 million households spend more than 30 percent of their income on rent; 11 million of those spend more than 50 percent, which is considered severely cost burdened. Much of the increase in households reporting housing insecurity can be attributed to soaring rents as demand for rental housing climbs (Joint Center for Housing Studies of Harvard University, 2016). Desmond (2012) describes the rising gap between wages and rents for the lowest wage workers, which, combined with declining federal housing assistance, has resulted in tenants have housing burdens that are upwards of 80 percent of their income.

Eviction can be the result of a disturbance to tenant income. The rise of unpredictable scheduling and work hours can make income fluctuations more common. Kalleberg (2012) describes the rise of precarious work, in which employer flexibility erodes employee security. The percentage of employees working as contractors, for less than full-time, or as waged employees with flexible scheduling has increased. The percentage of employees that are full time, with a constant weekly salary and benefits has decreased. In this way, pay is unpredictable, sick leave is uncompensated, and employees—not employers—bear the risk of slowdowns in demand and downturns. Rising labor precarity has been attributed to the decline of unions and manufacturing employment and the rise of the services economy, as well as the rise of financialization of the economy, in which downsizing and layoffs are more common (Desmond and Gershenson, 2016). When tenants live paycheck to paycheck, life events such as missed work due to illness or car repairs, can cause a tenant to be late with rent.

Maintenance issues are a common source of tension between landlords and tenants, and in states like Georgia where tenants do not have the right to deduct repairs from rent, the common practice of tenant withholding maintenance expenses from rent, or withholding rent to protest a severe maintenance issue can trigger eviction. Depending on a landlord's strategy for profit, they may be incentivized to take maintenance and upkeep more or less seriously. The literature describes an array of landlord strategies and behaviors in post-foreclosure properties. Mallach (2010) describes two landlord strategies: "milkers" and "holders." Milking focuses on rental income more than resale value. Landlords extract highest rents with the least investment, allowing building condition to deteriorate, then dump the property on the market or the municipality. Holders seek profits through home price appreciation, place more importance on maintenance, and may keep properties vacant until prices rise. Investor location can affect maintenance of properties as well, with local landlords being more willing to invest in properties where they are likely to capture spillovers, either through other properties or because they themselves live nearby; whereas non-local owners may be more likely to "milk" properties (Mallach, 2010).

Landlord factors influencing housing insecurity also include property management incentives. Interviews with Atlanta landlords suggests that landlords who worked with property managers sometimes had higher turnover as property managers sought to maximize fee revenue by selecting tenants who would turn over quickly (Herbert et al., 2013; Immergluck, 2013). Eviction filings can also be part of landlords' routine rent collection strategy. This does not always result in displacement. A common feature of low-income tenant relationships with landlords is that rent is short, late, or deducted due to necessary repairs and maintenance. In these cases, routine eviction filings are part of a rent collection/late fee strategy on the part of the landlord. They are not used to evict tenants, but rather filed then dismissed to increase revenue. In some cases, some landlords

or third-party property management firms make a meaningful portion of their income on ancillary charges like late fees and eviction filing fees. In 2017, Invitation Homes attributed a $2 million increase in overall revenue to the implementation of a standard lease that automated delinquency tracking and other ancillary fees, which led to a 22 percent increase in revenue from ancillary fees. Starwood Waypoint attributed its impressive revenue gains from 2015 to 2016 to a combination of new acquisitions and automation of ancillary fees like tenant chargebacks, late fees, eviction fees, and withholding security deposits (Abood, 2018; Starwood, 2017).

Housing insecurity due to eviction is of great concern because of the long list of negative consequences for households, landlords, and for neighborhoods. At worst, evicted families and individuals face homelessness (Crane and Warnes, 2000). Desmond and Shollenberger (2015) find that if households are able to find another home after an eviction, their moves are characterized by greater increases in neighborhood poverty and crime as compared to voluntary moves. This scramble to secure a need as basic as shelter, often with short notice, compels households to accept more dangerous environments with less opportunity. These evictions also cause families to accept substandard housing conditions (Desmond et al., 2015). Dissatisfaction with the poor living conditions households are forced into by an eviction often leads to another move. Compounding residential insecurity harms children and communities (Desmond, An, Winkler, and Ferriss, 2013; Desmond et al., 2015; Desmond and Kimbro, 2015).

Eviction also leads to negative consequences for health and income. Renters who experience the stressful and time-consuming experience of a forced move are more likely to lose their jobs (Desmond and Gershenson, 2016). Evicted mothers experience higher levels of parenting stress, depression, and poorer physical health, in addition to greater material hardship. These effects continue for years after the eviction (Desmond and Kimbro, 2015). The stress associated with evictions has been connected with a higher suicide rate (Fowler, Gladden, Vagi, Barnes, and Frazier, 2015). High rates of eviction also impair neighborhood well-being. Some research supports the finding that residential turnover leads to loss of social cohesion/neighborliness, which can create opportunities for violent crime (Morenoff, Sampson, and Raudenbush, 2001; Sampson, Raudenbush, and Earls, 1997).

The Legal Process of Eviction

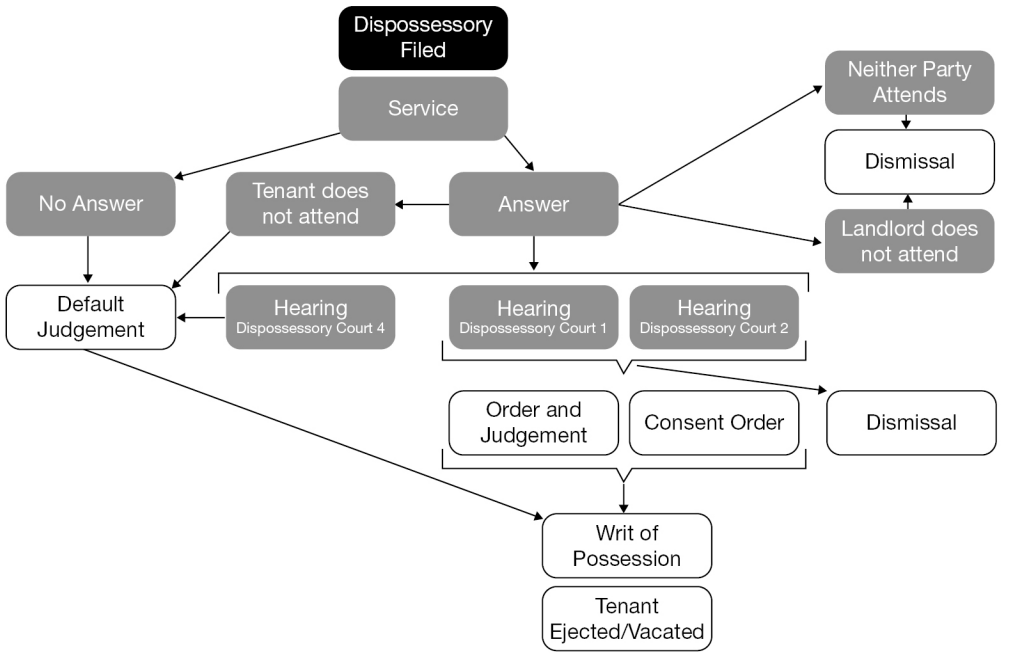
Evictions and housing displacement can occur rapidly in Georgia as the state has a swift eviction process that typically lasts less than a month. Hatch (2017) divides state landlord-tenant law into three clusters: protectionist, which favors tenants; pro-business, which favors landlords, and contradictory, which is a mixture. Hatch (2017) classifies Georgia as a pro-business state, with few landlord-tenant laws overall and a higher proportion of statutes benefiting landlords in their landlord-tenant law.

This research on housing insecurity relies on the paper trail that a legal eviction process generates as it moves through the courts; that data documents many of the moments in which a tenant can be displaced. The legal process of an eviction can follow many pathways of which many result in a tenant being forced to relocate. Exhibit 1 depicts some ways a case can proceed. The legal process of an eviction is distinct from events on the ground, and only partially captures the

number of tenants who leave under pressure from their landlord, thus many displacements are not captured in the data. Some landlords use the eviction process as an ancillary to collections efforts, and service of an eviction notice, (or in legal terms, a dispossessory filing) does not necessarily end in the landlord obtaining a writ of possession, but rather collection of fees and rent due. Tenants may also leave immediately after an eviction notice is served so that displacement occurs without any further paperwork being filed, representing displacement that would not be captured in a data set of court records.

Exhibit 1

Simplified Eviction Legal Process for Fulton County, GA



Source: Atlanta Volunteer Lawyers Foundation

As shown in exhibit 1 in the box shaded black, evictions begin when a landlord files a dispossessory or eviction notice. From there, intermediate steps are shaded in gray, and potential final outcomes are shaded in white. Regardless of the outcome of the eviction case, once an eviction notice is filed, unless the eviction is dismissed, this event is reflected on a tenant's record and is visible to future landlords who pursue background checks. After a filing, the tenant has 7 days to answer. If the tenant fails to answer, the court issues a default judgment, and the tenant is subject to forcible eviction. If, the tenant does answer, they are granted a hearing. The hearings take place at the Magistrate Court in three different sessions. In dispossessory courts one and two, the tenant's answer has raised a potential defense. The first court is for cases in which neither the tenant nor the landlord has a lawyer. In the second court, one or both parties have a lawyer. A handful of lawyers represent the vast majority of landlords in these cases. Most of these cases are sent to mediation for settlement. In dispossessory court four, the tenant's answer was deemed by the court

to be insufficient for a defense. The fourth court is remarkable because all tenants who appear are evicted en masse.

At the hearing the judge may issue an order and judgment or the two parties may resolve the dispute themselves (Thaler, 2016). This resolution results in a consent judgment, agreement, or order. A judgment or order can be used to garnish wages, establish terms of payment, establish that a tenant must leave, or all three. Once a judgment or order is obtained, the landlord can go to the court and for a $20 filing fee, obtain a writ of possession that allows marshals to forcibly remove a tenant from their home. The writ leads to a tenant being ejected or vacated. If part of the judgment involves monetary conditions, once the tenant has completed payment, the landlord should file a Satisfaction of Judgment. At any point in this process, the landlord may dismiss the eviction case or the tenant may decide to leave the rental property.

However, not all landlords go to the trouble of filing a dismissal (Thaler, 2016). This failure to file a dismissal can have effects on the credit record of the tenant and means that the resulting paper-trail can indicate evictions in cases where the case was dismissed. When an eviction notice is filed, it shows up on tenants' credit records and can make it difficult for them to access public assistance and rent private housing in the future. Whether or not there is subsequent displacement, an eviction notice in and of itself can be an adverse event for the tenant (Desmond and Shollenberger, 2015).

The goal of this research is to understand whether the new phenomenon of post-foreclosure single-family homes shifting into rental markets and the emergence of large corporate landlords managing scattered site rentals, has resulted in increased evictions and higher levels of housing insecurity. This research connects to three strands in the housing literature. We follow in the footsteps of other research into the trajectory of REO homes in the wake of the foreclosure crisis; we continue to investigate the ramifications of the rise of the large investor landlord in the scattered site, single-family rental space; and we contribute to a growing understanding of the phenomenon of high rates of evictions, in this case, examining patterns of evictions among a moderately well-off segment of renters—those renting single-family homes.

Design and Conceptual Framework

This research examines housing insecurity in Fulton County, GA by seeking to answer three questions.

1. What was the prevalence of eviction in Fulton County, GA in 2015?

2. Did tenants living in properties owned by large corporate landlords have more housing insecurity than other single-family rental tenants?

3. Did tenants living in properties owned by institutional investors have more housing insecurity than other single-family rental tenants?

We instrumentalize housing insecurity as the probability of a landlord filing for eviction. This form of housing insecurity is caused by four types of factors: ownership characteristics; tenant characteristics; property characteristics such as housing quality; and neighborhood characteristics like employment rates, access to jobs, neighborhood change like gentrification, demographics, and income.

Exhibit 2

Conceptual Framework

Housing Insecurity ← **Ownership Characteristics** + **Property Characteristics** + **Tenant Characteristics** + **Neighborhood Characteristics**

The intent of this paper is to determine whether landlord characteristics like size or institutional investor backing have an effect on housing insecurity. We expect that property characteristics will affect eviction rates, with newer and higher quality properties having fewer eviction rates, as there are fewer maintenance issues, which are a major cause of conflict between landlords and tenants.

We also expect that tenant characteristics will affect housing insecurity. Using census block group data, we impute tenant characteristics, measuring household income, race, gender, education, and rents to control for tenant characteristics. This technique is commonly used in the public health literature (Geronimus and Bound, 1998; Geronimus, Bound, and Neidert, 1996; Greenwald, Polissar, Borgatta, and McCorkle, 1994; Kaufman, 2017; Krieger, 1992; Soobader, LeClere, Hadden, and Maury, 2001). There are some caveats to be noted with regard to this approach. In two influential papers, Geronimus et al. (1996) and Geronimus and Bound (1998) found weaker associations between socioeconomic status and outcome variables when aggregate variables were used as compared to individual measures. Unlike this study, they used census tract and zip-code level aggregates which are at a higher geography and typically less homogenous than block groups. Summarizing the methodological literature, Kaufman (2017) still recommends the use of aggregate data, arguing that individual measures fail to capture the latent variable of socioeconomic status and that accounting for location allows for a more complete measure of this factor. Given that we use tenant socioeconomic status as a control variable here, and are less interested in precise estimates of the separate impacts of individual characteristics versus neighborhood level impacts than in adequately controlling for the confounding effects of both, using area level aggregate data as a proxy for tenant characteristics meets our needs in this study. The literature commonly describes using census tract or zip code socioeconomic data as a proxy for individuals; however, Soobader et al. (2001) have found that block group data systematically reduced the amount of bias introduced by geographic aggregates, particularly with regard to the confounding of race and income; and provide closer estimates than census tracts to actual coefficients for individual socioeconomic characteristics. In this article, we use block group data from the 2012–2016 ACS to proxy for individual tenant socioeconomic status.

To thoroughly account for a neighborhood effect, each parcel in the data set is tagged by census tract, which we use to control for neighborhood characteristics in a second model with census-tract fixed effects.

Site: Fulton County, Georgia

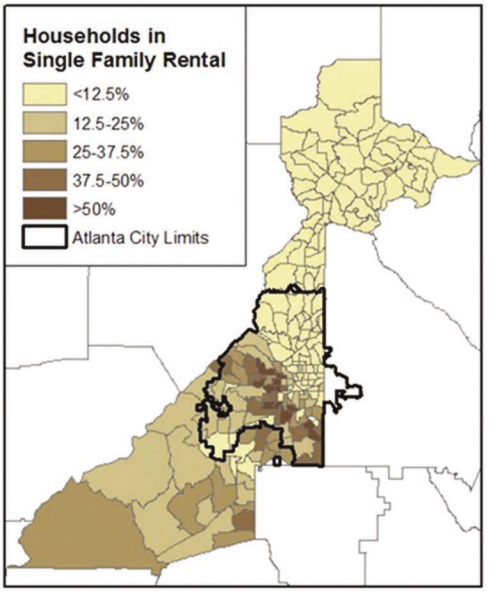
Fulton County, GA is the most populous county in the Atlanta-Sandy Springs Metropolitan Statistical area. Fulton County almost fully encompasses the city of Atlanta as well as several other major municipalities and stretches from southwest metropolitan Atlanta through downtown Atlanta into affluent neighborhoods in the north, providing a wide variety of neighborhood contexts.

By population, the city of Atlanta accounts for half of the county. 2014 census data show Fulton County has 373,005[3] households and a population of 967,100. The population is 46 percent White, 44 percent Black, and 10 percent other. Atlanta is one of the most highly segregated cities in the nation, by race and by income (Massey and Denton, 1989, 1993; Massey and Tannen, 2015). Slightly under half or 48 percent of all households rent.

Exhibit 3 depicts the distribution of single-family rentals in Fulton County. Single-family rentals are predominantly found in the southwest of the county. Their distribution roughly follow the distribution of past foreclosures and REO properties, which were concentrated in southwest Atlanta and in South Fulton County (Immergluck and Law, 2014b).

Exhibit 3

Single-Family Rentals by Census Tract, Fulton County



Sources: Author calculations, ACS 2014 5-Year Estimates, Fulton County Parcel Tax Assessors Data[4]

Data

Our data set is a cross-sectional, parcel-level dataset for all single-family homes in Fulton County in 2015. We define single-family rentals as those with a Land Use Code of 101 or 107, and where owner and property addresses do not tie. We then match eviction records to Fulton County tax assessor's data and deeds data by address, which provides us with ownership and property characteristics. Our analysis focuses on single-family rental properties so we removed multifamily

[3] 2014 ACS 5-year estimates

[4] Single-Family Rental units defined as those where Land Use Code of 101 or 107, where owner and property addresses do not match. Calculated as a percentage of all households as defined by 2014 ACS 5-year estimates.

and owner-occupied parcels.[5] This left 42,674 single-family rentals, 3,152 of which experienced an eviction filing in 2015. We then matched parcels to block group level census data to impute renter characteristics. Summary statistics and sources are displayed in exhibit 4.

Our dependent variable, housing insecurity, comes from eviction records collected from the Fulton County Magistrate Court website. Case data was scraped from the magistrate court's website in March of 2016 for all 2015 dispossessory filings. Because of the difficulty in ascertaining whether an eviction proceeding resulted in displacement based on the paper trail, and because an eviction notice without displacement is still an adverse outcome for tenants, we use service of an eviction notice as our measure of housing insecurity. The variable is specified as 1/0, 1 indicating the presence of at least one eviction filing at a given parcel in 2015. Around one-fourth of single-family properties in our sample had more than one eviction filed in a year; eviction filings from these properties represented around 44 percent of total eviction filings. These repeated eviction filings may represent a rent collection strategy by landlords, in which evictions are repeatedly filed against the same tenant. The number of evictions per parcel is not normally distributed. After testing the model as ordinary least squares and finding similar results to logistic regression, we opted to use logistic regression to maximize model fit.

Owner information comes from the Fulton County assessor's parcel database. We used the name in the "owner" field provided by the county for most parcels. However, some companies own significant numbers of properties under different names. For these firms, we collapsed subsidiaries and special purpose vehicles (SPVs) under their corporate umbrella to get an accurate count of the single-family rentals. Information about parent-subsidiary and SPV relationships were obtained from industry news and reports and from EDGAR's repository of SEC filings.

To identify large corporate landlords, we examined the distribution of number of properties each landlord owned in Fulton County, researched some of the larger property owners, and created a definition of large corporate landlord as one that holds more than 15 single-family rental properties. This definition is consistent with the literature on landlord size in Atlanta during the 2010s. Other research (Herbert et al., 2013; Immergluck and Law, 2014b) has defined large landlords as those acquiring more than 10 REO properties; because we are defining a static variable, and based on the distribution of properties in the data, we chose 15 as the cutoff. This measure identified 79 companies, including Georgia-based firms like Valor Homes 100, LCC which owned 110 single-family rentals in 2015; and Summit Realty Services which owned 47. Our regression results were not sensitive to using 15 units rather than 10. We also excluded banks and public entities from the definition of large corporate landlord as these entities were not landlords and are far more likely to be holding properties vacant than renting them out.

By researching large landlord names, and referencing other research on national and global institutional investors in single-family rentals, we also separately identified large institutional investors with a national or global real estate investment holdings (Schwarz and Ferris, 2015). The

[5] First, non-residential parcels were removed by dropping parcels where the number of livable units was zero. Single-family parcels were identified by land use codes 101 ("Residential 1 family") and 107 ("Single Family Residential Townhouse"). Parcels coded with other land uses were dropped. Non-owner-occupied parcels were identified by comparing the property address to the owner's mailing address. If they matched, the parcel was dropped from sample.

nine national or global firms that were active in Fulton County in 2015 include: Colony American Homes, Starwood Waypoint Residential Trust, American Homes 4 Rent, Silver Bay Realty Trust, Havenbrook Homes, Progress Residential, American Residential Properties Inc, Amherst – Main Street Renewal, and Blackstone – Invitation Homes. Their holdings ranged from 957 homes (Blackstone – Invitation Homes) to 55 homes (Amherst – Main Street Renewal).

To separately capture the impact of foreclosure history on housing insecurity, and to allow us to compare landlord type among post-foreclosure single-family rentals, we use deeds data to tag homes which had a foreclosure during the 2000s real estate crisis.

Although the association between tenant characteristics and evictions is not the primary subject of this paper and has been extensively studied elsewhere, tenant characteristics are an important predictor of evictions. We expect that tenant characteristics will affect the likelihood of eviction and therefore control for them in the model. Research has found that evictions are higher in households under the poverty line, as well as households with children, and those with a female head of household; and among racial minorities (Desmond, 2012; Desmond et al., 2013). We include measures of household income, gross rent, female head of household, families with children, race, poverty, and education. We do not have data at the household level for tenant demographic characteristics. So, all tenant characteristics are imputed from block group data drawn from the American Community Survey, a practice which has been found to provide useful estimates of individual socioeconomic status in the literature (Geronimus and Bound, 1998; Geronimus et al., 1996; Greenwald et al., 1994; Kaufman, 2017; Krieger, 1992; Soobader et al., 2001).

Finally, we expect that neighborhood characteristics will impact eviction rates. In order to control for these effects, and isolate the impact of landlord characteristics, we run the model a second time as a conditional logistic regression with census tract fixed effects.

A review of the literature led us to test the following property characteristics. Research has shown that, excluding homes rented to voucher holders, landlords had higher stability and less turnover at higher price points (Immergluck, 2013). We include three property characteristics to capture price point: age, assessed value per square foot, and assessed value per acre. These measures are indicators of housing quality, housing cost, and location desirability. We expect all three will affect eviction rates, as higher quality properties, more expensive properties, and homes located on desirable and more expensive land, will typically be rented at higher price points.

Exhibit 4

Summary Statistics

Variable	Observations	Mean	Standard Deviation	Minimum	Maximum	Source
Eviction	42,674	0.07	0.26	0	1	Author calculated: Fulton County Magistrates Court
Institutional investor	42,674	0.24	1.15	0	10	Author calculated: Fulton County Tax Assessors data

Exhibit 4

Summary Statistics

Variable	Observations	Mean	Standard Deviation	Minimum	Maximum	Source
Large owner (greater than 15 properties)	42,674	0.09	0.29	0	1	Author calculated: Fulton County Tax Assessors data
Previous foreclosure	42,674	0.44	0.50	0	1	Author calculated: deeds data
Year built (decades)	42,674	196.7	2.9	180.0	201.3	Author calculated: Fulton County Tax Assessors data
Home value (U.S. dollar square foot)	42,674	$0.44	$0.46	$0.00	$7.31	Author calculated: Fulton County Tax Assessors data
Land value (U.S. dollar per acre)	42,674	$1.54	$3.36	$0.00	$86.43	Author calculated: Fulton County Tax Assessors data
Percent female head of household	42,674	0.22	0.13	0.00	0.66	Imputed from Block Group: 2010–2015 American Community Survey
Percent households that are families with children	42,674	0.56	0.17	0.00	1.00	Block Group: 2010–2015 American Community Survey
Percent Black or African-American	42,674	0.69	0.34	0.00	1.00	Block Group: 2010–2015 American Community Survey
Percent with Bachelor's Degree	42,674	0.22	0.11	0.00	0.51	Block Group: 2010–2015 American Community Survey
Block group gross rent ($1,000s)	42,674	$1.03	$0.31	$0.24	$3.50	Block Group: 2010–2015 American Community Survey
Block group household income ($10,000s)	42,674	$4.85	$2.86	$0.53	$21.58	Block Group: 2010–2015 American Community Survey

Methods

After mapping and calculating descriptive statistics of evictions in Fulton County, GA, we segment out single-family rentals for analysis. We use a logistic regression model. Our data contains a cross section of 42,674 single-family rentals with a binary dependent variable which is equal to 1 in the cases that an eviction notice was served on a tenant at a property in 2015; and 0 if it is not.

We use a logistic model with clustered standard errors to the following model:

$$\text{Logit}(p_{\text{eviction}}) = \beta_0 + \beta_1 X + \beta_2 W + \beta_3 V + \varepsilon$$

X = ownership characteristics
W = property characteristics
V = tenant characteristics

This model uses a control strategy to deal with selection issues around the different geographic distribution of large landlords as compared to mom-and-pop investors. As a check, we calculate a census-tract fixed effects conditional logistic regression model to verify that the coefficients obtained in this model do not change substantially when we compare single-family rentals within census tracts.

We expect spatial correlation and account for this by clustering standard errors at a geography large enough to encompass regional factors. So, for the logistic regression model, we clustered errors at the zip-code level with 42 clusters (Angrist and Pischke, 2008).

Results and Discussion

Exhibit 5 depicts eviction filing rates in Fulton county for single and multifamily rentals. The overall rate of eviction filings in Fulton County—combining multi and single-family properties—is extremely high. In 2015, landlords of all (multifamily and single-family) rental units initiated eviction processes 39,221 times, or 107 times a day. 22.2 percent of all renting households in Fulton County faced eviction proceedings in 2015.

Exhibit 5

Eviction Rates by Single and Multifamily

	Multifamily	Single Family	Total
Eviction Filings	35,775	3,446	39,221
Rental Households	128,572	48,413	176,985
Evictions Filings Rate	28%	7%	22%
Percent of Total Households	73%	27%	100%

In Fulton County, evictions are concentrated in multifamily properties. As depicted in exhibit 5, 28 percent of all households in multifamily buildings had an eviction notice filed compared to 7 percent in single-family rentals.

Rates of eviction filings are also spatially concentrated; in four southwest Atlanta zip codes the rate exceeds 40 percent of all rental households, as depicted in exhibit 6.

Exhibit 6

Spatial Concentration in Evictions: Top Zip Codes by Eviction Rates, all Property Types

	Geography	(a) Eviction Notice Filed	(b) Eviction Notice Filed and Never Dismissed	(c) Writ of Possession Issued or Tenant Vacated/ Ejected	(d) Census 2010 # Rental HH	(a/d) Eviction Notice Filed	(b/d) Eviction Notice Filed and Never Dismissed	(c/d) Writ of Possession Issued or Tenant Vacated/ Ejected
1	30,344	3,031	2,180	1,021	6,564	46%	33%	16%
2	30,291	1,888	1,062	555	4,260	44%	25%	13%
3	30,337	1,478	1,138	499	3,339	44%	34%	15%
4	30,331	4,088	2,490	1,196	10,063	41%	25%	12%

Notes: Excludes Zip Codes which cross Fulton County boundaries. These rates would be understated for these zip codes, as we do not have eviction counts for surrounding counties.

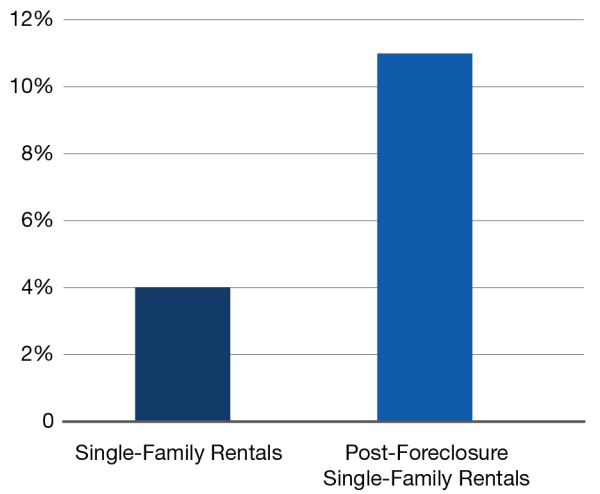
Sources: Author calculations; Fulton County Magistrate Records

Our data shed light on how landlords and tenants in Fulton County, GA, navigate the judicial system. On average, eviction cases took 26 days. 15,608 of 39,221 cases were dismissed. Of the completed cases in 2015, 54 percent of the tenants did not answer. Unless these cases were dismissed by the landlord, this led to a default judgment in favor of the landlord. The remaining 46 percent of tenants answered the eviction notice, but over one-half of these were deemed to not have raised a legal defense and were assigned to Dispossessory Court 4 for a default judgment in favor of the landlord. That outcome suggests that there may be a gap between what tenants believe constitutes a defense and that of the justice system (Lempert and Monsma, 1994). Only one-fifth of all cases were assigned to Court 1 or 2[6] and were therefore heard by a judge or mediator.

Accounting for just 27 percent of all households, single-family rentals represent a relatively small slice of the rental market in Atlanta. Among single-family rentals, post-foreclosure rentals are systematically different than single-family homes that did not go through foreclosure. Overall, 22 percent of single-family homes in Fulton county are rental properties. By contrast, over half (53 percent) of all post-foreclosure single-family homes were rentals in 2015. Post-foreclosure homes are not only more likely to be rentals, they also have higher eviction filing rates as shown in exhibit 7. Just 4 percent of single-family homes with no foreclosure history had an eviction in 2015; this rate was 11 percent for post-foreclosure single-family rentals.

Exhibit 7

Housing Insecurity in Single-Family Rentals by Post-Foreclosure Status

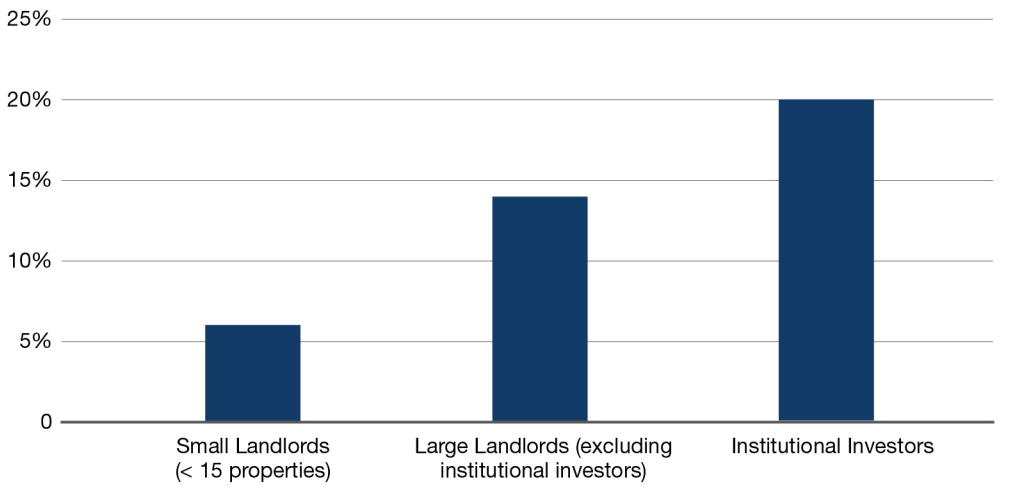


Overall eviction filing rates vary by firm size and firm type, as shown in exhibit 8. Small landlords with fewer than 15 properties file evictions on 6 percent of their tenants. Excluding institutional investors, large landlords have a 14 percent eviction filing rate. Institutional investors have a 20 percent eviction rate, more than three times that of mom-and-pop landlords.

[6] These courts are apparently named after their meeting times, which in 2015 were at 1 o'clock, 2 o'clock, and 4 o'clock. There was no 3 o'clock court and no Court 3.

Exhibit 8

Eviction Filing Rates by Landlord Type



The regression results in exhibit 9 uses logistic regression to evaluate the causes of evictions in single-family rentals in Fulton County in 2015. Model 1 evaluates landlord characteristics like institutional investor firm name and size, property level characteristics like post-foreclosure history, ownership, value, and age, and tenant characteristics like family type, race, income, and education. Model 2 displays odds ratios and significance when census tract fixed effects are included. In this model, around 53 census tracts containing 2,878 homes were dropped as they had no evictions.

Together, the two models show that overall, post-foreclosure properties are 59 percent more likely to have eviction notices than single-family rentals that have no record of a foreclosure. The housing insecurity that occurred in the form of foreclosures during the late 2000s has been followed by a pattern of housing insecurity in the form of evictions.

Exhibit 9

Eviction in Single-family rentals

	Model 1			Model 2		
	Odds Ratio	z	P>z	Odds Ratio	z	P>z
Private Equity Firm						
Colony American Homes	3.054	6.810	0.000	2.841	6.54	0.000
American Homes 4 Rent	2.809	4.240	0.000	2.694	3.2	0.001
Starwood Waypoint Residential Trust	2.132	5.970	0.000	1.980	2.85	0.004
Progress Residential	1.926	0.600	0.546	1.831	0.56	0.578
Silver Bay Realty Trust	1.923	3.740	0.000	1.837	2.61	0.009
Havenbrook Homes	1.902	3.960	0.000	1.873	4.76	0.000
American Residential Properties	1.577	1.900	0.058	1.522	1.59	0.113
Amherst – Main Street Rental	1.551	1.820	0.069	1.427	0.98	0.325
Blackstone – Invitation Homes	1.113	0.650	0.519	1.058	0.47	0.635

Exhibit 9

Eviction in Single-family rentals

	Model 1			Model 2		
	Odds Ratio	z	P>z	Odds Ratio	z	P>z
Large owner (> 15 properties)	1.634	5.060	0.000	1.676	7.41	0.000
Previous foreclosure	1.585	12.460	0.000	1.569	10.9	0.000
Home value per square foot (U.S. dollars)	0.396	-6.140	0.000	0.606	-3.03	0.002
Land value per acre (U.S. dollars)	0.976	-1.590	0.111	0.997	-0.21	0.833
Year built	1.066	5.760	0.000	1.060	6.08	0.000
Female head of household	1.487	2.190	0.028	1.563	1.69	0.090
Families with children	1.149	1.610	0.107	1.304	1.57	0.117
Black or African-American	2.074	3.440	0.001	1.610	1.83	0.067
High school degree	1.083	0.400	0.689	1.445	1.22	0.223
Gross rent	1.196	1.660	0.098	1.000	0.17	0.863
Household income	0.942	-3.220	0.001	1.000	-1.34	0.181
Census tract fixed effects	no			yes		
Number of obs	42,674			39,796		
Pseudo R2	0.0703			0.0281		

Ownership characteristics have a strong and significant relationship with housing insecurity. Single-family rentals with large corporate owners are 63 percent more likely to have housing insecurity after controlling for housing quality, tenant characteristics, and neighborhood characteristics. Previous research shows that, at least in the early years of the post-crisis decade, large investors were less likely than smaller corporate buyers to purchase in high poverty, high minority neighborhoods, so if there is selection bias that is uncontrolled for in Model 1, we expect that the bias will produce more conservative estimates of the probability of eviction among large corporate landlords. Additionally, we test our results with census tract fixed effects in Model 2 in exhibit 9. This model controls for neighborhood characteristics, estimating a comparison between landlords within the same census tract. We obtain similarly sized coefficients in Model 2; large owners are 68 percent more likely to evict than small owners, controlling for neighborhood factors.

Both models demonstrate that institutional investors are far more likely to pursue eviction than other landlords, even after controlling for property, tenant, and neighborhood characteristics. The dummy variables for institutional investor firm reveal that these firms are between 11 percent and 205 percent more likely to file eviction notices. Colony Capital had the highest propensity to evict, and was 205 percent more likely than other firms to file eviction notices after controlling for property, tenant, and neighborhood characteristics, followed by American Homes 4 Rent, who were 181 percent more likely to file evictions than a small landlord.

Other property-level characteristics have a significant relationship with housing stability. Increase in housing value resulted in a 61 percent decrease in housing insecurity. A one-decade increase in the year a home is built corresponds with a 7 percent increase in housing insecurity.

The second group of characteristics measures tenant characteristics on the eviction rate. These coefficients should be interpreted cautiously as they are simply included as controls, and because

the use of geographic aggregates as a proxy for individual characteristics has been found to produce slightly biased estimates in the literature. Previous literature on evictions has been more focused on lower and very low-income tenants rather than the moderate-income tenants one might expect in single-family rentals. For example, in this sample, mean household income for single family renters was around $48,532, well above median income for renting households in Fulton County of $37,296 (Census, 2011-2015). The relationships between eviction and characteristics typically associated with poverty may not be significant or as large among this subset of renters.

Of the tenant characteristics included in the model, as the likelihood that a tenant is Black or African-American rises from 0 to 100 percent, that tenant is 107 percent more likely to experience eviction. A household with a 100 percent likelihood of having female head is 49 percent more likely to experience eviction than one with 0 percent likelihood. An additional $10,000 of household income corresponds to 6 percent lower odds of receiving an eviction filing. Measures of gross rent, education, and the presence of children were not significant.

Conclusions

This research describes housing insecurity among single-family renters in Fulton County, GA. Overall, we find rates of eviction filings and completed evictions that are far higher than the 2015 national average of 6.27 percent and 2.37 percent, respectively (Desmond et al., 2018b). We find that overall, evictions are spatially concentrated in predominantly Black census tracts, and that extremely high levels of housing insecurity exist in many areas of southwest Atlanta and Fulton County. The majority of evictions take place in multifamily properties, however, evictions are also common in single-family rentals. Although there is no comparative research or data set to compare single-family rental evictions, the single-family rental rate of eviction filings in Fulton County is more than twice the 2015 national average for all evictions (Desmond et al., 2018b). The data show extremely high levels of residential displacement in Atlanta, levels which in other cities have been linked to high levels of crime, schools beset with constant turnover, lack of community cohesion, and a dilapidated built environment (Desmond and Kimbro, 2015; Desmond and Shollenberger, 2015).

We explore the impact of landlord characteristics on evictions in single family because the post-foreclosure, institutional investor-owned single-family homes are the product of emblematic of widespread institutional change in housing and mortgage markets. The impact of the foreclosure crisis on both supply and demand for single family homes, the entry of institutional investors, interconnections with secondary investor markets, and support by the GSEs are all innovations in the single-family rental market. During this period of institutional change in housing markets, it is possible that the United States is tilting away from a homeownership society and toward a rentership society. Large institutional investors have shown a strong appetite for this asset class, and their small share of overall single-family rentals represents opportunity for growth. Understanding housing insecurity in this sector is important because it is a new phenomenon and because it may grow as time goes on.

Large corporate landlords and institutional investors are not guaranteed to engage in practices that will lead to more or less housing insecurity, and in our model, we find a wide range of

practices, with Blackstone-Invitation Homes being 11 percent more likely to file eviction notices than non-corporate firms; while Colony Capital was extremely aggressive in their filing practices, and were 205 percent more likely to file than non-corporate firms. Depending on their strategies, institutional investors may be more or less likely to maintain properties and attract and retain tenants than smaller investors. Their capital reserves could support economies of scale and a higher capability to provide affordable housing and more likely to absorb short-term losses. Conversely, landlords with national or global scope, with scattered site rentals in any given region may lack of neighborhood embeddedness may make them less flexible in working out rental agreements with low-income tenants outside of the formal justice system. The conversion of owner-occupied housing stock to rentals has some potential benefits. Historically, zoning by housing type has been used to exclude lower income households from desirable neighborhoods. Providing the opportunity to rent in these areas may represent a pathway to opportunity that was not previously available to those who could not, or did not want to buy a single-family home.

We find that even controlling for other factors, Black tenants are particularly more likely than other tenants to face an eviction filing, as well as female heads of household, suggesting that there are distributional justice issues in which communities face eviction in single-family homes.

We find large, significant impacts of firm and landlord type on eviction filing rates, even when compared to demographic data and controlling for neighborhood effects. This finding underscores the importance of understanding how landlords factor into housing insecurity. One possible reason large corporate landlords backed by institutional investors may have higher eviction filing notices is that they may routinely use eviction notices as a rent collection strategy. No peer-reviewed academic research has been conducted into this phenomenon; given the magnitude of the effects found in this paper, even when compared to demographic factors, further investigation into the impact of landlord strategies is warranted. Subsequent research could compare whether large firms are more likely to dismiss eviction notices, or more likely to have a tenant listed as ejected/vacated in the records. While neither of these is a perfect measure of displacement, it could help differentiate between landlords who use the threat of eviction as a collection strategy and cases of actual displacement.

We find in Fulton County, GA that investor size is correlated with higher levels of housing insecurity among single-family rental properties. These results are noteworthy for Atlanta, but also for other cities where institutional investor backed corporate landlords operate. Looking into the data, there appears to be a company effect, with some firms having significant, and substantially higher, eviction rates than other firms, even after controlling for property quality, location, and foreclosure history. High levels of housing insecurity are disruptive to households and neighborhoods, impacting school performance, crime and safety, maintenance of buildings, community cohesion, and other attributes of community well-being. Further research is needed to understand why large corporate landlords increase housing insecurity compared to their smaller peers.

Another implication of the research is the need to work towards providing safe, stable, affordable rental housing for the growing number of households who rent in Atlanta and elsewhere. Recognizing the high cost of evictions to cities, neighborhoods, employers and households, some jurisdictions, like the City of New York, have begun providing automatic legal defenses to tenants

facing eviction. Other research has found that providing tenants with legal defense leads to much better outcomes for tenants with issues around maintenance with landlords (Blasi, 2004). Funding of tenant defense may help reduce the number of evictions, and deter frivolous filings.

Our data show that 12 percent of all rental households received an eviction filing that was not dismissed, a record that makes it more difficult for these tenants to find rental housing in the future, and relegates them to a small number of second-chance apartment complexes. Some states automatically seal eviction records; for example, the state of California automatically seals eviction records unless the landlord prevails, or wins at trial within 60 days of filing. The effect of this law is to prevent damage to credit histories of tenants who had an eviction filing which was not ultimately deemed valid or actionable. Similarly, the state of Wisconsin seals dismissed eviction cases after 2 years and destroys case information (Desmond et al., 2018a). Adopting those policies which restrict the public reporting of evictions, and focus reporting to tenant credit reports to those instances in which there was a judgment or an outstanding payment due would make it easier for the vast majority of tenants whose eviction cases are dismissed or end without a judgment to rent homes in the future. Another policy might be to charge higher eviction filing fees, to encourage landlords to use eviction filings as a method of removing tenants from properties, rather liberally filing as part of a routine rent collection strategy.

The high rates of eviction filings and housing insecurity among the tenants of institutional investors may be a burden to neighborhoods, judicial systems, and employers. Municipalities should attempt to negotiate with institutional investors around issues of code enforcement, maintenance, and evictions. Particularly where these institutional investors have a reasonable market share within certain urban submarkets, successful negotiations could affect large numbers of homes within a jurisdiction.

At the federal level, the GSEs have shown their willingness to provide financial support institutional investment in scattered site, single-family rentals. In accordance with their mandate, GSE support should be tied to the provision of affordable rental housing. Specific provisos might limit the number and scale of chargebacks and ancillary fees to tenants; limit the pace of rent increases, and eliminate discrimination based on source of income, so that single-family rentals are available to tenants with section 8 vouchers and other forms of housing subsidy.

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