Post-Crisis Investment in Single-Family Homes in Fulton County, Georgia

By

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Abstract

The twentieth and twenty-first centuries have witnessed shifts in the dominant modes of the provision of mortgage finance in response to crises of liquidity and devaluation of mortgage-related assets. The political economy of housing in the aftermath of the financial crisis of 2007 has been marked by the emergence of institutional single-family landlords. This thesis analyses these shifts in the financial use of single-family homes against Fligstein and McAdam's (2012) theory of strategic action fields, urban political economists' theories of capital circulation, and Cedric Robinson's (1983) elaboration of racial capitalism. Using empirical data from Fulton County, Georgia, I find that patterns of residential segregation perpetuated by various paths of mortgage finance provision and the institutionalization of single-family rental persist into 2017. This is due to shifts in the racial politics of the assignment of financial risk, and the historical context within which these politics play out.

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This thesis has been a long time in the making. What started as a collective curiosity about huge crowds at foreclosure auctions in 2012, has culminated in this thesis five years later. From beginning to end, I have been blessed with the support, friendship, and love of so many people.

I am very thankful to my advisor, Jason Jackson, without whose support, guidance, and advice, this would not have been possible. My reader, Desiree Fields, has helped me work to understand single-family rental since Occupy our Homes Atlanta surveyed tenants of Invitation Homes in 2013. Both of their suggestions and revisions helped me find clarity and meaning in moments of uncertainty.

I am eternally grateful to the members of Occupy Our Homes Atlanta (now the Housing Justice League). Together we fought evictions and foreclosures, and first started knocking on the doors of homes owned by private equity firms. That door knocking would not have been possible without the support of the Right to the City Alliance, which supported surveys of Invitation Homes tenants in Atlanta, Ga., Los Angeles, Calif., and Riverside, Calif.

The friendship and solidarity of my friends and classmates at MIT gave bright contrast to everything that happened in 2016. Diana, Grant, and Libbie have been by my side throughout.

And finally, but most importantly, to my family, and to Sarah. Only with your love and support have I gotten to where I am today.

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Chapter One: Introduction

On December 6th, 2011 – the first Tuesday of the month – I stood on the steps of the Fulton County courthouse in Atlanta, Georgia making as much noise as possible alongside about 40 others attempting to disrupt the public auction of foreclosed homes. The goal was to make it so difficult to hear the auctioneers that the auction would be put on hold and at least some homes would not be sold to the highest bidder, but remain tenuously in the hands of current struggling occupants. The crowd of bidders was sparse, and although we were not able to shut down the entire auction, we managed to pause it for a few hours, leaving auctioneers with homes unsold at the end of the legally authorized auction time window.

Just over one year later, I went back to the auction with a homeowner struggling to avoid foreclosure or at least set the stage for meaningful negotiations with their lender. When a home sells to an investor at auction residents living in the home have two parties to contend with, the foreclosing lender and the purchasing investor, which makes negotiation to remain in the home far more difficult. Upon arriving at the auction with the hopes of preventing anyone from bidding on this struggling borrower's home, the scene had shifted drastically from the year before. Instead of the 50 or so bidders that had been on the courthouse steps in December of 2011, by February of 2013 there were hundreds of people bidding on foreclosed homes. In previous months in the years following the onset of the Great Recession, many homes received no bids from prospective purchasers and became part of a mounting stock of real estate owned (REO) properties that added to a glut of available homes for sale. In February of 2013, I watched as hopeful investors engaged in bidding wars over almost every home up for auction. I saw bidders armed with folders of blank cashier's checks who, according to veteran bidders, won auctions by overbidding. The drastic change I noticed sparked my curiosity. After a few quick searches I found a number of articles describing what was behind the surge in foreclosure auction activity: institutional single-family landlords – firms with hundreds of millions, if not billions of dollars in bank credit facilities and private and institutional investment at their command – were spending millions of dollars each month to purchase single-family homes at steep discounts from pre-crisis highs, perform moderate renovations, and rent them out (Gopal and Gittelsohn, 2012). From the courthouse steps, it looked like demand for single-family homes had returned, albeit from institutional single-family landlords rather than potential owner-occupiers.

In this thesis I seek to understand changing investment relationships to single-family homes in the wake of the financial collapse of 2007 and its subsequent wave of displacement. To place these changing relationships in context, I ask how historical paths of mortgage finance provision relate to patterns of investment (and lack thereof) that have unfolded after the Great Recession.

Over the course of the twentieth century, and into the twenty-first, the provision of capital for the occupancy of single-family homes (through owner-occupancy or rental) underwent major shifts. From the federal standardization and subsidy of mortgage production through Federal Housing Administration/Department of Veterans Affairs (FHA/VA) insurance from the New Deal to the early 1960s, to the re-emergence of savings and loans (S&Ls) as dominant deposit-backed mortgage lenders through the 1980s, to the dominance of mortgages produced for capital markets from the 1990s to the present through securitization, and the reconfigured use of single-family homes as rental units owned by institutional landlords (Immergluck, 2009; Fligstein and McAdam, 2012; Fields, Under Review; Fields, 2014; Call, 2014; Call et al, 2014).

To analyze these changes in the political economy of housing, I use sociologists Neil Fligstein and Doug McAdam's (2012) theory of strategic action fields, and urban political economists David Harvey (1973) and Kevin Fox Gotham's (2000; 2009; 2012) work on the circuits of capital, and the dialectics of spatial fixity and liquidity. The theory of strategic action fields, as elaborated below, is helpful in rendering thinkable shifts between dominant paths of mortgage provision from the New Deal to the wake of the 2007 financial crisis while avoiding the assignment of omnipotent agency to any particular actor(s) involved. An understanding of the circulation of capital and the fixity, and eventual liquidity, of its investment in single-family homes elaborates the role of the single-family home in relation to capital market investors, and therefore financialization, over time. I analyze each shift the provision of mortgage finance in terms of strategic action fields and the circulation of capital, seeking to synthesize insights from each to provide an image of residential development that speaks both to economic sociology and urban political economy. While I use strategic action fields and capital circulation to analyze the character of industrial changes, I use Cedric Robinson's concept of racial capitalism to analyze the persistence of racialized uneven residential development, testing for the deployment of racial capitalist logics in each iteration of the provision of mortgage finance. The following sections outline the contours of Fligstein and McAdam's (2012) strategic action fields, Harvey (1973) and Gotham's (2006; 2012) conception of capital circulation, and fixity/liquidity, and Robinson's (1983) elaboration of the racializing character of capitalism applied to housing with help from Paula Chakravartty and Denise Ferreira da Silva (2012), Keeanga-Yamahtta Taylor (2012), Elvin Wyly et al (2012), LeeAnn Lands (2009), Dan Immergluck (2009), Kevin Kruse (2005), and Gotham (2000).

A Theory of Fields

In 2012, economic sociologist Neil Fligstein and social movement scholar Doug McAdam put forward a theory of strategic action fields. In part, this was to respond to what Fligstein and McAdam saw as the simultaneous emergence of the concept of the field in subsections of sociology. Strategic action fields are defined as mesolevel social orders which constitute the "basic structural building block[s] of modern political/organizational life in the economy, civil society, and the state (Fligstein and McAdam, 2012, p. 3)," constituted through strategic action, or "the attempt by social actors to create and sustain social worlds by securing the cooperation of others (Fligstein and McAdam, 2012, p. 17)." In other words, "[a] strategic action field is a constructed mesolevel social order in which actors (who can be individual or collective) are attuned to and interact with one another on the basis of shared (which is not to say consensual) understandings about the purposes of the field, relationships to others in the field (including who has power and why), and the rules governing legitimate action in the field" (Fligstein and McAdam, 2012, p. 9).
Actors that comprise strategic action fields – from here on referred to simply as fields – can be classified as incumbents, challengers, or internal governance units. Incumbents in a

particular field are actors who wield disproportionate influence in the field, and typically see their interests reflected in the dominant organization of the field (Fligstein and McAdam, 2012, p. 13). Challengers wield little influence over the framing of the field. Their actions in the field are based in part on the recognition of the dominant logic of incumbent actors. In seeking to gain influence in a field, challengers often articulate and perform alternative visions of what the field could be. Internal governance units are actors that promote compliance with the rules of a field and seek to facilitate the field's reproduction and smooth operation (Fligstein and McAdam, 2012). As structural building blocks, fields exist in relation to other fields. The relation between fields can be classified as proximate or distant, dependent, interdependent or interdependent, state or nonstate, and horizontal or vertical. Proximate fields have recurring ties, and therefore the possibility of influence, to a field in question. Distant fields have few ties and lack the capacity to influence a field in question. Dependent fields are highly subject to the influence of other fields. Interdependent fields influence each other to a relatively equal degree. Independent fields are not subject to influence by other fields. Because states, or governments, are not singular hegemonic entities, state fields are comprised of collections of fields which, if proximate, can be described as vertically or horizontally related. These state fields are often unique in having the formal authority to intervene in, structure, and legitimate nonstate fields.

According to the character of action within a field, a field can be characterized as stable or unstable. Stable fields are ones in which "the main actors are able to reproduce themselves and the field over time (Fligstein and McAdam, 2012, p. 9)." Fields become unstable through the social relations of actors in response to exogenous shocks that create a situation, which Lauren Berlant (2011) defines as "a state of things in which *something* that will perhaps matter is unfolding amid the usual activity of life (Berlant, 2011, p. 5)." Actors classify unfolding situations (Berlant, 2011) as threats or opportunities, and mobilize resources to respond to the situation as classified. Through this process innovative forms of collective action may emerge, in which actors mobilize resources behind in response to a situation in a manner not entirely fitting with the dominant understanding of the field. If enough resources are mobilized under innovative collective action, the field can become destabilized, leading to an episode of contention within the field, or "a period of emergent, sustained contentious interaction between...[field] actors utilizing new and innovative forms of action vis-a-vis one another (McAdam, 2007, p. 253, quoted in Fligstein and McAdam, 2012, p. 21)." In unstable fields during episodes of contention incumbent actors can be expected to act to preserve the status quo, while challengers attempt to innovate, thereby reconstructing the field, or constructing a new field. Episodes of contention within fields are resolved by the reestablishment of the status quo by incumbents, or the construction of renewed and adjusted field rules and norms by challengers. Fields stabilize as consensus about the relative positions of incumbents and challengers solidifies (Fligstein and McAdam, 2012, p. 23).

In sum, strategic action fields are mesolevel units of analysis established by collective understanding and social action, which exist in relation to each other, and are subject to change (and stability) according to social organizational dynamics (Fligstein and McAdam, 2012). In elaborating strategic action fields, Fligstein and McAdam have sought to provide an "integrated theory of how stability and change are achieved by social actors in circumscribed social arenas (Fligstein and McAdam, 2012, p. 3)." As such, strategic action fields provide a useful structure for the analysis of dynamically social processes, like the (re)configuration of the paths of mortgage finance. For Fligstein and McAdam, the dominant paths of mortgage finance can be described as strategic action fields. Stability in these fields is produced by a lack of exogenous shocks, and continued cooperation between actors to reproduce profitable status quos. Change in these fields is produced by exogenous shocks like a stock market crash, currency and interest rate fluctuation, and defaulting borrowers. In the wake of such shocks, fields are reconstituted and reconfigured through the reestablishment of the status quo by incumbent firms in partnership with the intervention of state actors in nonstate fields, or settlement and reorientation of the field along lines drawn by the innovative collective actions of challengers.

Circuits of Capital

David Harvey (1978) describes capital as circulating within three circuits. The primary circuit of capital is constituted by investment in commodity production. The primary circuit is beset by crises of overaccumulation, in which "too much capital is produced in aggregate relative to opportunities to employ that capital" (Harvey, 1978, p. 106). Overaccumulation is marked by the inability of the reinvestment of surplus value to produce returns as capital, which results in the amassing of quantities of unused capital and labor, with no clear path to create productivity through the linking of the two. The secondary circuit consists of investment in the built environments for production and consumption. Capital switching from the primary to secondary circuit can temporarily resolve crises of overaccumulation by providing a 'spatial fix' for capital rendered unproductive in the primary circuit. Harvey (1978) uses the notion of spatial fix to describe the literal fixation in place of capital in physical form, and as a metaphorical 'fix' or solution to capitalist crisis tendencies through spatial reorganization (Jessop, 2006). The tertiary circuit can also provide relief for crises in other circuits, but without the fixed character of investment in the built environment. The tertiary circuit consists of investment in science and technology, and social expenditures. The aim of both kinds of investment in the tertiary circuit are to increase the rate or quality of production.

The resolution of crises of overaccumulation through capital switching into the secondary circuit brings crisis tendencies particular to circulation within the secondary circuit:

> "Capital represents itself in the form of a physical landscape created in its own image, created as use values to enhance the progressive accumulation of capital. The

> geographical landscape which results is the crowning glory of past capitalist development. But at the same time it expresses the power of dead labour over living labour and as such it imprisons and inhibits the accumulation process within a set of specific physical constraints. And these can be removed only slowly unless there is a substantial devaluation of the exchange value locked up in the creation of these physical assets...Capitalist development has therefore to negotiate a knife-edge path between preserving the exchange values of past capital investments in the built environment and destroying the value of these investments in order to open up fresh room for accumulation" (Harvey, 1978, p. 124).

The spatial fixity of investment in the built environment is circumscribed by the tendency for the devaluation of that investment over time. Kevin Fox Gotham (2006; 2012) has elaborated on Harvey's (2001) notion of the 'spatial fix' in the context of investment in single-family homes. Gotham (2012), using Harvey (1985; 2001), uses the case of mortgage provision to demonstrate the use of financial methods of accumulation (securitization) to create liquid financial assets of spatially fixed capital investments (single-family homes). This creation of liquidity out of spatial fixity, deployed by the state as a strategy to manage financial crises resulting from capitalist tendencies in pursuit of accumulation, is found to be unequal to the task, and productive of yet further crises of overaccumulation and devaluation (Gotham, 2012).

The circulation of capital via the primary circuit produces crises of overaccumulation, to which solutions (in the form of renewed accumulation) are sought through switching into the secondary circuit (Harvey, 1978; 2001; Gotham, 2006; 2012). Investment in the built environment through the secondary circuit produces uneven patterns of development, as space is differentially reconfigured in service of capital accumulation through spatially fixed investment (Harvey, 1978; Gotham, 2012). "As capital immobilized in space, real estate always faces intersecting and multiple crises of realization, repayment, and falling rates of profit" (Gotham, 2012, p. 43-44). To overcome these crises, the state has intervened to create liquidity out of spatial fixity by "[t]ransforming mortgages and other long-term debt into liquid securities as an attempt to bring greater rationalization, standardization, and exchangeability to the difficult and conflictual process of buying and selling complex commodities that have a variety of use values and exchange values" (Gotham, 2012, p. 44). Thus shifts in the predominant paths of mortgage finance provision can be described using Harvey and Gotham as attempts to resolve crises of overaccumulation. Harvey (2001) describes suburbanization after World War II as such an attempt. Gotham (2012) then describes securitization's rise to dominance as a path of mortgage finance as an attempt to overcome crises of mortgage liquidity produced by shifts in the global regulation of finance capital (Lapavitsas, 2013) and domestic financial deregulation. For Harvey and Gotham, changes in the provision of mortgage finance are produced by crisis-tendencies within the capitalist mode of production. Attempts to overcome these crises by the switching of capital into the secondary circuit produce uneven residential development, as capital exercises its tendency to annihilate space with time (Marx, 1973, p. 539 in Gotham, 2012, p. 25).

Racial Capitalism

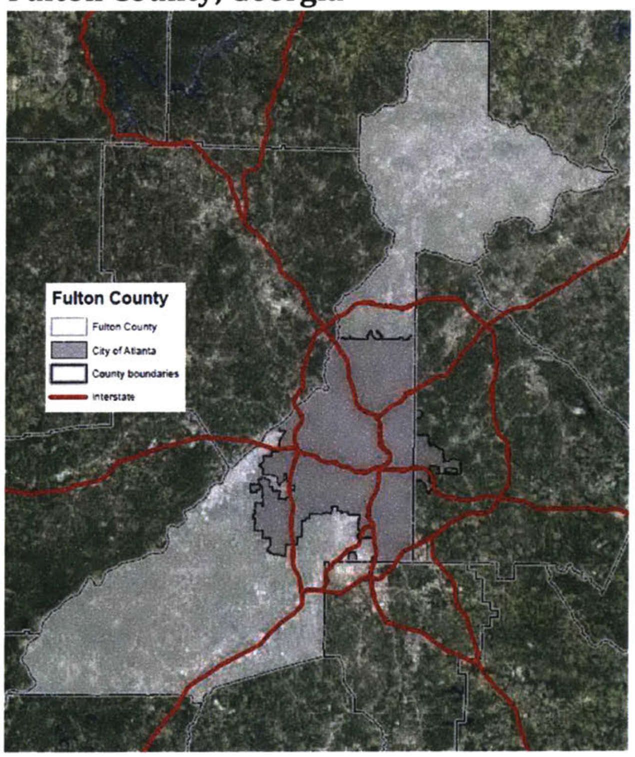
In his seminal work *Black Marxism: The Making of the Black Radical Tradition* Cedric Robinson (1983) shows that the foundations of the establishment of capitalism, and thereby the working class, were fundamentally unfolded along racial lines. Instead of narrating the emergence of capitalism as a revolutionary break from the confines of dogmatic feudalism, Robinson (1983) demonstrates that racial hierarchy with enslavement as its base persisted through epochal transitions from feudalism to capitalism. This racial hierarchy allowed for the physical and discursive construction of white Europe as purveyor of modernity against racialized others (Irish, Jews, Africans). The decoupling of feudal logic and capitalist logic erases the histories of these othered peoples, and serves to broaden the category of whiteness while emboldening the line between white and Black. Robinson (1983) asserts that racialism permeates social structures emergent from capitalism (Cheng, 2013). The working class, main protagonist of Marxist analysis, is one such social structure. "As a class brought into being at the end of the nineteenth and beginning of the twentieth century by racial capitalism, to the extent that it existed, the workers' collective consciousness remained a racial one subject to the disciplining ideologies of the bourgeois class and responsive to what they had been led to believe was 'American culture'" (Robinson, 1983; p. 316). In short, racist determinations were inherent in the development of capitalism and labor. Racial capitalism, the term Robinson uses to describe such a system, is characterized by caste-like "boundaries of racialist order" (Robinson, 1983, p. 262).

Racial capitalism functions through the production and exploitation of categories of racial difference. The concept therefore allows for the evaluation of paths of mortgage finance provision and their resulting geographies of residential development as turning on racist logics of social and economic hierarchy. Various paths of mortgage finance have produced racially segregated patterns of residential development. These patterns cannot be explained away by post-racial analyses of strategic action fields or capitalocentric analyses of investment in the built environment. Instead, as Robinson (1983) notes:

"As America was a critical subsector of this developing system [modern capitalism], the conflicts between American creed and reality, the contradictions of American society, the distortions of its social structures and political institutions ensued from its dependence on slavery and...resound throughout the system into the [twenty-first] century. Slavery, then, was not a historical aberration, it was not a 'mistake' in an otherwise bourgeois democratic age. It was, and its imprints continu[e] to be, *systemic.*" (p. 200)

The concept of racial capitalism can be deployed to explain the persistence of patterns of residential segregation. In all forms analyzed in this thesis, there remains a racial character to paths of mortgage finance provision. The FHA/VA largely denied subsidized mortgage insurance to non-white borrowers (Lands, 2009; Jackson, 1985; Gotham, 2000), S&Ls avoided making loans in predominately black areas (Kruse, 2005; Immergluck, 2009; Dedman, 1988; Wyly and Holloway, 1999; Taylor, 2012), and securitization thrived on the predation of disproportionately Black and Latinx borrowers (Wyly et al, 2009; Ashton, 2009; Gotham, 2012; Ding et al, 2008; Chakravartty and da Silva, 2012). Throughout the thesis I use the concept of financial risk, inscribed upon the urban landscape and individual bodies, to trace racial capitalism from the creation of the standardized mortgage market in the 1930s through the financial collapse of 2007.

Fulton County, Georgia



Fulton County's current borders were established at the onset of the Great Depression when Campbell County to the south and Milton County to the north merged with Fulton to avoid insolvency. Since then, the ghosts of these former counties' borders have provided the template for Fulton's spatial segregation. The median household income in Fulton County is $57,207. Its population is 47 percent white, 45 percent black, seven percent Asian, and eight percent Hispanic or Latinx. Atlanta's demographics are similar, with a median household income of $47,527 and a population that is 54 percent black, 41 percent white, five percent Asian, and five percent Hispanic or Latinx. Just under half of Fulton County's one million residents live in the city of Atlanta, whose city limits serve as a dividing line between the predominately white and wealthy northern part of Fulton County and its predominately black and working class south. Alpharetta, Johns Creek, Milton, Roswell, and Sandy Springs, all cities in north Fulton County, have median household incomes well above those of Fulton as a whole that average around $85,000. East Point, College Park, Hapeville, Fairburn, Union City, Palmetto, and Chattahoochee Hills in the less municipalized southern part Fulton County have median household incomes that average out to $40,690.

Sources: New Georgia Encyclopedia, 2013; GeorgiaInfo 2017; US Census, 2015

To evaluate changes in the provision of mortgage finance and investment in single-family homes, I situate my analysis in Fulton County, Georgia. Fulton County is a large, economically and demographically diverse, but spatially segregated county with Atlanta at its center. From the beginning of the twentieth century (DuBois, 1901) and into the twenty-first, Fulton County and Atlanta have been the site of deep engagement with the political economy of housing. LeeAnn Lands (2009) uses Atlanta to elaborate on the "culture of property" that deployed landscape-oriented conceptions of property and propriety to sort the city along racial lines and extend that sorting into the suburbs from 1880 to 1950. Kevin Kruse (2005) uses Atlanta and its environs to show the causes and effects of residential segregation and white flight in the making of modern conservatism from the 1930s through the 1970s. Ronald Bayor (2000) situates his study of *Race & the Shaping of Twentieth-Century Atlanta* in the same period. Floyd Hunter's (1969) *Community Power Structure* describes the racially paternalistic decision making structure of Atlanta's civic elite in the height of white flight. Clarence Stone (1989) builds on Hunter's work, using the racial politics of Atlanta to coin the phrase 'regime politics' to describe the political partnership of Atlanta's black civic elites and white business elites. Bill Dedman's (1988) Pulitzer prize winning *Color of Money* series from the Atlanta Journal Constitution uses Fulton County to illustrate continued lending discrimination by S&Ls. Elvin Wyly and Steven Holloway (1999) follow up on Dedman's (1988) report, updating readers on continued lending discrimination by S&Ls and the emergence of independent mortgage companies in the 1990s. Housing policy scholar Dan Immergluck has regularly relied on Fulton County and metropolitan Atlanta as empirical cases used to demonstrate patterns of high cost lending, foreclosure, and investment in single-family homes. This sizeable body of housing-related research situated in and around Fulton County, Georgia, allows for detailed analysis of shifts in paths of mortgage finance provision through time.

Empirical Analysis

In the interest of building Fulton County as a cumulative case for the study of the political economy of housing, the primary empirical research of this thesis builds directly upon the recent work of Immergluck and Law (2013; 2014), who trace the acquisition patterns and investment behaviors of likely-investors in real estate owned (REO) properties in Fulton County in the immediate aftermath of the foreclosure crisis from 2008 to 2011. To establish the spatial and racial distribution of foreclosures, which is to say the spatial and racial distribution of displacement and dispossession, I map foreclosure activity in Fulton County from 2007 to 2012 (Neighborhood Nexus, 2016). I show that as the impacts of the crisis matured, foreclosures radiated out from Atlanta's predominately Black and poor urban core into predominately Black and middle-income southern Fulton County. My findings here are in line with those of Immergluck and Law (2013) who note that with the passing of time, sales of REO properties shifted along similar lines. 2013 marks the first year that institutional single-family landlords are shown to have owned single-family homes in Fulton County, Georgia. As such, the period of Immergluck and Law's (2013; 2014) studies unfortunately entirely fails to capture the intense wave of single-family home investment funded by institutional investors-cum-landlords. Altering their methodology to better capture the emergent dimensions of institutional single-family rental investment, I map investment in single-family homes in Fulton County from 2011 to 2015. Using the same categorization of concentration of acquisition activity as Immergluck and Law (2013), I map the relative concentration, from 2011 through 2015, of likely-investors, institutional single-family landlords, and REO activity. Using REO activity as a rough stand in for continued foreclosures, I find that Atlanta's urban core remains the site of the most concentrated transference of single-family homes into bank ownership, with pockets of concentration in southern Fulton, and very little REO activity in northern Fulton. REO activity represents the stock of housing that has been emptied and made available for acquisition because of foreclosure and eviction. This stock of emptied housing represents single-family homes as distressed assets, capable of providing the most significant discounts for potential investors. I find that concentrations of likely-investor activity map closely onto concentrations of REO activity, again concentrated in Atlanta's urban core and parts of southern Fulton, with little activity in northern Fulton County. Concentrations of acquisitions made by institutional single-family landlords diverge from the commonalities shared between the geographic concentration of REO activity and likely-investor activity. Institutional single-family landlords by and large avoided purchasing properties in parts of Atlanta most impacted by foreclosure. Instead, their acquisitions are concentrated heavily in suburban South Fulton, with pockets of concentration in North Fulton and southern Atlanta.

Organization of the Thesis

The remainder of this thesis is organized into two sections whose content is divided roughly by the advent of the financial crisis of 2007. The first section traces the historical sources of mortgage finance from the Great Depression through to the Great Recession. This section uses historical framing provided by Immergluck (2009) to classify three paths of mortgage finance flowing through the FHA/VA from 1934 to the early 1960s, S&Ls from the early 1960s through the 1980s, and securitization from the 1990s to the global financial crisis. I analyze each shift in the dominant mode of mortgage finance provision against theories of change provided by Fligstein and McAdam's (2012) strategic action fields and Harvey (1978) and Gotham's (2006; 2012) circuits of capital and liquidity from spatial fixity. I also compare each shift against Robinson's (1983) conception of racial capitalism, using shifts in the deployment and assignment of financial risk to explain the persistence of the production of racially segregated residential landscapes. I then conclude the section by providing empirical evidence of the effects of the foreclosure crisis, placing that evidence in conversation with the history of the political economy of housing in Fulton County.

The second section primarily concerns itself with the emergence of institutional single-family landlords, and their construction of a new asset class through the renewed, but different, incorporation of single-family homes as nodes for financial accumulation. I begin the section by discussing federal policy that sought to provide relief and recovery from the fallout of the financial collapse. Then, with the help of Alan Mallach (2014) I describe the field of single-family rental as it existed prior to the emergence of institutional single-family landlords. Using accounts from the business press and corporate filings with the Securities and Exchange Commission (SEC), I then describe the construction of institutional single-family landlords, and their creation of structured financial instruments reliant on income streams through single-family homes. I place this section in conversation with the previous, historical, section by analyzing attempts at recovery and the emergence of institutional single-family landlords in terms of strategic action fields (Fligstein and McAdam, 2012) and capital circulation and spatial fixity (Harvey 1978, 2001; Gotham 2006, 2012). Again I test these analyses of emerging institutional single-family landlords against Robinson's (1983) racial capitalism, returning to practices of risk-based pricing (Ashton 2009) to demonstrate its continued relevance to single-family housing in Fulton County, Georgia. This section concludes with primary empirical research on the concentration of REO activity, likely-investor activity, and institutional single-family landlord activity. I conclude the thesis with a brief discussion of my overall findings and their implications for future research.

Chapter Two: Single-family Housing Finance

Paths of mortgage finance provision

In *Foreclosed*, Dan Immergluck (2009) puts forward a history of the financial structure of the provision of mortgage credit in the United States. In doing so, he focuses on three paths through which capital has been allocated to the provision of mortgages: Federal Housing Administration/Department of Veterans Affairs, savings and loan (S&L), and securitization. Immergluck describes these three categories as 'circuits' of mortgage finance. To avoid confusion with Harvey (1978; 2001) and Gotham's (2006; 2012) terminology, I define Immergluck's 'circuits' of mortgage finance as paths of mortgage finance.

Each path to the provision of mortgage finance is a route by which loanable capital is allocated towards the provision of mortgages in the United States (Immergluck, 2009). The FHA/VA path links capital to mortgage provision through the use of explicit federal guarantees that mortgage lenders will be able to recoup the entirety of their loaned capital in case of a default, and the ability of lenders to sell such mortgages to a federal secondary market (Immergluck, 2009; Lands, 2009). The S&L path rests on the use of consumer deposits backed by federal deposit insurance and the Federal Home Loan Banks as a base of loanable capital for the origination of mortgages (Gotham, 2012; Immergluck, 2009). The securitization path directly links return-seeking capital market investors, be they individuals or institutional investors, through structured financial instruments like mortgage-backed securities (MBS) and collateralized debt obligations (CDOs) (Immergluck, 2009; Sassen, 2012; Bryan and Rafferty, 2014; Goldstein and Fligstein, 2012; Ashton, 2009; Wyly et. al, 2009). These three paths existed simultaneously over the course of the twentieth century, with the S&L path predating the creation of the FHA/VA path in 1934 and the creation of the securitization path in 1970. The three paths described here have been dominant since the Great Depression, but represent the general methods of allocating capital to mortgage provision rather than a totalizing account of how capital is allocated to the production of owner-occupied single-family homes.

Prior to the Great Depression, S&L institutions provided one of the primary paths for capital to mortgage finance (Immergluck, 2009). Savings and loans got their start as building and loan societies, in which individuals would make payments into a collective pool until enough money had been raised to construct a building. Members would then offer this collectively raised capital as a loan to the member of the society willing to pay the highest interest rate (Immergluck, 2009). The S&L circuit of mortgage finance maintained essentially the same structure until the onset of the Great Depression in 1929. S&Ls would collect deposits from members. They would then use these deposits to originate mortgages. For the most part, these mortgages tended to be short lived and non-amortizing, requiring continual refinancing or the ability of a borrower to pay a large lump sum (Green and Wachter, 2005).

In the roughly the same period that S&Ls came to the fore as providers of mortgage finance, the racial geography of the City of Atlanta was transformed by emerging conceptions of property and propriety, and their attachment to whiteness (Lands, 2009). In the 1880s, Atlanta was characterized by neighborhoods filled with heterogeneous populations along race and class lines. The value of a home was derived from its size and the soundness of its structure (ibid). Thus black railroad workers and white bankers might share the same street, with differences in their social position marked by the condition – rather than the location – of their homes (ibid). A decade later, this conception of property valuation had changed for Atlanta's white elite. Influenced by park-neighborhoods and the City Beautiful movement of Chicago's 1893 Columbian Exposition, elites took on a landscape way of seeing property (ibid). This new way of seeing centered natural landscape features and social homogeneity along lines of race and class as the most desirable ordering of (sub)urban space. By the late 1920s, the epitome of a valuable single-family home was located in a park-neighborhood and owned by a white man, with any poverty and difference put out of sight by the home's long setback from the street, distance from the central city, and similarly white and wealthy neighbors. In Fulton County and Atlanta, such park-neighborhoods first started to emerge in the 1890s on the city's outskirts. Inman Park, Atlanta's first streetcar suburb, was governed by racial deed covenants that prevented any Black people from owning a home there. Throughout the early twentieth century, similar neighborhoods were developed for Atlanta's white elite, to provide them respite from the hustle and bustle of the diverse city in a manicured and whitewashed landscape (ibid.). As white elites fled to deed-restricted neighborhoods on the edges of the city proper, city zoning ordinances, racial deed covenants, discriminatory mortgage financing, and white mob violence drew racial boundaries around neighborhoods in the urban core. S&Ls financed the development of these stark boundaries by broadly refusing to lend to nonwhites, especially if lending would promote the racial integration of a neighborhood (Kruse, 2005; Lands, 2009). Black Atlantans that wanted to own homes had few options. They could either finance the purchase out of pocket, rely on financing from the small but growing cadre of black-owned banks, or purchase a home via land contract (Lands, 2009). By the time of the Great Depression Atlanta had been sorted into a racially segregated city by deed covenants, unconstitutional racial zoning laws, and the unmentioned but ever present potential for white mob violence (ibid; Burns, 2009).

As a large number of Americans found themselves out of work and under threat of foreclosure, the federal government sought to stabilize the situation by conducting its first large-scale attempt to structure the provision of mortgage finance (Green and Wachter, 2005). Depression era legislation created legal and financial infrastructure to standardize mortgage rates and terms, federally insure mortgages that met newly standardized terms, and create a secondary market to promote the liquidity and issuance of insured mortgages, overcoming a crisis of miniscule effective demand for mortgage-funded housing by creating a new, standardized path for capital to the provision of mortgage finance (Gotham, 2012; Immergluck, 2009; Green and Wachter, 2005). Federally guaranteed mortgage insurance through the Federal Housing Administration (FHA) and later the Department of Veterans Affairs (VA) made mortgage lending more appealing to lenders in the wake of historical rates of foreclosure and default (Immergluck, 2009). By originating an FHA or VA insured mortgage, lenders were granted a federal guarantee that the principal amount of the loan would be reimbursed should the borrower default (ibid). The creation of a standardized secondary market for insured mortgages came in the form of the Federal National Mortgage Association, known more commonly as Fannie Mae. As a government-owned enterprise, Fannie Mae used public funds to purchase FHA/VA insured mortgages (ibid.) further incentivized mortgage origination in a time of uncertainty. By selling mortgages to the secondary market, lenders could bring mortgage revenue forward in time. Instead of having to wait 30 years to recover what had been lent towards a mortgage, lenders could use proceeds from the sale of mortgages to Fannie Mae to realize profits from mortgage lending in the short term and reimburse their loanable capital (Gotham, 2012). Lenders that originated federally insured mortgages, which they then sold to Fannie Mae, were able to drastically decrease the amount of time their invested capital spent in any one place, allowing them to redeploy capital in service of other mortgages for other homes in other places (Gotham, 2012; Harvey, 1985). Prospective mortgage borrowers found FHA/VA loans appealing as well because FHA/VA loans amortized, required smaller down payments, and extended mortgage terms over a longer period, making mortgage payments more affordable (Green and Wachter, 2005; Immergluck, 2009).

Prior to the Great Depression, the strategic action field of mortgage finance was comprised of proximal but relatively independent strategic action fields according to the type of lender and their financing structure. In 1929, severe crisis in the field of finance provided an exogenous, destabilizing shock to the proximate field of housing. With New Deal legislation the government, as a state actor, constructed a more singular field of mortgage finance from the rubble of the crisis of 1929 (Fligstein and McAdam, 2012). State actors created subfields in mortgage finance with the creation of the FHA and the Federal Home Loan Banks (FHLB). The FHA, as a state actor, acted as an internal governance unit (IGU), overseeing compliance with field rules of fixed rate, fixed term, amortizing mortgages laid out by the FHA itself. Fannie Mae, created in 1938, can also be considered a state actor serving as an IGU for the field of mortgage finance. Fannie Mae facilitated expansion of the field by providing a secondary market for mortgages, increasing market liquidity. Commercial banks, insurance companies, and S&Ls comprised the nonstate actors in the field of FHA housing finance.

Harvey (1978) and Gotham's (2012) more Marxist theory of change describes the Great Depression and its resulting devaluation of mortgage-related assets as a result of a crisis of overaccumulation in the primary circuit of capital (Bellamy Foster, 1983). The federal government's New Deal legislation can then be understood as having structured the mortgage market to subsidize and facilitate the switching of capital into the secondary circuit. Additionally, the federal government invested in the tertiary circuit in regards to housing finance, investing in technology that came in the form of the establishment of national standards for mortgage lending backstopped by federal underwriting guidelines. Throughout this period efforts to standardize, subsidize, and promote individual homeownership served as an ideological substitute for the achievement of the 'good life' through collective militant organizing (Harvey, 2001). As veterans returned home from World War II, Harvey (2001) contends that the United States was able to avoid accumulation crises because of the capacity of the FHA/VA path of mortgage finance to enable investment in the secondary circuit. This investment produced a spatial fix in the form of suburbanization, which brought with it new and expanded modes of consumption "in accordance with the needs of capital accumulation" (Harvey, 2001, p. 86).

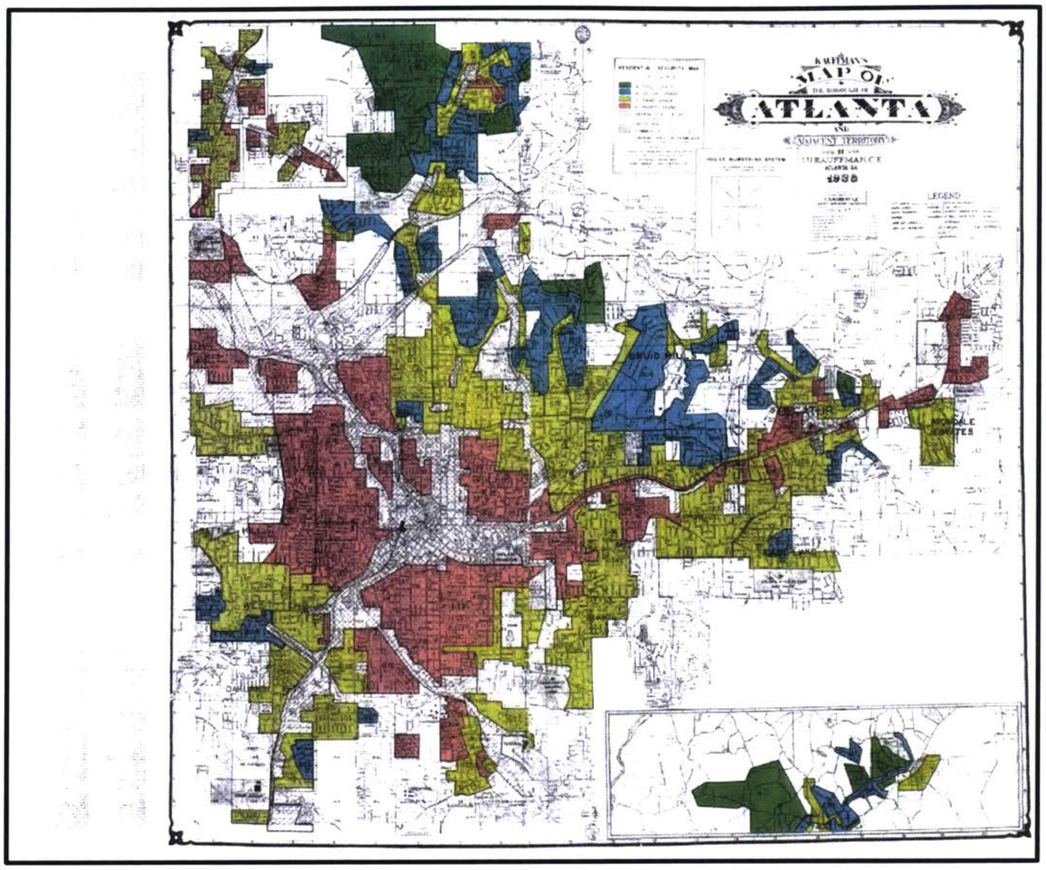
Race is conspicuously absent from accounts of the era of FHA/VA dominance offered by Harvey (1978; 2001) and Fligstein and McAdam (2012). This absence is particularly caustic in Fligstein and McAdams (2012). The first half of the chapter in which they describe the strategic action fields of housing is comprised of an account of the strategic action fields of the civil rights movement (Fligstein and McAdam, 2012). Doug McAdam is specifically a civil rights social movement scholar. For them, race is a void left unmentioned in the context of housing strategic action fields. Harvey's accounts of this era (1978; 2001) land squarely in the sights of Robinson's (1983) critique of Western Marxism. For Harvey (1978; 2001), the racialized character of mortgage finance provision is but a secondary consequence to the exploitation of the working class.

Gotham (2000), thankfully, has written extensively on the FHA's racialized policies. He rightly asserts that "the FHA institutionalized a racially separate and unequal system of home financing that favored suburban building for whites, while precluding insurance for homes in racially mixed and nonwhite neighborhoods in the inner city" (Gotham, 2000, p. 309). With the institution of the FHA, which insured three out of every five mortgages between 1935 and 1959 (Gotham, 2000), came the use of its racialized underwriting manuals and security risk maps, and the inscription of financial risk onto urban and suburban landscapes along racial lines (Lands, 2009). On the part of mainstream financial institutions like commercial banks and S&Ls, this delineation of risk enabled the practice of credit rationing referred to as redlining (Abrams, 1955; Squires, 2004). From the white park-neighborhood perspective of the ideal home, FHA and VA evaluators considered the presence of African Americans to be an automatic threat to property value (Lands, 2009). Predominately black neighborhoods were set onto maps in order to be avoided. Credit rationing, or denial of service, was the standard for nonwhite borrowers seeking FHA/VA insured mortgages.

Residents of nonwhite spaces, the contours of which delineated financial risk, or residents whose presence would serve to integrate previously homogeneously white sectors, which would allegedly serve to drive down property values, fell subject to predatory home financing schemes. Among the most prominent was the land contract, a method of seller financing, whereby a prospective homeowner would enter into contract with a property owner, residing in the financed property and making payments of principal and interest until eventually achieving ownership of the home. These arrangements tended to involve sizable down payments and high interest rates over 20 to 40 year terms (New York Times, 2016; Satter, 2009, p. 59), typically offered by white owner-financiers to Black occupants. Should an occupant breach – or allegedly breach – any terms of the contract, the financier would evict the occupant and offer a land contract (contract for deed) to yet another occupant striving for homeownership. For the marginalized occupant, these contracts offered a path to home ownership where the "conventional" mortgage markets developing at the time would not. For the owner-financier, these contracts offered an opportunity for continuously churning tenants to maintain property ownership and cash flow. There was also a secondary market for such contracts, which encouraged the speculative acquisition and churning of properties. Beryl Satter (2009) describes the process as follows:

> "After contract sellers made healthy sums of money through contract buyers' down payments and a year or so of high installment payments, many sold off their contracts to other investors for a price that was less than what the contract buyer owed on the building (though well above what the contract seller had originally paid for the property). The investors thus acquired an income-generating contract at a nice discount, while the speculators received more cash, which they could use to purchase more properties." (p. 59)

Through the land contract, the landscape orientation of risk could be deployed to produce high yield property investments at the expense of Black residents. Thus the inscription of risk onto landscape produced a dual system of housing finance, one in which white families qualified for federal mortgage subsidies, and black families were subject either to credit rationing or high cost financing along racial lines. Practices of maintaining and advancing residential racial divide in Atlanta and elsewhere took on a bureaucratic tone with FHA/VA insurance. In an undertaking of normalized racism in an age of explicitly racist Jim Crow laws, predominately black neighborhoods found themselves circled in red on FHA maps (Immergluck, 2009; Jackson, 1985).



1938 HOLC Residential Security Map of Atlanta

Black or poor central city neighborhoods were not included in efforts of recovery via mortgage finance undertaken by the federal government during the Great Depression. Instead, the federal government addressed the housing needs of black or poor inner city neighborhoods through paternalistic slum clearance and public housing construction (Vale, 2013; Lands, 2009). Atlanta's white civic elites in the 1930s and 1940s sought to use slum clearance to buffer Atlanta's central business district from dilapidated housing and further define Atlanta's "white" and "black" neighborhoods (Lands, 2009). To do so, these white civic elites sold slum clearance to the public as the necessary cleansing of diseased and blighted urban areas (ibid). Slums, in the words of a contemporaneous Atlanta Housing Authority film on the subject, constituted "'a jungle world breeding jungle life'" (Lands, 2009, p. 172). According to federal statute, public housing that was built on the sites of former slums was not allowed to alter the prevailing racial demographics of a neighborhood (Lands, 2009). To this end Atlanta's civic elites and public agencies "used slum clearance and public housing to eliminate mixed-race neighborhoods, raze small concentrations of black housing that still punctuated the predominantly white north side, establish buffers between black and white neighborhoods, and concentrate black families in the city's core and west side" (Lands, 2009, p. 171). Black Atlantans' quest to expand the availability of quality housing for Atlanta's growing black upper and middle class also faced resistance from the city's white civic elite (Lands, 2009). Black homeownership that was not furnished by land contracts or self-financing was increasingly financed by local black-owned financial institutions like Citizens Trust Bank and supported by the Atlanta Urban League (ibid.). Although the prosperity of Atlanta's black population grew from the 1930s, the geography of black homeownership was bounded by white paternalism and promotion of segregation (Lands, 2009; Stone, 1989). When seeking to expand spaces for black homeownership, members of the Atlanta Housing Council – an arm of the Atlanta Urban League (AUL) – assembled a report in 1948 for "Proposed Expansion Areas for Negroes" (cf. Lands, 2009). Their proposal suggested the building of single-family neighborhoods and multifamily buildings in areas adjacent to existing black neighborhoods or distant from white neighborhoods (Lands, 2009). The proposal was met warmly by Atlanta's white and black civic leaders (ibid.). Even so, attempts to follow the plan for expansion of black-occupied housing were often met with white resistance or the denial of federal subsidies (ibid). Between 1945 and 1956, the AUL "facilitated the construction of 1,276 owner-occupied dwellings and 2,862 rental units" (Lands, 2009, p. 188). Included in this were a rare 800 units intended for black occupancy that, after negotiation, were insured by the FHA (Lands, 2009). The geographic deployment of the concept of financial risk – the relative chance of not fully realizing returns on an investment – marked nonwhite or poor people and places as unworthy of conventional investment and subject to predatory land contracts (Lands, 2009; Taylor, 2012). From the 1930s through the years following World War II the FHA/VA path of mortgage finance determined risk of investment through explicitly racist underwriting guidelines and risk maps (Lands, 2009; Kruse, 2005; Immergluck, 2009; Jackson, 1985). This segregated evaluation of risk, and therefore allocation of subsidy, in separate and unequal housing markets constituted a 'race tax' (Taylor, 2012), making equivalent housing less affordable for Fulton County's black residents than its white residents.

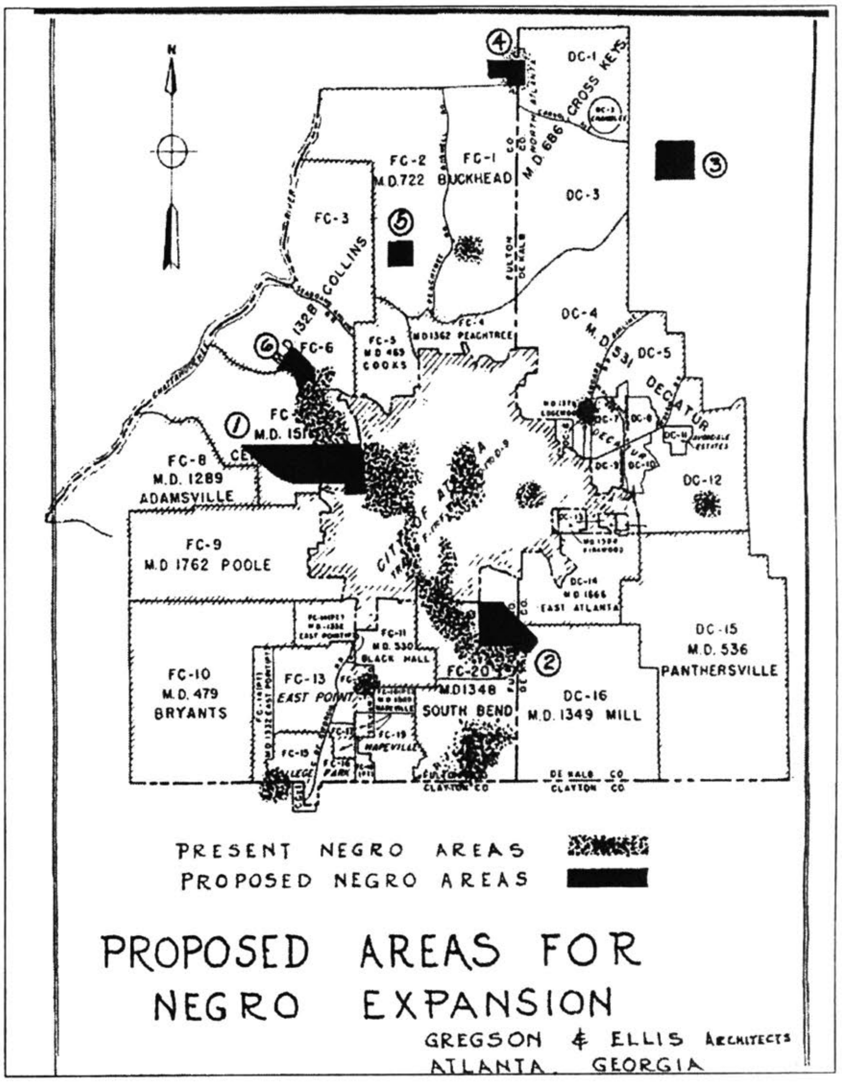


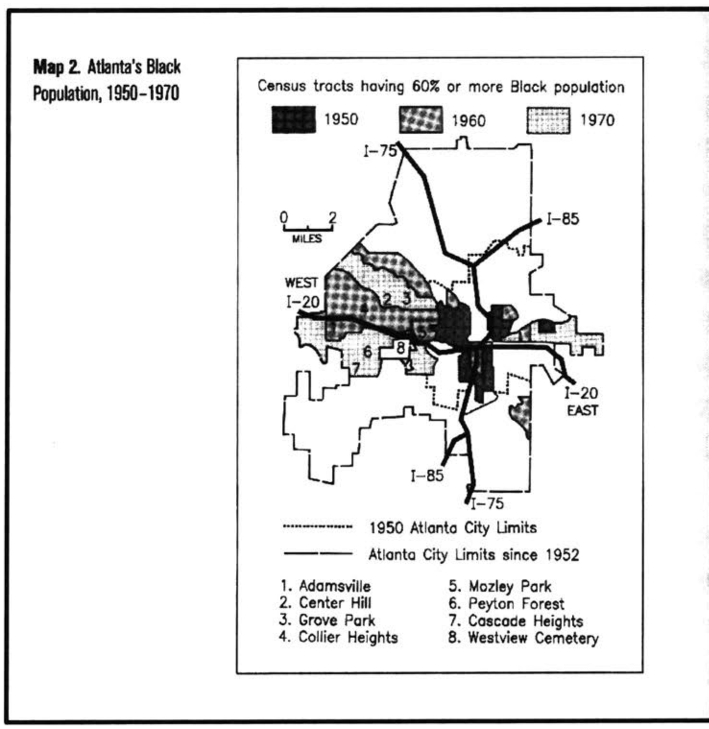
Figure 6.3. "Proposed Areas for Negro Expansion," Atlanta Housing Council, 1947, attached to letter from R. A. Thompson Jr. to James H. Therrell, July 29, 1947, folder 1, box 252, Atlanta Urban League Papers, Robert W. Woodruff Library of the Atlanta University Center.

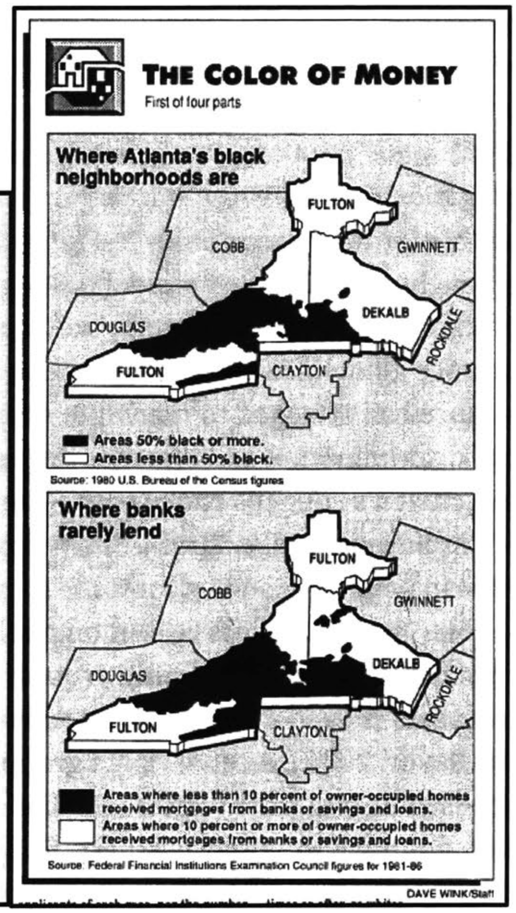
Lands (2009)

Savings and Loans

The establishment of the FHA/VA was a response to the shortcomings of the S&L path of mortgage finance, but Depression era legislation laid the foundation for S&Ls return to dominance in the 1960s (Immergluck, 2009). During the Depression, the federal government sought to standardize mortgage lending through S&Ls in addition to creating its own path for mortgage finance through the FHA/VA (ibid). In 1932, congress created the Federal Home Loan Bank system to provide liquidity to depository institutions like S&Ls that originate mortgages (ibid). The Federal Home Loan Bank (FHLB) system was comprised of member institutions, like S&Ls, which, upon buying shares of the FHLB, were given access to short term loans (ibid). S&Ls used the short term lending capacity of the FHLB to take out loans against mortgages they had issued (ibid). While this is not a direct secondary market for mortgages, the function is similar in that S&Ls could now replace capital put towards mortgages with amenable debt from the FHLB, thus accelerating their returns (ibid; Gotham, 2012). Additionally, S&Ls could take advantage of FHA/VA insured lending though they did so less regularly than commercial banks, insurance companies, and mortgage companies (Immergluck, 2009).

Able to make more loans against their own capital due to FHLB and government-owned secondary market support, the S&L path of mortgage finance returned to dominance after the pre- and post-WWII waves of FHA/VA borrowers subsided in the 1960s (ibid). Like the FHA/VA path it overtook following WWII, the S&L path was not a lever for the provision of economic justice along racial lines, and reinforced already existing racial segregation (Lands, 2009; Dedman, 1988). Although the Supreme Court had ruled racial deed covenants unconstitutional in 1948, and the Civil Rights Act of 1964 and Voting Rights Act of 1965 made Jim Crow laws illegal, S&L lending was acquiescent to the spirit of segregation (Lands, 2009: Immergluck, 2009). Efforts to expand space and lending available for black-occupancy in Fulton County confronted by white neighborhood councils that fought for continued residential segregation (Kruse, 2005). White Atlantans deployed racialized narratives of property value preservation that had been promulgated by FHA/VA insurance guidelines and the narratives of disease and destruction that campaigns for slum clearance had attached to nonwhite skin (Kruse, 2005; Lands, 2009). To soften images of racial discrimination and distance themselves from white nationalists in the wake of WWII, white citizen's councils spoke of the need to preserve community rather than the need for black exclusion (Kruse, 2005). Such community would prove illusive for working class whites in neighborhoods closest to "transition" away from homogenous whiteness as their wealthier neighbors, less reliant on public services, began to move away, some selling their homes to black Atlantans in the process (Kruse, 2005). The federal desegregation of public institutions proved a watershed moment for white flight in Fulton County and elsewhere (ibid; Bayor, 2000). As civil rights groups pushed for fair housing and black Atlantans purchased homes from whites who fled the city, the space available for black-occupancy in Fulton County grew (Kruse, 2005). S&Ls were wary to take part in this expansion however, and continued to lend sparsely if at all in predominately black areas (Kruse, 2005; Dedman, 1988; Wyly and Holloway, 1999). Throughout the 1960s and 1970s, community groups worked to fight discriminatory S&L lending that provided a whites with a disproportionately higher level of mortgage finance (Lands, 2009; Kruse, 2005; Squires, 2004; Keating, 2001; Immergluck, 2009). Social movement pressure on congress and the presentation of evidence of racially discriminatory lending patterns resulted in the inclusion of the Community Reinvestment Act as part of the Housing and Community Development Act of 1977 (Immergluck, 2009). The Community Reinvestment Act required depository institutions, like S&Ls, to demonstrate their service in meeting the credit needs of the communities in which they are chartered (Immergluck, 2009). However, discriminatory lending persisted well after passage of the Community Reinvestment Act. In a series of 1988 articles that won him the Pulitzer Prize, Atlanta-based journalist Bill Dedman demonstrated that banks and S&Ls in the Atlanta area continued to avoid making loans in predominately black neighborhoods (Dedman, 1988). As the predominant path of mortgage finance from the 1960s to the 1980s, S&Ls preserved established legacies of disinvestment in predominately black parts of Atlanta and Fulton County (Kruse, 2005; Dedman, 1988). At the same time, massive white flight to Fulton's northern suburbs and beyond opened up less contested space for black-occupancy to Atlanta's south and west (Kruse, 2005).





Atlanta's Black Population, 1950-1970

Bayor (2000)

Where Atlanta's black neighborhoods are; Where banks rarely lend

Dedman (1988)

Though the S&L path was dominant from the 1960s through to the 1980s, it faced considerable macroeconomic challenges during the same period that would eventually lead to the collapse of the S&L path of mortgage finance (Gotham, 2012; Immergluck, 2009). In the 1960s, rising interest rates and declining housing starts prompted investigation into the vulnerabilities of S&Ls to economic downturns (Immergluck, 2009). A fundamental challenge to the provision of mortgage credit through the S&L path was "the 'maturity mismatch' between long-term mortgage credit and short-term deposits that banks used to finance mortgages (Gotham, 2012, p. 36)." Recessions throughout the 1970s combined with the end of fixed currency exchange rates destabilized the U.S. economy (Lapavitsas, 2013; Immergluck, 2009; Gotham, 2012). Inflation and weak demand led to the stagflation crisis of the late 1970s and early 1980s (Gotham, 2012). After being appointed as Federal Reserve chairman in 1979 Paul Volcker adopted monetarist central banking policies, increasing interest rates to control the money supply and decrease inflation (Federal Reserve, 2003). As short term interest rates reached new highs S&Ls found it difficult to provide competitive returns on their deposits (Immergluck, 2012). In the early 1980s the federal government passed laws that eliminated deposit rate ceilings, increased deposit insurance, allowed S&Ls to invest in commercial real estate and junk bonds, and preempted state laws to allow banks to offer adjustable rate mortgages (ARMs) to help S&Ls generate investment returns that would meet their borrowing expenses (Immergluck, 2009). These laws encouraged S&Ls to rely on speculative investments in order to match returns to costs of lending (ibid). The effect of this restructuring was catastrophic for S&L institutions. In the largest collapse of financial institutions since the Great Depression more than 1,000 thrifts that cumulatively held over $500 billion in assets failed between 1986 and 1995 (Immergluck, 2009, p. 44).

In yet another post-racial depiction of the strategic action field of housing, Fligstein and McAdam (2012) describe the onset of an episode of contention in the strategic action field of housing finance arising from two exogenous shocks to the field. The first was the creation, by state actors, of challengers to incumbent S&L actors in the form of the government-sponsored enterprises (GSEs). The second was increasingly high interest rates, which undermined the business model of S&Ls, or prevented the stable reproduction of the field of housing finance as conceived by S&Ls. For Fligstein and McAdam (2012), the creation of the GSEs as semi-state actors was undertaken by the Johnson administration to provide enough mortgage financing to house the growing numbers of Baby Boomers. To solve this problem in a way that would not add liabilities to government balance sheets, congress privatized the previously government owned Fannie Mae and created the Federal Home Loan Corporation (Freddie Mac). In their new role as GSEs, rather than government-owned enterprises, Fannie Mae and Freddie Mac were tasked with providing a secondary market to originators of all "conventional" (30 year amortizing fixed rate mortgages given at 80 percent of a property's value) mortgages. In an extended episode of contention from the 1970s through the 1980s, the field of housing was defined by actors undertaking innovative collective action. S&L actors undertook the innovative actions, enabled by the legislation of new rules for the field, of speculative investment in commercial real estate and increasingly high interest rates for savings accounts. The GSEs mobilized innovative collective action in attempting to shift the primary source of mortgage finance from S&L deposits to capital market investors. Ultimately, the financial collapse of S&Ls led to the collapse of their conception of the field, opening the way for settlement of a newly defined strategic action field of housing finance.

Harvey (1978, 2001) and Gotham (2012), narrate the fall from grace of S&Ls primarily as a result of shifts in the global financial order. Along with the decline of S&Ls came the end of Fordist regimes of mass production and mass consumption. In 1971, Richard Nixon decoupled the value of the dollar from the gold standard, as increases in foreign dollar holdings made it increasingly difficult for the United States to match its printed currency with corresponding amounts of gold (Lapavitsas, 2013). This decoupling marked the end of the Bretton Woods system that had regulated currency exchange rates and enabled what Lapavitsas (2013) calls financial repression – or the systemic regulation of financial institutions through regulations on prices, quantities, and functions of financial activities. The demise of Bretton Woods introduced flexible exchange rates that fluctuated greatly throughout the 1970s (Lapavitsas, 2013). Volatile exchange rates made international financial activity subject to increased risk, and financial firms conducting business across national borders pushed for the removal of international capital controls (Lapavitsas, 2013). These events marked the end of an era of Keynesian systemic financial regulation that had limited finance to a supporting role in capital accumulation (Lapavitsas, 2013). The "post-Fordist" "regime of accumulation" which succeeded Fordism came to be characterized by flexible production and "differentiated, non-standardized consumption" (Jessop, 1992, p. 13). With the rise of Margaret Thatcher in the UK and Ronald Reagan in the US came the dawn of what Lapavitsas (2013) calls financial liberalization. Gotham (2012) characterizes these shifts in federal housing policy, from financial repression to financial liberalization, as a crisis management strategy, seeking to provide refuge for capital flight to the spatial fixes of the secondary circuit while rendering spatially fixed capital liquid through the development of securitization.

Fligstein and McAdam (2012) take a benign view of the federal government's actions in the field of housing finance during the collapse of S&Ls, ascribing motivations for the federal destabilization of the field to the desire to furnish opportunities for homeownership to all Americans. Harvey (1978; 2001) and Gotham's (2012) theory of change provides a more nefarious view of the state, pointing to its role – through market structuring legislation – as a facilitator of continued accumulation for the capitalist class. Robinson's (1983) assertions of the essentially racializing character of capitalist development, due to capitalism's own development in the European context of racialized hierarchy and enslaved labor, again find no audience with Fligstein and McAdam (2012) or Harvey (1978, 2001) and Gotham (2012). As demonstrated by Dedman (1988), the character of housing finance through the period of dominance experienced by S&Ls still fundamentally sorted potential borrowers along racial lines. S&Ls, following the boundaries of residential segregation as set forth by federal facilitation of the standardized mortgage market, continued to ration credit along racial-geographical lines, even after such practices were made explicitly illegal through the 1960s and 1970s.

Securitization

As housing production stagnated in the 1960s, the federal government directed Fannie Mae to purchase an additional $2 billion mortgages from lenders to stimulate demand for mortgages (Green and Wachter, 2005). With the Housing Act of 1954, congress made Fannie Mae a mixed-ownership firm, offering stock for public purchase. In the National Housing Act of 1968, congress split Fannie Mae in two. One part remained owned by the government, called the Government National Mortgage Association (GNMA) (Federal Housing Finance Agency, 2016a). The other part was still known as Fannie Mae, but was converted from a government-owned enterprise into what is known as a government-sponsored enterprise (GSE) (ibid). Fannie Mae was launched as a shareholder-owned private company with some government oversight and subsidy (ibid; Gotham, 2012). Two years later congress created the Federal Home Loan Corporation (Freddie Mac) along the same lines (Gotham, 2012; Immergluck, 2009). With the creation of Freddie Mac congress reoriented Fannie Mae's mission, instructing both Fannie Mae and Freddie Mac to provide secondary market liquidity to the conventional mortgage market (US Department of Housing and Urban Development, 1983). These legislative changes cleared a path for capital allocation to mortgage finance through securitization.

Securitization is the practice of pooling loans that are backed by assets – in this case mortgages backed by single-family homes – and selling the proceeds of that pooled debt as bonds to investors (Immergluck, 2009; Gotham, 2012; Goldstein and Fligstein, 2012; Ashton, 2009; Wyly et al, 2009; Newman, 2009). While nearly any group of loans secured to assets may be securitized, securitized single-family mortgages are referred to as residential mortgage backed securities, or RMBS (Immergluck, 2009). In 1970 Ginnie Mae issued the first RMBS structured as a relatively simple "pass-through" security (ibid). To create these securities Ginnie Mae, and before long Fannie Mae and Freddie Mac, purchased pools of loans with similar rates and terms (ibid). They would then issue bonds secured by the pool of mortgages, passing proceeds from mortgage payments along to bond investors (Immergluck, 2009; Fabozzi and Modigliani, 1992). This government innovation reduced transaction costs for mortgage originators selling to the secondary market by allowing them to sell similar mortgages to securitizing institutions in bulk rather than one at a time. Securitization also accelerated the velocity of capital in the secondary market. Prior to securitization, the government-owned secondary market created through Fannie Mae in 1938 reimbursed loanable capital to lending institutions and then held mortgages in portfolio (Gotham, 2012). With securitization, instead of holding loans acquired from the primary market in portfolio, the GSEs were able to sell bundles of those loans to capital market investors, reimbursing their own deployable capital and providing greater liquidity to the provision of mortgage finance (Gotham, 2012). The pooling of a large set of geographically diverse mortgages also reduced the risk that the entire instrument would fail should any region suffer sustained housing declines (Immergluck, 2009). Initial Ginnie Mae RMBS also provided a "double guarantee" that protected bond investors from both borrower and lender default (ibid). Investors were protected from borrower default because all of the initial loans to be securitized were FHA and VA loans, insured with the full backing of the US Treasury (ibid). The legal structure of the securitization separated the mortgages in the pool from the originating lender, providing investors protection from lender default as well (Gotham, 2012, p. 37; Immergluck, 2009, p. 35). This "double guarantee" decoupled risks of borrower or lender default from eventual returns on investment, which made fledgling RMBS a more attractive investment. Securitization allowed for the expansion of mortgage finance provision by doing what the secondary markets had done for mortgage lenders – bringing proceeds from long-term capital flows forward in time (Gotham, 2012). The sale of bonds secured to diversified pools of mortgages shifted the wait for returns from secondary market actors to capital market investors, who reimbursed secondary market actors' capital, allowing for its redeployment in the purchase of more mortgages (Gotham, 2012; Newman, 2009).

Although investment in RMBS grew nearly exponentially throughout the 1970s – attracting capital market investment to fund mortgage financing – it was not until congress passed finance-oriented legislation under Reagan in an attempt to save S&Ls that the securitization path came to dominate the determination of mortgage finance provision (Sifma, 2016; Immergluck, 2009). Where the legislation of the early 1980s failed the S&Ls, it was a boon to securitization (Immergluck, 2009; Gotham, 2012). Legislators abolished state usury limits on first mortgages, allowed national banks to be governed only by the usury limits of their home state, allowed non-depository institutions similar privileges, facilitated private non-GSE securitization, and created a legal structure that made it more difficult to tax RMBS cash flows (Immergluck, 2009, p. 42-43). As the S&L path of capital through S&Ls to mortgage finance collapsed in the late 1980s, securitization took off.

Shifting terms of financial regulation made it possible for the GSEs, and later private firms, to create new mortgage-derived financial instruments that would draw capital market investment to mortgage finance (Gotham, 2012; Newman, 2009; Sassen, 2012; Ashton, 2009; Wyly et al, 2009). Although simple pass-through securities comprised of FHA and VA mortgages held a double guarantee against default risks, RMBS investors still faced the risk of lessened returns due to prepayment of mortgages in a securitized pool (Immergluck, 2009; Fabozzi and Modigliani, 1992). Bondholder returns from RMBS are based on the long term repayment of mortgage principal and interest (Fabozzi and Modigliani, 1992; Lapavitsas, 2013; Ashton, 2009). When interest rates fall below levels that existed when a borrower took out a mortgage, that borrower will often refinance down to the lower interest rate (Fabozzi and Modigliani, 1992). This is a good thing for the borrower. It reduces the cost of paying down their mortgage and owning their own home. This is a bad thing for investors. For bond investors refinancing means repayment of the loan included in the securitized pool, which results in the premature closure of a flow of capital to the RMBS pool (Fabozzi and Modigliani, 1992). This prepayment reduces the total amount of interest that would have otherwise been paid towards the pool, reducing returns to bondholders (ibid).

In 1983 Freddie Mac created an RMBS that worked to internalize prepayment risk (Immergluck 2009). It was a new form of securitization called a collateralized mortgage obligation (CMO). In this structure, lenders would assemble a pool of loans. These loans would then be sold to a special purpose vehicle (SPV), a separate corporate entity that would facilitate the loans being removed from the lender's balance sheets and insulate lenders and investors from liability and capital reserve requirements (Lapavitsas, 2013; Ashton, 2009). What makes CMO different from pass through RMBS is the structuring of bond payments along a hierarchy of risk (Immergluck, 2009; Gotham, 2012; Fabozzi and Modigliani, 1992). In a pass through RMBS, all investors are equally exposed to the potential loss of returns via prepayment (Fabozzi and Modigliani, 1992). As described by Fabozzi and Modigliani (1992), in a CMO, the pooled debt is split into risk differentiated tranches or segments. The least risky tranches, with the lowest rates of return, are repaid first. The riskiest tranches with the highest rates of return receive payments last, but only if prepayments and defaults have left capital flows in the pool intact enough to still make payments (Fabozzi and Modigliani, 1992; Immergluck, 2009). This risk differentiation brought yet more capital market funding to mortgage finance through the securitization circuit (Sifma, 2016; Immergluck 2009; Ashton 2009). Institutional investors with fiduciary obligations to invest in high quality bonds could invest in the highly rated CMO tranches (Immergluck, 2009). Investors seeking greater risk for greater potential reward could purchase bonds attached to the lower tranches of a CMO (Immergluck, 2009).

By 1995 the securitization circuit – and therefore the capital market – had become the primary source of mortgage finance in the United States (Immergluck, 2009). In the 1970s, Fannie Mae and Freddie Mac began securitizing conventional mortgages as well as FHA and VA insured mortgages (US Department of Housing and Urban Development, 2003). Conventional mortgages at the time were amortizing mortgages with fixed interest rates and 30 year terms that were not insured by the FHA or VA (Immergluck, 2009). This expansion of the GSE secondary mortgage market allowed non-depository firms like independent mortgage companies and commercial banks to rely more heavily on funding from capital markets (Gotham, 2012; Ashton, 2009; Immergluck, 2009). (De)regulation then created the legal space for private securitizations, which could include mortgages with unconventional features like balloon payments, adjustable rates, and prepayment penalties (Immergluck, 2009).

One effect of the shift in dominance from the S&L circuit to the securitization circuit of mortgage finance was the vertical disintegration of mortgage production (Immergluck, 2009; Sassen, 2012). Securitization lowered the cost of mortgage lending by encouraging and allowing economies of scale in mortgage production (Immergluck, 2009; Fabozzi and Modigliani, 1992). The relative complexity of the securitization process also created more discrete roles and functions in the provision of mortgage finance (Immergluck, 2009). Mortgage brokers would approach loan originators with mortgage applications, receiving a fee per each approved application (ibid). As the popularity of investing in RMBS grew, more applications were accepted in order to meet demand for mortgage-derived investment instruments (Immergluck, 2009; Goldstein and Fligstein, 2012). Mortgage originating lenders would borrow short term debt from warehouse lenders in order to originate mortgages with little overhead (Immergluck, 2009; Goldstein and Fligstein, 2012). Originators would then sell pools of mortgages to RMBS issuers, earning revenue from fees and the sale of mortgages (Immergluck, 2009; Goldstein and Fligstein, 2012). Issuers would structure the RMBS and then pay a credit rating agency to rate the creditworthiness of the instrument (Immergluck, 2009). Taking the credit ratings of various tranches of the RMBS into account, investors would purchase RMBS bonds, reimbursing the capital used by the issuer to purchase the loans from the originator (Immergluck, 2009; Lapavitsas, 2013). Each stage in the vertically disintegrated process of mortgage production through the securitization circuit was replete with conflicts of interest and opportunities for transactional failure (Immergluck, 2009; Sassen, 2012).

Through the government-owned secondary market, and the S&L and FHA/VA paths of mortgage finance, investment risk was largely understood geographically, even if the geography of risk overlapped neatly with geographies of racial segregation (Lands, 2009). The development of risk-tranched securitizations through financial liberalization marked a transition in the way risk was considered and conceptions of control for mortgage finance were understood (Immergluck, 2009; Ashton, 2009; Fligstein, 1996; Goldstein and Fligstein, 2012).

Armed with the legal authority to create lightly regulated secondary markets out of nearly any kind of mortgage, non-GSE mortgage firms that relied largely on securitization to fund their lending began originating high cost loans (Ashton, 2009). In part, this was a response to the continuous hunt for yield that financial competition entails (Ashton, 2009). A result of this search for yield was the creation of subprime securitizations (ibid). These securitizations used high interest rates and high fees to generate increased revenue and yield by extending mortgage finance to people and places that had been excluded from previous waves of mortgage liquidity (Squires, 2004; Ashton, 2009; Wyly et al, 2006). Immergluck (2009) identifies waves of subprime lending as occurring in two subsequent booms. The first, from roughly the mid-1990s to the collapse of the dot com bubble in 2001, consisted primarily of home refinance loans (Immergluck, 2009). With the subprime refinance loans of the first subprime boom, brokers found they could add fees to the loan amount in order to generate more revenue from borrowers (Immergluck, 2009; Goldstein and Fligstein, 2012). Ashton (2009) notes that the Resolution Trust Corporation (RTC), which was created by the federal government and tasked with the sale of assets from failed S&Ls, innovated the securitization of nonconforming loans. The RTC issued $20 billion in RMBS comprised entirely of nonconforming loans (Ashton, 2009). The RTC developed the practice of overcollateralization in mortgage-backed securitization – a practice whereby the issuer of a security commits cash reserves towards the payment of bond obligations in the case that borrower prepayment or default eradicates investor returns (Ashton, 2009; Immergluck, 2009). The private sector deployment of the securitization innovations of the RTC led to a boom in subprime lending in the 1990s (Ashton, 2009; Immergluck, 2009). In a period from the mid-1990s to the dot com recession of 2001, vertically disintegrated mortgage firms originated high cost refinance loans with borrowers whose credit did not qualify them for more conventional financing (Ashton, 2009; Immergluck, 2009). In 1999, Wyly and Holloway updated Bill Dedman's analysis of racial disparities in S&L lending in the Atlanta area, finding that, despite public statements pledging the provision of credit regardless of race as required by the Community Reinvestment Act, depository institutions provided mortgages to white Atlantans at a rate five times higher than black Atlantans. In the origination of subprime loans, non-depository independent mortgage companies reversed the long held mortgage industry trend of implicitly racist denial of services, replacing it with the implicitly racist provision of predatory services (Wyly et al, 2006; Squires, 2005). The paucity of regulated lending and explosion of high cost lending in predominately black neighborhoods represented a shift in methods of accounting for risk in mortgage lending (Ashton, 2009). Where traditional mortgage lending, via S&Ls, or FHA/VA insured mortgages, had largely resulted in the refusal to lend to people of color because of their existence as a threat to property values and white propriety, subprime lending priced the perceived risk of these potential borrowers and converted it into yield for investors in securitized subprime mortgages (Ashton, 2009).

In the quest to provide high yields to capital market investors, Countrywide Financial fared well during the first subprime boom (Goldstein and Fligstein, 2012). In contrast to other firms, Countrywide had organized itself as a vertically integrated mortgage production firm (Goldstein and Fligstein, 2012). This meant that instead of simply originating mortgages and selling them to securitizers, Countrywide integrated forward in the mortgage production process to securitize its own originations and cut out the costs imposed by vertically disintegrated intermediary firms (Goldstein and Fligstein, 2012; Levine, 2007). Through the course of the dot com recession of 2000 to 2002, congress under the George W. Bush administration federally preempted state laws that were written to limit predatory lending activities, and Alan Greenspan's Federal Reserve lowered the federal funds rate from 6 percent to 1.75 percent (Immergluck, 2009; Federal Reserve, 2016). These acts served to allow greater national consolidation of mortgage firms, drastically lower interest rates on conventional mortgages, and lower rates of return on financial investments (like RMBS) impacted by interest rates (Immergluck, 2009; Lapavitsas, 2013). Low interest rates provided an environment in which yields from subprime securitizations, whose top tranches held investment grade ratings, were increasingly competitive (Ashton, 2009; Lapavitsas, 2013). These conditions fueled the second subprime boom, which began in 2002 and grew until the point of collapse in 2007 (Immergluck, 2009; Lapavitsas, 2013).

The second subprime boom (2002 to 2007), in contrast to the first, saw a higher proportion of home purchase loans than home refinance loans (Immergluck, 2009). Part of this was due to the fact that subprime mortgage firms had expanded their horizons, offering high cost loans not only to borrowers with non-prime credit ratings, but also to prime borrowers who, through high cost loans, were able to increase the amount of mortgage finance available to them and thereby purchase "more" house (Ashton, 2009; Adelino et al, 2016; Immergluck, 2009). These high cost loans with nonconventional features like adjustable interest rates and balloon payments to prime borrowers are called "Alt-A" mortgages (Immergluck, 2009). With frenzied national and international demand for the highly rated high yield investment instruments that were subprime RMBS, more financial firms began to adopt Countrywide's model of vertically integrated mortgage production (Goldstein and Fligstein, 2012; Levine, 2007). By 2007, Morgan Stanley, Merrill Lynch, Deutsche Bank, Lehman Brothers, Bear Stearns, Goldman Sachs, and other financial firms had vertically integrated backwards into mortgage servicing and wholesale mortgage origination, and forwards into the issuance of RMBS, and eventually the re-securitization of RMBS called collateralized debt obligations or CDOs (Levine, 2007; Goldstein and Fligstein, 2012). Goldstein and Fligstein (2012) demonstrate that mortgage producing firms understood their business to be driven by vertically integrated fee revenue generation and capital market driven mortgage production via securitization. They describe this as an industrial production model, which led to firms that originated large numbers of subprime mortgages, securitized large numbers of subprime mortgages, and repackaged securitized subprime mortgages into highly-rated high-yield CDOs. These firms held onto a large number of their own financial creations (either for market making or profit making) and, aided by demand for mortgage-backed investment instruments, pushed for the origination of fresh mortgages to fill production pipelines (Goldstein and Fligstein, 2012). As financial firms integrated vertically, they found it difficult to sell lower rated tranches of subprime RMBS (Goldstein and Fligstein, 2012). To overcome this difficulty, they purchased those lower tranches, and bundled them into another security called a CDO (Goldstein and Fligstein, 2012; Sassen, 2012; Gotham, 2012). In many cases, the top tranches of these CDOs received investment grade credit ratings (Goldstein and Fligstein, 2012; Sassen, 2012; Gotham, 2012). Investors in these highly rated CDO tranches purchased bonds that guaranteed them proceeds from mortgage payments that would flow from the mortgage borrower to the mortgage servicer through the waterfall structure of the RMBS through the waterfall structure of the CDO and eventually into their bank accounts (International Monetary Fund, 2008; Lapavitsas, 2013). As a business model, vertical integration allowed for the elimination of middlemen and guarantee of raw materials (mortgages) to be processed through the firm and output as bonds of mortgage-backed structured finance instruments (Goldstein and Fligstein, 2012). Between 1998 and 2004, the percentage of overlap between the 25 largest financial sector firms and the 25 largest subprime RMBS firms more than doubled from 24 percent to 56 percent (ibid).

As described above, Fligstein and McAdam (2012) classify the years following the collapse of S&Ls as a period of gradual settlement of the episode of contention in which the strategic action field of housing first embraced the dominant logic of the GSEs, that mortgages were to be funded through the sale of RMBS to capital market investors. Fligstein and McAdam (2012) then identify Countrywide as a rising challenger in the field of housing finance, mobilizing resources behind an industrial conception of the field, approaching mortgages as raw material to be processed and sold. The financial success Countrywide achieved through the industrial origination, packaging, and selling of high cost, high yield, highly rated mortgage-backed assets attracted others to join in innovative collective action. It was this industrial structure of the field of mortgage finance that would persist until the industry's collapse in 2007. Ignorant of the inherently racial character of high cost lending, Fligstein and McAdam (2012), identify the "real problem that eventually caused the worldwide financial crisis" (p. 158) as saturation of the conventional mortgage market. This saturation, they claim, drove lenders into a frenzy, desperate to preserve the flow of raw materials into their production pipelines.

Gotham (2012), on the other hand, again describes securitization as a state crisis management technique, using securitization to free lenders of the liquidity constraints of their balance sheets (p. 38). As a result, "[t]he erosion of lending standards and the dismantling of socio-legal regulations to protect consumers have interacted with the new legislation to fuel the rise of exploitation and speculative lending practices" (Gotham, 2012, p. 41). Seeking to solve the problem of "capital immobilized in space" (Gotham, 2012, p. 43), the state worked to transform long-term mortgage debt into highly liquid RMBS. This only served to exacerbate the tendency for devaluation and overaccumulation in the secondary circuit.

Though alluded to by Gotham (2012), Fligstein and McAdam's (2012) analysis is devoid of any mention of race. Even with Countrywide as the challenger risen to incumbent at the center of their story, there is no mention of Countrywide's legal settlement with the State of New York for racially predatory business practices (Reuters, 2006). From the 1990s through the 2000s, African American borrowers in cities across the United States were found to be far more likely to receive a subprime loan than white borrowers of equal means (Wyly et al, 2009; Rugh and Massey, 2010; Calem et al, 2004; Hershaff et al, 2005;

Squires, 2005). Data from Fulton County conforms with this trend. In Atlanta, low income (80 percent or less of area median income) African American borrowers were three times as likely to receive high cost home purchase loans than low-income white borrowers (Ding et al, 2008). Additionally, high-income (120 percent or more of area median income) African American borrowers were five times more likely to receive high cost home purchase loans than high-income white borrowers. These disparities played out over Fulton County's racially segregated residential geographies. From 2004 to 2006, high cost loans were concentrated in predominately black neighborhoods that had been historically denied mortgage credit on the basis of race, or were sites of expanded black-occupancy in the wake of white flight (NSP, 2008; Ding et al, 2008). The advent of risk-based pricing deployed by formal financial institutions reversed their century-old habit of financial exclusion, but the financial inclusion of nonwhite borrowers was enabled not by the goodness of lenders' hearts, but the possibility of constructing high cost high yield financial instruments on top of the personal incomes of those who could often least afford it (Ashton, 2009).

Collapse

The rate of homeownership in the United States peaked at 69.2 percent in 2004, about one year before delinquency rates on subprime loans started climbing towards historic highs (Richmond Federal Reserve, 2011). At the same time, demand for mortgage-derived investment instruments was frenzied. International demographic trends and commodity prices conspired to draw sizeable foreign investment to U.S. RMBS (Schwartz, 2012). A spike in oil prices left many commodity dependent countries with sizeable surpluses and aging European populations saved at higher rates. Foreign holdings of GSE RMBS grew from about 7 percent of the outstanding amount in 2000, to 21 percent of the outstanding amount by 2008 (Schwartz, 2012, p. 60). The result of foreign and domestic investors seeking highly-rated high-return investments, like Aaa rated RMBS and CDO tranches, shifted the determination of demand for mortgages (Schwartz, 2012; Newman, 2009). Capital market investors' demand for mortgage-derived investments pressured mortgage industry firms to originate more (likely high risk) mortgages than potential borrowers were demanding. This is evidenced by the apparent necessity of aggressive and predatory marketing of mortgages towards people of color (Wyly et al, 2009; Newman, 2009). To increase lending, borrowers had to be sought out, which furthered predatory lending practices as loans made later in the 2000s were more likely to be high cost and high risk. In 2005 CDOs purchased $140 billion in lower-tranche RMBS, which was more than the total issuance of $133 billion that year (Mason and Rosen, 2007, p. 72). In fact, some firms like Merrill Lynch started issuing CDO-squared, which were CDOs made from other CDOs (Financial Crisis Inquiry Report, 2011, p. 203).

The original intent of the securitization path as a tool for meeting consumer demand for mortgages was complicated by securitization's use as a tool for meeting investor demand for mortgage-based derivatives (Newman, 2009). According to Newman (2009, p. 315), this left some community organizations wondering if, by linking the provision of mortgage credit to capital market investors, they had increased their access to capital or capital had increased its access to them. The industrial organization of mortgage production had solidified a business model whereby the goal of revenue generation through transactions and fees trumped the goal of mortgage provision as a social good (Goldstein and Fligstein, 2012; Wyly et al, 2009). Mortgage payments from a single borrower could be packaged into a CMO, which could then be packaged into a CDO, which could then be packaged into a CDO squared. The entire securitization circuit, as convoluted as it was, rested upon the ability of borrowers to make timely and consistent mortgage payments. Packaging a mortgage into a RMBS required the sale of that mortgage to a securitizing entity. The price of the mortgage-to-be-securitized was a representation of estimated future revenue generation, and was enough to reimburse the lender's loanable capital and pay associated fees (Lapavitsas, 2013). When RMBS tranches are sold to CDO issuers, the same logic is at work. CDO issuers are paying for the perceived value of the mortgages underlying the RMBS. That value is determined by the underlying mortgages' ability to sustain capital flows from borrowers to investors, and the potential sale price to other investors interested in the capital flows or future sale price of the RMBS or CDO bonds (Lapavitsas, 2013). Mortgages, via the single-family home, were conduits of capital flows to global capital market investors.

Discussing the role of mortgages in global capital flows, Saskia Sassen (2012) emphasizes the logic of the securitization path as resting solely on the desire and ability of mortgage originators to sell bundled mortgages. In her description, the creation of mortgage instruments to meet the needs of such bulk transactions severed the connection of the long term payment of individual mortgages to the mortgage derivatives that were in vogue until 2008. She, like many others, contends that the imperative for fee-based secondary (and tertiary and quaternary) market transactions reduced investor concern for risk, which led to the unsustainable bubble in mortgage issuance, and home prices. Her analysis, however, fails to incorporate longer term logics of investment through which investments are made as part of a diversified portfolio to fill a particular risk profile or meet fiduciary obligations. These investments are made with an eye towards potential earnings from long term capital flows (Lapavitsas, 2013). Investors that were fueling the provision of mortgage credit via securitization, like pension funds, were not day traders (Ashton, 2009; Goldstein and Fligstein, 2012). They sought long term stable returns and, in the hunt for yield, the higher the returns the better (Ashton, 2009). The interest rates on CDO and RMBS bonds are linked to the interest rates of the mortgages underlying those bonds. The high rates of high risk mortgages and the Aaa ratings they earned when packaged into securities drove investor demand for these instruments in the first place (Ashton, 2009). Though fee generation was at the heart of mortgage firms' business models, the fee generation was only enabled by investor demand for the capital flows underlying the myriad mortgage-based derivatives. The provision of mortgage finance via securitization is fundamentally connected to the ability of borrowers to provide capital flows to bond investors (Lapavitsas, 2013).

In 2005, delinquency rates on subprime loans started to inch up as borrowers were confronted with increasing adjustable interest rates and monthly payments (Richmond Federal Reserve, 2011). Between 2005 and 2007 subprime originators expanded the issuance of high cost loans to prime borrowers in attempts to fill mortgage-production pipelines as demanded by board members (Fligstein and Roehrkasse, 2013). By 2007, the United States was facing a foreclosure crisis. That year, 13.8 percent of all subprime loans entered foreclosure (Immergluck, 2009, p. 136). This rate was much higher than the historical average and would only continue to increase. Subprime defaults reduced the capital flows moving from borrowers to investors. Because of their position in the waterfall repayment structure of RMBS, investors in lower rated RMBS tranches were the first to feel the effects of shrinking subprime capital flows. CDOs, and CDO squared, were entirely composed of lower rated RMBS tranches and started to fail rapidly (Sassen, 2012). Some firms had seen this collapse coming as delinquency rates rose and the market for mortgage origination saturated (Goldstein and Fligstein, 2012). Goldman Sachs was one of many firms to bet against the success of CDOs with what are called credit default swaps, or CDS (Lewis, 2010). As described by Sassen (2012), CDS were sold as insurance policies against the failure of a particular bond, firm, or asset. When delinquencies and foreclosures mounted in 2006 and 2007 signs of fracture appeared in the securitization circuit and CDS set up to bet that mortgage-backed derivatives would fail were called at an increasingly high rate. Unfortunately, CDS are not actually insurance, but financial derivatives (Sassen, 2012). Because of their operation in a regulatory grey zone, CDSs were not subject to the same kind of capital reserve scrutiny as insurance instruments would have been. They also allowed firms to purchase swaps on firms and bonds in which they had no stake. As investors called in their CDS, there was not enough capital to fund the swaps as promised (Sassen, 2012). CDSs issuing firms like Bear Sterns, Lehman Brothers, Merrill Lynch, and AIG were some of the first to collapse, spreading the effects of the mortgage crisis throughout the financial sector (Goldstein and Fligstein, 2012).

Through the widespread holding of RMBS and the secretive issuing of CDS the mortgage crisis exceeded itself. Accumulating subprime defaults led to greater failure of RMBS and CDO (Immergluck, 2009). CDS spread the effects of CDO failure to financial firms outside of the securitized provision of mortgage finance (Sassen, 2012; Newman, 2009). By 2008 investment in mortgage-backed derivatives ground to a halt (Chernenko et al, 2014). The provision of mortgage liquidity through securitization broke down. Because firms were unable to assess which other firms might hold assets devalued by the collapse, trust collapse and credit rationing ensued (Archaya et al, 2007). Constricted business lending after the CDS shock caused non-mortgage related businesses to fail (Sassen, 2012). As businesses struggled, so did borrowers with prime loans (Immergluck, 2009). The Aaa rated tranches of RMBS, portrayed as untouchable by credit rating agencies, brought investors heavy losses as mortgage-related investments plummeted alongside home prices. High rates of defaulting borrowers, products of high risk lending that had been enabled by securitization, eventually led to the freezing of securitization as a source of capital flows between borrowers and capital market investors. The fallout of the freeze was the Great Recession. Single-family homes that had served as important nodes for providing returns to capital market investors were emptied of defaulting borrowers.

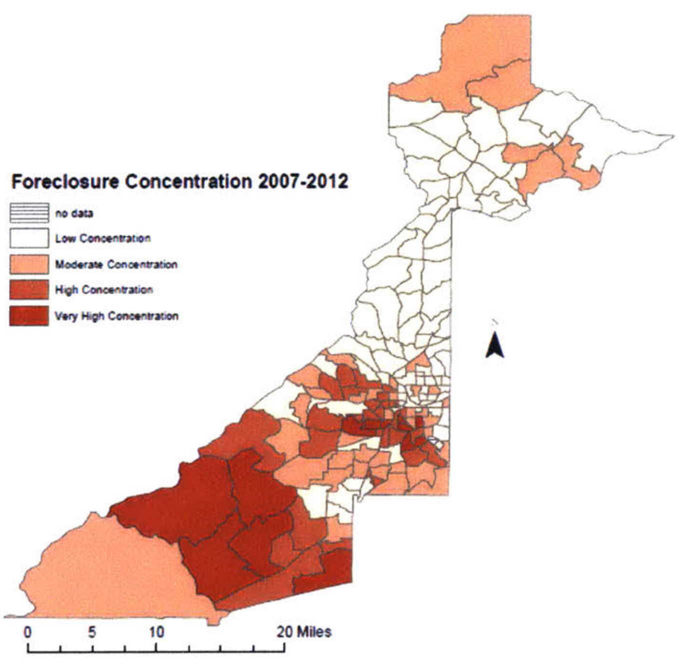
In Fulton County, the effects of this collapse followed historical contours of non-investment in predominately black neighborhoods and more recent contours of black residential expansion during the first and second subprime booms. Between 1990 and 2000 Fulton County's population grew by 25 percent (US Census, 2015). Between 2000 and 2010 it grew an additional 13 percent (US Census, 2015). Most of Fulton's new residents settled in the relatively undeveloped southern section of the county (US Census, 2015). This growth was enabled by the availability of land for development and the relative regulatory ease of building homes and attaining mortgages during the run up to the crisis (Saiz, 2010; Gyokuro et al, 2007). In Atlanta, higher priced subprime loans accounted for 12.9 percent of all loans made in 2004. In predominately non-white neighborhoods, high cost loans accounted for 25 percent of all loans made, more than twice the average for Atlanta as a whole (Ding et al, 2008). This high-cost subprime lending in Fulton County was concentrated in predominately non-white neighborhoods least able to afford them (Ding et al, 2008). In review, the emergence of high cost lending marked a transition for mortgage lending in the city. Until 1977, many lenders legally avoided making mortgages in predominately black areas. The passing of the Community Reinvestment Act required depository institutions to offer safe and sound credit in all communities in which they are legally chartered. Eleven years later, Bill Dedman's (1988) "The Color of Money" series in the Atlanta Journal Constitution revealed that banks in the Atlanta area originated between five and six times as many home purchase loans per owner-occupied housing unit in predominately white areas (north Fulton) than in predominately black neighborhoods (south Fulton). The publication of "The Color of Money" prompted local lenders to form the Atlanta Mortgage Consortium and pledge $65 million for mortgages in low and moderate income and predominately non-white neighborhoods (Wyly and Holloway, 1999). Elvin Wyly and Steven Holloway recreated Dedman's study in 1999. When considering mortgages made by depository institutions, Wyly and Holloway (1999) found that the discriminatory lending patterns of previous decades persisted, with racial geographic disparities in lending declining by less than 10 percent. They note however, that by 1999 independent mortgage companies were specializing in providing credit to low- and middle-income and predominately non-white neighborhoods. Throughout the nineties and into the early 2000s, the seemingly positive provision of mortgage credit by independent mortgage companies became more obviously predatory (Wyly and Holloway, 1999; Immergluck, 2009). Redlining that had denied credit to predominately black neighborhoods since the standardization of mortgages in the New Deal reversed course. In the early 2000s, it was in precisely these credit starved areas that a large proportion of high cost loans were being made (NSP, 2008). As made evident by the crash, this long-awaited blessing of credit would sour, bringing with it the construction of a new geography of racial disinvestment in Fulton County.

Geography of the Crisis

To understand the geography of the crisis brought on by predatory subprime lending, I mapped all recorded foreclosures in Fulton County between 2007 and 2012 at the census tract level. To normalize for differences in population I determined a rate for each census tract by dividing the number of foreclosures by the number of housing units. Using methods similar to Immergluck and Law (2013), I assigned a percentile rank to the foreclosure rates of all census tracts across all years with available data and categorized the tracts into four categories: low activity (0 – 50 percentile), moderate activity (50 – 75 percentile), high activity (75 – 90 percentile), and very high activity (90-100 percentile). They use these categories to compare likely-investor activity in Fulton County census tracts for each year included in their study: 2008-2009, 2009-2010, and 2010-2011 (Fulton County Tax Assessor, 2016). This kind of discrete year-by-year analysis is helpful in illustrating the geographic shift of foreclosure trends from year to year. However, this method does not provide for the illustration of the cumulative impacts of foreclosure over time. After the initial explosion of subprime foreclosures, foreclosure rates generally dropped, and moved into the suburbs, where borrowers with prime and conventional loans who had perhaps lost their jobs as a result of the recession were struggling to avoid default after many subprime borrowers had been foreclosed upon and evicted. In Fulton County, the subprime borrowers were located primarily in neighborhoods in Atlanta's urban core. To compare the intensity of the initial wave of subprime foreclosures concentrated in Atlanta to the later wave of prime foreclosures more dispersed in the suburbs, I universally rank all years of foreclosure data for all tracts. The results (below) illustrate that between 2007 and 2012, tracts with the highest concentrations of foreclosures were predominately black, and on average had higher levels of poverty than less affected tracts. These findings follow logically from the concentration of predatory subprime lending in predominately black parts of the county, regardless of income. The data also show that although the foreclosure crisis began in Atlanta's urban core, it spread more aggressively to Fulton's predominately black suburban south side than to its predominately white suburban north. It is also notable that, when comparing rates of foreclosure from 2007 through 2012, many suburban areas in southern Fulton County had among the highest rates of foreclosure. This shows that as foreclosures spread from the city to the suburbs, in predominately black parts of Fulton County, the intensity of the crisis remained.

FORECLOSURE ACTIVITY	Very High	High	Moderate	Low
Number of tracts	16	25	42	82
% black avg.	89.2%	90%	67%	31.9%
% white avg.	5.1%	5.2%	21.2%	52.9%
% in poverty avg.	32.3%	25.4%	20.7%	12.9%
% high income avg.	2.8%	2.7%	7.9%	18.8%

The geography of the foreclosure crisis bears an uncanny resemblance to Bill Dedman's maps in "The Color of Money." What Wyly and Holloway (1999) found in their follow-up to Dedman's study was that while depository banks continued to largely ignore predominately black parts of Fulton County, independent mortgage companies saw latent demand for mortgage credit and had begun conducting more business in predominately black and predominately poor parts of the county. With the establishment of securitization as a path of mortgage finance, the rolling back of regulatory protections for mortgage borrowers, and subsequent capital market demand for mortgage-backed securities, independent mortgage firms turned to predatory tactics to originate large volumes of mortgages for securitization (Ashton, 2009). As the potential for yields generated through predatory subprime lending became apparent, financial firms led a consolidation of the vertically disintegrated landscape of independent mortgage companies (Goldstein and Fligstein, 2012; Ashton, 2009). What seemed like a reversal in decades of racially discriminatory divestment was in fact a new type of lending discrimination (Squires, 2005). Instead of simply denying loans to people of color, mortgage companies specifically targeted people of color for poorly underwritten high cost loans (Ashton, 2009; Ding et al, 2008). This reverse redlining led to the emptying of homes across Fulton County, but primarily in predominately black neighborhoods. In the city,



where segregation was an explicit focus of the city's original zoning ordinances (Lands, 2009) and FHA underwriters carefully studied the geographies of black neighborhoods in order to avoid them, the effects of reverse redlining and its subsequent displacement wreaked havoc on neighborhoods that had long been subject to financial and bureaucratic violence. The difference between the historical geographies of the impacts of housing finance discrimination and those caused by the financial crisis of 2007 is the inclusion of a vast swath of moderate to high income predominately black suburban areas in south Fulton. This expansion into the suburbs follows black residential patterns over the course of both subprime booms.

Chapter Three: The Institutionalization of Single-Family Rental Recovery

The 2008 financial crisis led to the devaluation of mortgage-related assets and subsequent losses for anyone holding such assets. While capital market investors took financial losses, borrowers lost their homes. Predominately black neighborhoods that were historically subjected to redlining and the denial of mortgage subsidization and more recently subjected to disproportionately high proportions of high cost mortgages suffered high rates of displacement and financial loss as illustrated by the case of Fulton County in chapter one.

After other crises of mortgage liquidity, federal interventions actively shifted primary sources of mortgage capital. In the immediate aftermath of the crisis, much federal policy was focused on stopping crisis related losses (Immergluck, 2013). Through both the G.W. Bush and Obama administrations, congress passed bills authorizing federal spending to prevent foreclosure. These bills enacted programs for foreclosure counseling and mortgage modification that were mostly inadequate to the task (Immergluck, 2013; Fields et al, 2010). As Immergluck and other scholars have pointed out, programs intended to keep struggling borrowers in their homes were often too little too late. One of the Bush administration's first actions was the formation of the Hope Now Alliance, a coalition of lenders, financial trade associations, and other organizations that offered foreclosure prevention counseling via a 1-800 number (Immergluck, 2013; 204). Another Bush era initiative consisted of a voluntary loan modification program for subprime mortgages. Designed primarily by the American Securitization Forum, a financial special interest group, only about 3 to 12 percent of all subprime borrowers fit the voluntary program's eligibility requirements (Immergluck, 2013). The Obama administration enacted more effective programs that were still insufficient to meet the goals laid out upon their launch or have a meaningful impact at the height of the crisis (Fields et al, 2010). Under the banner of the Making Home Affordable program the US Treasury used funds from the Troubled Asset Relief Program (TARP) to launch the Home Affordable Refinance Program (HARP) and Home Affordable Modification Program (HAMP). HARP was intended to help 4-5 million borrowers refinance GSE owned loans in a time of historically low interest rates. HAMP was intended to help 3-4 million borrowers in immediate risk of foreclosure modify their mortgages, but rested on the principle that modifications should be financially beneficial to lenders, not necessarily struggling borrowers. Although MHA programs were intended to help 7-9 million borrowers refinance or modify their mortgages, about three years after their launch HARP and HAMP had only provided relief to about 2.3 million borrowers (Immergluck, 2013; 211).

The federal response to the crisis also included attempts to help mitigate the impacts of foreclosures and evictions once they had taken place. Vacant properties (emptied homes) exude negative effects on the neighborhoods in which they are located. Not only do they drive down property prices, potentially sending adjacent borrowers further into negative equity, vacant properties have also been linked to increases in crime and nearby foreclosures (Ellen et al, 2013, Immergluck and Smith, 2006; Kingsley et al, 2009). Emptied homes became one of the primary focuses of recovery efforts, but have been afforded lesser maintenance and upkeep in communities of color than in predominately white communities (National Fair Housing Alliance, 2012; Federal Reserve, 2010). Only by filling emptied homes once again would neighborhoods recover.

To help localities in their recovery efforts, congress authorized the Neighborhood Stabilization Program (NSP). Throughout the three phases of NSP's existence, $6.9 billion was distributed to local governments – from regional governance bodies to city governments – to repair, redevelop, landbank, or demolish single-family homes made vacant as the crisis ran its course (Immergluck, 2013). The deployment of NSP funds marked one of the few instances of direct federal support for mitigating the impacts of foreclosures that had already taken place and the vacated properties they left behind. While relatively ambitious, HUD estimated that NSP funding would directly affect about 100,000 properties. This was in contrast to conservative estimates of 550,000 to 720,000 foreclosed properties held by lenders between 2007 and 2013 (Immergluck, 2013, p. 222). In addition to the paucity of funds in comparison with the scale of the problem of emptied homes, NSP suffered from rigidity that prevented opportunistic uses of funds, local governments inexperienced in handling foreclosed or vacant properties, and cumbersome federal oversight (ibid.).

The federal responses to the crisis that targeted struggling borrowers were too little too late. Initiatives targeting struggling firms were more successful along their own terms. These initiatives were largely intended to help repair the securitization of mortgage finance. Instead of opening a new channel of mortgage finance liquidity as had been done after the Depression and as S&Ls started to fail, federal response to this crisis has focused on resuscitating the securitization that failed on such a grand scale.

Saving Securitization

One of the first acts of legislation enacted in response to the mortgage collapse enabled Fannie Mae and Freddie Mac, principal makers of the securitization reliant secondary market, to be brought under federal conservatorship. The devaluation of mortgage related assets had horrendous effects on the balance sheets of the GSEs. The collapse of either of the firms would have spelled the collapse of not only the securitization circuit, but also the main secondary markets for mortgages. The Housing and Economic Recovery Act of 2008 created the Federal Housing Finance Agency to bring the GSEs under more direct supervision of the federal government. The terms for the conservatorship as laid out by James Lockhart, the FHFA's first director, included financing facilities from the US Treasury to keep the GSEs afloat, suspension of dividend payments to stock holders, and authorization for the GSEs to spend about $20 billion a month to replace non-performing MBS in their portfolios with performing MBS investments. Since entering conservatorship Fannie Mae and Freddie Mac's roles in the secondary market have grown markedly with the near total absence of non-agency RMBS issuance after the collapse of the securitization circuit. From 2008 through 2016, GSE and Ginnie Mae have issued no less than 95 percent of all RMBS by dollar value (Freddie Mac, 2016), and hold about 83 percent of all outstanding RMBS by dollar value (Sifma 2016). As of the third quarter of 2016 the GSEs and Ginnie Mae controlled about $6.2 trillion of the $10.2 trillion – about 60 percent – of all outstanding single-family mortgage debt (Federal Reserve, 2016).

Bringing the GSEs under federal conservatorship was likely the only way to keep Fannie Mae and Freddie Mac solvent, enabling them to continue to attract capital market investment to the financing of mortgages. Since the GSEs were brought into conservatorship shareholders have been demanding dividends as Fannie and Freddie post profits (Will, 2016). Republicans have joined shareholders in calling for the privatization of the GSEs. Most recently, cabinet members of the Trump administration have called for a rapid end to GSE conservatorship (Light, 2016). In anticipation of the end of GSE conservatorship, the FHFA initiated a restructuring of the securitization circuit of mortgage finance. In 2012 the FHFA, under acting director Edward DeMarco, issued a white paper that proposed and sought comments on the potential for new secondary market infrastructure. The goals outlined in the document were to build a new infrastructure for the secondary mortgage market, contract the GSEs' share of the secondary market, and maintain foreclosure prevention and credit provision services (Federal Housing Finance Agency, 2012). After two years of receiving comments on the proposals in the 2012 white paper, the FHFA issued a more detailed plan for the future of Fannie Mae and Freddie Mac under conservatorship. One of the primary goals is the creation of a Common Securitization Platform (CSP) for the GSEs that would allow them to issue a Single Security. Deployment of the Common Securitization Platform would enable the simplification of GSE RMBS issuance, allowing both firms to issue a Single Security. This would simplify the complex structure of the secondary mortgage market and simplify the process of issuing and investing in RMBS.

Perhaps the most notorious action taken by the federal government was the recapitalization of systematically important banks and financial firms through the Troubled Asset Relief Program (TARP). Through TARP, the US Treasury Department was authorized to spend up to $700 billion to save the stability and liquidity of foundering U.S. financial institutions. With this authorization the Treasury Department purchased hundreds of billions of dollars in preferred stock and distressed assets – largely RMBS – to prevent the collapse of financial institutions. The Federal Reserve also purchased RMBS in the wake of the crisis to promote liquidity in the mortgage market. Through a process called quantitative easing the Federal Reserve purchased approximately $1.25 trillion in agency

RMBS (Stroebel and Taylor, 2012). As of November 2015, the Federal Reserve owned approximately one third of all outstanding agency RMBS (Kaul and Goodman, 2015). As noted above agency RMBS currently represents effectively the entire RMBS market. After the crisis of the securitization circuit, we are left with the securitization circuit – a constricted securitization circuit largely under federal conservatorship.

Credit Rationing and Emptied Homes

While the securitization path was being brought into federal conservatorship for revival, emptied homes remained a mounting problem. Crisis-related foreclosures began with subprime loans which were largely concentrated in historically under-resourced neighborhoods typically located in urban cores. As the crisis continued and the top rated tranches of RMBS failed, foreclosures radiated away from city centers into the suburbs built by FHA subsidized white flight in the 1960s and the rampant single-family construction boom fueled by the availability of mortgage credit and attempts to 'complete' the mortgage market during the early 2000s (Ashton, 2009; cf. Chinloy and Macdonald, 2005). In Fulton County, concentrations of emptied homes were most severe in Atlanta's historically marginalized south and west sides and the south Fulton suburbs that grew most rapidly between 1990 and 2010 (US Census, 2015). Accumulation of REO property became a primary downward pressure on home prices (Immergluck and Smith, 2006). Most lenders with growing stocks of REO properties had no desire to become landlords or property managers. To avoid continued property management, they offered REO properties for sale. Though efforts to revive the securitization circuit had prompted increases in corporate lending from the initial credit freeze that came with the collapse of mortgage-based CDS, mortgage lending firms showed little interest in making loans to borrowers that were anything less than prime. This consumer credit freeze has been called re-redlining by the California Reinvestment Coalition (2010).

Returning vacated properties to productive use via the traditional vector of homeownership was not working. The path to liquidity through securitization remained frozen as federal actors and mortgage firms stuck to dominant conceptions of the purpose and financial use of single-family homes (Fligstein and McAdam, 2012; Lapavitsas, 2013; Fields, Under Review). There was a glut of homes and, due to the collapse and constriction of securitization, a dearth of potential borrowers – especially in comparison to the number of homes made vacant through foreclosure after homeownership hit historic highs. Potential buyers targeted for the sale of REO properties were not individual buyers, but firms in a position to make far larger purchases.

Private firms and the federal government took different approaches to the attempted sale of their distressed single-family homes. Private lenders tended to process defaulting borrowers through foreclosure and sell homes at auction. In the state of Georgia, these auctions take place on the front steps of every county courthouse on the first Tuesday of the month. If the struggling borrower negotiated well, had been approved for federal assistance, or still had equity in their home, foreclosure may have been avoided through a short sale or deed-in-lieu of foreclosure.

Beginning in 2010 the Federal Housing Administration launched their Single-family Loan Sales program to avoid the cost of foreclosing, evicting, holding, and selling single-family homes associated with delinquent mortgages. The loans auctioned by the FHA are severely delinquent and go through all of the FHA's loss mitigation steps prior to being included in a pool for auction. The first auction saw the sale of three loan pools that were cumulatively comprised of 411 non-performing loans from around the country. One of the loan pools sold for 43 percent of the estimated value of the homes secured to the non-performing loans. The pools sold for 52 and 53 percent respectively, meaning that the winners of the auction – MCM Capital Partners and Lone Star Funds – purchased the rights to hundreds of homes for cents on the dollar (US Department of Housing and Urban Development, 2010).

In 2012 the FHA removed the pilot status of their non-performing loan (NPL) auctions and rebranded them as the Distressed Asset Sales Program (DASP). One year after the implementation of DASP, HUD began auctioning Neighborhood Stabilization Outcome (NSO) pools as well. These pools of loans are geographically concentrated in areas hit hard by the foreclosure crisis, and place additional requirements on winning bidders. Buyers of NSO pools must refrain from foreclosing on any loans in the pool for one year. Additionally, at least 50 percent of the loans in NSO pools must avoid foreclosure for at least four years after purchase. Avoiding foreclosure does not mean avoiding displacement. Acceptable alternatives to foreclosure for the NSO pools include short sales or deeds-in-lieu of foreclosure, sale to a non-profit or Neighborhood Stabilization Program grantee, or holding of the property by the purchaser for rental purposes (Goodman et al, 2016). In early 2015 the FHFA followed suit and began auctioning pools of non-performing loans associated with the GSEs. Since then, Fannie Mae and Freddie Mac have auctioned off nearly 39,000 mortgages with a total unpaid balance of $8.2 billion that are an average of three years delinquent (Goodman et al, 2016).

Prior to auctioning NPLs, the FHFA created a pilot program to auction REO homes owned by Fannie Mae to buyers willing to act as landlords. The goals of the initiative were to gauge investor interest in scattered-site single-family rental housing as a new asset class, determine whether bulk sales of REO properties could lead to "civic-minded" approaches to stabilize and improve market conditions, and assess whether the bulk sale model should be more permanently adopted by the GSEs (Federal Housing Finance Agency, 2012). The structure of these bulk REO-to-Rental auctions were unique. Instead of hopeful purchasers bidding to directly purchase pools of REO properties, Fannie Mae set up a form of seller financing. Upon successful bidding on an auction pool, new owners would enter into partnership with Fannie Mae. While responsibility for leasing and property management quickly transferred to the winning bidder, a portion of rental revenues from the properties would flow to Fannie Mae until the total value of the bid was met. At first, Fannie Mae would receive 90 percent of the proceeds from rental revenue. As payment thresholds were met, Fannie Mae's percentage would shrink to 50 percent and eventually 30 percent (SFR 2012-1 LLC, 2012). Pools were offered for auction in Atlanta, Chicago, Los Angeles, Phoenix, parts of California and parts of Florida. In total, investors purchased approximately 2,500 REO properties from Fannie Mae (HomePath, 2017). These bulk sales mark the first large scale institutional trade of rented single-family homes and an experimentation with large-scale single-family rental as a new potentially innovative collective action to orient firms towards the financial use of single-family homes.

Homeownership and Single-Family Rental

In the wake of one of the greatest devaluations of mortgage-related assets millions of borrowers were foreclosed upon and the inventory of single-family homes for sale reached record levels (Federal Reserve, 2016) driving home prices yet further downward. The securitization of mortgage finance that had linked mortgage borrowers in single-family homes to capital market investors was hamstrung (Lapavitsas, 2013). The federal government created foreclosure avoidance counseling, mortgage modification, and mortgage refinancing programs that were enacted too late and too timidly to stem the tide of emptied single-family homes for sale (Immergluck, 2013). Alternatively, the federal government and the Federal Reserve have worked to repair the damage done to the securitization circuit by the misalignment of financial incentives and capital market determination of mortgage demand. The remains of the securitization of mortgage finance rest primarily with the GSEs under federal conservatorship, being reshaped and standardized to enable the privatization or disbandment of the GSEs as they exit conservatorship in the future. After decades of increasingly easy lending, mortgage firms have been extremely reluctant to lend. In the wake of the crisis, investors in RMBS were unable and unwilling to provide the liquidity necessary to fill the vast quantity of emptied homes with new owner-occupants.

Even though prospective owner-occupiers have had a difficult time being approved for mortgages and returning emptied homes to productive use through homeownership, mortgage lenders, government agencies, and the GSEs – in keeping with the conceptions of control that define mortgaged owner-occupancy as the tool for linking single-family homes to financial accumulation – have had no desire to become large scale property managers and landlords. Such business is outside of their typical scope and maintaining REO inventories is a drag on their balance sheets (Mallach, 2014). To rid themselves of these burdensome inventories REO owners expanded their search for prospective buyers. In the early days of the recession, individuals and small and medium scale firms purchased REO properties with the intention of flipping them to owner-occupants (Immergluck and Law, 2013; Mallach, 2014). Extended stagnation made this a risky endeavor and resulted in many homes sold as REO sitting empty yet again (Immergluck and Law, 2013). Institutional investors with cash reserves and credit facilities answered the call. Less interested in preserving homeownership as the cornerstone of the American Dream than providing decent returns for their investors, institutional investors converted the single-family homes they purchased into rental units (Chang et al, 2011). Although the single-family rental market existed before institutional investors descended upon it, single-family rental properties have traditionally been owned and operated by small scale "mom and pop" arrangements. Since 2006, and more earnestly since 2012, institutional investors have purchased nearly 200,000 single-family homes and converted them to rental properties (Green Street Advisors, 2016). Homes that once served as conduits for capital flows to capital market investors via mortgages have been reconfigured to direct capital flows to capital markets via institutional rental arrangements instead. The typically hyperlocal and ad hoc single-family rental market is being institutionalized.

Here Fligstein and McAdam's (2012) strategic action fields are helpful in bridging the financial and sociological concepts of institutionalization. For Fligstein and McAdam (2012) markets that have been institutionalized in the sociological sense constitute a stable field. The alignment of actors behind a challenger's interpretation of a field – like single-family rental – reduces instances of firm death and the risk of price wars (Fligstein and McAdam, 2012; Fligstein, 1996). The historically local and relatively informal single-family rental market is a field in which a stability, a shared frame through which to compete and make money, had not emerged. As Fligstein notes, "new markets are born in close social proximity to existing markets. The start of a new market is not random, but is shaped by existing conceptions of control, legal conceptions of property and competition, and the existing organization of related markets" (Fligstein, 1996, p. 657). The birth of the institutional single-family rental market is an example of this phenomenon.

Renting Single-Family Homes

Renting single-family homes in the United States in not a new phenomenon. For as long as there have been single-family homes, some of them have been occupied by renters. The owners of these rent-generating investment properties have typically been 'mom and pop' operators or small local firms. Historically, being a single-family landlord has been a small scale, ad hoc, and highly localized endeavor, with single-family landlords relying on cash, hard money loans, and mortgages to finance their acquisitions and operations. Such investors in single-family homes are not institutional, meaning they rely largely on their own investable capital to build small portfolios of properties to generate personal or firm income. With the collapse of the securitization circuit of mortgage finance, devaluation of mortgage-related assets, and onset of the Great Recession, the operations of many small scale single-family rental operators were thrown into disarray. Many of these non-institutional landlords were subject to the same financial pressures that led to the mass displacement of hopeful homeowners. The National Low Income Housing Coalition (2012) estimates that up to 40 percent of all foreclosures have been conducted on rental properties.

Single-Family Rental as a Strategic Action Field

Housing scholar Allan Mallach is one of relatively few to have turned his attention towards single-family landlords and investment in REO. In describing general behavior patterns of single-family rental landlords Mallach (2014) provides an illustration of various investor typologies in the non-institutional single-family rental market: flipping, rehabbing, milking, and holding. These broadly conceived typologies can be understood as frames of social action, or possible ways of organizing lines of business that can be agreed upon and provide enough relative success to keep functioning socially and economically, and thereby produce a stable field where none existed (Fligstein and McAdam, 2012).

Flippers typically own properties they invest in for less than one year, seeking returns on their investments through appreciation. Predatory flippers are investors who buy properties in poor condition and attempt to make profit by selling the homes they buy nearly as they found them. These flippers often use unethical or illegal practices to finance and sell their properties. Market edge flippers tend to buy properties in good to fair condition, then rely upon broader market trends to appreciate and sell their assets.

Rehabbers and flippers share many characteristics. Both sets of investors seek returns through home price appreciation, have investment timelines of less than one year, and buy properties in poor condition. Rehabbers however, as the name suggests, focus on rehabilitating their properties to appreciate their prices, and then sell rehabilitated homes in good condition. Milkers also tend to buy at the lower end of the market but, unlike flippers and rehabbers, seek returns by renting out properties in poor condition while spending minimally on repairs and maintenance. Whether or not properties are rendered uninhabitable by lack of upkeep or become burdened with tax liens, milkers tend to abandon their properties within 2 to 4 years.

Holders, the final category of REO investor, tend to be more stable REO investors. These investors purchase properties to create cash flows of rental payments with an aim towards the eventual resale of the property assuming property value appreciation. Holders are differentiated by the time frames of their investment plans. Short term holders tend to seek returns/resale within 3 to 5 years of purchasing a property with an expectation of breaking even or making modest returns. Medium-long term holders tend to seek returns/resale within 5 to 10 years of their purchase, with expected modest or greater returns through appreciation.

In contrast to flippers and milkers, rehabbers and holders actually provide value and services to the neighborhoods in which they operate. When market conditions are right, rehabbers resuscitate properties in disrepair and return them to productive use through sale to prospective homebuyers or single-family landlords. Holders, who often acquire rehabilitated properties from rehabbers, provide for the long term maintenance and occupation of homes that may otherwise sit vacant. Prior to the emergence of institutional single-family landlords each of these conceptions of control, or ideas about what a single-family home is good for, existed largely in a shared ecosystem where market conditions determined whether it made more sense to flip, rehab, milk, or hold.

As the Great Recession took root, the single-family rental sector expanded rapidly. Rates of homeownership in the United States fell from historic highs of 69 percent in 2004 to a low of 62.9 percent in the second quarter of 2016, the lowest rate since 1965 (Joint Center for Housing Studies, 2014; Gopal, 2016). Over roughly the same period, from 2010 to 2015, the percentage of renter-occupied single-family homes increased from about 18 to 22 percent and the percentage of all rental units comprised by single-family units grew from just under 32 to 35 percent (US Census, 2016). Demographic trends set in motion by the mortgage collapse coincided with a glut of available housing. In an era of tight credit and declining homeownership, milking and holding functioned as viable frames for action in the field of single-family rental housing.

In the early days of the Great Recession in Fulton County, Immergluck and Law illustrate a ramp up in speculative investment in single-family homes. This initial investment activity was spurred by the affordability and availability of single-family homes to investors holding cash or able to secure financing in a credit environment that had become barren for individuals and small firms that comprised the pre-recession single-family rental landscape. Immergluck and Law show that in Fulton County's urban core, central Atlanta, flippers and milkers with varying capacity and competency acquired distressed (REO/emptied) properties. Many of these early investors lacked the capital, industry knowledge, and market awareness to flip homes up to other investors or home buyers in a newly dawned era of depressed home purchase demand. As flippers were confronted by weak prospects of property sales, some turned to milking and holding (Immergluck and Law, 2014).

Mortgage production pipelines that had collapsed with the bust became clogged with REO properties as homes were emptied through foreclosure and eviction. As REO inventory accumulated, these firms were forced into a new relationship with the assets that had served as collateral for the provision of mortgage capital by financial markets. In reckoning with the physical remnants of deals gone bad, these firms had little interest in holding onto the properties themselves. Holding physical assets was contrary to their conception of their role in the housing sector. These firms were originators, servicers, and traders, not landlords. They did not want the assets that continued to pile onto their balance sheets as they ordered the continued emptying of single-family homes through foreclosure and eviction due to borrower defaults. In part, this is what positioned single-family homes as "distressed" assets. The firms that owned these REO properties had come into direct ownership as the capital flows that had run through them had dried up. Without the ability to reconstitute these capital flows through mortgage origination, firms with large quantities of REO properties saw no way forward but through the disposition of these assets. The problem then became the contrast of massive supply to a dearth of effective demand. Such an imbalance in supply and demand tends to drive prices down. In this case the imbalance exacerbated the trend of falling home values and made REO properties available at deep discounts relative to peak home values that had been achieved in the height of the housing boom.

From the early days of the Great Recession, investors of various sizes saw an opportunity in acquiring single-family homes at such a steep discount. Flippers bought homes to sell to prospective homebuyers or other investors, but found tepid demand for their holdings when REO properties were so cheaply and readily available to anyone with the capital or credit to acquire them. Similarly, rehabbers found few willing customers to justify their expenditures. Milkers and holders made a better go of it. Their conceptions about what should be done with single-family homes – medium to long term rental – fit more neatly with declining homeownership rates, constrained mortgage credit, and rising rents.

Immergluck and Law (2014) show investors in Fulton County shifting their approaches to single-family homes from flipping and rehabbing to holding as the recession lingered. Even as it became apparent that the socioeconomic fallout of the mortgage collapse made it a good time to be a single-family landlord, many small firms and family operators found it difficult to access the capital needed to expand or bolster their operations. Local and community banks had been one of the predominant sources of capital for small-scale single-family landlords. As the recession unfolded, many of these banks were shuttered. Those that remained lent warily, tending to provide financing for single-family home acquisitions based on the finances of the individual seeking a loan rather than the income producing potential of the property, as is done with commercial loans. As such, small scale single-family landlords had to rely on cash and hard money loans to conduct operations and acquisitions. In comparison to mortgage loans, hard money loans tend to be offered by lightly regulated private lenders and have shorter terms and higher interest rates. These loans are often considered loans of last resort, as they significantly increase the cost of capital in comparison to loans offered by banks.

Institutional Single-Family Landlords

While the credit tightening and asset depreciation brought on by the mortgage collapse made it more difficult for traditional small-scale single-family landlords to meet their debt service obligations and expand their acquisitions, larger investors found themselves better positioned to access capital and take advantage of home price discounts. Not all firms suffered equally from the mortgage collapse. Institutional investors, large organizations like private equity firms and pension funds that invest on behalf of shareholders or fund investors, came to see potential for profit in the acquisition of single-family homes. While many institutional investors endured substantial losses on their mortgage related holdings as the mortgage industry collapsed, this investor class as a whole emerged from the crisis with access to their shareholder and fund investors' capital and close ties to banks. Because of the credit constriction following the collapse, many firms that might typically make corporate or personal loans had instead accumulated stockpiles of capital (Lapavitsas, 2013). This made it possible for institutional investors to acquire REO properties in large quantities with discounts unachievable by those without the access to capital institutional investors possessed.

In 2008, Waypoint Homes out of Oakland, California became one of the first firms to piece together a holding-oriented business model centered on institutionalizing the traditionally segmented and rather informal single-family rental market. With a $150 million investment from GI Partners (Gittelsohn and Perlberg, 2013), a San Francisco based private equity fund, Waypoint Homes reconfigured a path to financial profit through the conduit of the single-family home. Since then, a number of other firms backed by private equity firms, pension funds, and investment banks have followed suit. Their aim has been to institutionalize the single-family rental market to provide regular and predictable returns to investors through the creation of a new asset class: single-family rentals.

Institutionalization requires regularity and predictability of capital flows. The single-family rental sector has been an historically unattractive target of institutionalization due to the unique character of each home in a single-family rental portfolio and the inability to standardize materials for repair and maintenance of rental properties. The new institutional landlords have worked to overcome the irregularity and unpredictability of repairs and maintenance by achieving regional economies of scale. The basic business model of institutional single-family landlords has consisted of identifying homes available for acquisition in geographies made desirable by low rates of vacancy, newer housing stock, and 'good' schools; rehabbing properties with standardized fixtures and appliances to reduce maintenance costs through scale; leasing properties; and passing proceeds from rental income and home price appreciation on to their investors and shareholders.

Forms and Funding for Institutionalization

The institutionalization of single-family rental has relied upon the ability of institutional investors to identify and acquire homes at deep discounts at a magnitude capable of achieving economies of scale. To accomplish this, firms have taken advantage of capital raising techniques unavailable to smaller scale landlords. The most straightforward of these is direct investment in a particular firm. Two of the largest single-family rental firms currently in existence, Invitation Homes and American Homes 4 Rent, were launched respectively by direct investment from Blackstone – the world's largest landlord (Beswick et al, 2016) – and the Alaska Permanent Fund – the state of Alaska's public investment fund capitalized by taxes on resource extraction (Alaska Permanent Fund, 2017). Blackstone funded the creation of Invitation Homes with a part of a freshly raised $13.3 billion real estate fund (Gittelsohn and Perlberg, 2013a). American Homes 4 Rent's initial capital came largely from a $250 million investment by the Alaska Permanent Fund (Perlberg and Gittelsohn, 2013). After initial capitalization, institutional landlords have continued to turn to large financial institutions and institutional investors for credit and capital to continue their acquisitions and operations.

All currently existing institutional single-family landlords have at some point taken advantage of lines of credit from large financial institutions or consortiums of financial institutions. Typically, these lines of credit are secured by collateral in the form of firm equity or assets. The interest rates on these lines of credit tend to be cheaper than individual mortgage rates and the high rates demanded by hard money loans. Deutsche Bank in has made a large amount of credit available for various institutional landlords. Blackstone's Invitation Homes acquired a $600 million line of credit from Deutsche Bank in October of 2012 (Gittelsohn and Perlberg, 2013a). Within a year Deutsche Bank had expanded its line of credit with Invitation Homes to cover at least $3.6 billion (Gittelsohn and Perlberg, 2013b). Deutsche Bank's next largest line of credit is for $400 million with Donald Mullen Jr.'s Progress Residential (Gittelsohn, 2013). In mid-2013 Deutsche Bank also set up a $100 million line of credit with Five Ten Capital LLC and a $200m line of credit with Apollo Global Management (Perlberg and Shenn, 2013; Gittelsohn and Banerjee, 2013). In October of 2012 Citigroup extended a $245 million line of credit to Waypoint, which is now part of Colony Starwood Homes (Gittelsohn and Perlberg, 2013a). In October 2013 Colony American Homes, also a predecessor to Colony Starwood Homes, received a $500 million line of credit from a group of lenders led by JP Morgan and Credit Suisse (Colony American Homes, 2013). Two months later Colony American Homes extended its credit facility to $1.2 billion (Panchuk, 2013). American Residential Properties (ARPI), now part of American Homes 4 Rent (AH4R), secured a $150 million line of credit in January of 2013 from a group of lenders comprised of Bank of America, Deutsche Bank, Morgan Stanley, KeyBank, Barclay's Bank, and Raymond James Bank (American Residential Properties, Inc., 2013). This line of credit was expanded to $290 million in September of 2013, and $450 million in December of 2015, just prior to American Residential Properties' merger with American Homes 4 Rent which was finalized in March of 2016 (Housingwire, 2013; American Residential Properties, Inc., 2015; Gopal and Perlberg, 2015) . American

Homes 4 Rent secured a $500 million line of credit and $250 million bridge loan from Wells Fargo in 2013 (American Homes 4 Rent, 2013). Since merging with ARPI, AH4R has secured a $1 billion credit agreement with a group of lenders comprised of Wells Fargo, JPMorgan, Bank of America, and Raymond James Bank in August 2016 (American Homes 4 Rent, 2016).

Some firms have repurchase agreements with financial institutions. Similar to lines of credit, repurchase agreements enable firms to borrow over the short term to finance operations and acquisitions. Repurchase agreements, also known as *repos*, are a contract through which one firm sells shares to a buyer at an agreed price. The seller also agrees to re-purchase the shares at the end of a specified term for a price greater than that at which they were initially sold. In effect, this functions as a form of borrowing by the firm selling and re-purchasing assets. During the mortgage collapse of 2007-2008, the repo market enabled the collapse of mortgage firms who had taken on repo agreements with souring mortgage-backed securities as the collateral backing the agreement (Financial Crisis Inquiry Report, 2011). Firms were increasingly unable to meet their repo obligations and the shadow banking industry collapsed, spreading the collapse to other financial users of shadow banking firms like Lehman Brothers, Merrill Lynch, Morgan Stanley, and Goldman Sachs (ibid). Altisource Residential currently holds a two-year long repo agreement for up to $750 million with Wells Fargo (Altisource Residential, 2016). This means that Wells Fargo has agreed, between the signing of the contract in September 2015 and its conclusion in September 2017, to purchase up to $750 million in Altisource Residential shares collateralized by REO properties and non-performing, re-performing, and performing mortgage loans (Altisource Residential, 2016). Altisource Residential has additional repurchase agreements with Credit Suisse and Deutsche Bank which, taken together with a $200 million loan fund from Nomura Corporate Funding Americas LLC, provided $1.3 billion in financing for the acquisition and ownership of residential mortgages and REO properties (Altisource Residential, 2016).

Many of the institutions awarding lines of credit, repurchase agreements, and other loans to institutional landlords held huge reserves of REO properties. The lines of credit to institutional landlords have been provided largely to enable these firms to acquire REO properties. The problem of the crisis became the disposition and return to productive use of thousands upon thousands of emptied homes held as REO properties by foreclosing banks (Federal Reserve, 2010). If this problem could be solved, the effects of the crisis could be at least partially resolved. There are a number of ways this could have happened, but few which fit the political logics of capitalist accumulation in which housing is a major conduit. The federal government could have initiated a large scale loan repurchase and write down initiative as it did in the wake of the Great Depression (Vekshin, 2013). There could have been a moratorium on foreclosures and evictions (Moratorium Now!, 2017). These options would have stopped the flow of emptied homes onto bank balance sheets and prevented the need to dispose of the properties at all. Foreclosed properties could have been transferred to municipal land banks (Alexander, 2011). Instead, banks lent billions of dollars to institutional landlords to acquire REO and other discounted properties. In this arrangement, banks rid themselves of unwanted assets, and recuperated through interest some of what they had lost as mortgage borrowers defaulted.

As firms solidified and standardized their portfolios, some opted to raise further funds through initial public offerings as real estate investment trusts (REITs). A REIT is a corporate form specifically created by congress in 1960 for its investors to own and manage income-producing real estate (Immergluck, 2009). To qualify as a REIT, these firms must acquire at least 75 percent of their income through real estate investments like single-family homes, must hold at least 75 percent of their assets as real estate, cash, or government securities, and must have shares held by a minimum of 100 shareholders. In exchange for meeting these requirements, REITs are granted a special tax status. REITs are required by law to distribute at least 90 percent of taxable income to their shareholders as dividends. Only taxable income not distributed as dividends is subject to corporate income tax. Organization as a REIT provides an influx of capital and share of founders' profit upon an initial public offering (Lapavitsas, 2013).

Securitization

By far the most innovative form of financing for institutional landlords have been single-borrower and multi-borrower single-family rent backed securities. In October of 2013 Blackstone's Invitation Homes launched the first single-borrower single-family rental securitization (Shenn and Perlberg, 2015). Prior to putting the security together, Invitation Homes purchased homes in cash with funding from Blackstone and Invitation Homes' lines of credit (Call et al, 2014). Owning these properties outright, Invitation Homes worked with Deutsche Bank to pool properties for the securitization (Morningstar, 2013). Invitation Homes then created a special purpose entity (SPE) which took on a loan from Deutsche Bank to mortgage the properties in the pool (Morningstar, 2013). Rent payments from Invitation Homes tenants would be used to pay down the loan (Morningstar, 2013). Income flows from the pooled properties were then mixed into tranches to provide different levels of risk and reward for prospective investors (Morningstar, 2013). The Deutsche Bank loan was then converted into tranches of certificates privately offered for purchase to investors (ibid). Rent payments from Invitation Homes tenants would then flow through to bond holders as repayment of the loan taken out against their rented homes (ibid).

The novelty in this securitization comes from a blending of commercial and residential securitization and risk evaluation logics (Raymond, 2014). Like residential mortgage backed securities, these securitizations are backed by mortgages on single-family homes. Like commercial mortgage backed securities, these securities are rated on the ability of a firm's expected net cash flows to repay bond obligations (Raymond, 2014). This new financial instrument not only allows for leveraged funding of institutional landlord acquisitions and operations; it also makes an important alteration to the structure of mortgage backed securities that collapsed as defaults rose. Single-family rental securitizations cut out what, from the perspective of high finance, became the weak link that brought toxicity to mortgage-backed securities: the defaulting borrower.

Defaulting borrowers were a creation of the mortgage industry that then led to the industry's collapse. As borrowers defaulted on (often predatory) mortgages, the capital flows fueling mortgage-backed securities and CDOs dried up. The only way to replace the lost capital flow of a defaulted borrower was to originate more loans. The second subprime boom first expanded, and then saturated, the market of potential borrowers to fund capital flows. In a saturated market that was quickly souring as mortgage default rates skyrocketed, firms were unable to find new sources of capital to funnel to investors through financial instruments. The spike in the foreclosure rate led to a spike in REO offerings, which in turn depressed home prices. Credit availability constricted drastically, and a flood of supply met a dearth of effective demand to strip the exchange value of single-family homes and reconstitute once desirable assets as toxic. The erosion of capital flows originating from the bottom point in the vertical chain of securitization, the borrower, undermined the structure of mortgage-backed securities and overlying CDOs.

In securitizing income from single-family rental properties, institutional landlords have extended the logic of vertical integration down from the level of loan origination to the level of direct property ownership. In these securitizations, the firms themselves are the borrowers tasked with avoiding default. To meet the obligations of their mortgage, these firms use income from tenants' rent payments. These securities guard against the disastrous effects of defaulting borrowers by shifting the responsibility of payment downward onto more legally precarious and replaceable tenants. In this structure the origin of the capital that flows through to investors is not a borrower at risk of default, but tenants who can legally be much more easily displaced and replaced should they fail to provide a flow of capital equal to the firm's obligations to bond holders.

Institutional landlords use these securitizations as a cheap way to raise funds. Offering securitized bonds is a way for firms to acquire cash in the present while committing future cash flows underlying the pooled properties to the pockets of bond investors. One potential drawback for securitizing firms is that in the process of securitization, control of all revenue from properties whose tenants are contributing to bond payments tends to be in the hands of the trustee and subject to the terms of the securitization agreement. While securitizing rental homes may provide cheap funding to continue operations, it also prevents flexibility in the disposition of the properties bound to the terms of the bond issuance. Not only do firms sacrifice their own control over pooled properties, they give greater control to the servicer, special servicer, and trustee. In the event that cash flows from the selected properties fail to meet the terms of the offering, the properties underlying the securitization can be sold without the consent of the issuing firm (Morningstar, 2013).

Invitation Homes followed their initial single borrower single-family rental securitization with six other securitizations as of December 2016. Alongside Invitation Homes, in the last three years Colony American Homes (now Colony Starwood), American Homes 4 Rent, Silver Bay, American Residential Properties (now American Homes 4 Rent), Progress Residential, Starwood Waypoint Residential (now Colony Starwood), TriCon American Homes, Home Partners of America, Colony Starwood Homes, and Amherst have issued a total of 31 single-borrower single-family rental securitizations to channel $17.5 billion from single-family home renters to securitized bond investors (Morningstar, 2016).

The first multi-borrower single-family rent backed securitization was created by Blackstone's B2R (Buy 2 Rent) subsidiary which offers financing to small and medium scale single-family landlords. Multi-borrower securities consist of bonds secured to single-family rental properties through multiple loans used to finance the purchase, rehabilitation, and operation of 1 to 100 single-family rental properties by small to medium single-family landlords. In this structure, rent payments flow from tenants to landlords, who use that rental income to repay their loan. Loan payments are then passed along to bondholders according to the risk premia differentiated by tranche. While single-borrower securitizations function as loans from investors to institutional landlords, the structure of multi-borrower single-family rental securitizations maps more closely to the originate-to-distribute model of industrial mortgage production.

Single borrower securitizations fund the operations of institutional landlords, who predominately acquire homes through foreclosure auctions, but also purchase non-performing loans, short sales, and from MLS (National Home Rental Council, 2016; American Homes 4 Rent, 2014). In a sense, multi-borrower securitizations are acquisitions of interests in single-family rental properties not directly owned by the securitizing firms, but financed through debt to the securitizing firm. This offers a new avenue for the institutionalization of single-family rental which exceeds the singular institutional landlord. By offering financing to smaller landlords, these lenders connect smaller scale landlords to financial capital markets to which they have never had access. These kinds of securitizations provide the most rapid and open path towards expanded institutionalization (capital market funding) of single-family rental.

Since 2008 these ad hoc actions taken by aspiring institutional single-family landlords have coalesced to create a an industrial model of single-family rental. From the dominant conception of mortgage finance provision, these firms have borrowed the technique of securitization to relink single-family homes as nodes in networks of financial accumulation. From the realm of private equity, institutional landlords have imported an ethos of buy, build, and sell; purchasing emptied single-family homes, reorienting them to capital markets and filling them with tenants, and selling rights to proceeds from tenant income through securitizations and public offerings. From small scale single-family landlords institutional landlords have come to understand single-family homes as rental units. From housing data websites that gained prominence after the collapse, institutional single-family rental firms have adopted technologies to render markets calculable via digital assessment of the condition and value of homes targeted for acquisition or maintenance (Fields, Under Review). From commercial real estate accounting, single-family landlords have created financing mechanisms that allow for the financing of properties based on their capacity to generate income rather than the ratio of debt payments to firm revenue (Raymond, 2014). By pulling from various conceptions of control in proximity to single-family homes, institutional single-family landlords have developed an increasingly institutionalized and financialized market for the rental of and investment in single-family homes.

Institutional Single-Family Rental Investment in Fulton County, Georgia

Methodology

My methodology largely follows that used by Dan Immergluck and Jonathan Law in their (2013) article "Speculating in Crisis." In that article, Immergluck and Law focus specifically on transactions involving REO properties. While my analysis focuses on a larger group of properties, their methodology is helpful in suggesting methods for identifying likely-investor owned tracts. Conducted prior to the large scale institutionalization of the single-family rental market, their study observes likely-investors, which are defined as having purchased more than two properties REO properties or four properties of any disposition, having an indication of corporate status in their listed name (LLC, INC, Corp., etc.), or reselling an REO property within 12 months of acquisition (Immergluck, 2012; Immergluck and Law, 2013). Properties held by owners that met any of these three criteria were included in their analysis. Excluded from their study were properties owned by government lenders like the Federal Housing Administration or Department of Housing and Urban Development, Government Sponsored Enterprises like Fannie Mae and Freddie Mac, banks, and bank affiliates.

I am interested in a similar group of likely-investors, but not the same group. While REO sales and investors are relevant to my study, I seek to capture a broader picture of investor acquisitions of detached single-family homes in Fulton County. This is because while institutional investors have purchased many properties as REOs, they have also purchased numerous single-family homes via short sales, inter-firm bulk acquisitions, and individuals. Because I am more interested in investigating holding-oriented investment rather than flipping-oriented investment in single-family homes, I eliminate their third criterion: the reselling of an REO property within 12 months of acquisition. As such, the likely-investor-owned properties analyzed here are held by entities that meet either of the following criteria:

1) Appearance of purchase by a corporate entity via the presence of 'Inc.', 'Corp.', 'LLC', or other corporate identifiers in the buyer name.
2) Buyer name matched to four or more acquisitions in the county over the 2011-2015 period.

In addition to identifying likely-investors that acquire single-family homes in Fulton County, I also identify properties that transition into bank ownership, and properties acquired by institutional single-family landlords. I use the appearance of bank identifiers in much the same way I use corporate identifiers. These owners largely included variations on common bank names (e.g., 'Wells Fargo', 'Bank of America NA', 'Federal Home Loan Mortgage Corporation', etc.). I classify institutional landlords as firms that have issued single-borrower single-family rental backed securities. To date, there have been ten such firms: Invitation Homes, Colony American Homes, Starwood Waypoint, Colony Starwood, American Homes 4 Rent, American Residential Properties, Silver Bay Realty Trust, Tricon American Homes, Amherst, Home Partners of America, and Progress Residential. To identify the firms these institutional landlords use to acquire and hold single-family homes, I use two methods. The most straightforward includes using an institutional landlord's public facing website to identify a property in their ownership. I then use the Fulton County tax assessor's website to find the name under which the property is held. Alternatively, I identify properties owned by institutional landlords by investigating firms that held more than 10 properties in any given year. I use the Georgia Secretary of State's website to look up corporate registration, and use corporate address and registered agent information to match property owners to publicly available office addresses and corporate executives of institutional landlords.

This method falls short of capturing the entire population of institutionally owned single-family homes for four reasons. Firstly, many institutional landlords have used a variety of corporate names to acquire and hold properties. Because of this, there are likely institutionally owned firms that I failed to identify, although I searched for spelling and typographical variations on institutional firm names. Secondly, in addition to single-borrower securitizations, there have been firms that have more recently conducted multi-borrower single-family rental securitizations. These firms – B2R, FirstKey, and Colony American Finance – do not directly own properties. Instead, they make the institutionalization of single-family rental possible by issuing mortgages to finance the operations of other single-family landlords. The names of the landlord-borrowers involved in multi-borrower securitizations are not made publicly available. Therefore, while clients of multi-borrower securitization firms may be listed among likely-investors, they are not directly identified as part of the single-family rental circuit of housing finance. Thirdly, there are institutional single-family landlords that have not issued any securitizations. While I am interested in these landlords and their role in the institutionalization of single-family rental, it is extremely difficult to find sufficient information to describe the structure of their financing, which is one of my primary focuses. When investigating corporate identities of large property holding firms, I found numerous firms and individuals with possible ties to institutional investors. A series of firms named Valor Homes owns numerous properties in Fulton County, but the listed corporate address was a private home, and internet searches returned no further information on the possible ownership or financing of the firms. Conversely, there are also non-securitizing institutional landlords with very public presences. HavenBrook Homes is one example of such a firm. Started by single-family rental prognosticator and former Morgan Stanley analyst Oliver Chang's Sylvan Road Capital, HavenBrook Homes owned 451 single-family homes in Fulton County in 2015. In March of 2015, Pacific Investment Management Co. (PIMCO) bought out Sylvan Road's stake in HavenBrook Homes (Perlberg, 2015).Their acquisition and operation of single-family rental properties is funded by institutional capital. However, because of the inconsistency of available data on such firms, I do not include them when considering concentrations of institutionally owned single-family homes. Lastly, since the onset of institutional single-family rental investment, some firms have merged and others have been acquired. To account for these consolidations, I classify properties as institutionally owned only once acquired directly by a securitizing firm. This is simple with the Colony American Home and Starwood Waypoint merger and the American Homes 4 Rent and American Residential Properties merger. Each of those firms had issued securitizations prior to merger, and so their properties are included in the data set for institutional investors in each year of their existence. Silver Bay, however, acquired The American Home, an institutional landlord that had not issued any securities before being acquired. For the same reason I exclude HavenBrook Homes and Valor Homes from my analysis of institutional landlords, I also exclude The American Home. This exclusion has two effects: it makes my list of institutionally owned properties more conservative than actually existing institutionally owned properties, and it provides a more focused view of landlords that finance their operations via securitization.

After analyzing property ownership along the above criteria, I am left with lists of owners under the following classifications:

> **REO**: indication of bank status in owner name.
>
> **Likely-investor**: indication of corporate status in owner name; acquisition of four or more properties between 2011 and 2015.
>
> **Institutional Landlords**: companies directly linked to institutional landlords that have issued single-borrower securitizations by firm name or corporate address.

This category also contains subclassifications for Invitation Homes, Colony American Homes, Starwood Waypoint, Colony Starwood, American Homes 4 Rent, American Residential Properties, Silver Bay Realty Trust, Tricon American Homes, Amherst, Home Partners of America, and Progress Residential.

In the previous section, I use Immergluck and Law's classification of levels of investment activity by percentile ranking into four categories. In order to allow for easy comparison between Immergluck and Law's work and my own, I will use similar classifications for likely-investor, institutional investor, and REO activity. I classify census tracts by likely-investor activity as No Investor (NI) tracts with zero likely-investment activity, Low Investor (LI) tracts that fall below the median level of likely-investor activity, Moderate Investor (MI) tracts which fall between the 50th and 75th percentile, High Investor (HI) tracts which fall between the 75th and 90th percentile, and Very High Investor (VHI) tracts comprised of tracts in the top ten percentiles. I use the same percentile classifications to evaluate institutional landlords. Those categories fall within the same percentile ranges and are classified as No Institutional Investor (NII) Low Institutional Investor (LII), Moderate Institutional Investor (MII), High Institutional Investor (HII), and Very High Institutional Investor (VHII) tracts. I use the same classification for properties that transition into bank ownership, ranking tracts as No REO (NREO), Low REO (LREO), Moderate REO (MREO), High REO (HREO), and Very High REO (VHREO). Using the same scale for each of the three categories of ownership allows me to compare between them. In addition to classifying property ownership along the proceeding lines for each individual year, I also create a universal data set to allow for analysis of the cumulative spatial dimensions of each form of property ownership across the entire period of the study.

Upon classifying levels of investment or REO activity by census tract, I compare the concentration of that activity to demographic data on the racial and economic character of each tract. Noting these attributes of each tract allows me to link my analysis to previous writings on the relationship of housing, race, class, finance, and displacement.

Findings

Year by Year analysis

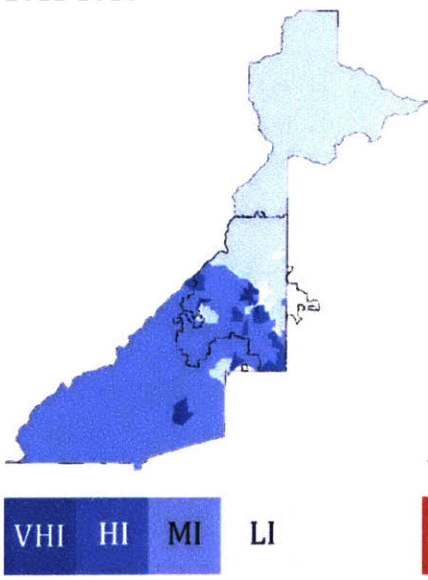
In Fulton County, institutional landlord investment is not documented in property data until 2013. This matches journalistic accounts and my own observations. It also means that in the span of three years, institutional landlords acquired 1,803 single-family homes in Fulton County and thousands more in the surrounding metro area. Upon arriving in Fulton

County in 2013, institutional investors primarily acquired properties in the southern part of the county. Parts of northern Fulton and southeastern Atlanta were also subject to pockets of institutional investment. In 2014 and 2015, institutional landlords made more acquisitions within Atlanta's city limits, but the most concentrated sites of institutional single-family rental investment remained in southern Fulton County.

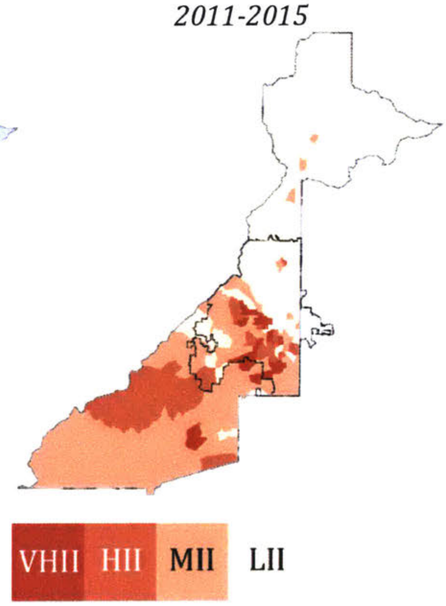
My analysis of likely-investor activity in Fulton County begins in 2011, where Immergluck and Law concluded. Because my criteria for likely-investors focuses primarily on acquisitions, my results show more focused concentration in the southern, suburban, part of Fulton County. Two years before institutional landlords began purchasing homes in the Atlanta area, South Fulton had become the primary site of continuing foreclosures in the county. Likely-investor activity was also prevalent within the city limits in the historically black neighborhoods of west and southwest Atlanta. In 2012, likely-investors acquired a greater proportion of properties in North Fulton, including parts of Sandy Springs and northwest Atlanta. Between 2013, which marked the arrival of institutional landlords, and 2015, likely-investors shifted their most concentrated activity back towards the southern and eastern parts of Atlanta while remaining heavily concentrated in South Fulton.

Cumulative Comparison

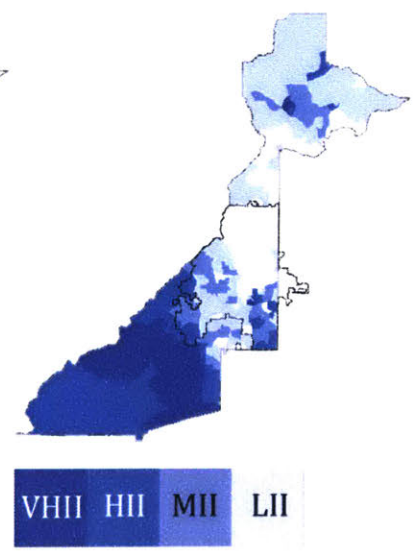
Likely-Investor Activity 2011-2015



REO Activity 2011-2015



Institutional Landlord Activity 2011-2015



Likely-Investors	VHI	HI	MI	LI	NI
Number of tracts	8	12	62	113	4
% black avg.	88%	87%	86%	20%	44%
% white avg.	7%	10%	10%	68%	43%
% in poverty avg.	34%	32%	27%	9%	24%
% high income avg.	0%	1%	1%	4%	7%

REO	VHREO	HREO	MREO	LREO	NREO
Number of tracts	19	16	51	105	8
% black avg.	89%	83%	75%	23%	31%
% white avg.	7%	14%	19%	65%	53%
% in poverty avg.	34%	26%	25%	9%	15%
% high income avg.	1%	1%	1%	3%	9%

Institutional Investors	VHII	HII	MII	LII	NII
Number of tracts	10	19	26	67	77
% black avg.	83%	76%	66%	45%	33%
% white avg.	13%	19%	28%	45%	57%
% in poverty avg.	18%	28%	22%	17%	14%
% high income avg.	0%	1%	2%	2%	5%

Likely-Investors, REO Properties, and Institutional Investors

The above maps of Fulton County show the cumulative concentration of likely-investor ownership, REO properties, and institutional landlord ownership from 2011 to 2015. The subsequent tables indicate socioeconomic characteristics of the tracts in which likely-investor activity, REO properties, and institutional landlord activity occurred over the period of the study. Among the categories of property ownership, REO properties were the most highly concentrated, with 35 tracts classified as HREO (16) or VHREO (19). Institutional investment was also fairly concentrated, with 29 tracts classified as either HII (19) or VHII (10). Likely-investor activity was the most geographically dispersed, with only 20 census tracts having High (12) or Very High (8) levels of likely-investor activity.

According to 2015 census data, the population of the average Fulton County census tract is 48 percent black, 43 percent white, and 17 percent of its residents live below the poverty line. As with foreclosure rates from 2007 to 2012, high investment and REO activity primarily occurred in predominately black census tracts with higher than average rates of poverty. As is demonstrated by the above maps and confirmed by the tables that follow them, concentrations of likely-investor activity and of REO properties are more closely related in their geographic distribution than concentrations of institutional investment are to REO properties. The visualizations of all three forms of property ownership reveal Fulton's stubborn race and class segregation as a line running diagonally from northwest to southeast through the center of Atlanta. The same line is visible in maps representing racial demographics and income or poverty status. In all cases, the least amount of investment activity occurred on Atlanta's north side. No institutional landlord has purchased a single property in the predominately white and wealthy northern Atlanta. Instead, they have focused their investments in South Fulton, with pockets of activity in far northern Fulton, and lower levels of investment in Atlanta's urban core.

Institutional Investment by Firm

The investments of nearly every institutional single-family rental landlord are predominately located in south Fulton County. Invitation Homes, which was one of the first firms to begin large scale acquisitions in the Atlanta area, is rare in that it has acquired homes in Atlanta's urban core, which was hit hard by the foreclosure crisis. It is likely that this pattern of investment was enabled by Invitation Homes' aggressive entry into the Atlanta market. In their first year in the area, they acquired 170 homes in Fulton County. Colony American Homes, the next largest firm by property count at the end of 2013, had only 57 properties. By buying more homes earlier, Invitation Homes may have been able to acquire more centrally located properties. Amherst and Tricon American Homes own no properties north of Atlanta.

Socioeconomically, institutional investors have generally concentrated their acquisitions in census tracts that are far more predominately black, with higher poverty rates, than Fulton County as a whole. Three firms deviate from the norm, or did at one point. Silver Bay Realty, prior to its acquisition of The American Home, held its most concentrated clusters of properties in tracts that were more than 70 percent black, but fell beneath the County's average poverty rate. Prior to its merger with American Residential Properties, American Homes 4 Rent was the only firm to have both of its highest rates of investment (VHII, HII) in census tracts that are predominately white, with poverty rates at least 10 percent below the County average. The census tract containing Progress Residential's most concentrated investments is also predominately white, though closer to average in its poverty rate.

Of the firms analyzed here, Invitation Homes is invested at a high rate in nine tracts, the most of any institutional landlord. Invitation Homes is also invested in more tracts in Fulton County than any other similar firms. Invitation Homes owns properties in 54 percent of all Fulton tracts. The next closest firm by tracts invested in is Colony Starwood Homes, which is also the second largest institutional landlord in Fulton County behind Invitation Homes. Firm size alone does not determine investment area however. Aside from these two sizeable firms, other firms own properties in roughly 20 percent of all Fulton County census tracts. The distribution patterns of Tricon American Homes, Amherst, Progress Residential, and Home Partners of America's investments were not concentrated enough in any particular census tracts to garner a VHII designation.

Chapter Four: Discussion and Conclusion

Discussion

Placing the above findings in discussion with Fligstein and McAdam (2012), Harvey (1978; 2001), Gotham (2012), and Robinson (1983)

Fligstein and McAdam's (2012) theory of fields helps describe the emergence of institutional landlords in a field previously comprised of small scale property owners. The field of single-family rental can be thought of as within the field of single-family property investment. The field of single-family property investment continues to be dominated by owner-occupants and the financial institutions that fund their investments with mortgages financed through capital market investment in securities. Since 2007 the owner-occupant segment of the single-family investment field has dwindled. In reaction to the endogenous shock provided by defaulting borrowers to the field of mortgage finance from 2007 through 2013, defaulting borrowers have been marked with stained credit scores, and mortgage lending institutions have resorted to credit rationing. The result has been a drop in the rate of homeownership, and as a result, the diminution of the field of owner-occupancy relative to other fields oriented towards investment in single-family homes.

Institutional landlords used this opportunity, this crisis in the field of owner-occupancy, to consolidate other fields of single-family investment behind renter-occupancy of single-family homes. Prior to the institutionalization of single-family rental, the field of single-family investment not consisting of owner-occupancy and its supports was highly fractured, as demonstrated by Mallach (2014). Smaller fields of flipping, rehabbing, milking, and holding comprised the remainder of the field of single-family investment. Institutional investors have consolidated parts of the fields of flipping and rehabbing behind their holding-oriented business strategy. Instead of flipping or rehabilitating homes for the purpose of owner-occupancy, such tasks are now undertaken to a large degree in support of renter-occupancy. This consolidation has taken place in a context of collectively deployed strategic actions appropriated from other fields proximate to single-family investment. This appropriation, the bringing in of ideas and techniques from elsewhere, has mobilized resources behind institutional landlords' conception of the field. Examples include: combining logics of residential and commercial mortgage-backed securitization to produce single-family rental securitizations (Raymond, 2014), the use of lines of credit and repo agreements to fund acquisitions as is common for firms behaving financially (Altisource Residential, 2016), the use of tenant screening and property management techniques of large multifamily landlords, and the deployment of granular property data at a national scale as developed by foreclosure and home sale websites that gained prominence during the crisis (Fields, Under Review). Institutional landlords, as challengers in the field of single-family rental, mobilized these borrowed logics and techniques and billions of dollars to quickly rise to dominance in the field. The result has been the rapid destabilization and settlement of the field of single-family rental. In its new settlement, the field is more intimately entwined with financial markets, expanding the portion of the field of single-family investment engaged with and reliant upon capital market investors.

Following Gotham (2012), the crisis of 2007 was caused in part by the state-led creation of a spatial fix for capital investment through securitization. This served as an attractive spatial fix as state and nonstate actors worked to make single-family homes, spatially fixed investments, highly liquid. The result was a capital crisis that devalued any capital fixed to single-family homes. In response to this devaluation, the state has largely stayed the course, responding to a crisis of liquidity caused by the structure and logic of securitization by bringing nearly the entire secondary market for mortgages under federal conservatorship. Asset devaluation led to credit rationing, further restricting liquidity in pursuit of homeownership. As mortgage finance institutions emptied homes once occupied by defaulting borrowers, they were left with spatially fixed and devalued assets. Institutional landlords served to solve this problem by appropriating spatially fixed assets that had been devalued in part because of their relation to mortgages, and in an act of creative destruction, reconfiguring that spatial fix. Institutional landlords purchased REO properties with their own stockpiles of capital and interest bearing lines of credit from REO holding financial institutions. These landlords instilled devalued REO properties with value by associating them with renting, rather than homeownership, and rendering their spatially fixed investments liquid by offering up income streams to capital market investors via securitizations and public offerings. In a sense, institutional landlords have followed a path pioneered by the state, creating liquidity out of spatial fixity (Gotham, 2012). In sum, Institutional landlords have created liquidity out of spatial fixity through the acquisition of devalued, formerly liquid and spatially fixed assets, single-family homes.

The geography of the spatial fix deployed by institutional landlords in comparison to the spatial fix deployed by mortgage finance institutions illuminates the contours of capitalist creative destruction. Using foreclosure and REO activity as indicative of the destruction of mortgage finance's spatial fix, and institutional landlord investment as indicative of this new spatial fix, I show that it is the residents and built environment of Atlanta's west side that have been left out of this new spatial fix, subjected instead to continued speculative activity and fragmented investment. The excision of Atlanta's west side from investment in the built environment mirrors its exclusion from such investment over much of the twentieth century. As I have shown, the logic of financial risk from the perspective of financial institutions serves as an example of racial capitalism (Robinson, 1983). Prior to securitization, financial risk was inscribed onto a racialized landscape and performed as credit rationing. Racially predatory land contracts filled part of the demand for homeownership by people deemed unworthy of rationed credit. With securitization, financial risk came to be racially inscribed more directly onto individuals and performed as the abundant and often predatory extension of high cost credit. In both scenarios, nonwhite people were subjected to high cost predation and rendered profitable for white predatory owner-financers (in the case of land contracts) or white-owned financial institutions.

The absence of institutional landlords from historically marginalized and predominately black parts of Fulton County may at first seem to run counter to the historical prevalence of real estate investment as racial capitalist exploitation. However, with the changes to the field of single-family investment wrought by crisis and institutional single-family landlords, the deployment of financial risk has again been reconfigured. Institutional landlords racially deploy risk along both individual and geographic lines. Through the National Home Rental Council, many of the largest institutional landlords have coalesced on strategies for erecting barriers to what they consider to be potential financial risks to their investments. Many institutional landlords require that a household's income be sufficient to render the rental property affordable, or about three times the monthly rent. Perhaps for fear of delinquent tenants serving as the defaulting borrowers to their new securitization model, this criteria marks financial risk individually. Many institutional landlords also mark the formerly incarcerated as too risky to engage with, denying the tenancy of anyone convicted of a felony (HavenBrook Homes, 2017). Institutional landlords deploy geographic understandings of risk in choosing where to acquire homes. Home Partners of America, for example, only leases homes in areas included in above average school districts (Home Partners of America, 2017). In Fulton County, as elsewhere, public schools were subject to the whims of white flight (Kruse, 2005). That is, schools in areas to where white people fled to create more homogenously white community have tended to do well. Schools in areas from which white people fled were sapped of tax revenue through depopulation. Setting aside the validity of quantified school ratings, the quality of schools in an area has been historically determined by white flight and disinvesment. Thus institutional landlords like Home Partners of America, and the others that orient their investment around school districts (Invitation Homes, 2017), inscribe historical racial determinations into their reconfigured spatial fix. Institutional landlords, therefore, predominately operate to exclude individual and geographic risk from their portfolios. Yields to their investors are built more prominently on the prospect of rising rent and home price appreciation.

Conclusion

In mapping the cumulative impact of foreclosures on Fulton County, I have found that both Atlanta's urban core and its southern suburbs were similarly hard hit by foreclosures. Immergluck (2012) has shown that investment in single-family homes during and immediately after the recession was concentrated in historically disinvested black neighborhoods on the city's south and west sides that were subject to redlining, and then reverse redlining. In the ensuing years, the highest foreclosure rates drifted out to South Fulton suburbs, many of which had been built in the midst of the subprime boom of the early 2000s. North Fulton, which was built with FHA/VA mortgages and the generational wealth that ensued, remained largely unscathed by the worst foreclosure rates. REO data shows that southern and western Atlanta have retained high concentrations of REO properties. This is either because there have been continued foreclosures in the areas where the mortgage collapse hit fastest and hardest, or because banks have been unable to dispose of their REO stock in those predominately black and predominately working class neighborhoods. While likely-investor activity remained largely congruent with REO patterns, institutional investors have not invested as heavily in west Atlanta as they have in South Atlanta.

The historically astronomical default rates of subprime mortgages deprived highly rated RMBS of their capital flows and initiated the collapse of the securitization circuit of mortgage finance, which spread through CDS to other sectors of the economy, bringing about the Great Recession. Through the Great Recession and beyond, foreclosure rates remained highest in historically marginalized sections of Atlanta, and a strip of suburban South Fulton County. Both areas are and were predominately black. Both were prevalent sites of high cost lending.

In March of 2012, the decline of home prices that began in earnest in July of 2007 finally troughed (Standard & Poors, 2016). The recovery that ensued has been uneven. In some neighborhoods, very well qualified home buyers have managed to access mortgage credit through the securitization circuit, with their new mortgage likely owned or guaranteed by Fannie Mae or Freddie Mac. Southwest Atlanta, while subject to investment from early speculators, remains a prominent site of REO activity that receives less attention from institutional investors. Lack of institutional investor activity alongside continued REO activity implies that southwest Atlanta, a poor and predominately Black part of Fulton County has again been made subject to low rates of investment in the built environment. This is a result of the spatial fix deployed by institutional landlords in service of their investors, which has creatively destroyed income streams produced by previous spatially fixed mortgage investments rendered liquid through securitization. South Fulton is also predominately Black, but most of its residents are middle-to-high-income. South Fulton experienced the county's highest levels of population growth and new housing construction throughout both subprime booms (US Census, 2015; Fulton County Tax Assessor, 2016). Its large quantities of newer construction homes make South Fulton an obvious target for the crisis-discounted acquisition of quality single-family homes. Homes in South Fulton also tend to be larger than older homes within Atlanta's city limits. The extreme concentration of institutional single-family landlord acquisitions in South Fulton is potentially worrisome when considering that the incomes of many black South Fulton residents would make homeownership affordable. It may be the case that institutional investors crowded out individuals and households seeking to buy homes for owner-occupancy due to the credit rationing that has lingered behind the foreclosure crisis. More nefariously, it is also possible that the provision of mortgage credit is entering a renewed phase of redlining, in which potentially prime borrowers are not considered for mortgages because of their race.

What has followed is the institutionalization of single-family rental. During the foreclosure crisis, defaulting borrowers had become the bane of the mortgage industry's existence. The vertically integrated production of mortgages for capital market consumption might have generated fee revenue each time a mortgage changed hands, but the borrowers whose mortgages filled RMBS were unable to meet the demands of investors and defaulted en masse. With an eye towards demographic trends denoting Americans' new found aversion to mortgages and lines of credit from banks that originate mortgages at low rates, institutional investors decided to adapt the securitization circuit to finance their acquisition and operation of single-family rental properties. To do so, they became the mortgage borrower themselves, reducing the fragility of the finance structure by eliminating its weak link, and using other people's money to pay down the debt. In doing so, institutional landlords have relinked single-family homes into networks of capital accumulation, this time serving as a conduit for rent payments to capital market investors instead of mortgage payments.

What institutional single-family landlords have accomplished is still contingent. There are no federal laws to structure, and ensure the survivability, of institutional single-family rental. However, with the election of Donald Trump, the future of single-family rental as an asset class is looking brighter. Among Trump's considerations for Treasury Secretary were the creators of two of the largest single-family rental firms currently in existence. Jonathan Gray, Blackstone's head of real estate, turned the job down because he still had "much work to do at Blackstone" (White, 2016). Thomas Barrack Jr., founder of Colony American Homes and Colony American Finance, raised $32 million dollars in support of Trump's campaign (Ballhaus and Schwartzel, 2016). Steve Mnuchin, who was actually nominated as Trump's Treasury Secretary, has a recent history that consists of buying and profiting from distressed real estate assets. Mnuchin, who is likely to be confirmed, has said that the privatization of Fannie Mae and Freddie Mac is high on his to do list (Light, 2016). The GSEs are currently effectively the only providers of liquidity to the mortgage market through securitization. In a note sent to journalists, Kroll Bond Rating Agency notes that the elimination of the GSEs as we know them would deeply undermine the US housing market as it continues to recover. Kroll also notes that, should the GSEs be eliminated, the loss of the subsidy they provide to liquidity in the mortgage market may spell the end of the 30 year fixed rate amortized loan that has come to be known as "conventional" (Ramirez, 2017).

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