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Renting the Dream: The Rise of Single-Family Rentership in the Sunbelt Metropolis

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Keywords: Renting; housing; single- family rentals; single-family; suburban; rentership; homeownership; rent; suburbs; housing tenure

ABSTRACT

In the aftermath of the foreclosure crisis, there has been a marked shift toward renting in the United States, with a large increase in households renting single-family homes. In the 50 largest metropolitan areas, the number of detached, single-family rental homes (SFRs) increased from 3.8 million to 5.8 million from 2006 to 2015. Single-family rentership rates increased in all 50 large metro areas, with the percentage of single- family units that are rented increasing from 11.3% to 16%. Notably, the nine metropolitan areas with the largest increases were all located in the Sunbelt. Given expected neighborhood sorting, it is important to consider neighborhood increases in SFRs. In one large Sunbelt metro area, Atlanta, increases in SFRs from 2010 to 2015 were particularly large in older, inner- county diverse suburbs. Regression results show that, controlling for other neighborhood characteristics, neighborhoods with larger Asian, Latino, and black populations saw larger increases in SFRs. The effects were particularly high in neighborhoods with larger Latino and, especially, Asian populations. Another key finding is that, in neighborhoods with lower property values, more foreclosures during the crisis were associated with sizeable increases in SFRs. However, more foreclosures in neighborhoods with high property values were not associated with increases in SFRs. This is possibly due to the exclusionary nature of high property-value suburbs and the strong demand in such neighborhoods for owner-occupied housing. Implications for policy and research are considered.

Since the middle of the 20th century, the United States has been a majority homeownership nation. With the expansion of the middle class after the Great Depression and the institutionalization of more affordable and accessible mortgage markets, the U.S. homeownership rate climbed rapidly from below 45% in 1940 to over 60% by 1960, and then more gradually until 1980 (Fetter, 2013; Spader, McCue, & Herbert, 2016). Since 1980 there have been ebbs and flows in the homeownership rate, punctuated with a spike in the rate from the middle 1990s to 2004, when the rate reached a peak of 69%. Since 2004, in the wake of the mortgage crisis, the rate has dropped significantly, settling at about 63%–64% since 2015.

Single-family homeownership, in particular, is not just a phenomenon of household aspiration. Rather, it was the foundation of suburbanization and suburban form, with both construction financing and homeownership finance led by the Federal Housing Administration and Veterans Administration loan programs (Jackson, 1987). Arguably, the exclusion of renters, especially those of modest means, was and still is a hallmark of modern American suburbs. Localities employ fiscal and exclusionary zoning practices to build and maintain neighborhoods dominated by homeownership, especially in metropolitan areas where land is relatively more affordable (Levine, 2010; Pendall, 2000). The suburban ideal is marked by homeownership, and the physical design and organization of suburbs have relied on single-family homeownership as the primary form of tenure (Hayden, 2009). The growth of such vehicles as the homeownership association, in which infrastructure and amenities for new developments could be financed without imposing fiscal costs on existing local government, reinforced the suburban reliance

on homeownership (Boyack, 2014; McKenzie, 1994). Minimum lot sizes and other planning devices discouraged the use of rental tenure as low densities and inefficient transportation grids discouraged economies of scale in providing rental housing.

In the aftermath of the U.S. foreclosure crisis of the late 2000s, there was a marked shift toward renting, and away from homeownership, for at least four reasons. First, as many as 9.4 million households lost their homes during the foreclosure crisis (Rosen, Bank, Eckstein, Stern, & Tcheau, 2017). These households exited the homeownership market very rapidly and were precluded from reentering it for several years because of their damaged credit histories. Secondly, mortgage markets tightened dramatically in the wake of the crisis, and although they have loosened slightly in recent years, they remain relatively tight (Acolin, Goodman, & Wachter, 2016). Third, many younger households are significantly burdened with student debt, the levels of which have increased markedly over the last 20 years (Haurin, 2016). Fourth, weak job growth and earnings stagnation, especially among younger and low- to moderate-income households, means that downpayments and incomes required to qualify for a mortgage became more difficult to come by. Some have also argued that younger households' preferences toward homeownerships were permanently dampened by the crisis, although the evidence for this effect is not very strong (Haurin, 2016).

The crisis precipitated a rapid decline in ownership rates, and, thus, a substantial increase in rentership. Although the construction of multifamily rental housing began to grow markedly after the crisis, especially starting in 2012, much of this new rental housing was priced at relatively high per-square-foot rents and was often located in booming central cities (Betancourt, Zahalak, & Dean, 2014). The greatest share of the increase in rental housing since the crisis has occurred in the single-family market. This new rental supply is almost entirely existing units that have been converted, often with help from the foreclosure process, from ownership to rental (Kurth, 2012). Since a sizeable portion of the increased rental supply is from former homeowners displaced by foreclosure, and a sizable portion of the new supply is formerly foreclosed homes, a substantial portion of the net transition from ownership to rentership is a shift in tenure, but not type of structure.

This article first examines trends in detached, one-unit single-family rental units (generally referred to as SFR) in the 50 largest metropolitan areas in the United States from 2006 to 2015. Data from the American Community Survey (ACS) indicate that, in the 50 largest metropolitan areas, the number of single-family (one-unit) rental homes increased by approximately 2 million units during this period, from 3.8 million to 5.8 million (American Community Survey, 2018).

It then zooms in on one large metropolitan region that has seen large increases in SFR, the Atlanta, Georgia, metropolitan area. The Atlanta metro area experienced one of the largest increases in single-family rentership among the 50 largest metropolitan areas. It was, like most metro areas seeing large increases in SFR, hit hard by the foreclosure crisis. Moreover, it is a robust and demographically diverse metro area that has experienced growth in population since the crisis, as have many of the metro areas seeing growth in single-family rentals.

Large increases in the number of SFR may have substantial consequences for neighborhoods, especially neighborhoods where increases in rentership are large. Rapid declines in homeownership rates, for example, could prove challenging for community and school stability (Ihlanfeldt & Mayock, 2014). On the other hand, increases in SFR in middle-income neighborhoods might provide access for low- and moderate-income renters who otherwise would have few opportunities to rent in many neighborhoods where single-family properties constitute a large share of the housing stock (Pfeiffer & Lucio, 2015; Schwartz & McClure, 2014).

The point of the work here is not to further a notion of homeownership as clearly superior to rentership for neighborhoods or families. Rather, the goal is to examine the geography of these changes, and to examine how the geography of rentership changed in response to high levels of foreclosures and other initial neighborhood conditions. In what types of metropolitan areas did SFR increase the most?

Were foreclosures large drivers of increased rentership at the neighborhood level? Did foreclosures lead to higher rentership rates in higher property value neighborhoods as well as in lower property value neighborhoods? What other neighborhood characteristics affected neighborhood tenure change?

The findings show that single-family rentership rates increased in all 50 large metro areas, with an overall increase from 11.3% to 16% from 2006 to 2015. The nine metropolitan areas with the largest increases are all located in the Sunbelt. In 19-county metropolitan Atlanta, increases in SFR from 2010 to 2015 occurred across the region but were particularly large in diverse suburbs, especially in suburbs in the five core metropolitan counties. Regression results show that, controlling for other neighborhood characteristics, neighborhoods with larger black, Asian, and Latino populations saw larger increases in SFR. The effects were particularly large for Latino and especially Asian neighborhoods. Another key finding is that in neighborhoods with lower property values, increases in foreclosures were associated with sizeable increases in SFR. However, more foreclosures in neighborhoods with high property values did not result in an increase in SFR. This is possibly due to the exclusionary nature of high-value suburbs and the strong demand in such neighborhoods for owner-occupied housing.

Predictions for Long-Term Trends in Homeownership Versus Rentership

The recent lower levels of homeownership (and, conversely, higher levels of rentership) are generally expected to persist in the United States, at least through the next few decades. Many of the forces that supported the recent drop in homeownership, including tight mortgage markets, weak earnings gains among low- and moderate-income households, and heavy student debt burdens, are expected to continue to put downward pressure on ownership levels. Whereas the maturing of millennials into prime ownership years may provide some countervailing pressure, the persistence of weak wage growth and low net savings levels are expected to dampen homeownership rates. Moreover, Goodman, Pendall, and Zhu (2015) suggest that growing racial diversity may also work against increases in homeownership rates, partly because households of color often face greater challenges in mortgage and credit markets.

Three sets of experienced observers of homeownership trends recently provided projected ranges of where homeownership rates are likely to end up in the coming decades. In general, the projections point to a continued but slower decline in the national homeownership rate over the next 15 to 20 years. Spader et al. (2016) project that the U.S. homeownership rate will end up between 60.6% and 64.7% in 2035. This compares with the current rate of about 64%. Acolin et al. (2016) project a rate ranging from 60.3% to 65.1% by 2030, and Myers and Lee (2016) project a range between 54.7% and 60.1%. Although there is significant variance in these estimates, they tend to center around the projection of homeownership rate ending up significantly lower than the current 64%. Moreover, these forecasts reject any notion that the country as a whole will end up as a majority-renter nation over the next two decades. Nonetheless, a decline from a national homeownership rate in the upper 60% range to one closer to 60% suggests that, for many neighborhoods, the decline will be larger.

Foreclosures, Neighborhoods, and Tenure

In the wake of the crisis, a large literature has arisen on the impact of foreclosures on households and neighborhoods. A large portion of this literature estimates the impacts of foreclosures on nearby home values (e.g., Harding, Rosenblatt, & Yao, 2009; Immergluck & Smith, 2006). Other research has examined the effect of foreclosures on other neighborhood conditions, including crime (Cui & Walsh, 2015; Williams, Galster, & Verma, 2014). A somewhat smaller literature has examined the trajectory of foreclosed properties over time, seeking to understand the chain of title of the properties and their eventual tenures and uses (Ellen, Madar, & Weselcouch, 2015; Immergluck & Law, 2014a; Molina, 2016; and Pfieffer & Lucio, 2015).

The role of investors in purchasing foreclosed properties is not new. In many lower income urban neighborhoods, investors have always comprised a substantial portion of the demand for such properties (Ellen et al., 2015; Immergluck & Law, 2014a). The mortgage crisis, however, increased the number of foreclosures flowing through the process, expanding the volume and geography of single-family properties available for investor purchase and conversion to SFR.

Ellen et al. (2015) utilized address-level property data from Fulton County, Georgia (the central county of the Atlanta metropolitan area), Miami-Dade County, Florida, and New York City to understand what happens to foreclosed properties (often called REO, for real estate owned) in different urban contexts. They found that about one third of REO sales went to investors in Fulton and Miami-Dade, whereas about one half went to investors in New York City. They also found that a variety of neighborhood factors, including race of neighborhood, property value, age of home, and other factors, affected the likelihood of whether a property would go to an investor (who is likely to rent the property out) versus an owner-occupier.

Ellen et al. (2015) showed that investors in Atlanta, Miami, and New York City were much more likely to purchase low-value properties than were homeowners. In a study of Los Angeles, Pfeiffer and Molina (2013) found that investors were more likely to buy properties in neighborhoods with lower incomes, lower levels of educational attainment, and higher proportions of African Americans. Ellen et al. (2015) and Immergluck and Law (2014a) both found that investors were more likely to purchase low-value properties than owner-occupiers were.

As the foreclosure crisis matured, and foreclosures became less concentrated in high-minority, lower income neighborhoods, sales of foreclosed properties also became more spatially dispersed, including into suburban and more affluent neighborhoods (Ellen et al., 2015). Sales of foreclosed properties may have become even more deconcentrated than the foreclosures themselves because the foreclosures were now occurring in areas of more interest to both homeowners and investors. This notion is consistent with Molina's (2016) finding that foreclosed properties located in more diverse (i.e., less predominantly African American) neighborhoods were more likely to sell (to either investors or owner-occupiers) rather than remain vacant.

Overall, the existing literature suggests that foreclosures are likely to yield higher levels of rentership in neighborhoods with lower property values, lower incomes, and/or higher shares of African American populations. At least one study also suggests that foreclosures in such neighborhoods are more likely to yield rental housing accessible to lower income renters. In particular, Lee (2016) found that a higher level of foreclosures in a census tract led to higher levels of Housing Choice Voucher usage in a neighborhood, but that this phenomenon was dampened in low-poverty neighborhoods. Consistent with these findings, Pfeiffer and Lucio (2015) found that foreclosed homes sold to investors were not likely to be rented out to voucher recipients in high-value, low-poverty neighborhoods, although they were more likely to be rented to voucher recipients in moderate-poverty neighborhoods, or at least neighborhoods that were less poor than where voucher residents tended to live more generally.

Trends in Single-Family Rentership in Metropolitan America

Figure 1 shows that, whereas increases in multifamily (used here to mean two or more units in the building) rental units accounted for a somewhat larger portion of the increase in overall rentals in the 50 largest U.S. metropolitan areas than did one-unit SFR (2.9 million units vs. 2.0 million units), the rate of increase among SFR was much greater over the 2006–2015 period. SFR increased by 51.8% versus 17.3% for multifamily units. Moreover, we know that much of the growth in multifamily rental units, particularly those in buildings with five or more units, has come primarily from new construction, with annual units constructed increasing from under 130,000 in 2011 to more than 310,000 units in 2015 (U.S. Census Bureau, 2018). (There were some conversions of condominium units from ownership to

rental during this period.) Multifamily construction during this period was heavily concentrated in large central cities with strong economies, especially New York City; Boston, Massachusetts; and Dallas and Houston, Texas (Betancourt et al., 2014). The increase in SFR, on the other hand, is due almost entirely to conversion of formerly owner-occupied units into rentals via the foreclosure process and related mechanisms (e.g., deed-in-lieu of foreclosure, short-sales to investors, etc.). Given the wider intrametropolitan distribution of the single-family stock, we would expect the growth in SFR to be more widely dispersed compared with the growth in multifamily stock.

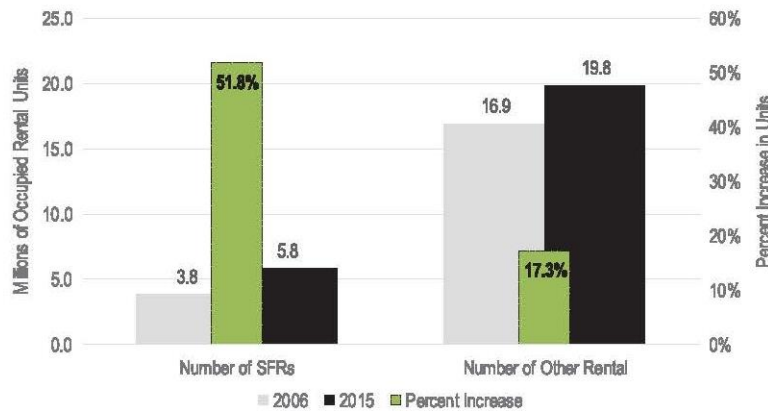


Figure 1. increases in single-family (one-unit) and other rental units in the 50 largest metropolitan areas, 2006 to 2015.

According to the ACS, all of the 50 largest metropolitan areas in the United States saw increases in rentership from 2006 to 2015. The left-hand columns in Table 1 show that increases ranged from 1.6 percentage points in the Buffalo, New York, metropolitan area to 9 percentage points in the Las Vegas, Nevada, metropolitan area. In the aggregate, these 50 metro areas saw rentership increase by 4.9 percentage points, from 35.3 to 40.2%.

The right-hand columns in Table 1 indicate the change in rentership rate among single-family (one-unit) properties. In the aggregate, the rentership rate increased from 11.3% to 16.0%, an increase of 4.7 percentage points. This means that the share of single-family homes that were rented in these 50 metropolitan areas increased by a factor of 42%. The 10 metro areas experiencing the greatest increases in single-family rentership experienced relatively high rates of foreclosure during the mortgage crisis, suggesting that foreclosures may have been a major determinant of the shifts in tenure. Of these 10 metro areas, 8 ranked among the top 10 metro areas with the highest shares of foreclosed homes in late 2008, near the peak of the foreclosure crisis (Immergluck, 2010). With the exception of Detroit, these metro areas are located in the South or the West, with most of them considered Sunbelt metro areas. Conversely, 8 of the 10 metro areas with the smallest increases in rentership are in the Northeast, with the remaining two being Baltimore, Maryland, and Austin, Texas.

One factor that may account for some of the greater increases in SFR in Sunbelt cities is the fact that large institutional investors began actively pursuing buy-to-rent strategies in 2012, and many focused on states and metropolitan areas with lesser tenant protections and lower acquisition costs, including many larger Sunbelt metro areas. Fields, Kohli, and Schafran (2016) examined securitizations of SFR properties by eight large institutional investors from 2013 through June of 2015, and found that the rental properties in these securitizations were predominantly located in Sunbelt cities. Phoenix (Arizona), Atlanta, Tampa Bay (Florida), Dallas, Houston, and Las Vegas were the top metropolitan areas represented in these 21 securitizations. The top 10 metro areas are all considered Sunbelt metro areas. Of course, securitization is not the only funding stream available to larger investors, but these findings

Table 1. Top 10 and bottom 10 large metro areas for increases in rentership and increases in single-family rentership, 2006 to 2015 (of the 50 largest metropolitan statistical areas).

| Metropolitan area | Rentership rate 2015 (%) | Increase since 2006 (%) | Metropolitan area | Single-family rentership rate 2015 (%) | Increase since 2006 (%) |
|--|--------------------------|-------------------------|--|--|-------------------------|
| Top 10 | | | | | |
| Las Vegas-Paradise-Henderson, NV | 48.4 | 9.0 | Las Vegas-Paradise-Henderson, NV | 28.1 | 10.5 |
| Miami-Fort Lauderdale-Miami Beach, FL | 41.5 | 8.9 | Phoenix-Mesa-Scottsdale, AZ | 23.0 | 9.4 |
| New Orleans-Metairie-Kenner, LA | 39.8 | 8.1 | Memphis, TN-MS-AR | 23.1 | 7.9 |
| Phoenix-Mesa-Scottsdale, AZ | 39.5 | 8.1 | Atlanta-Sandy Springs-Marietta, GA | 19.2 | 7.7 |
| Tampa-St. Petersburg-Clearwater, FL | 37.1 | 7.6 | Riverside-San Bernardino-Ontario, CA | 24.9 | 7.7 |
| Atlanta-Sandy Springs-Marietta, GA | 38.4 | 7.5 | Sacramento-Arden-Arcade-Roseville, CA | 22.8 | 7.5 |
| Orlando-Kissimmee, FL | 40.4 | 7.0 | Tampa-St. Petersburg-Clearwater, FL | 19.4 | 7.2 |
| Riverside-San Bernardino-Ontario, CA | 39.2 | 7.0 | Miami-Fort Lauderdale-Miami Beach, FL | 18.5 | 7.0 |
| Detroit-Warren-Livonia, MI | 32.0 | 6.6 | Orlando-Kissimmee, FL | 20.0 | 6.6 |
| Memphis, TN-MS-AR | 40.3 | 6.5 | Detroit-Warren-Livonia, MI | 16.2 | 6.5 |
| Bottom 10 | | | | | |
| Baltimore-Towson, MD | 34.4 | 3.1 | New York-Northern New Jersey-Long Island, NY-NJ-PA | 9.7 | 2.4 |
| Boston-Cambridge-Quincy, MA-NH | 38.8 | 3.1 | Providence-New Bedford-Fall River, RI-MA | 10.0 | 2.3 |
| Raleigh-Cary, NC | 35.4 | 3.0 | Philadelphia-Camden-Wilmington, PA-NJ-DE-MD | 7.9 | 2.3 |
| New York-Northern New Jersey-Long Island, NY-NJ-PA | 49.2 | 3.0 | Pittsburgh, PA | 11.9 | 2.2 |
| Oklahoma City, OK | 36.1 | 2.9 | Rochester, NY | 10.8 | 2.1 |
| Austin-Round Rock, TX | 42.5 | 2.7 | Buffalo-Niagara Falls, NY | 10.1 | 2.1 |
| Hartford-West Hartford-East Hartford, CT | 33.5 | 2.6 | Austin-Round Rock, TX | 15.1 | 1.7 |
| Rochester, NY | 32.9 | 2.5 | Baltimore-Towson, MD | 8.2 | 1.5 |
| Pittsburgh, PA | 30.8 | 2.4 | Hartford-West Hartford-East Hartford, CT | 6.9 | 1.2 |
| Buffalo-Niagara Falls, NY | 34.8 | 1.6 | Boston-Cambridge-Quincy, MA-NH | 6.5 | 1.2 |
| 50 largest metropolitan areas, aggregate | 40.2 | 4.9 | 50 largest metropolitan areas, aggregate | 16.0 | 4.7 |

are consistent with the notion that capital markets appeared to prefer southern and western metro areas. Bordia (2017) analyzed SFR holdings by institutional investors, including those funding acquisitions via all methods, not just rental stream securitizations. He found that the Atlanta metropolitan area was the largest metropolitan area for institutional investors in terms of number of SFR owned, followed by Phoenix, Miami, Tampa, Dallas, Charlotte (North Carolina), and Houston, all Sunbelt cities.

Examining Neighborhood-Level Changes in Single-Family Rental

It is clear that many large Sunbelt metropolitan areas experienced substantial increases in single-family rentership in the wake of the U.S. foreclosure crisis. Many of these metro areas were at the epicenter of the crisis and saw both homeowners pushed into the rental market and thousands of single-family homes purchased by investors, many of which were converted into SFR. Given the substantial increases at the metropolitan level, we would expect intrametropolitan sorting to result in some neighborhoods experiencing even higher increases in single-family rentership. In this section, we turn to neighborhood-level changes in SFR and focus on one large metropolitan area, Atlanta, that ranked near the top of large metro areas in terms of increases in single-family rentership.

Large increases in the share of single-family homes that are rented have the potential to affect the housing, economic, and social fabric of neighborhoods. At the same time, increases in SFR may open up neighborhoods that had been effectively closed to renter households, allowing for a greater spectrum of housing choices for renters in a region and a potential promise of less racial and economic segregation (Pfeiffer & Lucio, 2015; Schwartz & McClure, 2014).

Many suburban and some central-city neighborhoods have historically had very high homeownership rates, well above 75%. Due to data availability, census tracts are used here as proxies for neighborhoods, and the 5-year tract-level ACS data are used to measure changes in single-family rentership. One factor that is expected to influence neighborhood-level changes in single-family rentership in the postcrisis era is the level of foreclosures in the neighborhood during the crisis. Foreclosures were likely a key factor in the transition of single-family homes from owner-occupied to rental properties as investors purchased bank-owned homes (or purchased them at the foreclosure auction) and redeployed them as rental properties (Immergluck & Law, 2014a). Due to the expected importance of foreclosures, and the possible interactions between foreclosures and other neighborhood conditions, the tract-level analysis here uses the Atlanta metropolitan area, for which localized foreclosure data were available.

The Census Bureau's definition of the Atlanta metropolitan area includes 29 counties. However, many of these counties are very small and sparsely populated. Foreclosure data were available for 19 of the more centrally located counties (including all of the five core and most densely populated counties). These 19 counties contain 2,028,705 households, accounting for over 94% of the households in the 29 county metropolitan area. The remaining 10 counties are effectively rural, or at the extreme of the exurban fringe, with populations averaging just over 11,000 households each. SFR from the 5-year 2006–2010 ACS are compared with SFR from the 5-year 2011–2015 ACS. (The 2006–2010 estimates are referred to as the 2010 5-year data, and the 2011–2015 estimates are referred to as the 2015 5-year data. They will be simply referred to as the 2010 and 2015 ACS data from this point forward.) To examine the spatial distribution of SFR, the 19-county region was classified into three categories: (a) the City of Atlanta; (b) the inner suburbs, which include the five core counties (Fulton, DeKalb, Clayton, Gwinnett, and Cobb), excluding the City of Atlanta; and (c) the outer suburbs, which include the 14 remaining counties. There are 126 census tracts in the City of Atlanta, 502 in the inner suburbs, and 303 in the outer suburbs.

Figure 2 illustrates the growth of SFR in the three parts of the metro area from 2010 to 2015 and

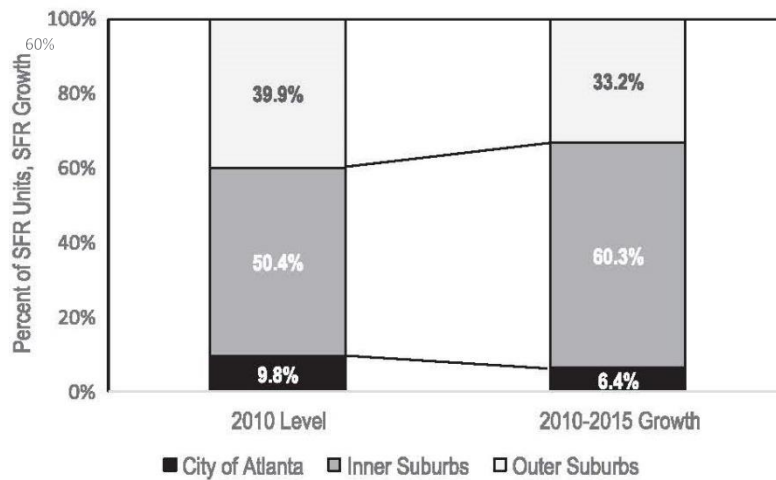


Figure 2. Increase in single-family rentals 2010 to 2015, by intraurban location, compared with 2010 single-family rental distribution.

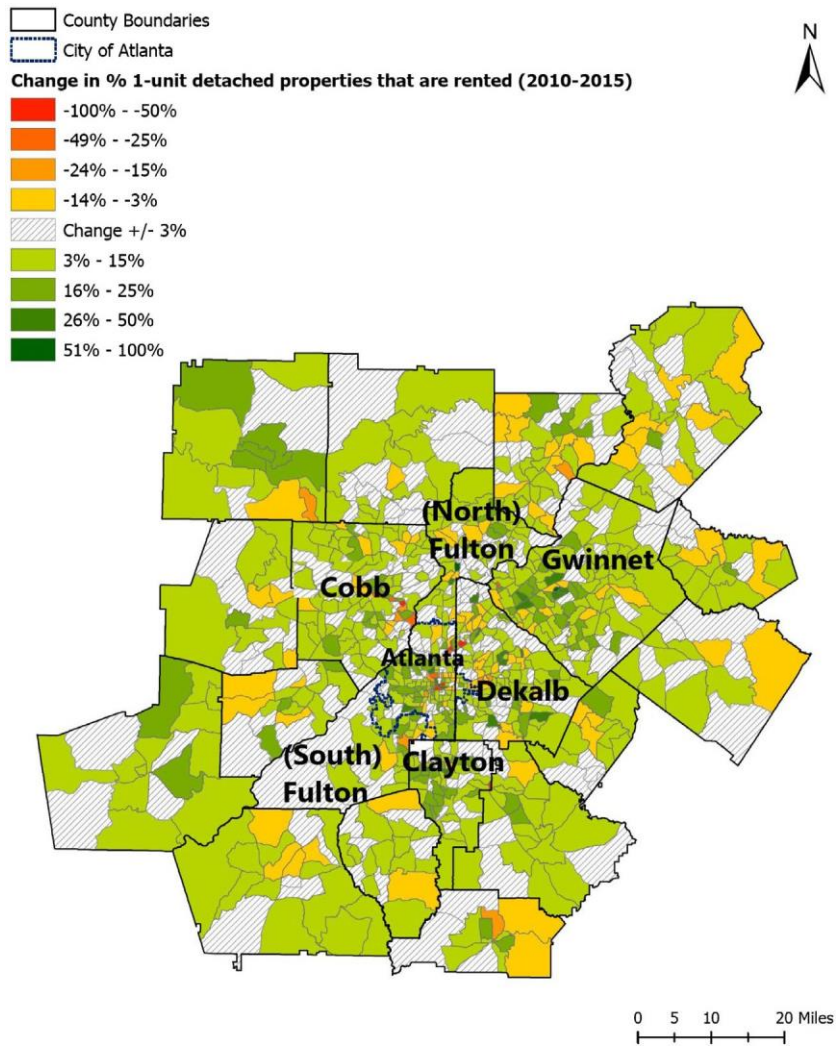


Figure 3. Percentage-point change in share of single-family homes that are rented.

Table 2. Increases in single-family rentals (SFR) by tract poverty rate and by city/suburban location, compared with 2010 single-family rental levels.

| | City of Atlanta | | Inner suburban | | Outer suburban | | Total | |
|-------------------------------|-----------------|--------|----------------|--------|----------------|--------|---------|--------|
| Increase in SFR, 2010 to 2015 | | | | | | | | |
| <10% poverty tracts | 407 | 8.8% | 16,806 | 38.9% | 8,489 | 35.6% | 25,702 | 35.9% |
| 10–19% poverty tracts | 984 | 21.3% | 12,795 | 29.6% | 10,643 | 44.6% | 24,422 | 34.1% |
| 20–39% poverty tracts | 2,277 | 49.4% | 12,773 | 29.5% | 4,693 | 19.7% | 19,743 | 27.5% |
| 40%+ poverty tracts | 941 | 20.4% | 873 | 2.0% | 12 | 0.1% | 1,826 | 2.5% |
| All tracts | 4,609 | 100.0% | 43,247 | 100.0% | 23,837 | 100.0% | 71,693 | 100.0% |
| Total SFR in 2010 | | | | | | | | |
| <10% poverty tracts | 1,504 | 9.8% | 22,834 | 28.7% | 20,113 | 31.9% | 44,451 | 28.1% |
| 10–19% poverty tracts | 2,881 | 18.7% | 25,564 | 32.1% | 25,565 | 40.6% | 54,010 | 34.2% |
| 20–39% poverty tracts | 7,210 | 46.8% | 29,089 | 36.5% | 14,819 | 23.5% | 51,118 | 32.3% |
| 40%+ poverty tracts | 3,826 | 24.8% | 2,123 | 2.7% | 2,508 | 4.0% | 8,457 | 5.4% |
| All tracts | 15,421 | 100.0% | 79,610 | 100.0% | 63,005 | 100.0% | 158,036 | 100.0% |

Table 3. Increases in single-family rentals (SFR) by tract percentage black and by city/suburban location, compared with 2010 single-family rental levels.

| | City of Atlanta | | Inner suburban | | Outer suburban | | Total | |
|-------------------------------|-----------------|--------|----------------|--------|----------------|--------|---------|--------|
| Increase in SFR, 2010 to 2015 | | | | | | | | |
| <10% black tracts | 54 | 1.2% | 3,400 | 7.9% | 5,441 | 22.8% | 8,895 | 12.4% |
| 10–49% black tracts | 861 | 19.0% | 25,280 | 58.5% | 15,307 | 64.2% | 41,448 | 57.9% |
| 50–89% black tracts | 374 | 8.2% | 10,378 | 24.0% | 3,089 | 13.0% | 13,841 | 19.3% |
| 90%+ black tracts | 3,253 | 71.6% | 4,179 | 9.7% | 0 | 0.0% | 7,432 | 10.4% |
| All tracts | 4,542 | 100.0% | 43,237 | 100.0% | 23,837 | 100.0% | 71,616 | 100.0% |
| Total SFR in 2010 | | | | | | | | |
| <10% black tracts | 1,037 | 6.7% | 6,738 | 8.5% | 22,101 | 35.1% | 29,876 | 18.9% |
| 10–49% black tracts | 3,057 | 19.6% | 38,638 | 48.5% | 31,716 | 50.3% | 73,411 | 46.4% |
| 50–89% black tracts | 4,187 | 26.9% | 22,181 | 27.8% | 9,188 | 14.6% | 35,556 | 22.5% |
| 90%+ black tracts | 7,286 | 46.8% | 12,151 | 15.2% | 0 | 0.0% | 19,437 | 12.3% |
| All tracts | 15,567 | 100.0% | 79,708 | 100.0% | 63,005 | 100.0% | 158,280 | 100.0% |

compares it with the distribution of SFR in 2010. It shows that the inner suburbs accounted for a disproportionate share of the increase in SFR, accounting for 60.3% of the metropolitan growth, compared with 50.4% of 2010 SFR. The share of SFR in the City of Atlanta accounted for just 6.4% of the growth in SFR from 2010 to 2015, compared with 9.8% of 2010 SFR.

Figure 3 illustrates, by census tract, the percentage-point change from 2010 to 2015 in the percentage of single-family homes that are renter-occupied. It also labels the City of Atlanta and the five core counties (Clayton, Cobb, DeKalb, Fulton, and Gwinnett). The map shows that the bulk of census tracts saw an increase of at least 3 percentage points in the share of single-family homes that were rented, and that a substantial number of tracts saw this share increase by more than 15 percentage points. There were clusters of tracts with particularly large increases in SFR (over 15 percentage points) in Gwinnett County, Clayton County, and some parts of the city of Atlanta. In general, most outer suburban tracts also saw increases in single-family rentership, but a larger share of tracts saw decreases in single-family rentership, or no substantial change, in the outer counties.

Tables 2 and 3 break out census tracts in the 19-county area by poverty rate (2015) and by percent-age black (2015). They do this across the City of Atlanta versus inner suburban versus outer suburban classification of tracts. The figures show the spatial distributions of both the increases in SFR from 2010 to 2015 (top sections) and the level of SFR in 2010. The right-hand columns in Table 2 indicate that,

compared with the distribution of SFR in 2010, the increase in SFR was relatively more dispersed toward lower poverty tracts. Tracts with less than 10% poverty in 2015 accounted for 28.1% of SFR in 2010, but accounted for 35.9% of the increase in SFR from 2010 to 2015 in the 19-county region. Meanwhile, tracts with poverty rates above 20% accounted for 37.7% of SFR in 2010, but only 30% of the 2010 to 2015 growth in SFR.

Thus, SFR increasingly flowed into low-poverty tracts. The fact that more than one-third of the increase in SFR occurred in low-poverty tracts is somewhat surprising given the prior, limited research that showed that investors did not purchase a very large share of foreclosed properties in low-poverty neighborhoods. For the region as a whole, SFR shifted moderately toward lower poverty neighborhoods. This is consistent with the notion that foreclosures created an environment in which many properties became available to buy-to-rent investors over a brief period of time, even in relatively more affluent neighborhoods. Moreover, there is anecdotal evidence that some of the larger investors active in the Atlanta market focused on neighborhoods with school districts perceived as strong performing, which would tend to be correlated with lower poverty rates (Immergluck & Law, 2014b).

When looking within each part of the metropolitan area (city, inner suburbs, outer suburbs), it becomes clear that the same patterns generally hold, but it is also clear that the shift of SFR toward lower poverty neighborhoods occurred primarily in the suburbs and especially in the inner-suburban five-county area. Notably, almost 39% of the increase in SFR in the inner suburbs occurred in tracts with poverty rates below 10% in 2015, compared with 28.7% of SFR being located there in 2010. Conversely, whereas 39.2% of SFR in the inner suburbs in 2010 were in tracts with poverty rates above 20%, only 31.5% of the growth in SFR occurred in these tracts.

When looking at tracts by percentage black, the results are somewhat different.¹ Overall, the share of the increase in SFR that occurred in predominantly nonblack tracts (those that were less than 10% black in 2015) was substantially smaller, at 12.4%, than the share of SFR in predominantly nonblack tracts in 2010, at 18.9%. However, growth in SFR was disproportionately large in tracts that were 10 to 49% black in 2015. These tracts accounted for 57.9% of the growth in SFR, while accounting for just 46.4% of all SFR in 2010. Moreover, majority black tracts accounted for 29.7% of the increase in SFR, compared with 34.8% of SFR in 2010.

Whereas the increase in SFR was relatively more concentrated in minority-black tracts, this was more in tracts that were 10%–49% black and not in those less than 10% black. Predominantly nonblack tracts did not experience a proportionate share of the increase in SFR.

Whereas low-poverty tracts experienced disproportionately large increases in SFR, the same cannot be said for predominantly nonblack tracts. So, when looking at the dispersal of SFR by neighborhood economic segregation, the increase in SFR appears to reach low-poverty tracts, but not predominantly nonblack tracts. Rather, the dispersal occurred mostly in more racially diverse tracts, some of which have low poverty rates, where most of the increase occurred.

A Multivariate Analysis of Increases in Single-Family Rentership at the Neighborhood Level

What neighborhood characteristics were associated with increases in single-family rentership during the 2010 to 2015 period in metropolitan Atlanta? To answer this question, a multivariate model is employed as follows:

$$DSFR_{2010-2015} = \alpha + \beta_1 SFR_{2010} + \beta_2 SFOO_{2010} + \beta_3 SFVAC_{2010} + \beta_4 F_{2008-2010} + \beta_5 V_{2010} + \beta_4 (F_{2008-2010} * V_{2010}) + \beta X_{2010} \quad (1)$$

where $DSFR_{2010-2015}$ is the change in SFR in the tract from 2010 to 2015, SFR_{2010} is the number of SFR in 2010, $SFOO_{2010}$ is the number of single-family owner-occupied homes in 2010, $SFVAC_{2010}$ is the number of vacant single-family homes in 2010, $F_{2008-2010}$ is the number of foreclosures in the tract from 2008 through 2010 (during the peak of the foreclosure crisis), V_{2010} is the median value of owner-occupied

homes in 2010, and $(F_{2008-2010} * V_{2010})$ is an interaction term equal to the foreclosure variable multiplied by the median value variable. The last vector term is a set of additional tract-level independent variables, including change in population from 2010 to 2015, percentage black, percentage Asian, percentage Latino, median family income, population density, median year in which houses were built, percentage commuting over 30 min, and distance to the Atlanta central business district. Most static variables are measured as of the 5-year 2010 ACS.

The interaction term was included in the model because it was expected that the effect of foreclosures on the change in SFR might vary depending on one or more neighborhood characteristics. After trying various interactions, the interaction of foreclosures with median home value was found to have the most pronounced effect. (This is not unexpected since neighborhood quality conditions are often capitalized into home values.) The sample size of the regression prevented the inclusion of multiple interaction terms without creating substantial multicollinearity problems. Table 4 provides the summary statistics for the dependent variable and independent variables used to estimate Equation (1). The results of estimating the model are shown in the three left-hand columns in Table 5. To control for spatial context, another model using county-level dummies is also estimated. There are 19 counties in the data set. Counties in Georgia are relatively small, as Georgia has the second highest number of counties in the United States. This model as supplemented is shown in the right-hand columns. The addition of the county-level dummies (whose coefficients are not shown) improves the fit significantly and affects the magnitude and significance of some coefficients. Thus, the right-hand column results will be discussed here.

Table 4. Summary statistics for the 919 tracts used in the regression.

| | Mean | SD |
|--|------------|------------|
| Change in number of SF rentals, 2010 to 2015 | 77.62 | 119.55 |
| SF rentals, 2010 | 171.77 | 132.02 |
| SF owner occupied, 2010 | 1,190.62 | 800.18 |
| SF vacant units, 2010 | 157.73 | 117.83 |
| change in population, 2010–2015 | 432.78 | 821.69 |
| Foreclosures, 2008–2010 | 349.11 | 304.18 |
| Percentage black, 2010 | 33.73 | 31.33 |
| Percentage Asian, 2010 | 5.05 | 6.24 |
| Percentage Latino, 2010 | 10.63 | 13.26 |
| Median family income, 2010 | 70,913.59 | 33,534.18 |
| Median home value, 2010 | 211,923.39 | 106,981.75 |
| Population density, 2010 | 2,332.83 | 2,074.75 |
| Median year housing built, 2010 | 1,984.34 | 13.02 |
| Percentage commuting more than 30 min, 2010 | 47.08 | 12.29 |
| Distance to CBD | 19.87 | 12.35 |

Notes. SD = standard deviation; SF = single family; CBD = central business district.

Table 5. Regression results. Dependent variable = change in number of single-family (SF) rental units from 2010 to 2015.

| | Model without county fixed effects | | | Model with county-level dummies (not shown) | | |
|--|------------------------------------|--------------------------|----------------------|---|--------------------------|----------------------|
| | B | Standardized coefficient | p value ^a | B | Standardized coefficient | p value ^a |
| (Constant) | 1830.820 | | .003** | 2685.311 | | .000** |
| SF rentals, 2010 | - 0.509 | - 0.562 | .000** | - 0.536 | - 0.591 | .000** |
| SF owner occupied, 2010 | 0.066 | 0.443 | .000** | 0.056 | 0.376 | .000** |
| SF vacant units, 2010 | 0.290 | 0.286 | .000** | 0.270 | 0.266 | .000** |
| Change in population, 2010–2015 | 0.017 | 0.117 | .000** | 0.019 | 0.134 | .000** |
| Foreclosures, 2008–2010 | 0.208 | 0.529 | .000** | 0.225 | 0.571 | .000** |
| Percentage black, 2010 | 0.166 | 0.044 | .438 | 0.615 | 0.161 | .009** |
| Percentage Asian, 2010 | 1.961 | 0.102 | .000** | 2.202 | 0.115 | .000** |
| Percentage Latino, 2010 | 0.752 | 0.083 | .008** | 1.104 | 0.122 | .000** |
| Median family income, 2010 | - 1.25E-04 | - 0.035 | .482 | - 6.562E-05 | - 0.018 | .703 |
| Median home value, 2010 | - 1.84E-04 | - 0.165 | .003** | - 7.046E-05 | - 0.063 | .231 |
| Population density, 2010 | 1.02E-03 | 0.018 | .529 | 2.15E-03 | 0.037 | .194 |
| Median year housing built, 2010 | - 0.899 | - 0.098 | .004** | - 1.369 | - 0.149 | .000** |
| Percentage commuting over 30 min, 2010 | - 0.756 | - 0.078 | .015* | - 0.714 | - 0.073 | .019* |
| Distance to CBD | 1.229 | 0.127 | .006** | 2.446 | 0.253 | .001** |
| Foreclosures × Median home value | - 8.161E-07 | - 0.388 | .011* | - 8.101E-07 | - 0.385 | .007** |
| N = 919; adjusted R ² | 0.370 | | | 0.404 | | |

Notes. ^aUsing robust standard error.
*p < .05; **p < .01.

The results show that, as expected, tracts with initially (as of 2010) higher levels of SFR, other variables held constant, are expected to see smaller increases (or larger declines) in SFR. This is consistent with the notion that neighborhoods with few SFR have more room for SFR increases. Consistent with this finding, tracts with initially higher levels of owner-occupied or vacant homes are associated with larger increases in SFR since these are the homes available for conversion into SFR over the 2010–2015 period. Tract characteristics that are associated with subsequent larger increases (or smaller declines) in SFR include increases in population, percentage black, percentage Asian, percentage Latino, and greater distance from downtown Atlanta. Characteristics associated with subsequent smaller increases (or larger declines) in SFR include newer housing stock (higher median year built), and percentage commuting over 30 min (i.e., tracts farther from jobs). The initial level of SFR, as well as of owner-occupied and vacant single-family homes, have large standardized coefficients, and so variations in these variables are strongly associated with changes in SFR. Another variable with a particularly large standardized coefficient is the distance to central business district (CBD) variable. A 1-standard deviation increase in distance to CBD is associated with a 0.253-standard deviation increase in SFR. Thus, other variables held constant, distance from the core of the city is associated with larger increases in SFR. At first this may seem inconsistent with the results in Tables 2 and 3, where much of the increase was found in the inner suburbs. However, the inner suburbs are much more demographically diverse than the outer suburbs are, and many have shorter average commutes, so these factors work to push up the growth in SFR.

A key variable of interest is that of foreclosures, and their interaction with median home value.

We would expect that, in general, more foreclosures in a tract during the 2008 to 2010 period would lead to a larger number of SFR in 2015, compared with 2010.² However, in neighborhoods with stronger markets for owner-occupied housing, more foreclosures may not always translate into more SFR, as single-family homes are purchased by owner-occupiers, or by investors who flip them to owner-occupiers. In general, we would expect high-value markets to be those where foreclosed homes are more likely to end up in the hands of owner-occupiers (Immergluck & Law, 2014a; Ellen et al., 2015). To interpret the relationship between foreclosures, median home value, and changes in SFR, it is important to look at the related coefficients simultaneously. Figure 4 does this by plotting, at different median home values, the expected change in SFR from 2010 to 2015 versus the number of foreclosures during the 2008 to 2010 period. The positive sign of the foreclosure coefficient, the negative sign of the median home value coefficient, and the negative coefficient on the interaction term suggest that as median home value declines, the slope of the relationship between foreclosures and SFR becomes more positive (steeper). The solid line indicates the slope at the (approximately) average tract median

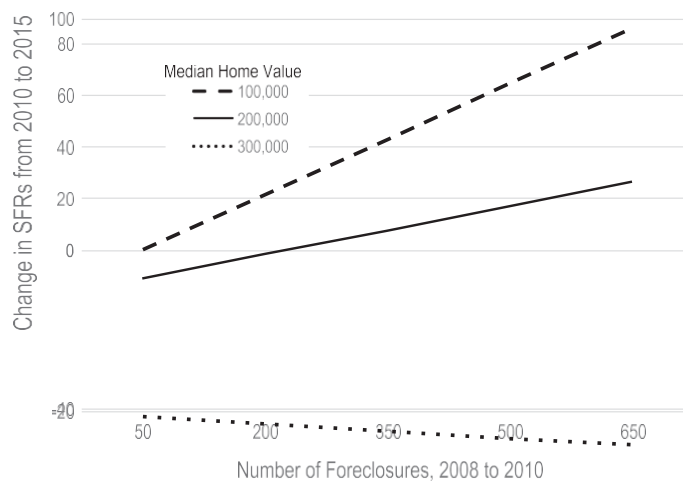


Figure 4. Effects of foreclosures on change in single-family rentals at different median home values, other variables fixed.

home value in the Atlanta metro area of \$200,000. For neighborhoods with this median home value, an increase of 150 foreclosures, other variables held constant, is associated with an increase of nine SFR from 2010 to 2015. For neighborhoods with a median home value of \$100,000, however, the same increase in foreclosures is associated with an increase of 12 SFR. Meanwhile, for neighborhoods with a median home value of \$300,000, the same increase in foreclosures is associated with a slight decline (about two) in expected SFR, other things held equal.

Therefore, whereas more foreclosures are typically associated with larger increases in SFR, this is less the case in higher home-value neighborhoods. Since percentage black is fairly strongly (inversely) related to median home value, this is consistent with the finding in Table 3 that predominantly white census tracts did not see a proportionate increase in SFR from 2010 to 2015.

Conclusions and Implications

In the aftermath of the U.S. foreclosure crisis, there has been a substantial increase in rentership in large metropolitan areas across the country. Whereas multifamily rented units increased by 17.3% from 2006 to 2016, from 16.9 million to 19.8 million, one-unit single-family rentals increased even faster, by 51.8%,

from 3.8 million to 5.8 million, over this period.

Single-family rentership rates (the portion of one-unit, single-family units that are rented) increased in all 50 of the largest metro areas, with an overall increase of 4.7 percentage points, from 11.3% to 16%. Again, the increase in SFR rates varied greatly, from Boston and Hartford, Connecticut, metro areas increasing only 1.2 percentage points, to Las Vegas increasing by 10.5 percentage points. The nine metropolitan areas with the largest increases in SFR rates were all Sunbelt metro areas, most of which were hit hard during the foreclosure crisis.

Atlanta, the metro area examined closely here, had the fourth largest increase in SFR, going from 11.5% to 19.2%, for an increase of 7.7 percentage points. This is a 67% increase in the SFR share metro-wide over a 5-year period. The increases in SFR are widely distributed across the Atlanta metropolitan area, with most tracts seeing at least a 3-percentage-point increase in single-family rentership, and many tracts seeing increases of more than 15 percentage points. However, the tracts with the largest increases in rentership rates tend to be clustered in certain areas within the city of Atlanta, or especially the five core counties.

To identify the neighborhood characteristics associated with larger increases in SFR, a multivariate tract-level model was employed for the Atlanta metropolitan area, including the initial level of SFR (in 2010), the initial level of single-family owner-occupied and vacant homes, and a number of demographic and housing characteristics. A key independent variable was the number of foreclosures in the tract between 2008 and 2010, during the height of the foreclosure crisis, as well as an interaction term between the foreclosure variable and the median home value of the tract. The results showed that neighborhoods with larger black, Asian, and Latino populations had larger increases in SFR. The effects were particularly large for Latino and especially Asian neighborhoods. Other things being equal, a neighborhood with a 10-percentage-point higher share of Asian residents is expected to see an increase of 22 SFR from 2010 to 2015. This may be associated with the desire of investors, especially institutional investors, to purchase homes (for rental) in neighborhoods where schools are perceived to be high performing. Neighborhoods with large Latino and Asian populations are particularly clustered in western Gwinnett County (especially near Interstate 85), which (as Figure 3 shows) experienced large increases in SFR.

Another variable related to SFR growth was the age of the housing stock. Neighborhoods with older housing stock (i.e., lower median year built) experienced larger increases in SFR. Thus, as suggested by Figure 3, older, inner suburbs, and some city neighborhoods, tended to see larger increases in SFR. It may be that, other things being equal, newer neighborhoods were more attractive to owner-occupiers of single-family homes, or that there was less interest in renters or investors in newer housing stock or newer neighborhoods. Investors often prefer a relatively low acquisition price in order to convert a property to an SFR, and newer properties are likely to be relatively more expensive per square foot.

Finally, distance to downtown Atlanta, after controlling for other variables, had a substantial, positive impact on the increase in SFR. Being 10 miles farther from downtown Atlanta, other variables held constant, is associated with an increase of 24 SFR. This may appear somewhat counterintuitive when recalling that inner suburbs generally experience larger increases in SFR than outer suburbs. However, the outer suburbs are generally much less diverse demographically than the inner suburbs, which works against increases in SFR. They also often have generally newer housing stock and longer commute times, both of which work against larger increases in SFR.

A key finding is the varying slope on the foreclosure variable. For neighborhoods with lower property values, other variables held constant, the slope on foreclosures was fairly steep, so that increases in foreclosures were associated with sizeable increases in SFR. However, with other variables held constant, more foreclosures in neighborhoods with high property values did not result in more SFR. This is likely related to the exclusionary nature of high-value suburbs and the strong demand in such

neighborhoods for owner-occupied housing. Moreover, investors looking for rental properties are often seeking properties with relatively modest acquisition costs so that they can minimize up-front investment and achieve sufficient rates of return from renting.

These findings have several implications for policy and research. First, it is true that, on average, the surge in property availability created by the foreclosure crisis allowed for an increase in SFR and a generally more dispersed spatial distribution of these properties. Increases were disproportionately high in neighborhoods with diverse populations and were less concentrated than existing SFR in predominantly black and very high-poverty neighborhoods. There was even a somewhat disproportionate increase in SFR in low-poverty neighborhoods.

However, there was not a proportionate increase in SFR in predominantly nonblack neighborhoods. (In the Atlanta metropolitan area at least, low-poverty neighborhoods are not equivalent to predominantly nonblack neighborhoods.) This is consistent with the results of the regression model in Table 5. Foreclosures in high-value neighborhoods, which often tend to be predominantly nonblack, did not tend to lead to larger numbers of SFR. Moreover, SFR increases occurred in neighborhoods with larger nonwhite populations, especially those with larger Latino and Asian residents. These findings suggest some limits to the ability of the increases in single-family rentals to increase rental options in predominantly nonblack, high-property value neighborhoods. Instead, the SFR shifted toward moderate and lower poverty, and somewhat more ethnically diverse, neighborhoods, many of which, in Atlanta's case, are in inner-suburban neighborhoods. Many of these neighborhoods provide access to generally strong school systems, which is a significant factor for many families seeking detached single-family homes.

More research is required to understand whether the results would be similar for other metropolitan areas. The most obvious question is whether these results would be similar in metro areas with smaller overall increases in SFR, or where institutional investors were not as active. Other differences might include metro areas where the central city is a larger portion of the metropolitan area, for example, or where there is more multiethnic diversity in the central city or in the outer suburbs. More work is also needed to measure the extent to which large, institutional investors constitute a significant share of SFR at the neighborhood level or even at the level of individual suburbs. If this occurs, a number of concerns may arise, including those about whether individual firms own a significant portion of any one jurisdiction's residential property.

It is also important to understand the neighborhood effects, and the neighborhood responses, of large increases in SFR in different contexts. If a predominantly single-family neighborhood goes from 20% rental to 40% rental over a span of just a few years, could this have impacts on schools, neighborhood cohesion or other outcomes? Alternatively, are new renters in such neighborhoods treated well by existing residents? Do they participate in neighborhood associations or other local activities? Is there a role for planners, and housing or social service organizations, to support transitions to higher rentership rates to smooth these transitions?

Increased single-family rentership also has important implications for fair housing policy and planning. The finding that more ethnically and racially diverse neighborhoods experienced larger increases in single-family neighborhoods, but at the same time predominantly black neighborhoods saw increases that were smaller than their existing share of SFR, suggests that rental options are available in diverse neighborhoods, at least in the Atlanta area. At the same time, it will be important for fair housing advocates and enforcement agencies to pay close attention to any actions that local governments may take to limit single-family rentals in their communities. Moreover, efforts to regulate rental housing quality may be reasonable, but if such efforts become overzealous they may be used to discourage SFR and renters, which could have disparate impacts by race, ethnicity, or other protected classes. Additional fair housing questions concern the advertising practices of the SFR sector, including the practices of some of the institutional investors. Are owners marketing properties in low-poverty and

predominantly white neighborhoods broadly? Do owners accept Housing Choice Vouchers? Overall, based on the evidence from Atlanta examined here, increasing SFR in suburban, ethnically diverse neighborhoods with relatively strong school systems offers significant promise of providing more housing options to renters, especially renters with children. At the same time, there appear to be limits to this access, especially in predominantly white neighborhoods.

Notes

1. There is a slight discrepancy between the total SFR and increase in SFR in Table 3 versus Table 2 because a few tracts do not have a defined poverty rate or percentage black because of measurement-suppression issues in the ACS tract data.
2. Foreclosures take some time to work through the system and it may be well over a year between when a foreclosure is initiated and when a home ends up owned by a new owner (and either renter-occupied or owner-occupied).

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