

Slumlords? The Economics and Finances of Small-Scale Low-Income Housing

by

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B.A. in Economics and Political Science
Yale University
New Haven, Connecticut (2014)

Submitted to the Department of Urban Studies and Planning
in partial fulfillment of the requirements for the degrees of

Master in City Planning
Master in Business Administration

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

June 2021

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ABSTRACT

The American urban poor suffer from our collective policy failure to guarantee all citizens access to a quality home. Low-quality housing has implications for neighborhood stability, adult and child health, and quality of life for those who live there. America's history of racial segregation means that this low-quality housing has affected low-income, communities of color generationally. And yet, though 95 percent of low-income Americans live in private housing, the private low-income rental market is relatively understudied. The 1-4-unit market, which represents nearly half of all housing units for the urban poor, is particularly overlooked in both the academic literature and in policymaking. This paper seeks to improve our collective understanding of this market by bringing together existing economic and sociological theories of how the private, small-scale low-income rental housing market operates into a cohesive economic and financial framework.

To understand the market, I consider the economic and behavioral incentives of landlords and property investors. I differentiate the operational behaviors of specific types of landlords, evaluate the property and portfolio-level economics of small buildings in the low-income market, and consider the incentives created by the limited nature of financing in this market. Altogether, these economic and financial incentives and behaviors generate a market that is actively aligned toward degrading property conditions in favor of landlord and investor profit. This paper builds on the existing academic literature through discounted cash flow analyses that model the economic considerations of low-income landlords and through GIS mapping of the presence of large-scale landlord operations in communities in New Haven, CT.

Having articulated the frameworks for understanding the market, I consider how the current COVID-19 crisis has exacerbated issues of quality and financial sustainability. I then identify a three-pronged approach for addressing housing quality and the broader market failures in the low-income market through (a) renewed approaches to code enforcement, (b) innovative landlord approaches that would bring better actors into the market, and (c) broad policy reform to improve housing for low-income Americans. I conclude with an evaluation of how housing quality policy can tie into current trends around inequality, infrastructure investment, and post-COVID recovery.

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Acknowledgements

I wish to thank MIT Professors David Geltner and Nathan Wilmers, and Yale Professor Cynthia Horan for their support of my research into landlords over the last decade. Without their help, this thesis would not have been possible. The City of New Haven provided important data, and the research contributions of those cited in this thesis, particularly Matthew Desmond, Phillip Garboden, Dan Immergluck, Alan Mallach, and Sandra Newman, were an inspiration for trying to bring the stories of this market together. I am also in debt to the trade publications and alt-weeklies who have focused on this housing market long before others.

I would also like to thank my parents and my fiancée for their support and for letting me drone on about my thesis. Ed Golding and Jacob Anbinder provided useful advice and guidance. Special thanks must also go to the Alabama A&M Department of Community and Regional Planning, the American Planning Association National Capital Area chapter, and the MIT Center for Real Estate for giving me venues to talk about this research along the way.

Biographical Note

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Table of Contents

1. Introduction and Overview	8
2. Literature Review	10
2.1. Landlords in the Period of Urban Decline	10
2.2. Rebirth of Interest.....	11
3. The Enduring Role of Private Housing for the Poor in American Cities	14
3.1. 1880s-1930s: Private Urbanization and Landlordism	14
3.2. 1930s-1970s: The Rise of Public Housing	15
3.3. 1970s to Present: New Federalism and Public Retrenchment.....	16
4. The Role of Private Small-Scale Low-Income Housing in Today’s City	17
4.1. Small-Scale Housing Nationwide	17
4.2. The Role of this Housing in New Haven, CT, a Case Study	17
4.2.1. Findings.....	19
5. The Human Cost of Low-Quality Housing for the Poor	22
5.1. The Social Consequences of Low-Quality Housing	22
5.2. Tenant Stories from New Haven and Elsewhere	23
6. The Microeconomics of the Market	25
6.1. Landlord Typologies	25
6.1.1. Amateur Landlords	25
6.1.2. Professional Landlords.....	27
6.1.3. Holders, Milkers, and Flippers.....	27
6.1.4. Behavioral Economics of Landlords.....	33
6.2. Building-level Economic Modeling	35
6.3. Portfolio-Level Economic Modeling	38
6.4. Neighborhood Level Effects	40
6.4.1. Landlord Investment Decisions and Neighborhood Stability	40
6.4.2. Low-income Sub-markets.....	40
6.4.3. Unique Characteristics of the Low-Income Market.....	41
6.5. LLCs and the Hidden Oligopoly	44
6.5.1. Findings from LLC Mapping.....	48
7. The Financing of the Market	50
7.1. The Inadequacy of Traditional Finance	50

7.2.	The Rise of the SFR Market.....	51
7.3.	Hard Money Lending and the Power of Cash	54
7.4.	Finance on the Margins: Mortgage Fraud, Straw Buying, Contract Sales, and Arson ..	56
8.	The Economics of COVID-19 Era Low-income Housing	59
8.1.	The Class C Cliff.....	60
8.2.	Diverging Rent Trends	61
8.3.	The Consequences of Gaps in Policy for Tenants.....	62
8.4.	Landlords Face the Big Squeeze	64
8.5.	Shifts in Ownership.....	65
8.6.	Shifts in Perspective	65
8.7.	Responding to the New Market.....	66
9.	Incentives and Implications: A Common Framework for Understanding the Economics and Finances	67
10.	Housing Code Enforcement and How to Improve It	72
10.1.	Embracing Innovative Code Enforcement Strategies.....	73
10.2.	Non-Regulatory Strategies	74
11.	Socially Responsible Landlord Strategies	77
11.1.	Previous Suggestions for New Landlord Models	77
11.2.	The Social REI Model	78
11.3.	Financial Analysis of the Social REI Model	79
11.4.	De-Risking Housing for the Poor	82
11.5.	The Viability of Alternative Approaches	83
12.	A Stronger Policy Framework for Improving Housing Quality	85
12.1.	Developing Tools to Better Understand the Market.....	85
12.1.1.	LLC Mapping.....	85
12.1.2.	Track Neighborhood Property Transactions.....	85
12.1.3.	Systematically Monitor the Private Lending/Hard Money Space	86
12.2.	Reforming the Economic Structure of the Market	86
12.2.1.	Giving Financial Resources and Rental Options to Tenants	86
12.2.2.	Better Use of the Foreclosure Process	87
12.3.	Reforming the Financial Structure of the Market.....	88
12.3.1.	GSE and Systemic Financial Reform	88
12.3.2.	Low-Interest Loans for Property Improvements.....	89

12.3.3.	Property Tax and Assessment Reform.....	89
12.4.	Investing in Housing Quality in the Infrastructure Plan.....	90
12.5.	Larger Transformations of the Housing Market.....	90
12.5.1.	New Community and Social Ownership Approaches	90
12.5.2.	Increasing the Quantity and Type of Housing Available.....	91
12.6.	Advancing this Policy Agenda with a Federal Focus in a Biden HUD.....	91
13.	Conclusion	93
14.	Appendices.....	95
14.1.	Appendix A. Property-Level Before Tax Discounted Cash Flow Analyses	95
14.2.	Appendix B. Property-Level After Tax and Financing Analyses	96
14.3.	Appendix C. Portfolio Analysis Studied Portfolio	97
14.4.	Appendix D. Portfolio Analysis Key Financials	98
15.	Bibliography	99

1. Introduction and Overview

The American urban poor suffer from our collective policy failure to guarantee all citizens access to a quality home. This policy failure has two dimensions: the unsatisfactory conditions of the housing available to the poor and the inadequate supply of public and private housing at a price that the poor can afford.

Interventions to increase the quantity and quality of housing need to be rooted in an understanding of the microeconomic dynamics of the low-income housing market in urban environments. In the United States, this market is overwhelmingly private (Vale and Freemark 2012), versus the larger social housing systems in other countries. This private ownership means that understanding the actions and incentives of landlords is fundamental to determining how this market functions. How do they seek to make money? How do they finance and manage their properties?

This market is typified by small-scale housing, with the overwhelming number of low-income urban residents living in buildings with 50 or fewer, but especially four or fewer, units (Garboden and Newman 2012). Many live in single-family homes, either as renters or owners (Apgar and Narasimhan 2006). The unique economic conditions of smaller buildings are also pivotal for characterizing this housing market and any policy solutions to fix it. As is the nature of ownership of these buildings. Large landlords may be able to exert substantial market power in their ability to set rents through their control large numbers of units, but also can use that scale to develop sustainable businesses. Small landlords, meanwhile, may struggle to adequately finance and maintain their properties (Garboden and Newman 2012). Large landlords' ability to purchase large numbers of properties may also crowd out smaller landlords and potential working-class homeowners. The *flow* of buildings may therefore shape the low-income housing market more broadly. If that flow results in properties moving to malevolent or unaccountable actors who consciously degrade property (Travis 2019), it may have consequences not only for individual tenants but neighborhood stability, as well. Since homeownership is Americans' principal source of wealth accumulation, these market dynamics can affect the opportunities for low-income individuals, particularly those of color, in their efforts to build wealth.

This paper seeks to address all of these dynamics and add a more coherent and comprehensive economic framework to the literature. It will explore how the market is structured, what the differing incentives of the players in the market are, and what it means for improving housing in American cities. Methodologically, this paper seeks to bring together and supplement existing strands of economic and sociological research into landlords and housing finance at the bottom of the market to develop a coherent theoretical framework for understanding the nature of the low-income housing market. Critically, it will emphasize just how important understanding this market is to understanding the broad question of housing for the poor and how meaningful it is to center the actions of landlords and investors in designing housing policy. In particular, it will also fill in two specific gaps in the current literature on low-income housing. First, it provides a nuanced and detailed understanding of the financing used in this market, which follows its own logic separate and apart from the typical financial practices of the larger real estate market. Additionally, the paper introduces to the literature a more rigorous

action plan for appropriate policy measures for addressing the market failures in this sector that lead to low-quality housing for the poor. Despite the urgency of the problem facing the poor in the housing space, solutions for addressing problems in this market have been limited and insufficiently developed. This paper aims to correct that deficiency.

To achieve the paper's goals, I have divided the work into three sections: **history and context**, **housing framework**, and **solutions**. Throughout these three sections, I will rely on case studies, predominantly in New Haven, CT, where I have been following landlord activities for the past decade, to deeply explore the experiences of those managing and living in these properties. New Haven represents a compelling geography for the case study, because its neighborhoods represent examples of the prevalent, but understudied, stable low-income neighborhoods where poverty is enduring, but demographics and household income are constant over time (Data Haven 2015; Data Haven 2019).

In the history and context section, I will begin with a review of the existing literature on small-scale, low-income housing for the poor. I will then turn to a historical view of this housing stock in the American city to explain the central role that this private housing has played in the market for over 100 years. From there, I will characterize the ubiquity of this housing stock in the modern American city using Census data, existing analyses, and GIS analysis of low-income neighborhoods. This section concludes with the real-life consequences of failing to address the conditions in the private, low-income housing market for tenants and communities, providing a human face for our policy choices.

The housing framework section first assesses the microeconomics of the market, looking at landlord actor incentives, market structure, and building and firm-level economics, and what that means for housing conditions. This paper builds on the literature with innovative use of discounted cash flow analyses of representative properties to replicate the balance sheets of poverty landlords. From there, it evaluates the nature of the financing available in this sector and how it reinforces economic realities that broadly work against ubiquitous quality housing for the poor. The section concludes with a deep evaluation of incentives and implications: what does a framework for understanding how this housing works and how its principal agents act tell us about how we might begin to fix its deficiencies?

Having built this framework, I segue to the **solutions** section of the paper. As noted above, this section provides much needed clarity on what can be done about the challenges of the private low-income housing market, focusing in on (a) how to reform code enforcement, (b) how to create new private sector models for socially-responsible landlordism in this market, and (c) how to use a suite of housing policy reforms to bring benefits to this market.

The paper incorporates substantial discussion of the implications of COVID-19's economic and health fallout on this housing market. The current housing crisis has exacerbated the real and prolonged challenges in providing quality, private housing for the poor. How we respond to this crisis will determine whether, and how quickly, we can begin to reshape the outlook for millions of low-income Americans across the country. I hope that this paper can contribute positively to that process.

History and Context

2. Literature Review

In seeking to build a coherent framework for understanding this market, we need to bring together the economic, sociological, and legal literature that has previously sought to describe the logic of landlord actions in this space, the nature of the market, and the consequences for housing quality. There are roughly two modern periods of the existing literature with relevance for our current exercise. The first emerges from the period of post-war urban decline and highlights the associated degradation of the urban American housing stock as landlords confronted flight to the suburbs and larger trends of disinvestment. The second period of landlord behavior literature emerged in the 2000s and intensified in the past decade.

2.1. Landlords in the Period of Urban Decline

As mentioned further below, Sternlieb's (1969) seminal work *The Tenement Landlord* provided a detailed ethnographic study of the condition of housing and financial decisions of landlords in Newark, NJ. He built a substantial body of literature related to landlords in the declining city and, correspondingly, his follow-up 1973 work was titled *Residential Abandonment*. It provided a time-series of investigation of how "slum tenements" moved from occupied to abandoned. Sternlieb argues that the decision for landlords to abandon properties was determined principally by their perception of the ability for current and future tenants to pay current and potentially increased future rents. The extant building condition or the tax burden faced by the property were only secondary concerns. His evaluation concluded that the "absentee landlord," often a white owner living outside Newark, needed to be replaced with owner-occupancy drawn from local residents who, with support from the government, could help to stabilize buildings and neighborhoods (Sternlieb 1967).

Gilderbloom and Appelbaum (1988) divided the world of low-income landlords into "amateurs" and "professionals" and also drew distinctions between smaller buildings and larger buildings. They believed that amateur slumlords to be more "empathetic" toward tenants when they fell behind on rent, whereas professional landlords were less caring and likelier to evict. Amateur landlords would be also highly motivated by the need to continue making mortgage payments. As a result, and because the loss of income from a vacant unit would be proportionally more severe for them, they would seek to fill units quickly by reducing the amount of screening to which they subjected potential tenants. Indeed, Gilderbloom and Appelbaum found that small buildings filled vacancies substantially more quickly while professionally managed and larger buildings tended to leave longer vacancies and charge higher rents.

Hartman et al. (1981) also indicated that a certain type of illegal behavior might form part and parcel of landlord activities to profit in the low-income space, writing,

[Real estate speculators] begin by selling property back and forth between combinations of associates, family members, and even loyal secretaries, at gradually rising prices. This allows the property to be insured each time at a higher value, and ultimately at a level considerably above its true market value.

*(Dummy corporations are sometimes employed to further obscure the true nature of these sales.) While all this is going on, landlords will “milk” the building, putting off needed repairs and neglecting to pay taxes. This causes the true value of the building to deteriorate further below the insured value and make life miserable for the building’s tenants. When the building is **torched** [emphasis mine], the profit will be considerable.*

Several years later, Duncan Kennedy (1987) laid out a theoretical framework for how this “milking” would occur when low-income housing landlords respond to the perceived lack of profitable rents in this market. In declining neighborhoods, landlords would not be able to increase the rent that they charge. As the property ages, the rational action for the landlord increasingly would be to purposely allow the property to degrade. His law student Robin Powers Kinning (1994) further nuanced the argument, drawing a distinction between the “sociopathic” milker who drives his property into the ground as a strategic decision and the unfortunate landlord who finds himself financially underwater and milks out of financial constraints.

In the background of the evaluation of the landlord was a fierce discussion of the efficacy of, and strategies for, housing code enforcement. Code enforcement stands as the principal municipal policy lever against low-quality housing. Ackerman (1971), Komesar (1973), Heskin (1978), and Reed (1979), among others, engaged in ongoing debates about whether code enforcement was truly a benefit for the poor. Increasing housing standards could increase living conditions, but at the same time the increase in rents to recoup the costs of improvements could displace tenants. This debate raised a fundamental question that will flow through the paper: is poor-quality housing just a natural consequence of poverty? For housing to be provided as an in this market, does it necessarily have to be undermaintained, or else risk not being provided at all? Or are there market conditions that make high-quality, low-rent housing possible?

2.2. Rebirth of Interest

For most of the 1990s and 2000s, the literature regarding landlord behavior appears to have gone largely silent. However, in the past decade or so, there has been a meaningful rebirth in academic interest in understanding the behavior and consequences of landlords in the low-income market. This paper will focus on the set of authors who have contributed substantially to this literature (notably Desmond, Garboden, Immergluck, and Mallach) and weave their findings into a more comprehensive narrative of what is happening in this housing space. But why has there been this reemergence in study of landlords, both in academic settings and newspapers? I find at least three reasons:

1. **The Emergence of the LLC** – As Travis (2019) identified, the Limited Liability Company (LLC), which emerged across the country most meaningfully from 1988 to 1996, reshaped the direction of landlord-tenant relations, giving landlords a new mechanism for pursuing both limited liability and anonymity in operations after the 1970s and 1980s saw relative gains for forcing landlord responsibility in the legal arena. The presence of these entities has created new wrinkles to old stories about landlord disinvestment.

2. **The post-recession shift in the housing landscape** – The Great Recession, a crisis borne out of failures in the housing market, has itself reshaped the composition of ownership of the American housing stock. The collateral impacts of the Great Recession both caused individuals to shift from homeownership to renting and created a lucrative market for investors to convert previously owner-occupied housing into rental units, particularly in communities most affected by the housing crisis (Mallach 2014). The issue of the quality of rental housing has become more acute as more people have become renters. The issue of landlord absenteeism has been exacerbated by this new class of property investors, including some single-family home (SFH) investors who are encouraged to invest in properties from afar (Immergluck and Law 2014; Christopher 2019).
3. **The renewed discourse on eviction** – Matthew Desmond’s work around landlord behavior has refocused researchers’ and the broader public’s attention on the specific role that landlords play in this market. Before him, Hartman and Robinson’s “Evictions: The Hidden Housing Problem” in 2003 is credited with reinvigorating a scarce academic literature (Nelson et al. 2021). Not only do landlords evict, they may overcharge Section 8 tenants (Desmond and Perkins 2016), preventing that program from serving more people in need, and they can earn extra-normal profits on the backs of poor tenants (Desmond and Wilmers 2019). These findings have influenced other new sociological research in the housing arena, including work around LLCs (Travis 2019) and code enforcement (Bartram 2019).

The new literature has helped to create a nuanced understanding of how landlords behave. Garboden and Newman (2012) took a deep dive into the paltry finances of Baltimore landlords to understand why they were unable to maintain properties. Mallach (2014) and Immergluck and Law (2014) illuminated differing incentives and interests within the private small-scale housing market by investigating the increased role of property investors in single-family homes following the foreclosure crisis. Mallach identifies investors who are interested fundamentally in property appreciation, i.e. “flipping,” milking, or holding the properties with a “normal” expectation of return without degrading the property. Rosen and Garboden’s (2020) detailed ethnographic work with landlords and property investors further explored the differing personal motivations for engaging in the space, with both an entrepreneurial mindset and a paternalistic desire to improve the lives of poor people serving as major factors for why many engage in landlordism in a financially challenging market. And on the opposite side of the coin, ethnographic study of code enforcers has shed new light on the current regulatory regime. Bartram (2019) has evaluated how code enforcer discretion fits into the code enforcement landscape, finding that code enforcers tend to penalize larger landlords over smaller interests and, especially, poor homeowners.

Still, there are substantial gaps in the literature that this paper will help to address. More research is needed to better understand the prevalence and nature of private small-scale housing for the poor, the fundamental market dynamics that drive a lack of quality in that housing, and then solutions for correcting the dynamics that lead to housing that is low in quality and quantity. In particular, this paper will innovate on the literature by providing:

- New strategies for tracking landlord ownership of properties, and implications for neighborhood-level housing markets;

- An investigation of unique forms of housing finance and financial incentives in the low-income market; and
- More comprehensive evaluation of the policy strategies available to policymakers in light of the continued challenges in the market, the COVID-19 crisis, and the opportunity for policy reform under the new administration.

3. The Enduring Role of Private Housing for the Poor in American Cities

Amid the relatively sparse literature described above, a large portion of the literature on low-income housing specifically in the United States is focused primarily on public housing and on subsidized low-income housing, like the Low-Income Housing Tax Credit (LIHTC) program.¹ However, most people in the United States, including most poor people, live in private housing that is paid for with private dollars. In 2003, of the 27.4 million total renters in the United States, only one-fifth lived in a subsidized unit (Apgar and Narasimhan 2006). Today, while there are 17.6 million very low-income and extremely low-income individuals in America,² only 4.5 million Americans receive rental support, and there are fewer than one million units of traditional public housing (Joint Center for Housing Studies 2019).³ While individuals may receive supplemental income through programs such as Social Security Disability Insurance, they are largely paying “out of pocket” to a private landlord.

This reality, that the bulk of housing for the poor has been privately owned and privately financed, has been the overarching condition of the American urban housing market throughout history. Even in periods where government has sought to build housing or provide subsidy for low-income housing, it has never comprehensively provided assistance to the poor for their housing needs. Below, I briefly review the role that private housing has played in three eras of American urban housing policy. This review reinforces that while the ebbs and flows of direct government involvement in the provision of housing are critical to understand, the private market’s dominance is the most salient feature for understanding how the poor live in this country. Policy solutions have to begin with this market and its actors.

3.1. 1880s-1930s: Private Urbanization and Landlordism

In this first period, housing for the poor was provided in tenements, shacks, and other forms of often low-quality and crowded housing, the sort of places that were the focus of progressive reformers and documented in Jacob Riis’s *How the Other Half Lives*. During this timeframe, urban areas were burgeoning and rental housing along with it. In the US, 24.4 percent of new housing consisted of apartments in 1921. By 1928, it was 53.7 percent, much of which was built by new professional corporations dedicated to apartment building (Dennis 1995, 312). These private enterprises held the largely exclusive domain of housing development. The first true public housing complex, Garden Homes in Milwaukee, was constructed in 1923. It was perceived of as a failure and abandoned before the end of the decade (Attoe and Latus 1976).

¹ More recently, due to supply constraints on housing for lower middle-class and even moderate-income families, particularly seen in desirable coastal cities, an emerging strand of literature has focused on how to produce more housing generally (*See* Glaeser and Gyoriko 2003; Buntten 2017, for example).

² According to the U.S. Department of Housing and Urban Development, “very low income” Americans earn less than 50 percent of the area median income and “extremely low income” Americans earn less than 30 percent of the area median income.

³ Some of this decline is due to the Rental Assistance Demonstration (RAD) program, which converts traditional public housing into project-based Section 8 units.

And with the private landlord dominant, so too was renting overall. Between 1891 and 1941, the urban homeownership rate in the U.S. hovered in the 30s, reaching a maximum of 44 percent of urban dwellers in 1931 before the Depression reduced the rate back to 38 percent (Dennis 1995, 320). In this time period, patterns of behavior and financial incentives that will be subject of our present-day analysis began to emerge. During multiple periods of this timeframe, landlords found pretty meager returns in the low-income market. An approximately 3-3.5 percent return on investment was the going rate for properties in New York City at the turn of the 20th Century. Capital to invest in new housing often fled to more remunerative ventures. As housing became scarcer as a result following World War I, the shortages drove both rent increases and property condition declines, while tenants were left with limited choices (Fogelson 2013).

In this period, the efforts of reform and improvement remained largely private. The National Housing Association was created to advocate for higher quality homes for low-income urban dwellers (Veiller 1911). The Tenement House Act of 1901 in New York, one of the key regulatory reforms of this era, also focused on improving construction standards of private housing for the poor (Fogelson 2013, 18).

3.2. 1930s-1970s: The Rise of Public Housing

The second period, spanning from the 1930s to the early 1970s, is thought of as a period of substantial construction of social housing in the US. However, during this era, new housing was designed not to house all the poor who were living in so-called slums, but rather to reward the “deserving poor” with high quality housing. It was not an effort to increase the overall quantity of housing for the poor, either, and most of the early public housing did not serve the poorest of the poor (Vale 2000). In fact, between 1949 and 1974, the urban renewal policies that accompanied public housing development destroyed 500,000 low-income housing units (Gilderbloom and Appelbaum 1988). In Boston, only 12 percent of residents in cleared slums found housing in new housing projects. In New York, the figure was 18 percent. By the end of the 1970s, the number of public housing units in the country would only reach 1.2 million (Vale and Freemark 2012).⁴ During this period of great investment and destruction associated with public housing, where did the rest of these poor people live? They lived in unsubsidized privately-owned housing.

George Sternlieb, in *The Tenement Landlord* (1969), documented the nature of such housing in Newark, NJ in the 1960s. Newark is a pivotal case, as it received some of the highest urban renewal dollars per capita in the country. Sternlieb considered the other side of that supposedly model city, noting that the existing stock of private, low-income housing far outstripped the new supply offered by public programs, by approximately fortyfold (Sternlieb 1969, 2). At the time, he found the housing in Newark to be of generally poor, “blighted quality,” with relatively high rents despite the low incomes of the residents living there. The story of the role that private housing played during the urban renewal era is chronically underappreciated and further credence that more attention should be paid to the private market that existed in its shadow.

⁴ These figures do not include project-based Section 8 vouchers.

3.3. 1970s to Present: New Federalism and Public Retrenchment

The third period of housing policy, from 1974 to today, was largely a period of re-privatization. The implementation of New Federalist housing policy under Nixon saw the implementation of the Section 8 program and the transition away from traditional public housing, including the imposition of a moratorium on new public housing in 1973 (Morris 1974). However, the new Community Development Block Grant (CDBG) program, which could be used for public housing, meant that public housing units reached their peak of 1.4 million by the late 1980s (Vale and Freemark 2012).

In the 1980s and 1990s, the Low-Income Housing Tax Credit (LIHTC) program and then the HOPE VI program to redevelop public housing focused on increasing the quality of housing in which the poor lived (Crowley 2009) and on increasing the housing available to the poor through private ownership (Vale and Freemark 2012). As a result of these policy changes, LIHTC and Section 8 Housing Choice Vouchers (HCVs) became the two largest sources of subsidized housing in the country. Since its creation, LIHTC has created 2.3 million units (Payton Scally et al. 2018). By 2011, 2.2 million units had HCVs associated with them, 1.4 million units had project-based Section 8 vouchers, and there were under 1.2 million public housing units and falling (Vale and Freemark 2012). The emergence of HCVs and LIHTC underscored a further private role in housing for low-income Americans, as both rely on private developers and landlords to provide the vast majority of the subsidized units.

While some may debate the wisdom of the privatization of the housing stock, this period reinforces the importance of the questions in this paper's research agenda. An era of privatization has led to an even more central role for private landlords in the low-income space. Meanwhile, the units provided under the subsidy programs implemented in this period still represent only a small portion of the overall need as described in greater detail below. The LIHTC program has proven particularly challenged at providing housing for the poorest of the poor (Ibid.). And as a result of budget compromises made in the 1990s, the guaranteed replacement unit for former public housing tenants was struck in LIHTC implementation (Crowley 2009). As a result, as former public housing tenants were displaced from their "twice-cleared" (Vale 2013) neighborhoods and these new programs failed to meet all the needs of the poor, everyone else was left living in private housing supported by private incomes. This paper aims to understand that world.

4. The Role of Private Small-Scale Low-Income Housing in Today's City

Moving from the historical perspective, an understanding of small-scale low-income housing today should start by examining the role of such housing in the American city. To do so, I begin with an overview of the scale of this housing type nationally and then focus in on the case study of New Haven, CT to show how this housing comes to predominate in low-income neighborhoods.

4.1. Small-Scale Housing Nationwide

Among all renters, nearly 11 million live in single-family homes (Apgar and Narasimhan 2006). Across all rental housing units in the country, approximately half are in the 1-4-unit market (Mallach 2007). Much of the privately provided housing for the poor in particular is small-scale. Forty-seven percent of housing units in cities in the United States are in buildings with four units or fewer, and they house 44 percent of the urban poor.⁵ Eighty-six percent of units are in buildings with 50 or fewer units and they house 85 percent of the urban poor (Garboden and Newman 2012). Many poor people live in single-family homes, in both cities and rural areas. The archetypal housing for the poor in rural and exurban areas is the trailer, which houses 20 million Americans through mixed ownership and rental structures (Salamon and MacTavish 2017). The vernacular architecture in the working-class areas of many cities is also small-scale. The Boston triple-decker, the Baltimore rowhouse, the New Orleans shotgun house, the Chicago two-flat, and workers' cottages of industrial company towns have historically housed the poor and continue to do so today.

The U.S. Census Bureau's Rental Housing Finance Survey (RHFS), which has been conducted intermittently over the last two decades, provides further exploration of the housing trends. Within the 1-4-unit rental market, only around one-third of units are owner-occupied (Mallach 2007). Just 22 percent of rental units in small buildings are managed professionally and only 42 percent have an active mortgage (HUD 2020).

4.2. The Role of this Housing in New Haven, CT, a Case Study

As a case study, this paper looks at four low-to-moderate income neighborhoods in New Haven, Connecticut (population 129,000) to understand the composition of residential property type and ownership in low-income communities. Methodologically, this example aims to evoke Sternlieb's (1969) work to document who owned the "slums" of Newark as part of a larger study to understand what could be done to address issues of housing condition. Then, as now, understanding the nature of the neighborhoods we are seeking to improve is central to a coherent and effective policy response.

⁵ When referring generally to "low-income" or "poor" renters, this paper is referencing individuals who make 150% of the Federal Poverty Line or less, which is currently \$39,300 or less for a family nationwide. While U.S. Department of Housing and Urban Development standards are 80% of area median income, in high-rent markets this definition can rise into the high five-figures.

The four neighborhoods selected are Dixwell, Fair Haven, the Hill, and Newhallville. Dixwell and Newhallville are nearly entirely African-American neighborhoods, while the Hill is racially mixed, with the “North Hill” historically more Hispanic, the “South Hill” historically more Black, and “City Point” at the far south of the neighborhood whiter and more affluent. Fair Haven is historically the Hispanic neighborhood in the city. Once largely Puerto Rican, it has seen more recently an influx of Ecuadorian immigrants, while the “Chatham Square” section in the northeast of the neighborhood has become increasingly gentrified (City of New Haven 2003; Appel 2008). **Table 1** below lays out the demographic information associated with these neighborhoods.

Table 1. *Demographic Characteristics of Four Studied Neighborhoods*

<i>Characteristics</i>	Dixwell	Fair Haven	Hill	Newhallville	Citywide
Population	5,045	16,273	15,069	6,036	130,884
White %	19%	15%	14%	3%	30%
Black %	56%	20%	36%	79%	31%
Hispanic %	18%	64%	46%	16%	30%
Median HH Income	\$25,320	\$35,370	\$28,809	\$27,769	\$37,508
Poverty Rate⁶	30%	33%	39%	34%	26%
Low-Income Rate⁷	54%	59%	64%	71%	48%
Homeownership Rate	15%	20%	25%	26%	28%
Unemployment Rate	22%	18%	19%	14%	7%

Sources: Data Haven 2015; Data Haven 2016; Data Haven 2019

To better understand the housing characteristics of the neighborhoods, I consulted the New Haven tax parcel map provided by the City of New Haven GIS Department. I then validated the data in the map using the City Tax Assessor’s online parcel data lookup tool. I analyzed the parcel map data based on the following characteristics:

- **Property type:** Multifamily, and single-family 1-4 units were assessed
- **Number of dwelling units:** Buildings with 1-50 units were assessed
- **Property ownership, specifically:**
 - Address of owner relative to address of building;
 - Presence of LLC, estate, or other holding entity in ownership records; and
 - Number of holdings by single property owner and related entities.

Citywide data were examined to provide summary characteristics in the city, in addition to detailed information about the parcels in the four studied neighborhoods. In total, 18,958 residential properties were examined at the citywide level and 8,047 total properties were evaluated in the four study neighborhoods.

⁶ Measured as number of individuals below the Federal Poverty Line.

⁷ Measured as number of individuals below 200% of the Federal Poverty Line.

4.2.1. Findings

Initially, I identified summary-level information about 18,958 residential properties (of 23,704 total) in New Haven. That information is provided in **Table 2** below.

Table 2. New Haven Citywide Housing Statistics

<i>Attribute</i>	Frequency	Percentage
Total Properties	23,704	
1-4 Unit Building Properties	18,283	
<u>Single Family Ownership Characteristics</u>		
Owner Address is in New Haven	16,005	88%
Owner Address is <i>not</i> Owned Property	6,000	33%
Number of “Unique” ⁸ Owners	16,308	
Number of LLCs	685	
5-50 Unit Building Properties	655	
5-50 Unit Buildings Units	7,417	
<u>5-50 Unit Ownership Characteristics</u>		
Owner Address in New Haven	341	52%
Owner Address is not Owned Property	545	83%
Number of Unique Owners	506	
Number of LLCs	226	

At a citywide level, we can see the degree to which small buildings dominate the composition of properties in the city and the overall number of units throughout the city. We can also learn something about the nature of ownership. So-called “absentee landlords” can be as narrowly defined as landlords who do not live in their rental (Elorza 2007), though this term may also describe the subset of those landlords who fail to attend to property maintenance needs. It appears that “absentee” landlordism does not initially appear to predominate in the citywide small housing market. Owners appear to be located for the most part in New Haven, if not directly connected to the property they own. We will explore further the truth to that appearance with further investigation of hidden ownership patterns. The 5-50-unit market, however, begins to show a broader collection of out-of-town and professional landlords.

Turning to the four neighborhoods chosen for this study, we see similar trends in property type and ownership in **Table 3** below. When we aggregate information from the four neighborhoods, we see the relatively outsized role that LLCs and potentially absentee landlords play. Half of the LLCs are represented in these neighborhoods, despite being only one-fourth of the city’s residential housing stock. Still, small housing predominates here, as well, representing 73% of the properties. The data also highlight the large number of different landlords, with single family 1-4-unit landlords owning just barely over one property on average, and multi-family owners owning about 1.3 buildings.

⁸ We must be careful here, because many of the “unique” landlords are tied together when LLCs, property management arrangement, and family ties are brought together, as described further below.

Table 3. Housing Ownership Characteristics in Four Low-Income Neighborhoods

<i>Attribute</i>	Frequency	Percentage
Total Properties	8,407	
Single Family 1-4 Unit Properties	6,152	
Single Family Ownership Characteristics		
Owner Address is in New Haven	5,124	83%
Owner Address is <i>not</i> Owned Property	2,178	35%
Number of Unique Owners	5,428	
Average Buildings/Owner	1.1	
Number of LLCs	358	
5-50 Unit Ownership Characteristics		
Owner Address in New Haven	90	45%
Owner Address is not Owned Property	169	85%
Number of Unique Owners	156	
Average Buildings/Owner	1.28	
Number of LLCs	59	

The ubiquity of the small-scale rental building comes to life in **Figure 1** below, which shows the composition of the residential buildings in the four neighborhoods. The red areas are 1-4-unit buildings, while yellow areas are 5+-unit apartment buildings. Light blue areas represent condominiums. The large swaths of red reinforce that the predominant housing and buildings in these four low-income neighborhoods is the 1-4-unit building that is the focus of this study. Addressing the quality issues of the ubiquitous small residential building can have broad implications for the conditions of whole neighborhoods. I will later address the nature of ownership in the low-income rental market and what that means for how the market works. Addressing property-level housing quality issues must contend with the large number of actors and large number of individual properties who all must be engaged with, through regulation and policy, to force improvements in property condition. It is a massive collective action problem.

Figure 1. Housing Composition in Dixwell, Fair Haven, the Hill, and Newhallville



5. The Human Cost of Low-Quality Housing for the Poor

The incentives and dynamics of this market matter because they have a direct relationship with the living conditions and life outcomes of low-income tenants. In this section, I outline the broad social consequences of low-quality housing and then highlight the personal stories of tenants in New Haven, CT and elsewhere in the U.S.

5.1. The Social Consequences of Low-Quality Housing

Matthew Desmond's work, including his seminal book *Evicted* (2017), has helped to re-center the active role that landlords play in poor people's lives. As Desmond and others have made clear, private landlords can, and do, evict tenants in large numbers in this market. Desmond has found that one-fourth of all moves between units by low-income residents were the result of eviction notices. Evictions have consequences that spill into other aspects of tenants' lives. For example, Desmond found that evicted workers were 15 percent more likely to be laid off than those with more stable housing.

Landlord decisions around investment also have a variety of implications for tenants. Poor-quality housing is also associated with poor health. Scholars have begun to pay particular attention to lead poisoning as a central cause of a host of individual and societal ills (Krieger and Higgins 2002), including higher levels of local crime (Armitage et al. 2013; UNC Charlotte Institute 2010). Leventhal and Newman (2010) found strong associations between environmental toxins and overcrowding in housing and children's health. One study of child burn victims indicated that 99 percent of such victims lived in a low-quality home, with many lacking fire alarms and appropriate hot water temperatures (Gielen et al. 2012). Another study found a strong correlation between poor quality housing and mental health distress (Evans et al. 2000). This mental health relationship appears significant for both elderly individuals (Evans et al. 2002) and pregnant women (Suglia et al. 2011). Poor quality housing also appears to be correlated with asthma incidence in children (Northridge et al. 2010).

The pervasiveness of low-quality housing is severe in the low-income market. More than ten percent of renters nationwide report having been uncomfortably cold in their units due to lack of heat for more than 24 hours (US Census Bureau 2011). While only 5.2 percent of units nationwide are characterized as "inadequate" by the Census Bureau due to severe deficiencies in basic housing elements like running water, toilets, heat, and electrical systems, individuals earning under \$25,000 per year are four times more likely than those making over \$75,000 to live in such derelict housing (Raymond et al. 2009). In Baltimore, for example, 40 percent of homes are substandard (Garboden and Newman 2012). Memphis has a similar substandard rate (Stacy et al. 2018). There has long been substantial correlation between low-income and minority status and inadequate housing (Stegman 1982), **meaning that the negative social and personal effects of poor housing are felt enduringly and generationally**. As a result, housing quality is another element of the substantial social inequality that exists in the US.

Yet the deficiencies in the housing that is available for the poor sometimes occlude the other outstanding issue: in many parts of the U.S., very little housing is available on the private market that is affordable for the poor at all. The lack of supply discussed previously creates

considerable financial challenges for low-income residents. Only 31 percent of renters can afford the median apartment asking price in the country (\$1,550). Meanwhile, prices and sales associated with rental housing were at close to all-time highs (Joint Center for Housing Studies 2018) before the COVID-19 pandemic altered the market. The issue of housing scarcity for the poor has major implications for the structure of the market and housing quality. High rent burdens and few options mean that the poor have limited leverage in seeking to leave low-quality housing.

5.2. Tenant Stories from New Haven and Elsewhere

Beyond the numbers, the consequences of low-quality housing are real and life-threatening for some of the most vulnerable tenants. Below, I recount some case studies of how these consequences have played out for residents of low-quality housing.

Michael Steinbach and Janet Dawson, a Fort Lauderdale, FL based couple, have been active in the New Haven housing market since at least 1995. Owning 200 rental properties at their peak of activity in the early 2010s, they vastly increased their holdings in the city at the tail end of the Bush boom years and the beginning of the foreclosure crisis. From the beginning, they were well-known in the city for their limited commitment to housing quality, scrimping on nearly any form of maintenance (Satija 2011a).

Properties owned by the couple, who have operated under a number of management firms, have been the source of the most complaints to the city's code enforcement agency, at least since 2008. Horror stories from residents tell the extent of the properties' disrepair. Take Delwana Wiggins, who lived in a Steinbach-owned property in Chatham Square, a mixed-income area of the Fair Haven section of New Haven.

Wiggins has been living in her second-floor apartment for nearly four years. A few weeks before the accident in August 2009, she noticed that her bathroom ceiling had started leaking and called her landlord.

"They kept saying they were going to send somebody out to fix it, and they never did," Wiggins said...On the morning of Aug. 15, she got up to use the bathroom. She heard a tenant in the third-floor apartment moving around right above her. "Next thing you know, the whole ceiling just caved in on me."

Her brother pulled her out of the bathroom as rocks and cement fell top of her. As a result of her injuries sustained during the ceiling collapse, Wiggins suffered a miscarriage. She is not alone. Back in 2005, 13-year old Pedro Hernandez slipped and fell when walking by a Steinbach property, cutting his face on a rusty fence, and scarring it (Satija 2011b).

Housing quality can devastate tenants even when the landlord is not malicious in their mismanagement of the property. The plight of both financially-strapped landlords and their tenants played itself out in a courtroom in New Haven in July 2011. Two weeks earlier, a 59-year-old woman leaned against the front railing of her second-story porch in Newhallville chatting with a neighbor, when the railing gave way and she fell 20 feet to the ground. She was

later admitted to a local hospital. As a result of the accident, the landlord was arrested. The property had several housing code violations, and the city had been working to serve a warrant against the landlord for three months. However, this landlord, Joanne Keyes, was not some mischievous professional landlord from outside of town. Instead, she was a 79-year-old retired English teacher. The injured tenant, in fact, was her niece. Over the years, the niece has suffered from physical, mental, and drug-related problems, for which Keyes had great sympathy, often allowing the niece to live rent-free for months at a time. Nevertheless, while there are few signs of negative intent in this example, a poor, old woman's inability to pay for needed improvements brought about poor quality and injury ("New Haven woman" 2011).

Other stories across the country, often in alt-weeklies, talk of the real consequences of insufficient maintenance of the housing where many live. Failure to effectively manage carbon monoxide has displaced tenants (Bailey 2011). As has inattention to natural gas heating, which can result in catastrophic explosions. In Long Branch, a Hispanic suburb of Washington, DC seven died and dozens were displaced from a natural gas explosion (Iannelli 2017). During the current COVID-19 crisis, as landlord incomes have been limited by mass unemployment, some have resorted to serious reductions in maintenance. That has resulted in accumulating trash, mold, and infestations for residents (Gallaher 2021). In the *COVID-19* section of this paper, I will further explore how the current crisis has exacerbated the existing challenges in the low-income market.

These stories remind us that the condition of housing for the poor continues to matter as a critical public policy issue for addressing a host of other human health, neighborhood stability, and economic opportunity public policy goals.

Housing Framework

To craft a coherent framework for understanding the small-scale, private, low-income housing market, we will start with an exploration of the dynamics of the market at a property, portfolio, and neighborhood level. From there, we will turn to how finance affects the market and what the economic and finance regimes mean for the incentives of market actors.

6. The Microeconomics of the Market

To explain the microeconomics of the market, I will incrementally build out the scope of analysis to methodically understand the nuances of how this market functions. I will begin with the key actors, landlords, explaining the different types of landlords and approaches for understanding how they make decisions. This will entail giving consideration to their different incentives and approaches. Next, I will turn to building-level economics to understand the resource constraints under which landlords make decisions on a building-by-building level. From there, we will look at how more professionalized landlords build out their portfolios into viable and sustainable businesses. Then I will look at the neighborhoods in which this housing is located and how neighborhood markets affect landlord economics. The final piece of the puzzle will be about larger questions of market structure and power: are private low-income housing markets truly competitive and how does the structure of the Limited Liability Company (LLC) hide oligopolies in housing.

6.1. Landlord Typologies

Actors in the rental housing space come in with a variety of interests and approaches to how they do business. Historically in the literature, landlords have been divided between *amateur* and *professional* landlords, with professional landlords sometimes referred to as “absentee” landlords (Sternlieb 1967; Elorza 2007).

6.1.1. Amateur Landlords

For our purposes, amateur, or small, landlords are those landlords that own fewer than ten properties, purchase properties as a means of passive income secondary to their primary occupation and, in contrast to professional landlords, come to acquire properties in a more ad hoc and less targeted manner. They may also be owner-occupants who rent out other units in the building. Based on analysis collected by Mallach (2007), landlords with only a few holdings are the predominant type of landlord in the country. Using the Census Bureau’s Property Owners and Managers Survey from 1995 and the 2001 Residential Finance Survey (RFS), he found that 85 percent of single-family attached properties are owned by individuals who own 10 or fewer units. That number declines only slightly to 82 percent for two-family buildings and to 71 percent for 3-4-unit buildings. While more recent Rental Housing Finance Surveys (RHFS) do not provide a perfect updated comparison, the 2015 RHFS did find that 77 percent of 2-4-unit buildings are owned by individual investors versus other entities (U.S. Census Bureau 2015).

For these small and amateur landlords, the mortgage remains the principal source of financing. An estimated \$400-\$500 billion in outstanding mortgage debt is held in the 2-4-unit market (Mallach 2014). **Table 1**, below, provided from Mallach (2007), indicates the

predominance of the mortgage as a financing instrument. Mallach also finds that 77 percent of investors in the 2-4-unit space used a mortgage to acquire a new property. The 2015 RFHS data indicate that 65 percent of 2-4-unit buildings with valuation under \$200,000 have a mortgage (US Census Bureau 2015).

Table 4. Mortgage Status in Small Housing Units

Category	Single family properties	2-4 family properties
Mortgage status:		
With mortgage	39.2%	53.3%
Without mortgage	60.8%	46.7%
Type of mortgage instrument:		
Fixed rate level payment	75.9%	75.8%
Adjustable rate mortgage	10.4%	14.0%
Balloon or other	13.7%	10.2%

Source: U.S. Census Bureau 2001; U.S. Census Bureau 2018; table format recreated from Mallach 2007

The data seem to show that the mortgage is the main way many landlords are financing their housing investment. Those without a mortgage generally indicated that they did not have one because the financing was not needed (US Census Bureau 2018). What is perhaps interesting, though, is the converse of this finding. While mortgages are predominant, a not insignificant (46-60 percent) proportion of the market is unmortgaged. The properties without mortgages tend to be old (Apgar and Narasimhan 2008), meaning that, while existing financing costs may not stand in the way of housing quality improvements, the additional need for investment may be overly burdensome for the landlord.

Many of the amateur landlords, particularly owner-occupants, are relatively moderate-income individuals themselves trying to manage properties that just do not cash out. As authors have found over different timeframes (Gilderbloom and Appelbaum 1988; Garboden and Newman 2012), many small-scale rental properties just do not make positive cash flow on a yearly basis. Garboden and Newman identified, in particular, the possibility of financing costs wiping out whatever meager profits a landlord earns, which is a particular challenge for working-class individuals who have a small portfolio. I will further discuss the nature and implications of these economics in the pages that follow.

What does all this mean for housing quality? Amateur, small-time landlords who may live in the low-income neighborhoods they seek to serve face a financing landscape that is expensive on an asset with poor returns with limited financial means to guard against downward risk. While more favorable financing would potentially reduce their burden, the fundamental precarity of the owner and their asset seem to drive disinvestment, as recounted in Schloming and Schloming (1999):

Small owners...do their own management and repairs and often delay costly capital improvement as long as they can. They will nurse along a leaky roof and old plumbing just to squeeze out a few more years of life before doing big-buck capital replacements.

6.1.2. Professional Landlords

Professional landlords, meanwhile, are those who own and operate rental housing as a major occupation, often incorporated through a formal entity, and have a portfolio of 10 or more properties. As with amateur landlords, the literature is divided on normative questions about professional landlords. The sociology literature finds that professional landlords are interested in shorter ownership periods in order to achieve a quick resale and are likely to have higher operating costs and higher rents (Gilderbloom and Appelbaum 1988). They are also more likely to use LLCs, which in the low-income market can be used to conceal landlords who consciously degrade properties from consequences (Travis 2019). However, they also have the ability to professionally manage large portfolios of buildings and drive cash flow from them (Garboden and Newman 2012). This large portfolio also allows them to weather vacancies more, leading to more tenant screening and higher and longer vacancy rates (Gilderbloom and Appelbaum 1988). As we will discuss further, the size and nature of the portfolio may also set price and condition in neighborhood sub-markets. The largest and most professional owners, those who own more than 50 units, hold 10 percent or less of the stock across the 1-4-unit market. However, those holdings amount to 850,000 to 900,000 units nationwide (Mallach 2016), a sizable sum in aggregate.

What does this mean for housing quality? Professional landlords play a large role to play in neighborhood housing conditions in urban areas. At once, they likely have resources to handle major repairs to housing, but they may also pursue financial strategies that degrade property or move it out of the housing market that allow them to achieve returns on a larger portfolio basis. In the next sections, we will dive into the detailed finances of these landlords to better explain how they operate.

6.1.3. Holders, Milkers, and Flippers

Building on our characterization of landlords based on their professionalism, we can look at their economic strategies. From the literature, there are three competing visions of how market actors operate. Under the first framework, the housing stock in this market is fundamentally unprofitable. As a result, landlords choose to milk as a rational strategy for deriving value from the low end of the market. The 2015 RHFS data indicate that, of 2-4-unit properties for which data is available, 60 percent earn less than \$1,000 per month per dwelling unit. Among owner-occupants in the 2001 RFS, the median income was \$39,245 (Mallach 2007).

In their review of small properties in the low-income market, Garboden and Newman (2012) evaluated representative properties with 4 or fewer units using the 2001 Residential Finance Survey.⁹ They found that of those properties, 22 percent have negative net operating income (NOI). As they described it, “these properties are worthless and cannot be maintained at their current rent and vacancy levels” (Garboden and Newman 2012, 512). Of the properties that do have positive NOI, 23 percent of those go in the red when evaluated at the equity before tax level, once their debt burdens are considered. Using these figures, **40 percent** of housing in this market is fundamentally unprofitable. Even more striking is the broader lack of financial stability in this market. Garboden and Newman estimate that landlords in this market require about \$1,000 in cash-on-hand to mitigate the costs of vacant units and unexpected maintenance. They

⁹ After a 12-year hiatus, the RFS was reborn as the Residential Housing Finance Survey in 2013, 2015, and 2018. Later sections will refer to the more recent surveys.

find that only 5 percent of properties in the market have owners with that financial stability. They provide a representative discounted cash flow, as shown in **Table 5** below.

Table 5. Cash Flows of Small Properties

	With mortgage		Without mortgage	
	Mean	Median	Mean	Median
Operating Income (annual)				
Commercial rent	\$2	\$0	\$0	\$0
Residential rent	\$7,758	\$6,502	\$5,216	\$4,575
Effective Gross Income	\$7,760	\$6,502	\$5,216	\$4,575
Vacancy Loss	11.5%	0%	18.8%	0%
Vacancy Income Loss	\$1,005	\$0	\$1,209	\$0
Potential Gross Income	\$8,765	\$6,502	\$6,425	\$4,575
Operating costs				
Project management	\$140	\$0	\$210	\$0
Land rent	\$87	\$0	\$83	\$0
Maintenance	\$1,458	\$783	\$967	\$421
Other expenses	\$196	\$0	\$65	\$0
Utilities	\$718	\$0	\$447	\$0
Mortgage insurance	\$37	\$0	\$0	\$0
Property insurance	\$431	\$337	\$364	\$325
Property tax	\$1,223	\$903	\$878	\$602
Total operating costs	\$4,289	\$3,058	\$3,014	\$2,179
Net Operating Income	\$3,471	\$3,383	\$2,202	\$2,227
Debt service				
First mortgage	\$7,939	\$6,068	\$0	\$0
Second mortgage	\$273	\$0	\$0	\$0
Total debt service	\$8,212	\$6,068	\$0	\$0
Cash Flow after Financing	(\$4,741)	(\$3,070)	\$2,202	\$2,227

Source: Garboden and Newman 2012

If investing in, and owning, small rental property is so unprofitable, why would individuals do so? The literature that falls into this framework argues that the two approaches to achieve positive net cash flow are either (a) to take advantage of depreciation or other tax benefits or (b) so-called “milking.” Gilderbloom and Appelbaum noted in 1988 that landlords had seen near-continuous decreases in cash flows from 1960, often resulting in negative cash flows, but that the ability to make use of write-offs from depreciation rendered the investment valuable.¹⁰

The act of “milking” refers to a landlord’s conscious degradation of a rental property in order to maximize profit while foregoing the long-term suitability of the housing stock. In 1987, Duncan Kennedy articulated a framework for the rationality of milking in the sort of situation that Garboden and Newman describe: where making appropriate expenditures in the building result in a loss. As soon as a landlord realizes that he cannot make money by maintaining the property adequately, he will begin to scrimp on maintenance. There are both multiple-owner and neighborhood-level consequences of this incentive. If a previous landlord has milked the

¹⁰ Depreciation from an investment perspective (Bokhari and Geltner 2016) complicates matters, as depreciation decreases the cash flow expected from a property.

property, a new owner will be disinclined to invest more in maintenance to rehabilitate the property. Under this framework, such investments would almost certainly result in a loss. At the same time, one landlord's decision to milk might push the "animal spirits" of local landlords in a negative direction. As Kennedy writes, in response to one milking landlord, "every landlord might be able to invest more in maintenance of existing structures, hoping thereby to get higher rents and increase property values, were it not for the fact that each believes that others are and will continue disinvesting, so that the neighborhood is in an inevitable state of decline" (Kennedy 1987, 512-3).

In this first framework, then, investing in and owning small housing at the low-income level is fundamentally unprofitable. That creates a strong and pervasive incentive to do wrong by property, tenant, and neighborhood and milk the property for its short-term value. In this framework, milking is an unfortunate consequence of the limited resources in the low-income housing sector.

A second framework argues that there is ample profit to be had in the low-income sector. In a recent paper, Desmond and Wilmers (2019) outline that above-normal profits can be extracted from rental properties in low income neighborhoods. Using data from Milwaukee and nationwide, they find that landlords spend less on maintenance for low-income tenants than high-income tenants. However, they also find that while property values and taxes are lower for low-income properties, rent levels are relatively consistent for high- and low-end renters. This disparity results in higher profits for landlords operating in low-income neighborhoods as opposed to middle-income neighborhoods.

Additionally, Desmond and Perkins (2018) found that the Housing Choice Voucher Program (HCVP), or Section 8, can be additionally lucrative. Using area fair market rents inflates the Section 8 market rent in low-income neighborhoods. As a result, landlords are implicitly "overcharging" Section 8 tenants as compared to other low-income tenants who happen, by policy or lottery,¹¹ not to have the subsidy. In Milwaukee, that overcharge amounts to \$3.8 million annually (Desmond and Perkins 2018).

But how is it that the extra-normal profits that Desmond and Wilmers find are able to be sustained? Why don't additional landlords enter the market, undercut the "exploitative" landlords, and erase this rent-seeking behavior? Desmond and Wilmers offer a sociological perspective that explains the consequences of real and perceived risk in the neighborhood. Low-income landlords face more risk of nonpayment from their tenants, requiring them to charge more in rent to offset that risk. At the same time, the perceived risk creates an oligopolistic setting where only landlords willing to engage in a low-income neighborhood do so, giving them higher levels of market power. The real risk results in higher, and justifiably so, required profits. The lack of competition helps to sustain those profits. The authors offer two worthwhile quotes for how this exploitative market structure takes hold:

"The poor 'are shunted to a special class of merchants who are ready to accept great risk.'" (Desmond and Wilmers 2019, 1117).

¹¹ It is important to note that while Section 8 units are largely restricted to individuals making less than 30% of Area Median Income (AMI) with some available for those making up to 80 percent of AMI, the availability of funding means that most communities rely on a lottery to distribute vouchers. The wait times for these lotteries are often exorbitant and some communities have even shut down their lotteries altogether.

“Yes, you can make money in a bad neighborhood, but you also can face some problems no civilized person should have to face. You’re better off looking for the worst house in the best neighborhood’...The market advantage that accompanies renting in poor neighborhoods requires landlords to confront the realities of concentrated disadvantage and accept possible reputational costs of being labeled a ‘slumlord.’ Just as there is also a stigma associated with living in a low-income neighborhood, there is also a stigma of landlording in one’” (Desmond and Wilmers 2019, 1118).

In this second framework, it is not that low-income housing is an exceptionally unprofitable element of the housing market when done properly, though it is one with attendant risks due to unexpected costs and the relative instability of the lives of the tenant base. Rather, low-income housing can offer extremely lucrative profits as a result of landlord power and social barriers to entry. As such, market returns could be pushed down toward normal profits if more scrupulous landlords were involved.

The third framework posits that a consideration of milking alone fails to adequately consider the range of incentives that landlords might have depending on local neighborhood conditions. Mallach, writing about post-recession investors in Las Vegas, provides a nuanced framework for understanding the actions of landlords in a particular market. As shown in **Table 6** below, he describes three types of actors and their incentives and actions:

- **Flippers** are fundamentally interested in short-term appreciation of their property and seek to maximize property value by buying and selling in quickly appreciating markets and/or investing in upgrades in the property to do so.
- **Holders** are interested in positive cash flow from a property so as to achieve long or even short-term profits.
- **Milkers** are interested in degrading properties, as spelled out above, in order to achieve profit.

Table 6. Typology of Property Investors

Category	Principal investment goal	Secondary investment goal	Strategy	Time horizon
Flipper, predatory	Appreciation	None	Buy properties in poor condition and flip to buyers in as-is or similar condition, often using unethical or illegal practices	<1 year
Flipper, market edge	Appreciation	None	Buy properties in fair to good condition and flip to buyers, with profit based on market information or access	<1 year
Rehabber	Cash flow	None	Buy properties in poor condition, rehabilitate them, and sell them in good condition	<1 year
Milker	Cash flow	None	Buy properties in poor condition for very low prices and rent them out as is with minimal maintenance, often to problem tenants; may abandon property after 2-4 years	2-10 years ¹²
Holder, short term	Cash flow	Expectation of break-even sale or modest appreciation	Buy properties to rent out for short period for cash flow and resale	3-5 years
Holder, medium-long term	Cash flow	Expectation of modest or greater appreciation	Buy properties to rent out for more extended period for cash flow and resale	5-10 years

Source: Mallach 2014

Mallach’s work suggests that we need to consider a few potential courses of action for landlords and situate them not only in the wealth of the neighborhood, but also the direction that valuations are taking. Relying on this nuance, I seek to create a more comprehensive framework for how this sector operates in the sections below.

The work of Kennedy (1987) and Garboden and Newman (2012) suggests consistency in the way that landlords act when they own properties in low-income communities. Because small-scale properties in this market are not profitable to dutifully maintain, pay taxes on, and

¹² Mallach estimates 2-4 years for this approach. My research finds longer holding periods for milkers, similar to the 20 years seen by traditional holders.

mortgage, property owners have strong incentives to milk, scrimping on maintenance while maintaining relatively stable rents due to market scarcity. Desmond and Wilmers (2019) argue that real and perceived risks around the rental housing market create market conditions that permit extra-normal profits, perhaps contradicting the milking-as-necessary-act thesis above. Yet these approaches do not fully consider how these incentives would comport with a landlord’s longer-term profit-maximizing goals and how these incentives may shift in differing market conditions. Mallach (2014) seeks to provide more nuance about the goals of different types of investors, from milkers to “predatory flippers” who are interested in quickly raising the value of a property.

It is clear that we need to think, therefore, about the market dynamics in which the low-income housing in question is located. Intuition would suggest that the three types of investors that Mallach identifies could be translated to the most likely different type of landlord in a neighborhood. That is, in a gentrifying neighborhood where property values of existing properties are increasing, we would expect there to be a number of **flippers** in that market as substantial profits can be gained by acquiring property, making improvements, and then selling it for far higher than the purchase price. In a stable neighborhood, we would expect **holders** to dominate, as the highest economic outcome should be the ability to hold a property and receive cash flow over time. In a declining neighborhood, we would expect the **milkers** to dominate. With cash flows decreasing due to the drop in income associated with this decline, property owners would be wise to reduce costs on their end, too, resulting in the reduction in maintenance spending that is characteristic of milking.

With this information, we can show simply how to think about the different markets and landlords based on market strategy and size in one synthesized way. In Section 6.2, we will explore the economic implications of these approaches. See **Figure 2** below.

Figure 2. Theoretical Composition of Low-income Housing Market

		Neighborhood condition		
		Gentrifying	Stable	Declining
Management strategy	Flipper	Pro/Amateur landlord	Most prevalent	
	Holder	Pro/Amateur landlord	Most prevalent	
	Milker	Pro/Amateur landlord	Most prevalent	

Even with this framework, we can think about how actors may be present across all three neighborhood conditions. For example, milking may be a viable strategy even within a gentrifying neighborhood. In such a neighborhood, two things may be true. First, that the supply of affordable housing is being lost, creating more unmet demand for such housing among displaced people trying to remain in their community. Second, that if the neighborhood that is gentrifying is doing so because of some locational fundamentals—people want to live there to be close to some attractor—then they may be willing to live in the worst building in the hot neighborhood, driving demand higher. These demand pressures, combined with the far lower costs of investment needed to pursue this strategy than trying to flip or upgrade the property, could make this a very profitable exercise. While this approach is unlikely to be more profitable

than flipping because it does not capture the full upside economic potential of the property, it may be more accessible to an unsophisticated landlord who lacks the ability to redevelop.

6.1.4. Behavioral Economics of Landlords

Like all economic actors, landlords enter the market with more than just a rational view of how to profit maximize. They carry with them emotions, ideologies, and personal preferences that result in specific strategies that may meet their own economic or non-economic goals. Within the low-income housing space, key behavioral considerations include

- Decisions around renting to Section 8 Housing Choice Voucher (HCV) recipients;
- Eviction strategies; and
- How the property owners emotionally relate to their low-income tenants, evincing emotions from paternalism to disdain.

To help understand how landlords think about their economic decisions, I have layered in findings of the academic literature with observations from my own research into landlord social media pages. Over the last several months, I have joined landlord Facebook groups and subreddits to understand their motivations and preferences. Understanding how landlords think is critical for explaining how the market functions and for designing policies that will work to address its failures. It is also critical for addressing landlord concerns proactively when reform policies are introduced.

To Section 8 or not to Section 8: While the HCV program is designed to promote neighborhood choice for low-income renters, landlords in many states can deny a lease to renters who will use an HCV to pay. This denial often presents an economically disadvantageous outcome for the property owner, as the HCV program guarantees that a fair market rent will be consistently paid to the landlord, despite the voucher holder's meager income. A major concern in the open low-income market is the prevalence of late or uneven payment (Garboden et al. 2018). The literature suggests that discrimination against voucher holders comes on the one hand from an apprehension about who "Section 8 tenants" are. A sizable percentage of landlords believe that HCV tenants are materially worse than other low-income tenants (Ibid.). But concerns also come from other financial and regulatory considerations built into the HCV program. Certain rental insurance policies, for example, have prevented property owners from taking on HCV tenants (Tighe, Hatch, and Mead 2017). In existing low-quality housing in low-income neighborhoods, a setting where a guaranteed market rent might be desirable, the inspection requirements may stand in the way of landlord participation. The U.S. Department of Housing and Urban Development (HUD) requires that properties using HCVs be inspected first (Bernstein 2010). Matthew Desmond in *Evicted* explained succinctly how some landlords feel about the program's requirements, writing, "Sherrena and Quentin [a landlord couple] didn't accept rent assistance in most of their properties because they didn't want to deal with the program's picky inspectors, 'Rent assistance is a pain the ass'" (Desmond 2016, 147). Landlords may also wish to avoid the bureaucracy of the local public housing authority (Garboden et al. 2018). Additionally, the relatively small size of the program, in comparison to the overwhelming pool of cash-strapped tenants, makes it easy to avoid.

Eviction as a strategy: When confronted regarding evictions, landlords will typically identify them as an activity of "last resort" (Conlin 2021). In truth, some landlords may view eviction as a piece of profit-maximizing strategy. For example, Immergluck et al. (2020)

identified a process of “serial evictions” in the Atlanta area, where a small subset of landlords appears to be disproportionately responsible for eviction filings and often file multiple times against the same tenant. Garboden and Rosen (2019) also found that landlords saw late fines, which carried with them their own threat of eviction, could help to generate additional income out of properties. Immergluck et al. (2020), reviewing the literature, outline five factors that lead to certain landlords concluding that eviction is a fundamental part, not an unfortunate consequence, of managing property. I summarize those factors and provide further supporting evidence below.

1. Filing for eviction can “discipline” uncooperative tenants, including through the public “shame” of the eviction notice.
2. Large landlords, such as the Single-Family Rental (SFR) landlords that I will discuss later, have developed algorithmic systems for determining when to file based on a calculation of when delinquency is standing in the way of profitability. Therefore, the process for moving toward eviction has become mechanized in large professional operations.
3. As Garboden and Rosen’s (2019) research suggests, late fees can add to landlord incomes and certain landlords may select for tenants that they know will accrue such fees.
4. Somewhat more speculatively, they also argue that frequent filings can serve to retaliate against tenants who complain about conditions, without citing specific evidence. In partial support of this claim, Desmond (2016) found that 83 percent of landlords who received a nuisance citation related to domestic violence evicted, or threatened to evict, the couple or, often, the female victim of said abuse.
5. Some states have very lenient policies for filing an eviction, making it easy to file repeatedly. Similar states in their demographics may have different levels of serial eviction just because of filing fees, attorney requirements, and other procedural elements. Nelson et al. (2021) identified the broad discrepancies between filing fees, timelines, and prevalence of informal eviction practices that can result in some property owners being able to frequently evict (publicly or privately) in a way that gives them additional control of their property.

Eviction can therefore serve as an unexpected strategy for increasing the profitability of buildings and individual units and for managing tenants perceived to be headaches by landlords.

Human behavior: Another key piece of how low-income landlords as economic actors behave is the emotion and values that they place on their relationship with tenants and their role as landlords. Here, both Garboden’s ethnographic work and investigation of the landlord forums are particularly instructive. Rosen and Garboden (2020) find that many landlords take a reformist, paternalistic approach to their tenants. They see in themselves a fundamental social good being performed in their provision of low-income housing. They may take it upon themselves to try to guide their tenants, who they may see as wayward or undisciplined due to the environments in which they were raised. They may, more negatively, make moral judgments about their tenants around an ethic of “responsibility,” often blaming that same “upbringing” while bemoaning that their tenant is not behaving properly. Therefore, issues like an inability to pay are often ascribed to a lack of responsibility from the tenant, versus financial precarity. From one landlord they interviewed:

Franklin, however, insisted that his high rent delinquency rate is not because his tenants cannot afford to pay, but rather because they fail to budget: “They’re spending their rent money. And once it’s spent, it’s spent, and well, ‘Mr. [Franklin], he’s a nice guy, we’ll push it, I’ll pay him next month.’ They don’t think like you and I think.”

This attitude is of substantial consequence when major economic shocks take place, be it the Great Recession or the current COVID-19 pandemic. As I will explore later, landlords’ opinions on whether tenants can or should pay in the midst of a global economic crisis are currently remaking housing conditions for millions.

Small-scale landlords also see themselves as part of a collaborative culture of entrepreneurship. As shown in their social media forums, would-be landlords are frequently asking about how to grow their businesses and establish themselves as property owners. Others chime in quickly, remarking on how they got “addicted” to the business, and outlining the pieces of the strategy that set them on their path. Garboden (2018) further elucidated the culture associated with amateur investors. He finds that landlordism stands as a unique entrepreneurial endeavor available to individuals with limited formal education. Amateur investors are often born in moments where their own professional ambitions have been negatively affected. The culture of real estate investment associations (REIA) has created a value system based around the three core values:

1) self-sufficiency, particularly self-employment, is a key aspect of personal well-being; 2) land and real estate is preferable to stocks, bonds, and other savings because they do not require elite skills and can be learned by doing; 3) in order to succeed you can’t hold back, you must be willing to take risks (Garboden 2018, 18).

Garboden also notes that this culture creates a vibrant opportunity for so-called hard money lenders, non-bank property investors who invest in real estate, to identify loan opportunities. As I will discuss further on, the financial structures of the hard money market have major consequences for landlord decisions and housing quality.

6.2. Building-level Economic Modeling

From an understanding of the individual actor and some of their monetary and non-monetary incentives, we can begin to evaluate the project-level economics of buildings and how the theories of landlord behavior may come together.

To do so, I prepared discounted cash flow “pro formas” that seek to explain the market incentives of landlords facing different market conditions. Starting with a single prototypical building, I present two of the three market scenarios: a stable neighborhood and a declining neighborhood. I use as the basis for the analysis real information from a sample 3-unit, 9-bedroom building in the Dixwell neighborhood of New Haven. This building was sold appraised most recently at \$142,128 and has a monthly rent roll of approximately \$3,400. Based on the framework defined previously, I will demonstrate the different financial outcomes for the properties based on operating approaches undertaken.

- **Gentrification and Flipping:** Since flipping exists in a substantially different time horizon from either holding or milking and largely removes properties from the low-income market, I will not include flipping in this analysis. Additionally, gentrification takes a very different economic form, due to rapid appreciation, that is not easily modeled against the stable and declining conditions.
- **Holding and Milking:** I will examine both holding and milking strategies within gentrifying, stable, and declining contexts to explain the viability and economic returns associated with each.

In **Table 7** below, I spell out the major differences in assumptions across the different scenarios. Throughout this section, more detailed information is provided in **Appendix A**.

Table 7. Discounted Cash Flow Analysis Assumptions

Assumptions	Stable		Declining	
	Milk	Hold	Milk	Hold
Ownership Approach	Milk	Hold	Milk	Hold
Purchase Price ¹³	\$142,128	\$142,128	\$106,596	\$106,596
Initial Rent	\$12.36/sf	\$12.36/sf	\$12.36/sf	\$12.36/sf
Yearly Rent Growth	3%	3%	0%	0%
Yearly Cost Growth	2%	2%	0%	0%
Percent of Full Maintenance Paid	57%	100%	57%	100%
Initial Property Tax	\$3,559	\$3,559	\$2,669	\$2,669
Vacancy Rate	5%	5%	11%	11%
Capital Expenses (Percent of NOI)	2%	5%	0%	5%
Cap Rate ¹⁴	12%	12%	13%	13%
Opportunity Cost of Capital	9%	9%	11%	11%
Finance Interest Rates ¹⁵	7.5%	7.5%	8.5%	8.5%

A key input in these assumptions, given our focus on quality, is the amount of maintenance contributed to the property. On the operations side, the milking condition in both stable and declining neighborhoods assumes that property managers spend 57 percent of the appropriate maintenance budget estimated by Garboden and Newman (2012). This operational investment level corroborates the real-world valuation of the property.

On the basis of these assumptions, we can then begin to construct discounted cash flow models to indicate how different economic approaches may yield property-level benefits for real estate investors. To estimate these benefits appropriately, we need to compare returns in the context of the returns that investors can expect to gain in the timeframe that they plan to invest. We will look at ten-year holding periods for holders and milkers in stable and declining

¹³ In the gentrifying neighborhood, there is a 10 percent premium on housing prices. In the declining neighborhood, the property is purchased at fire sale or auction, with a 25 percent price reduction, as a result.

¹⁴ While cap rates are typically not used in the 1-4-unit space for pricing, versus comparative sales, the cap rate allows us to relate investment levels to market conditions.

¹⁵ More challenged neighborhoods see higher mortgage rates due to perceived risk (Desmond and Wilmers 2019).

neighborhoods. While detailed cash flow information is provided in **Appendix A**, the table below summarizes the key operational financial results across the studied contexts.

Table 8. Pre-Tax-and-Financing Operational Comparison

	Stable – Hold	Stable – Milk	Declining – Hold	Declining - Milk
Initial Year NOI	\$10,656	\$17,063	\$8,957	\$17,226
Sale Year NOI ¹⁶	\$18,886	\$26,212	\$4,459	\$14,167
Sales Price	\$163,161	\$223,891	\$29,457	\$103,969
Net Present Value	\$11,725	\$68,505	(\$56,004)	\$24,382
IRR	10.18%	16.56%	(1.93%)	15.00%

In this look at the stabilized initial cash flows, there are two notable findings. First, the yearly NOIs for the buildings are very modest, especially since we have yet to take financing and other costs into account. The full Net Present Value analysis confirms that seeking to appropriately maintain and hold properties is a less remunerative strategy than milking and that, in the context of a declining neighborhood, milking may indeed be a necessity to generate a positive return.

Next, I incorporated the NOI figures from **Table 8** into an after-tax cash flow that considers financing. These cash flows are summarized below. For each project, the mortgage assumed 30 percent equity and 30-year amortization. Mortgage rates were described previously in **Table 7**, and assume a difference in rates between scenarios due to risk-based pricing informed by the condition of the neighborhood. **Table 9** below summarizes the after tax and finance economic conditions. More detailed data are provided in **Appendix B**.

Table 9. After-Finance Cash Flow Summary

	Stable – Hold	Stable – Milk	Declining – Hold	Declining - Milk
Initial Year NOI	\$10,656	\$17,063	\$8,957	\$17,226
Initial Year Income After Financing	(\$674)	\$6,255	\$676	\$9,828
Initial Year After Tax Cash Flow	\$1,699	\$6,109	\$1,759	\$7,272
Sales Year Income After Financing	\$8,027	\$16,104	(\$2,987)	\$7,380
Sales Year After Tax Cash Flow	\$7,832	\$11,628	(\$2,278)	\$5,070
Sales Price	\$163,161	\$223,891	\$29,457	\$103,969
Net Cash from Sale	\$65,667	\$117,401	(\$32,183)	\$37,717
Net Present Value	\$12,109	\$60,349	(\$39,771)	\$22,649
Internal Rate of Return (IRR)	12.49%	23.79%	n/a	23.59%

The results of this exercise bring into focus several of the key contentions of the literature regarding building-level income, issues associated with financing property, and the role and benefits of milking for profit maximization. The overall rent levels achieved in these small-scale, low-income buildings are quite low. On the one hand, this result is not particularly surprising given the size and context of these buildings. Still, it is a critical insight to understand just how

¹⁶ Year 10 for stable and holding conditions.

precarious profits are within buildings in these markets. Under certain broader economic conditions, the framework that argues that milking is a necessary result of providing low-income housing is borne out by the results shown here for declining neighborhood properties. Consistent with Garboden and Newman’s (2012) findings, especially when finance is taken into consideration, some landlords in both stable and declining neighborhoods that are trying to adequately maintain their property would see losses. Stable neighborhood landlords appear to have negative taxable income (-\$674), though their cash flows remain slightly positive, consistent with Gilderbloom and Appelbaum’s (1988) findings that many landlords profit primarily from the tax shelter benefits, versus the cash flow returns of the building, in these neighborhoods. Landlords in declining neighborhoods experience major losses when mortgage costs are taken into account, since the rent stream and sales price are insufficient to cover outstanding mortgage costs. The obstacles to high-quality financing are described further in Section 7, *Financing*.

At the same time, we see how in a market dominated by milking landlords, extra-normal profits are possible, as identified by Desmond and Wilmers (2019). Landlords who degrade their properties can continue to earn large profits and, indeed, earn larger profits than landlords trying to do the right thing. In the stable neighborhood context, the rate of return is double for the milker versus the holder (23.79% vs. 12.49%). This finding underscores that the framework that identifies milking as a business opportunity, not just a business necessity, can effectively explain more stable low-income contexts. The moderate returns for stable neighborhood holders echo another finding of Desmond and Wilmers— that low-income landlords generally see small profits with a long-tail of large risk due to unexpected expenses. Those consistent profits may form the basis of new management strategies that could improve quality while reducing risk in the market. I will explore those further in Section 11, *Socially Responsible Landlord Strategies*.

6.3. Portfolio-Level Economic Modeling

In moving beyond the building to the portfolio, we can further explore how economies of scale might facilitate a successful business despite the meager rents in the low-income housing market. To do so, I sought to create a synthetic portfolio of an actual New Haven landlord.

I sized the portfolio at 30 properties, approximately the size of the package of properties that Netz Mandy, the largest landowner in town, uses for bond issuances. To assemble this portfolio, I used property listings from a sizable low-income landlord, and from Craigslist, with additional data provided from the City of New Haven Tax Assessor’s database.¹⁷ The descriptive statistics of this portfolio are summarized in **Table 10** below. All properties are listed in **Appendix C** at the end of the paper.

Table 10. Summary of Property Descriptive Statistics

Category	Data
Number of Properties	30
Average Rent/Unit	\$1,476
Average Number of Bedrooms/Unit	3
Average Rent/Bedroom	\$546
Total Number of Units	98

¹⁷ Unfortunately, Mandy Management does not provide their rents on their online listings site.

Category	Data
Units/Building	3.3
Total Number of Bedrooms	247
Average Number of Bedrooms	8
Average Monthly Rent/Building	\$4,339
Total Appraised Value of Portfolio	\$6,252,500
Total Assessed Value of Portfolio (est.)	\$4,376,750

The socially optimal maintenance budget was assumed as estimated by Garboden and Newman (2012) and is consistent with the property-level analysis above. I assumed that the landlord would only use 25 percent of the ideal maintenance budget¹⁸ and would rely on a 10-year hard money loan at 12 percent annual interest. The assumptions for this analysis are summarized in **Table 11** below. For the purposes of a comparable financial analysis, I assume that the portfolio is sold after ten years.

Table 11. Assumptions for Modeled Portfolio

Criterion	Modeling Assumption
Annual Rental Growth	3%
Vacancy Rate	5%
Capital Expenditures (% of Net Operating Income)	5%
Opportunity Cost of Capital	12%
Monthly Maintenance per Unit	\$214
Debt Interest Rate	12%
Loan Term	10 Years
Debt Loan to Value	70%

I then analyzed the financial performance of the portfolio, looking both pre- and post-financing. The pre-financing analysis gives us the cash-on-cash returns. In the following sections, I will discuss the role of cash returns as a key metric for investor decision-making in this market. The post-financing analysis provides a more direct comparison to the hard money lending popular with some landlords. The results of such an analysis are shown in the table below.

Table 12. Financial Performance of Traditional Low-Income Housing Portfolio

Criterion	Traditional Landlord
Net Operating Income (Year 1)	\$994,307
Net Operating Income (Year 10)	\$1,381,675
Initial Value of Portfolio	\$6,252,500
Terminal Value of Portfolio	\$11,694,557
Net Present Value	\$3,635,269
Unlevered IRR	20.29%
Levered IRR	23.28%

¹⁸ The operational investment is reduced from the project-level assessment due to assumed efficiencies in operations at scale.

The rent levels, and efficient management, of a multi-building portfolio within a low-income neighborhood can generate a meaningful return for the property owners willing to work in the low-income market. **Table 12** shows that highly competitive returns (20-23%) are achievable and present low-income market today. In the *Solutions* section of this paper, I will explore whether deeper investment in housing quality can still generate competitive returns.

6.4. Neighborhood Level Effects

Moving out from a single building or a set of buildings, it is important to consider how landlord decisions relate to larger neighborhood questions. Three in particular are critical:

- What is the impact of landlord disinvestment decisions on the surrounding neighborhood?
- Can low-income sub-markets be evaluated as individual markets to understand housing trends?
- What are the unique features of this unique sub-market?

6.4.1. Landlord Investment Decisions and Neighborhood Stability

Do landlord investment decisions have larger impacts on the investment decisions that other neighborhood actors make? In other words, can landlords degrade more than just their building? Kennedy (1987) postulates that the investment decisions of bad landlords provide an important signal to others. If one landlord is degrading the condition of the property, then other landlords will avoid investment since the delinquent neighbor will drag down any potential increase in value generated by improvements. Massey and Denton (1993) concur, suggesting a domino effect where the cumulative microeconomic decisions to disinvest build on each other, making it less and less likely that the next property owner will choose to make positive investment. Others argue that the acquisition of formerly owner-occupied housing by landlords, particularly in aging, minority neighborhoods, is the inciting incident that leads to broader neighborhood decline (Gibson 2007). In that approach, the ownership succession is the sign of decline and disinvestment techniques by “absentee landlords” further the decline that communities see. Public reinvestment in neighborhoods that have gone through succession can have minimal effect in resurrecting housing quality, particularly if the larger macroeconomic effects that caused decline remain and the overarching incentives for landlords remain the same (Margulis and Sheets 1985). So, the decisions that landlords make can have neighborhood-wide impacts that are not easily undone.

6.4.2. Low-income Sub-markets

The second question is whether poor neighborhoods can be studied as somewhat independent economic units, versus mere extensions of a city or region’s housing market. An important avenue for understanding this market is to more directly consider how housing sub-markets function in low-income and minority contexts. While the process of gentrification or decline necessarily relate to the larger economic conditions in the metro area, there is sustained evidence that these neighborhoods also exist as isolated units within larger regional housing markets. By evaluating mortgage loan investment in Camden County, NJ, Smith et al. (2001) were able to identify unique neighborhoods of color within the suburban Philadelphia market. Research during the current COVID-19 crisis has found markedly different economic outcomes. Black neighborhoods in Cleveland, OH, for example, have retained low sales prices even as the

residential property market has boomed (Ford 2021). The source of our ability to study these neighborhoods as isolated sub-markets also stems from the process of residential segregation in the US, where minority residents have been shunted to certain neighborhoods as white flight and gentrification have occurred (Gibson 2007). Therefore, in many cities, there are lower-income minority neighborhoods that have remained that way and can be studied as examples of a certain piece of the housing market. In the studied neighborhoods in New Haven, we can confirm that there are *stable* low-income neighborhoods that can be evaluated as units. The four neighborhoods studied in Section 4 have had essentially no change to their poverty levels of racial composition between 2015 and 2019 (Data Haven 2015; Data Haven 2019), even as New Haven has grown and seen renewed downtown investment (Breen 2020). While there is substantial literature on gentrification and abandonment, more can be done to understand low-income sub-markets in stable and enduringly low-income places.

6.4.3. *Unique Characteristics of the Low-Income Market*

The third question, directly tied to an understanding of low-income housing sub-markets, relates to the actions of tenants in response to property degradation. It is a question that we keep coming back to. How is it that landlords are able to degrade properties without commensurate decreases in rents and revenues? The answer is something that we might refer to as the lack of market penalty for milking.

As the cash flow analysis shows, there is a substantial upside to engaging in milking provided that the “penalty” for milking is relatively low. Desmond and Wilmer’s (2019) work indicates that the penalty for milking is limited in low-income neighborhoods, but also that middle-class and above neighborhoods do have a penalty for milking. In their research, such buildings see much higher levels of investment in building maintenance, despite an apparent impact on building-level profits.

To truly understand this market, we have to come to some conclusions about what makes milking viable. That answer lies in better characterizing the low-income housing market generally, beyond the confines of the small rental market.

The low-income housing market is a fundamentally supply-constrained market, as described above. The demand for affordable housing far outstrips the supply of affordable and available units for the very poor. This market condition creates power for landlords in the market as they are offering a product in short supply. At the same time, though, their tenant base has a low ability to pay.

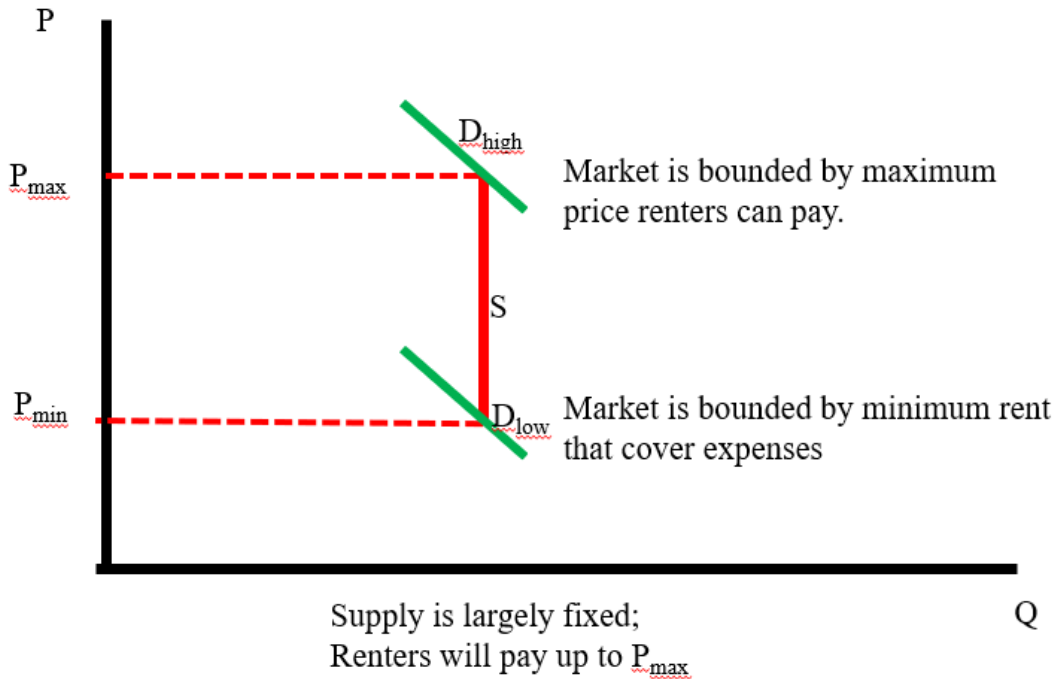
As a result, while everyone would desire housing at $P = 0$, where P refers to rents, there is some P_{\min} that stands as the minimum price at which a landlord can lease a unit and still afford the costs of the building. At the same time, in cohesive low-income neighborhoods—that is, neighborhoods segregated by income/race where social norms and policy limit diversity—there is also a hard limit on the upper bound of rent prices, P_{\max} , that is a function of the income available at the neighborhood level.

$$P_{\max} = f(\text{Income}_{\text{neighborhood}})$$

Therefore, despite the high demand for the supply constrained housing, there is some level at which the landlord cannot further increase rent and expect to receive tenants. The supply of buildings is also very inelastic. It is expensive to tear down existing housing and it is

expensive to build new housing. It may, in some cases, be too expensive to build new housing that local residents can afford without deep subsidies. These factors create a hard and likely steady cap on the price of housing at P_{max} , as shown in **Figure 3** below.

Figure 3. Housing Supply and Demand Curves in the Low-income Market

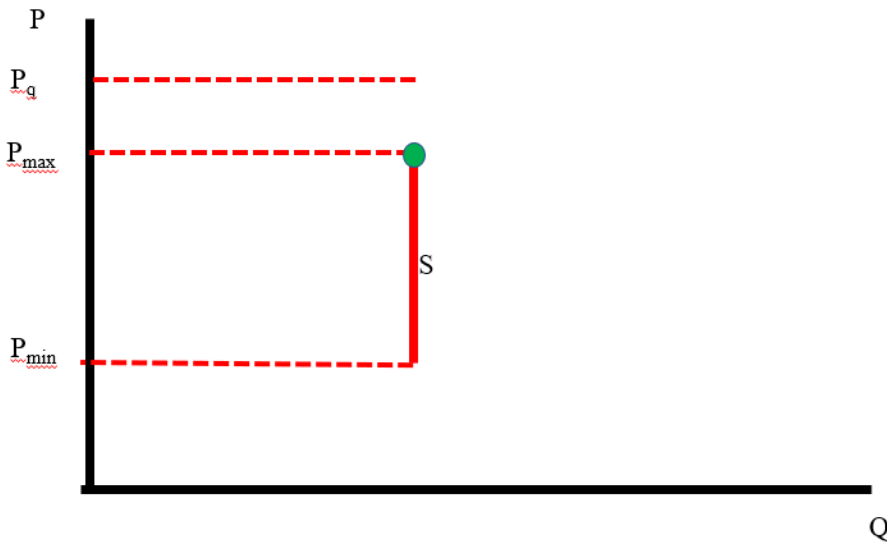


The simple graphic helps us explain conditions in both relatively high demand and low demand low-income markets. How does this market dynamic relate to quality? For a landlord operating in the market who seeks to invest in buildings properly, the question confronting them is:

Does P_{max} exceed P_q , the price at which quality can be assured because adequate maintenance costs can be covered by rents?

If P_{max} is less than P_q , as in **Figure 4** below, then the only rational action for the landlord, and frankly the only way to guarantee housing availability for the tenants, is to spend less on maintenance than is appropriate or desirable.

Figure 4. Quality in the Demand Curve



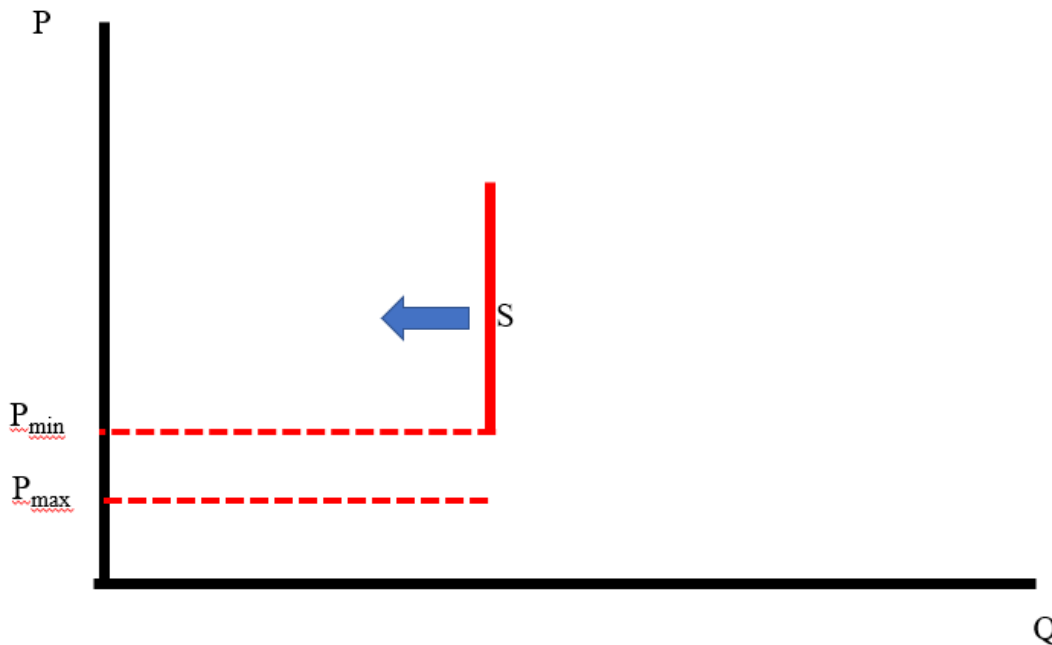
In this way, this condition represents the first framework for housing disinvestment, as the landlord compelled is to underinvest due to the income constraints of the market. A less scrupulous landlord, perhaps the “sociopathic” landlord that Kennedy (1987) describes, would ask a different question on their path to profit maximization:

Will I have to reduce the P that I offer by more than I reduce maintenance, as a result of the supply constraints in the market?

Shut out of the broader housing market due to income constraints, racial discrimination, eviction discrimination, or source of income discrimination, low-income tenants have limited ability to push back on a landlord choosing to milk the property. The tremendous need for housing at the low end therefore gives the landlord leverage to lessen maintenance and not suffer a meaningful “penalty” in terms of their financial operations. This dynamic is at the heart of the issue of market power in the low-income housing space.

One situation in which the landlord will lose the leverage to underinvest in the property is if P_{\min} falls lower than P_{\max} . This may occur in a declining neighborhood where rents fall so low that it is not profitable to offer the building for lease. In this case, there will be abandonment, as there was and is in many declining communities across the country. In his reassessment of Newark a decade after the research that became *Tenement Landlord*, Sternlieb found that the milking landlord who chose to offer a property at P_{\max} but spend less on maintenance had all but disappeared. Instead, declines in demand due to the shrinking population of Newark meant that landlords could not offer any price to operate the property, much less one that would maintain the building in good quality (Sternlieb and Burchell 1973). In Philadelphia, the financial ill-health of a building, measured in tax arrearages, and of its neighbors, was found to be a strong predictor of later abandonment (Hillier et al. 2003). In both instances, these communities were experiencing dynamics shown visually in **Figure 5** below.

Figure 5. A Model of Neighborhood Decline



When the maximal rents are too low to support renting due to neighborhood decline and migration, supply declines sharply.

The lack of a “market penalty” indicates the value of policies that give low-income tenants a so-called outside option. The outside option, which actors in the mainstream of the housing market enjoy, is that ability to have real choice and bargaining power in a heterogeneous market (Novy-Marx 2009). If low-income, minority tenants had real choice in the housing market, could that force landlords to invest more to compete for their housing dollars? In the *Solutions* section, I will explore policies to create that option while improving on the “moving-to-opportunity” framework that dominated in the 1990s.

We have grown from the property to the neighborhood to explain how housing conditions are shaped in low-income markets. Understanding the structure of ownership will help us further understand how housing quality and market dynamics come into conflict.

6.5. LLCs and the Hidden Oligopoly

From the neighborhood level, we need to further understanding the larger issue of market power. I contend that the low-income rental housing market exhibits oligopolistic qualities because of the market power that a handful of landlords are able to exert in low-income communities and because of the social barriers to entry for new landlords to enter the market. A useful lens through which to consider the issue is the limited liability company (LLC). The LLC has emerged as an important tool for structuring real estate ownership in a range of real estate markets. Two elements of the LLC are critical for market power issues: its anonymity and its limited liability hide ownership concentration and allow landlords to exert their power over tenants with limited fear of repercussions. The anonymity it provides allows landlords to develop

large property holdings without the City and appropriate regulatory agencies understanding who controls the neighborhoods. The limited liability associated with LLCs makes it harder for code enforcers to properly identify owners of derelict housing and hold them accountable for their failure to meet obligations under the housing code. This challenge has caused at least one exasperated code enforcer to remark: “I can’t arrest an LLC” (Breen 2019).

While the review of neighborhoods in New Haven indicated a large number of landlords, a deeper investigation, through a process that I call LLC mapping, shows how landlords web together different LLCs to form large property interests. LLC mapping is a straightforward way to begin to demystify the ownership structure and provide insights about the networks of landlords. To perform this work, I use tax data to identify networks of LLCs that may otherwise be hidden. As a case study, I used the parcel tax data for New Haven. Using the citywide shapefile, I identified the top addresses associated with properties in the city in 2013. Addresses were used, rather than entity name, in order to identify the networks that may otherwise be obscured. By identifying the top addresses, I could then identify different LLC names and past owner information. Using that information, I found “hidden” associated properties that, while their owner information listed another address, were part of the same ownership group.

Because of data availability issues, I was only able to map data associated with 2013. However, I was able to access tax data for both 2013 and 2020. As a result, I am able to visualize the conditions in 2013, but also to provide tabular information about the concentration of ownership over the past seven years.

Based on this approach, I first developed a list of the top ten addresses in 2013 for property ownership citywide. While this analysis gives us a clear image of “who owns the neighborhood,” this view also provides information on landlord activity in the low-income market and more middle and upper-income markets. This analysis is important for shedding further light on the sources of capital and financing for landlords in the low-income market.

Table 13. Top Property Owner Addresses, 2013

Address	Number of Identified Properties	Description of Network
3000 Whitney Avenue	70	Steinbach-Dawson
419 Whalley Avenue	54	Menachem Levitin
19 Howe Street	32	Pike International
134 Lawrence Street	25	William Esposito
300 Whalley Avenue	24	Renaissance Management
900 Chapel Street	21	New Haven Redevelopers
91 Elm Street	19	David Candelora
2600 Dixwell Avenue	17	Quinnipiac Bank
PO Box 3616	16	Netz/Mandy
C/O Grauer Realty	16	Betsy Grauer

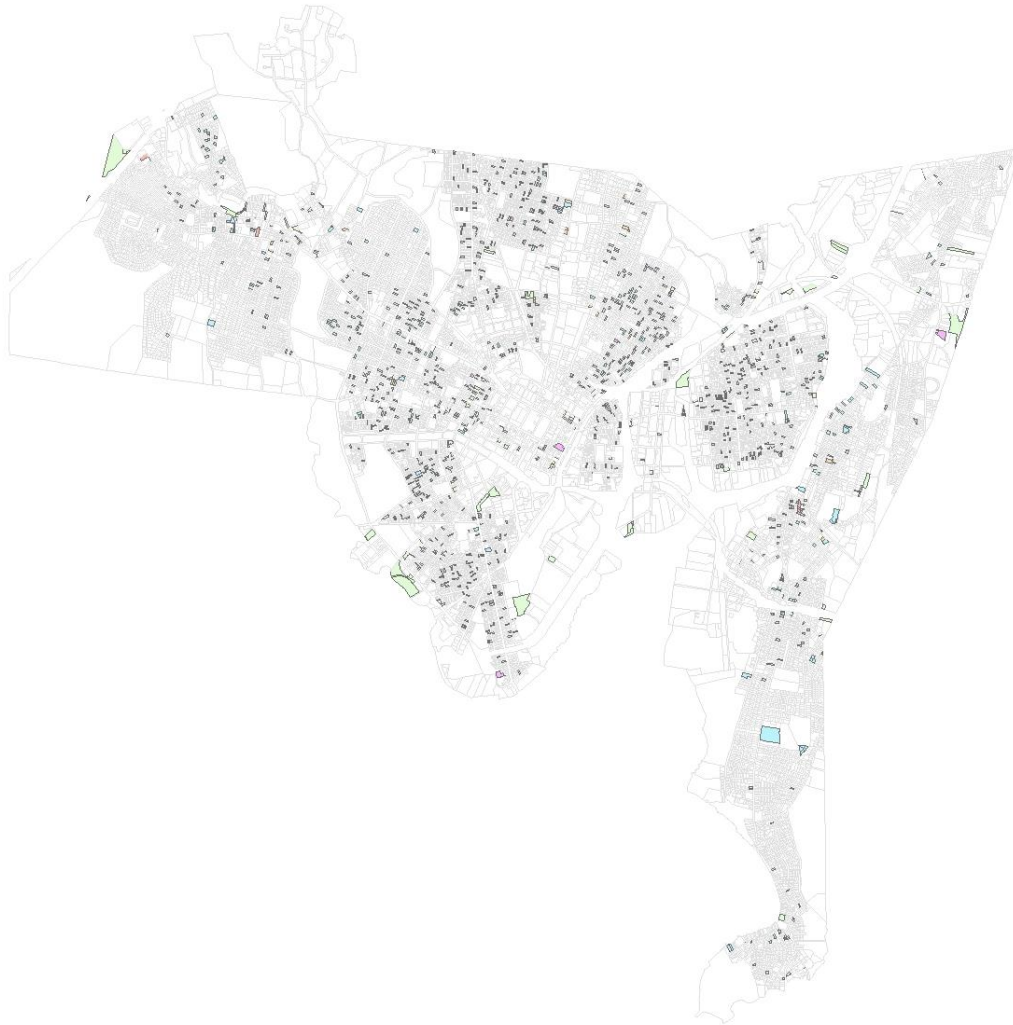
Using these addresses, I then identified the total number of units associated with these ten groups, as well as the number of entities used to control these properties, by casting a wider net and looking at all the different entities associated with this network, as shown in **Table 14**.

Consistent with framing of LLC mapping, we can use this information to visualize how LLC ownership blankets the city. **Figure 6** shows the ubiquity of LLCs across New Haven.

Table 14. LLC Ownership Linkages Citywide in New Haven, 2013

Address	Description of Network	Actual Number of Properties	Number of Entities
3000 Whitney Avenue	Steinbach-Dawson	116	7
419 Whalley Avenue	Menachem Levitin	57	7
19 Howe Street	Pike International	65	28
134 Lawrence Street	William Esposito	54	3
300 Whalley Avenue	Renaissance Management	39	18
900 Chapel Street	New Haven Redevelopers	22	3
91 Elm Street	David Candelora	20	9
2600 Dixwell Avenue	Quinnipiac Bank	56	13
PO Box 3616	Netz/Mandy	24	11
C/O Grauer Realty	Betsy Grauer	18	12

Figure 6. LLC-Owned Property in New Haven



All colored properties represent residential or vacant parcels owned by LLCs in New Haven.

To provide an understanding of the market concentration of the larger property owners, I then focused in on combining this assessment of LLC-owned property with property owned by the individuals associated with the two largest ownership groups in 2013 (Steinbach-Dawson and Levitin, both of whom have been mentioned above). I used this view to examine particular blocks where LLCs and their related actors begin to cluster. **Figure 7** below shows the clustering of LLCs in the low-income neighborhood of the Hill.

Figure 7. LLC Ownership of Residential/Vacant Property in the Hill North



All colored properties are those owned by an LLC.

I then turned to the 2020 property tax data, accessed via the New Haven Assessor’s Office, to examine the ownership networks associated with two emerging landlord operations, Ocean Management and Netz/Mandy, which have received substantial news coverage over the past few years for their explosive growth in the city. In **Table 15**, we see both the size of these entities and they that they have structured themselves into dozens of operational entities.

Table 15. Large Landlord Ownership Statistics, 2020

Landlord Group	Ocean Management	Mandy/Netz
Number of Properties	251	378
Number of Entities	43	55

6.5.1. Findings from LLC Mapping

What does this approach show us? It visually reinforces two themes of the low-income housing market with relevance for market power. The social barriers to entry in the market are revealed by the prevalence of “merchants of the poor” (Desmond and Wilmers 2019) landlords. Here, we can see how a certain class of landlord dominates the low-income market in New Haven. As noted previously, Michael Steinbach and Janet Dawson engaged in a series of strategic defaults over 2010-2013, all while degrading property conditions (Satija 2011). Menachem Levitin was sentenced to a two-year sentence in 2015 for orchestrating a straw buying scheme (Bass 2015). Netz/Mandy was fined by the US Department of Housing and Urban Development for failure to adequately disclose lead to tenants (HUD 2005).

The LLC also reveals the hidden nature of this oligopoly. On first blush, the market is extremely diffuse, with 1,740 different LLCs operating in the city. On closer inspection, while there are still many small LLC holders, there are a few that hold large numbers of units throughout the city. In 2020, Ocean, with over 250 properties, and Mandy/Netz with over 360, are major market actors. This hidden oligopoly has further implications for policy. On the positive side, it means that successful portfolio-wide property enhancements could benefit many low-income residents. On the negative side, it means that strategies to provide greater choice for tenants may be more lacking: in the communities in which folks live and at prices they can afford, there are far fewer options than meet the eye.

In addition to these key themes, the LLC mapping work also shed light on how landlords perform day-to-day activities. Using Ocean Management, we can collectively assign the types of LLCs employed by such a firm in four categories:

1. **Acquisition/transfer LLCs.** These LLCs are used to acquire property or transfer property from one LLC to another. They do not retain property and will only be directly caught on a property tax search if the property has been recently acquired. For Ocean, this LLC is “Shadmit LLC.”
2. **Single-property LLCs.** Some LLCs appear to be designed for only one property and often have that address as its name. It is unclear why this designation is used.
3. **Broad business activity LLCs.** These LLCs have a decent number (usually 10-20) properties and appear designed to contain a manageable number of properties. Most Ocean entities follow this designation.
4. **Investor-driven LLCs.** These LLCs appear to be designed for specific investor interests. For Ocean, these include “RJ Carmen LLC” and “Lior Pick LLC.” In other words, this appears to be a way to hive off the properties that a particular investor has chosen to support.

Characterizing how LLCs may take on different roles within a landlord operation plays an important role in helping us understand management and financial strategies, but more research is needed.

In all, when ownership dynamics are layered on top of the property and neighborhood-level economics, we can begin to see the bounded power of poverty landlords – economic agents at once limited and empowered by the limited resources and options of their tenants.

7. The Financing of the Market

Within this broadly understudied market, a crucial piece is the least understood: financing. Who is it that invests in these properties and what are their incentives? What does access to capital look like for landlords in this sector? The role of housing finance in this market also plays a critical role in how it functions. This paper seeks to substantially expand our collective understanding of how low-income buildings are financed. Four key factors are important for understanding the private low-income housing market:

1. Limited availability of traditional housing finance, particularly in the 1-4 unit market.
2. The emergence of the Single-Family Rental (SFR) market as a major investment class.
3. The use of hard money and other non-bank lending to power investment in the market.
4. On the margins, the use of fraudulent financing measures to expand landlord operations.

7.1. The Inadequacy of Traditional Finance

As noted previously, there is approximately \$400-\$500 billion in outstanding debt associated with the 2-4-unit market, almost entirely in traditional mortgage debt (Mallach 2016). Despite that number, there is a major gap in the low-income side of the 2-4-unit market to preserve and enhance the condition of these properties. In 2012, the Bipartisan Policy Center's Housing Commission held a roundtable discussion in Chicago with community organizations on the small-scale affordable rental market. When asked about the challenges facing 2-4-unit multifamily housing, Ed Jacob of Neighborhood Housing Services stated,

“There is an extremely limited amount of long-term capital/take-out financing resources available, particularly for 3-4 unit properties. In Chicago, most 3-4 unit properties are old buildings with a significant amount of deferred maintenance. Although purchase prices are extremely low, the significant rehab or maintenance needs, coupled with low after-rehab appraisals, the practice of not underwriting rental income on small multi-family properties, and the absence of a secondary market for small multi-family properties, has meant that most private lenders are inactive within the space” (Jacob 2012).

Newman also has found that banks are highly hesitant to provide rehabilitation loans in this market because of the small size of the properties and the substantial risks with “small” rehabs becoming much larger than expected (Newman 2005). Paul Weech of the Housing Partnership Network told the Housing Commission that the lack of “portfolio level financing” was an obstacle to improving housing quality. The fundamental nuts and bolts of housing lending, the underwriting standards like the loan-to-value requirements, stand in the way of competitive mortgages playing more of a role in improving housing quality.

What financial instruments are being used in the small-scale private low-income house space, then? In the place of larger financial sector involvement, the financial arrangement of the low-income small-scale market is bifurcated between properties that have traditional mortgages and those that are debt free. Only about 60 percent of small properties have mortgages; the

remainder do not have mortgages. Those that do have mortgages tend to pay rates 100 points higher than large properties. The Joint Center for Housing Studies indicated that the obstacles for lenders are high underwriting costs relative to the size of the loans, the requirement that the property owner, not the property, to back the loan, and increased rates of default in small properties (Belsky et al. 2012). The properties without mortgages are either old or owned by cash buyers who do not want to face the costs and risk associated with private bank lending or who would be rejected (Apgar and Narasimhan 2008). In periods of distress, cash buyers emerge in an even more a prominent way. In Chicago in 2011, 77 percent of sales of 2-4-unit buildings in low-income, high-foreclosure areas were purchased with cash (Smith 2012).

The Chicago interviews also reinforce that the Government-Supported Enterprises (GSEs), Fannie Mae and Freddie Mac, are not actively supportive of the affordable side of the small-scale market. Jacob added in the interviews: “Fannie Mae and Freddie Mac requirements for 3-4-unit properties include a 25 percent down payment, mandatory 6 month PITI [principal, interest, taxes, and insurance] reserves, and high credit score requirements” (Jacob 2012). Others have found similar non-involvement from GSEs. Ginnie Mae originates around 2 percent of all mortgages in this market, while Fannie Mae and Freddie Mac hover around 2-3 percent (Goodman and Zhu 2016).

7.2. The Rise of the SFR Market

Since the Great Recession, the US housing market has seen a shift in homeownership trends, particularly in the communities most affected by the foreclosure crisis. As Americans moved away from homeownership, the number of so-called “single-family rentals” (SFRs), detached single-family homes available for rent, jumped from 3.8 million to 5.8 million between 2006 and 2015 (Immergluck 2018b). The development of the SFR market since the mortgage crisis has been a two-step process. It began with a rise in mom-and-pop investors in the immediate wake of the crisis and has now become a major investment area for private equity and Real Estate Investment Trust (REIT) players. This shift has been accompanied by a rise in the complexity of financial products. This reshaping of the market has had profound impacts on the financial landscape in the small-scale market in the Sun Belt, where this investment has been most prevalent.

As the global economy came to a screeching halt, individual, or mom-and-pop investors swooped in. In Atlanta, for example, they purchased 40 percent of bank-owned property in 2008 and 2009 (Immergluck and Law 2014). These investors were not large banks, private equity firms, or other traditional institutional real estate investors. Rather, they were primarily individuals relying on cash in order to make purchases, since banks would not generally provide loans to these early SFR investors (Ibid.). These investors gained a market advantage by being quick on the scene, developing relationships with local realtors, and using the *lis pendens*¹⁹ to identify distressed properties (Mallach 2014). These investors’ expectations were for relatively high returns from a combination of appreciation and annual net profits. Immergluck and Law (2014) identified between 8 and 15 percent unleveraged returns. Mallach (2014) reported that investors were seeking 8 percent annual returns from rents.

¹⁹ A *lis pendens* is an official, public note of an impending foreclosure. The *lis pendens* for buildings have been used by non-profit foreclosure assistance organizations, property investors, and mortgage scammers as market information.

As this market continued to mature since the crash, a cottage industry catering to individual investors emerged. Services like Roofstock help individual investors identify properties sight unseen and encourages would-be investors to make investment plays outside of their local community (Beasley 2018). Investors who can incur more risk are encouraged by these services to invest in lower-priced properties that will generate higher yield. The general target rate on SFR investments, according to the countless advice columns one can find, is now over 10 percent (Christopher 2019). While these pieces of advice are focused on the market at-large, this paper’s financial analysis indicates that the principal way to achieve such returns in the low-income market is through milking.

Beginning in 2012, the SFR market began to shift from these small-scale investors to institutional investors, with major private equity firms like Blackstone leading the way (Fields, Kohli, and Schafran 2016). As of 2016, 95 percent of the homes that came into Fannie or Freddie’s possession during the crisis ended up in the hands of SFR investors (Mari 2020). The number of SFRs in high-poverty areas outstrips the numbers in high-opportunity areas, as defined by the GSEs, by nearly 3-to-1 (Freddie Mac 2016). The major institutional investors formed REITs to organize their property holdings and the largest investors have quickly established an extremely high degree of scale in a short period of time, as shown in **Table 16** below.

Table 16. The Largest SFR REIT Players, 2018²⁰

Company	Number of Homes	Investor	Investment
Invitation Homes/Colony Starwood ²¹	78,832	Blackstone; Colony Capital; Starwood Capital)	\$14.8 billion
American Homes 4 Rent	48,000	Alaska Permanent Fund	\$9.6 billion
Progress Residential	17,333	Goldman Sachs	\$3.0 billion
Tricon	17,249	Tricon Capital	\$1.4 billion

Source: Chilton et al. (2018), Abood (2018).

As the institutional SFR market itself matured, the complexity of the financial instruments grew accordingly. Initially, SFR REITs relied on mortgage finance to acquire properties. About two years after the emergence of SFR REITs, the industry developed rent-backed securities (RBSs), creating a bond market for single-family rentals for the first time. These RBSs are backed by the rental income from the properties with the mortgage as a collateral (Fields, Kohli, and Schafran 2016). The development of this financial tool has accelerated the growth of SFR REITs and given an instrument that allows the institutions to return to the cash buying strategies of the individual investor, reducing cost of capital and delays from financing (Chilton et al. 2018).

Largely absent from the traditional small-scale market, Fannie Mae has begun to securitize single family rental properties. The first deal, in 2017, was valued at \$1 billion and

²⁰ A review of 2021 data indicates that ownership levels remain similar, with Invitation at around 80,000 homes, American at 50,000, and Tricon at 22,000 (Hoya Capital Real Estate 2021).

²¹ Invitation Homes and Colony Starwood merged following compilation of this data. Total homes and investment are shown.

included 7,204 units. However, this investment was not targeted towards the affordable market segment. **Table 17** below shows the affordability level of this deal.

Table 17. Affordable in Fannie Mae’s First Single Family Rental Securitization

Income Level	Percentage of Homes Affordable at Income Level
Less than 60% AMI	1%
60-80% AMI	30%
80-100% AMI	36%
100-120% AMI	22%
Greater than 120% AMI	12%

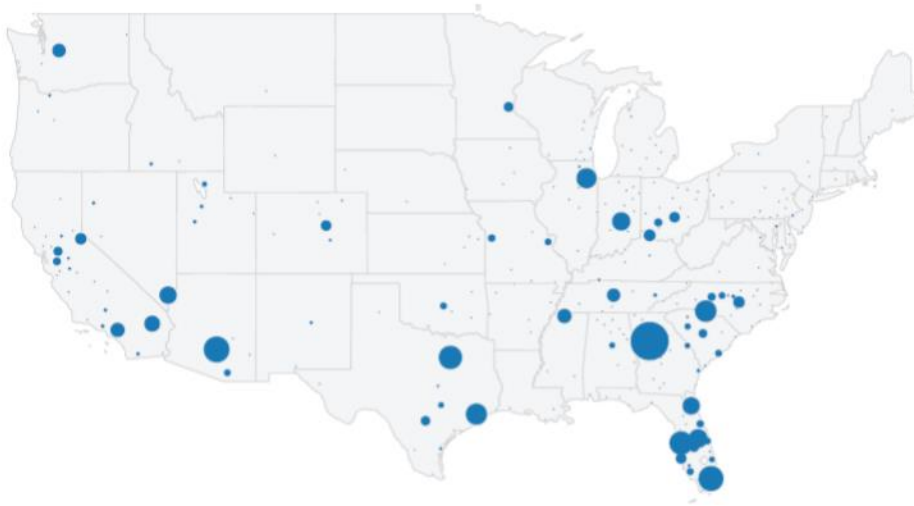
Source: Goodman and Kaul (2017b)

For institutional SFR investors, yield remains the mantra, with industry analysts expressing concerns about continued rising costs threatening the attractiveness of the market (Seeking Alpha 2019). This push for yield has driven consistent above-inflation rent increases in properties owned by SFR REITs (Ibid.) and has also encourages disinvestment in housing quality. In their study of SFR REITs in the Nashville metropolitan area, Chilton et al. (2018) noted that community organizations had identified that buildings owned by Blackstone’s Invitation Homes “are poorly maintained, violate local codes,” and are the subject of a nationwide Facebook group lamenting the poor conditions. As Mari (2020) described, the fundamental economic incentives of the SFR institutional model create an extremely strong push to reduce maintenance expenditures:

Landlords can be rapacious creatures, but this new breed of private-equity landlord has proved itself to be particularly so, many experts say. That’s partly because of the imperative for growth: Private-equity firms chase double-digit returns within 10 years.

While the emergence of the institutional SFR market is meaningful for understanding what is happening with low-income rental finance, it is very important to note where it is most concentrated. While there are SFRs across the country now with mom-and-pop investment, the combination of high yields, high rent-to-price levels, and low valuation attractive to large-scale investment was most prevalent in the Sun Belt (Freddie Mac 2016), as shown in **Figure 8** below. The bubbles represent locations of SFR investment by major institutional investors. The size of the bubble indicates the relative level of investment in those markets.

Figure 8. Concentration of SFR Institutional Investment



Source: Freddie Mac (2016).

7.3. Hard Money Lending and the Power of Cash

As evidenced by the map above, the story of institutional SFR investment is focused in the Sun Belt communities where low valuations made the rapid acquisition of foreclosed and distressed property possible. The sort of market consolidation that we have seen in communities like New Haven is not fully explained by the rise of SFR REITs. The interviews from Chicago indicate that traditional mortgage lending does not always meet the needs of this market. How are major operators filling this gap to finance their operations? Hard money lending addresses two gaps in the finance landscape. It is more easily available traditional mortgage lending, while permitting a faster deal flow, a key source of competitive advantage within the market.

Through a review of financial materials developed by one major landlord group in New Haven, CT, Netz-Mandy Management, and an exploration of real estate trade publications and investor-focused web sites, we can begin to fill out how this financing works. For the major landlord players in New Haven, the story of their financing is a combination of leveraging hard money lending with bond financing on the Tel Aviv Stock Exchange. The financial returns expected from these sources create challenges for meeting housing quality goals.

Large-scale landlords, in addition to the cash and mortgage offerings described above, make use of what is known as “hard money” lending. Hard money loans are commercial loans, not traditional mortgages, that are issued by companies or individuals rather than banks. These loans are relatively short in duration. For most construction or flipping hard loans, the duration is around 12 months. For holding arrangements, these loans stretch to the longer time horizon of 2-5 years. Market sources indicate that interest rates on these loans are 10-15 percent, well above commercial mortgage rates (RE Tipster 2019). In New Haven, when the notorious landlord couple Michael Steinbach and Janet Dawson strategically defaulted on a series of mortgages in the wake of the foreclosure crisis, they shifted to a hard money lender who required a 12 percent

annual return (Satija 2014). Among landlords and investors, hard money lenders are prized for their speed and their limited intrusiveness compared to banks (Maurer 2016).

American landlord investors have also turned to the Tel Aviv Stock Exchange (TASE) to further finance property investment by issuing bonds. TASE financing is also a post-Great Recession investment innovation. From when the first US real estate bond was sold in Tel Aviv in 2008 to 2016, \$2.5 billion in American projects have been funded through this method. The appeal of the TASE is that bonds can be packaged at smaller sizes than regularly possible in the U.S. bond market and financing costs are lower (Mashayekhi 2016). For TASE investors, “very highly strong cash-generating assets” are fundamental to getting the bond listed (Ibid.). In New Haven, the major property ownership and management group (Netz-Mandy) has been listed on the TASE and issued a series of bonds involving New Haven real estate. My research indicates that these bonds are a type of RBS that makes use of properties in single LLCs that Netz-Mandy identifies as “BOND” LLCs in property records.

Garboden’s work (2018) engaging with amateur real estate investors also sheds light on the social and psychological aspects of how hard money lenders interact with those beginning to play in this market. Described by some unwitting investors as “vultures,” lenders frequent real estate investing markets looking for undercapitalized would-be investors who need their untraditional services. The rates Garboden that cites (12-16 percent annually) continue to fit with the theme of hard money lending driving a market where substantial appreciation, rent increase, or maintenance reduction are needed to overcome financing hurdles. Garboden also lays out how hard-money loans are typically structured.

Hard-money loans are based on the expected future value or rent streams of the property and the lender does have a right to foreclose on the property to recoup non-payments. They are released to the borrower in batches based on certain milestones being met. In the context of hard money lending used for property flipping, they are generally paid off by a more traditional loan, particularly once a property has been upgraded. This short time horizon has interesting implications for how private lenders view the property: “Because the hard-money lender gets in and out of these deals quickly, they operate very much like subprime mortgage originators whose primary incentive is to amplify investment regardless of the soundness of the purchase” (Garboden 2018, 32).

The speed with which hard-money lenders are able to work because of their laxer underwriting standards means that they can beat – and perhaps crowd out – traditional finance in the small-scale residential market. And the typical valuation method, based on a future increased value to the property, may encourage more real estate investors to adopt a flipper strategy (Montagne 2017). In that way, hard money lending encourages unfavorable outcomes on both sides of our policy issue: either through degradation of housing conditions or removal of housing from the affordable market.

How large is the private lending space? The trade association representing hard money lenders, the American Association of Private Lenders, estimates that the hard money lending market is hovering somewhere around \$60 billion annually (Montagne 2018). While this pales in comparison to the traditional mortgage market, it is a massive capital infusion going into neighborhoods that ought to be shaped toward public policy goals and comparable to the commercial mortgage backed securities market, which reached \$96.7 billion in 2019 (Mandzy 2020).

Private lenders pride themselves on the speed that they can provide, sometimes boasting that 10 minutes is all it takes to assess a potential loan (Ullman 2021). This speed is fundamental to the competitive advantage of the lending. But prospective hard-money borrowers also find that the real estate market in this space listens to those who have the cash on hand now. In the landlord forums that I have frequented, investors lament the reality that **cash is king** in purchasing properties. Here is one such example:

“How do you compete with cash buyers? I keep losing bids. I have hard money ready to go but still losing even when over-bidding \$5k-10k.”

The competition with that speedy cash buyer, like the SFR investor, can be offset by finding “off market” options, through what is often referred to as real estate wholesaling. In this approach, which is frequently touted in landlord forums, an investor scours an area they know well to find homeowners who may be looking to sell, but have not formally listed their properties. They generally do not take on the risk themselves, but often find a property investor looking for a good deal on a non-competitively-bid property. This model is popularly recognizable through the ubiquitous “We Buy Ugly Homes” franchises from a company known as HomeVestors. It is part of what Karger (2007) argues is the “fringe” housing market. There are some advantages to this system for the market as a whole – my experience in New Haven included many homes owned by descendants or trustees that had fallen into disrepair or abandonment. But, the process creates a risk of equity theft²² for the seller and is a sales method largely unavailable to a working-class homeowner who might wish to stabilize a property. The value placed on speed in finance, then, creates a competitive condition within the marketplace and is a fundamental point to understand if we wish to improve the quality of finance that is undergirding low-income housing economics.

7.4. Finance on the Margins: Mortgage Fraud, Straw Buying, Contract Sales, and Arson

Informal and illegal practices are often found in the context of market failures. Consistent with the “merchants of the poor” framework (Wilmers and Desmond 2019), it is not surprising that an element of criminality flows through real estate at the bottom of the market. As dramatized in *The Wire* and backed up by local reporting in Baltimore, low-income private housing can serve as an effective front for drug money (Haner 1999). But the means of financing the housing can also border on a criminality that is often overlooked.

I return to New Haven for further exploration of some of the financial misdeeds that may occur in the market. We begin by rounding out the story of Michael Steinbach and Janet Dawson, the New Haven landlords whose severe neglect of maintenance injured tenants and left properties severely degraded. Having knocked most maintenance costs off of their balance sheet, Steinbach and Dawson also perform complicated financial transactions to reduce their mortgage and property tax costs. Prior to the fall of the mortgage crisis, the Steinbachs were able to acquire mortgages for many of their hundreds of homes at inflated prices. For example, at 13 Redfield Street, Janet Dawson was able to garner a \$120,000 mortgage for a property worth less than \$80,000. At it, and other properties, Steinbach and Dawson then decided not to pay the value of the mortgage. As the banks swarmed in, they transferred the properties over to a swath of limited-liability corporations, like “Mad Max LLC, Pretty Pee LLC, EZ Mortgage LLC, Boo

²² “Equity theft” occurs when sellers with high pressure to sell end up giving away large portions of the value of the property to move it quickly, likely after the entreaty of an unscrupulous property investor (Stokes et al. 2020).

Betty LLC and Misty Girl LLC.” Far from done, once the bank foreclosed on these LLCs, Steinbach and Dawson would buy back the property at auction, for a lower price. The reduction in values for the properties brought about similar reductions in property tax and potential mortgage payment costs. As Steinbach and Dawson repurchased properties, they avoided trying to solicit loans from the banks they burned. Instead, property investors are giving them hard cash in exchange for 13 percent yearly returns on the properties (Satija 2013).

Two other groups of New Haveners landed themselves in prison for a complex scheme to run mortgage fraud on low-income tenants’ properties. One ring, led by Menachem Levitin, engaged in a series of double-ended scams on low-income properties. They engaged in a process known as a straw purchase. Straw buying is a relatively well-trodden path in the area of mortgage fraud where an individual stands in the place of the real buyer in order to conceal a criminal operation underneath (Baumer et al. 2017).

Finding a property in derelict condition and an owner willing to sell, Levitin “assisted” the seller in finding a buyer, whose identities had been stolen. Levitin’s appraiser accomplice created an inflated appraisal, which was used to obtain a mortgage for the property. Levitin then paid the real price to the seller, profiting on the difference mortgage and the actual evaluation. The pretend buyer would get foreclosed on by the lender, and Levitin would emerge to let the bank short-sell the property to him. Having acquired significant properties through this process, Levitin milked. One of his properties, 147 Lloyd Street, was cited in a single inspection in 2010 for 35 violations, among them the presence of raw sewage in the basement. The second mortgage fraud ring, led by a former Alderman, among others, operated similarly to Levitin’s. Instead of stealing identities, though, the fraudsters paid “straw buyers” around \$10,000 to stand in as the purchaser of the home. When the properties inevitably went into foreclosure, the straw buyer was dragged into bankruptcy. During this entire process of scammers trying to extract as much from fraudulent mortgages as possible, neglected tenants suffered in derelict housing (Satija 2013).

The use of certain sales tactics have emerged as exploitative financing tools. In Philadelphia, for example, Robert Coyle built an “empire” of \$15 million in rental properties (Star News 2013). Once the housing market burst in the Great Recession, he decided to strategically default on the entirety of his assets. Before leaving the game completely, though, he performed a bait-and-switch on tenants by offering them the ability to buy their properties through a rent-to-own scheme. Instead of owning the home, the tenants found themselves as the owners of a very delinquent mortgage on the verge of foreclosure. A similar vein that emerged during the aftermath of the housing crisis was mortgage rescue fraud, where individuals swooped in to “help” a struggling homeowner and offered to provide a structured payment plan. In some cases, the fraudsters then had the property transferred to them and subsequently evicted the resident (Forbes Stowell 2012).

An old exploitative sales tactic that has made a resurgence is what is known as contract-for-deed (CFD) sales. Under so-called CFDs, a prospective homeowner agrees to make installment payments for a house, including incurring obligations for tax and upkeep of the property. However, the property remains in the possession of the lender and the homeowner/tenant builds no equity. These tactics were highly prevalent and racialized in the 1950s and 1960s (Rothstein 2017). In the wake of the Great Recession, a new crop of private equity firms specializing in selling CFDs have re-energized the market, targeting low-income and minority neighborhoods, many of the same places that the SFR investors have focused on.

As of 2009, CFDs governed approximately 7.3 percent of all financed homes and 4.3 percent of all homes (Immergluck 2018a). In Immergluck's study of three markets, the racialized aspect of this practice shone through. Black CFD rates were at least double those for white homebuyers (Ibid., 657).

And if intentional degradation of housing property stands as the quotidian manner by which low-income private housing finance pushes against the traditional, rational approach to preserve housing as a long-term asset, intentional arson is the *ne plus ultra*. Particularly during the period of urban decline, and gaining fame during the "Bronx is burning" era of the 1970s, "arson-for-profit" emerged as an approach where real estate owners conspired to burn their own property in order to profit from the insurance payout (Goetz 1997). Its past and current prevalence is not wholly understood, but a review of news articles suggests there continue to be a string of individuals investing through this destruction. In early 2018, a group of five individuals was arrested for scheming 27 fires over 15 years (U.S. Department of Justice 2018).

While these forms of finance collectively represent both extreme cases and clearly unlawful activities, they punctuate the indelible conclusion of a review of the finance in this market. "Good" capital that comes from both established, regulated sources and seeks to further the public interest is limited. Even capital from large, traditional financial institutions counteracts public policy goals. And then there is *bad capital*, lightly tracked dollars pursuing destructive ends. In the next section, I will articulate what these financial machinations mean for both the overall functioning of the market and our understanding of how dollars compete in the low-income market.

8. The Economics of COVID-19 Era Low-income Housing

Having described the market failures inherent in the functioning of the American private low-income housing space, we turn to the current crisis. The COVID-19 pandemic has further exacerbated the economic and finance challenges in the low-income market. Since March 2020, the rental housing market has been rocked by the resulting unemployment crisis. Policymakers have generally responded with a set of local, and then federal, eviction moratoria and prohibitions on utility cut-offs. There have also been a patchwork of financial incentives and subsidies developed to try to support landlord and tenant alike. There are six fundamental themes to understand about how COVID-19 is reshaping the low-income housing market.

1. **The substantial “class C cliff:”** Rental payments have precipitously declined at the bottom of the market, even if they have remained stable elsewhere.
2. **Diverging rent trends:** At the same time, rents have increased at the bottom while declining at the top.
3. **The consequences of the gaps in eviction moratoria:** The uneven implementation of the eviction moratoria have meant that tenants have been left in the cold or are seeing accumulating personal debt.
4. **The Big Squeeze for landlords:** A decade after the Big Short, landlords now are being squeezed between their own costs and tenants who cannot pay.
5. **Shifts in ownership:** Small owners are expected to sell to larger investors as a result of the financial squeeze they currently face.
6. **Shifts in landlord organization and perspective:** Frustrated by the current political and economic environment, landlords, particularly small landlords, are beginning to organize in new ways and express particular opposition to anti-eviction policies.

There are two parts to the COVID-19 housing market. The first part is the economic dislocation caused by the pandemic. In the “class C cliff” section, I will detail how the specific economic impacts of COVID-19 have had unique reverberations in the market. The second part of the current landscape is the set of policy interventions that governments have sought to impose to reform and stabilize the market in the current moment. Before we dive into the implications of the current moment for housing economics, we have to look at the profound impacts of the policy action taken. The social benefits of these moratoria policies have been tremendous. One paper estimated that eviction moratoria reduced COVID-related deaths by 11 percent and moratoria on utility shutoffs decreased COVID-related deaths by 7.4 percent. Had the policies been uniformly implemented from March through November of 2020, versus the general patchwork of policies that were actually implemented, estimates suggest that an additional 164,000 COVID deaths would have been averted (Jowers et al. 2021). The magnitude of this program bears repeating. This was a staggering policy decision to upend the traditional relations between landlord and tenant, and one whose scope and scale was absent during the Great Recession. It was clearly life-saving and transformative. Below, we will dive into the economic consequences of COVID-19 and its policy response and what it means for the future of the private, small-scale low-income housing market.

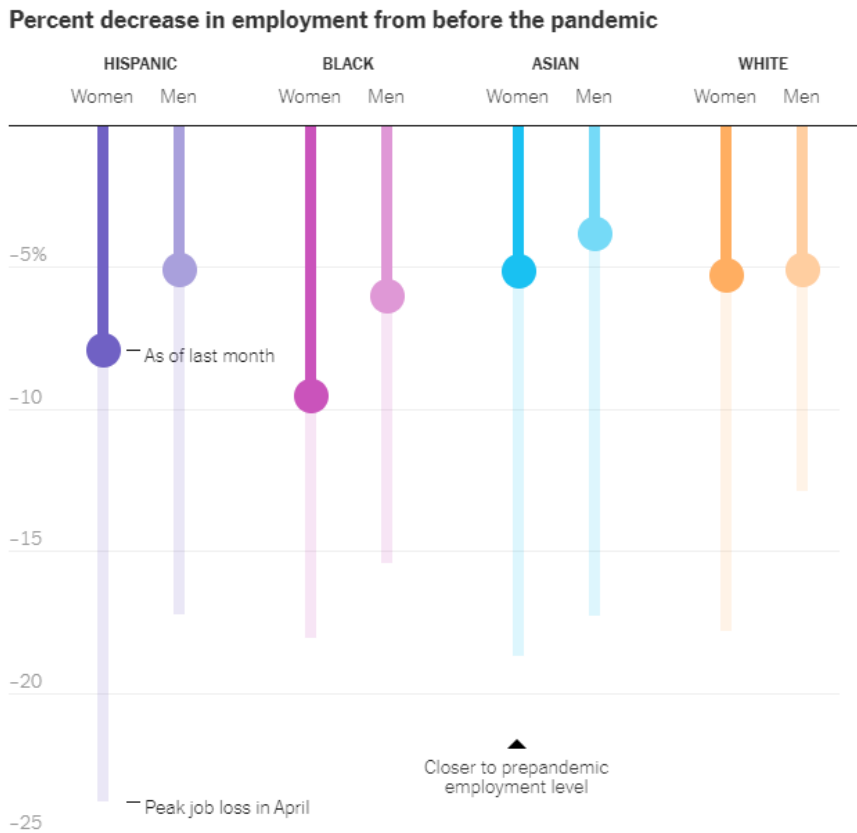
This section also considers what comes next. As we emerge from the COVID-19 crisis, how might the current pressures translate into further reshaping of the market? The low-income rental housing market will be emerging in a substantially weakened state, with both tenant and landlord having lost substantial income over the past 15 months. I expect that the conditions may

result in a reshaping of who owns property in the low-income space. Just as the Great Recession saw a shift toward rental housing in this market, we may see small landlords sell to larger, often private equity-backed interests. From a regulatory standpoint, landlords may be more emboldened to oppose regulation that increases costs.

8.1. The Class C Cliff

We begin with an examination of the economic consequences from COVID itself and how those relate to the low-income housing market. During the pandemic, the Trump Administration tried to indicate that after initial shelter-in-place orders in March 2020 the economy was headed for a “V-shaped” recovery, i.e., bouncing right back. Others argued instead that the economy was “K-shaped” (Stewart 2020). In this model, highly educated individuals with jobs easily done from home have been able to maintain activity, while lower-income, particularly service-sector workers, have seen larger and longer economic distress. The unemployment data shows strong evidence of this K-shape. As of March 2021, while employment levels for those with bachelor’s degrees or above had basically returned to pre-pandemic levels, those without a high school diploma had a 13 percent drop in relative employment. Blacks and Hispanics saw more sustained job loss (Koeze 2021). **Figure 9** brings together different demography to show the uneven nature of economic recovery.

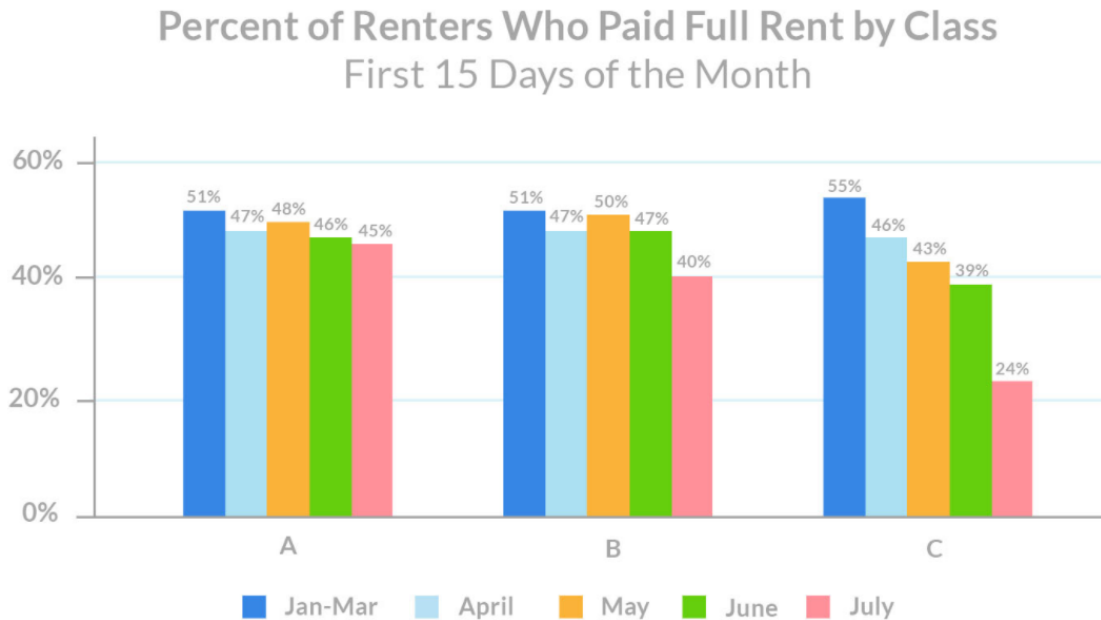
Figure 9. The COVID Economy



Source: (Koeze 2021)

The K-shaped nature of economic conditions under the current crisis is deeply reflected in the low-income rental market, referred to as “Class C” in industry publications. Timely payments in this market shot down from 80 percent in January 2020 to 37 percent by July 2020 (Carmiel 2020). Looking at a different metric, rent paid off by the 15th of each month, other sources have shown how a similar drop-off did not occur in the Class A and Class B residential markets (LeaseLock 2020). While Class A only saw rent paid decline from 50 percent to 46 percent of rent, Class C dropped from 54 percent to 31 percent paid between pre-pandemic and Summer 2020. **Figure 10** below visualizes this effect. What does this mean? There is a tremendous amount of rent not being collected in the market. As a result, certainly landlords are likely cash-strapped and substantially reducing maintenance. Housing quality is likely to continue to suffer. It also means that we are seeing strong evidence of a break in the functioning of the housing market between the mainstream and the low-income segments. However, the story becomes more complicated, and perhaps even more discouraging, as we dig deeper. Below, I further discuss what the current policies and economic trends mean for tenants and landlords.

Figure 10. The Class C Cliff



Source: LeaseLock 2020

8.2. Diverging Rent Trends

Despite the dire evidence of non-payment at the bottom of the rental housing market, rents are still increasing for low-income renters. Amid narratives that professionals are leaving cities, the high-end residential market saw a 3 percent drop in rents between the end of 2019 and the end of 2020. Nationwide, the low-end market has seen an equivalent *increase* in rents. The *Washington Post* reported on some tenants in this market, bearing the brunt of our K-shaped economy, who saw the worst side of these rent increases:

And some unlucky tenants have endured much bigger hikes. Porter, whose contract job at a nonprofit recently ended, is paying a nearly 5 percent increase,

bringing the monthly price of her two-bedroom apartment to \$1,500. (Porter, who has epilepsy, receives disability payments and vouchers that help cover the bills.) Andrea Ospina, who lives on the outskirts of Dallas-Fort Worth, said her rent rose last summer from \$900 to \$1,250 — or nearly 40 percent. This was shortly after her husband was laid off from his truck-driving job. (Rampell 2021)

These rent trends spell particular bad news for the low-income tenants that are the subject of this exercise. Already 30 percent of all US households are housing cost burdened, with nearly 18 million spending more than half their income on housing (Bouie 2021). They have limited ability to pay more, especially when so many more of them are out of work.

The increase in rent, though, represents a major market failure given the loss of available income for housing in this market. Why is this unexpected trend taking place? Analysts point to a larger breakdown in the typical function of the housing market caused by the pandemic. Homes that should have gone on the market in 2020 did not due to the pandemic (Ibid.). Higher-income renters moved into lower-cost apartments as their own economic futures became more uncertain. At the same time, with the eviction moratorium resulting in landlords losing rent from some unemployed tenants, advocates theorize that rents are being raised on other tenants who can pay to compensate (Rampell 2021). This rent dynamic reinforces the price setting power of landlords in the market. Further, the picture that the divergent rent trend paints is stark. While many renters in this market are facing economic precarity, many who may still have income are seeing more and more of that limited amount going into housing. Even with those additional dollars, the evidence that housing quality is improving is limited. As one tenant told the *Post*:

“They say that the cost of living continues to rise, but then never provide additional amenities...They remain the same or less” (Ibid.).

8.3. The Consequences of Gaps in Policy for Tenants

From a tenant perspective, the current system of moratoria has two fundamental gaps. First, it is not a rent holiday, despite some advocacy for that outcome early in the pandemic. As a result, unpaid rent obligations are deferred and accumulate as commercial debt for delinquent tenants. Estimates from last fall sought to understand how large this “rent shortfall” is. Based on analysis prepared for the National Council of State Housing Agencies, the unpaid rent generated from the beginning of the pandemic through January 2021 reaches between \$26 billion and \$35 billion (Stout 2020). As of February 2021, the National Apartment Association estimated that the rent shortfall had reached as high as \$70 billion (Chen 2021). While above we noted that this shortfall is a major loss of operating capital for improving housing quality, here we might consider it as a major financial obligation that will add to the future burdens of lower-income tenants. The American Recovery Plan, the most recent recovery package, adds \$25 billion in rental relief to the \$25 billion included in the CARES Act, but it remains to be seen how much is used and where the ultimate rental shortfall stands by September 2021, when the latest CDC moratorium is set to expire.

Additionally, the eviction moratorium only covers those who cannot pay their rent due to lost income from COVID-19 and requires the tenant to sign an affidavit, which concludes, “This declaration is sworn testimony, meaning that you can be prosecuted, go to jail, or pay a fine if

you lie, mislead, or omit important information” (U.S. CDC 2020). Other types of evictions are still viable, and there is substantial concern that landlords are making use of other justifications, such as damage to the property or other contract violations, to continue to engage in evictions. This risk has resulted in advocacy groups continuing to raise the alarm that tens of millions of renters could still be at threat of eviction. To further explore this issue, we can examine how gaps in the moratorium or human behavior have resulted in continued evictions at a troubling time and why landlords continue to evict despite the apparent challenges in the market and the broader economy.

Indeed, the concerns of activists appear to be well-founded. Princeton’s Eviction Lab estimates that over one million individuals have faced evictions since the pandemic and associated moratoria began (Fessler 2021). Some of these evictions or displacements appeared to occur in locations where a local mandate was not buttressing the federal policy. A Government Accountability Office (GAO) report indicated that evictions were 88 percent lower in communities with a local moratorium than in those without (U.S. GAO 2021). GAO indicated that awareness of the moratorium may be low in communities without a local policy. Even for residents that claim protection from eviction for non-payment under the moratorium, other causes of eviction may play a role. Landlords continue to pursue evictions based on violation of lease terms or may choose not to renew a tenant’s lease (Scott 2021). An eviction does not even necessarily need to be completed for the action to drive tenants to move. Matthew Desmond’s data from Milwaukee indicates that 34 percent of eviction filings in the city this year resulted in the tenant moving before the process was complete (Desmond 2021). Similarly, nearly half of all tenants indicate that they are thinking of moving due to their existing late rent status, despite the presence of the moratoria (U.S. GAO 2021).

Throughout the pandemic, commenters have raised an important question that reinforces the value of studying and understanding landlord behavior and the market that landlords work in: Why, in the midst of a global pandemic and economic collapse, are landlords evicting at all? As *ProPublica* reporter Lydia DePillis framed the question on Twitter:

Here's what I don't understand about the eviction wave that's underway. Especially in weaker housing markets, where everybody's losing their income, what's the incentive not to work with a tenant? Are landlords sure they can find another? (DePillis 2020).

What *do* landlords expect to gain in putting people out onto the streets and into a pandemic? First, eviction is very much a normal course of business for landlords. Though landlords in the forums I frequent note the challenges and hardships associated with evicting, 3.6 million eviction actions are filed every year, with 1.5 million being completed (Gromis 2019). Earlier, I discussed how some landlords may use the eviction process as a “strategy” to advance economic goals. That section outlined some of the behavioral economics that influence how and why landlords choose to evict. In the context of the current crisis and based on my review of what landlords tell each other in public forums, I posit that there are five principal reasons that landlords continue to evict, even when the broader macroeconomics signal a market in distress:

1. **Bullish expectations.** Landlords have reason to believe that they can indeed fill a unit, even if a current renter is suffering. The tight low-income market and rising rents seem to support this hypothesis.

2. **Moral hazard.** Being lenient could lead to other tenants learning of the landlords' generosity and seeking to also not pay rent.
3. **Carrying costs.** An unoccupied unit may have fewer costs than an occupied unit, if no rent is being received. In master-metered buildings, utility costs can become a major drain. Some tenants have reported receiving notices to limit their energy use.
4. **Cultural norms.** As discussed previously, landlords often see late-paying tenants as people who are unable to manage their money, not the "deserving poor." As a result, they tend to have limited sympathy. Some landlords in recent forums have noted tenants that they want to evict due to non-payment and indicate that their unemployment "has nothing to do with COVID."
5. **Pre-COVID behavior.** Tenants who were struggling to pay rent before COVID-19 have been targets for landlords in forums. Landlords see these individuals as particularly unlikely to pay now and are dismayed at months more of nonpayment.

With the gaps in current law, landlords considering these factors have continued to push forward on filings and actual evictions, putting tenants at risk during a housing crisis.

8.4. Landlords Face the Big Squeeze

On the other side, landlords also feel the pains of an incomplete process. I have documented above the level of rent lost and the reasons that landlords feel that evictions are justified on the merits. Even those landlords who recognize the exceptional circumstances of the moment feel squeezed by the unevenness of policy support for their position. Their principal concern is the lack of a comprehensive moratorium up and down the cost chain.

The lack of a comprehensive approach was particularly pronounced under the moratorium enacted under the CARES Act. Landlords whose mortgages were backed by FHA or the GSEs were subject to forbearance policies. All others—the vast majority of those in the 1-4-unit rental space—were not (Himmelstein and Desmond 2021). As a result, many landlords still owed mortgage payments despite decreased rents. Prior to the pandemic, it appears that a minority of evictions occurred at properties with qualifying financing (Ibid.). As a result, the CARES policy only covered a portion of the most vulnerable residents and did little for some financially-strapped landlords.

Landlords may also owe utilities and other operating costs and have limited ability to pay. These include property management fees and also state and local taxes, which were generally not waived during the pandemic. While utility shut-offs have generally been included in local moratoria, these costs contributed to a sizable squeeze for landlords. Small property owners in particular, who lack the reserves to weather even less disruptive events than this, have been particularly affected (Chen 2021).

Communities across the country have made some use of rental assistance through the CARES Act funding that they received to combat the virus. However, these resources have been insufficient to meet the massive needs (Himmelstein and Desmond 2021). I will discuss below how the administration of the program has potentially limited landlord participation. It also remains to be seen how much of the squeeze the American Relief Plan will ease.

8.5. Shifts in Ownership

Having outlined the general condition of the current crisis, we can begin to ask how the current distress will re-shape the future of the market. The current indication in the rental housing market is that the trend of consolidation will continue as a result of the crisis. Small landlords are most unable to deal with the loss of income from tenant unemployment. They are reporting to local media, in their pleas for financial support, that current conditions require them to sell off to larger entities willing to bear the current risk (Tiernan 2020). Many of these landlords most affected maintain that they are the ones who have provided the below-market rates on which the market at the focus of our study depends (Schweitzer 2020). As a result, housing market watchers have begun to wonder whether 2009 will play out all over again, with new large-scale investors, like Invitation Homes, again purchasing large portions of the housing stock (Andrews 2020).

The initial evidence is that these prognostications are coming to fruition. SFR investors, including crowdfunding platform Fundrise, are driving major increases in winning housing bids. This activity seems largely concentrated in the Sun Belt still. SFR investors purchased 24 percent of homes in Houston this past year (Dezember 2021). The change from the last recession is that more players want in. Traditional real estate firms see the market as a compelling place to earn yields and are joining the fray (Ibid.). Continued consolidation of the SFR market is also afoot, with some of the largest real estate investors agglomerating their holdings. Progressive activists have noted that a small subset of billionaire private equity owners stand to gain the most from this consolidation (Myklebust et al. 2021). These trends suggest that the model of the market as increasingly a competition between homeowners and renters is being strengthened. It also means that the financial flows of this market, where profit is extracted through underinvestment in quality, threaten to further concentrate the value of lower-income communities in the hands of the wealthiest few, exacerbating inequality and limiting stability and wealth creation for lower-income Americans.

8.6. Shifts in Perspective

As properties begin to shift ownership, we also have to consider how the existing stock of landlords will consider future policy reform. Simply put, landlords are quite angry. The current COVID-19 crisis is pushing heavily against the set of economic goals landlords have and the moratorium tests the moral beliefs that many landlords hold about their tenants and their property. There are two social trends in the landlord industry that will be important to track: a schism between small and large landlords and increased non-compliance with government policy.

The economic differences between small and large landlords explored in this paper have been brought forward in the crisis. As a result, many small landlords have organized for the first time, creating their own property associations apart from larger groups (Perry-Brown 2020). They feel that they have been unfairly placed at the center of managing the economic consequences of the COVID-19 pandemic (Schweitzer 2020). The small landlords have become reflections of their poorest tenants. With limited income from a few properties, some landlords have themselves had to rely on public and private assistance (Breen 2021). Policymakers will need to consider both small and large landlord needs and incentives in crafting future reform of the market.

At the same time, the feeling of landlords that they have been placed in the center of the crisis may reduce their compliance in policy change. Many low-income housing advocates realized that the lack of a moratorium up-and-down the cost continuum in the residential market had placed many landlords in a tough position. Organizations like the National Low-Income Housing Coalition (NLIHC) have advocated for direct rental assistance. And yet, many landlords have refused to participate in rental assistance programs. When the rental assistance has been designed as either support to tenant or to landlord, other factors have resulted in landlords refusing to accept the money. They may feel that the tenant has already broken their trust or that requirements that they waive some of the outstanding rent debt are unacceptable. The scale of this non-compliance is not quite known, but advocates in Houston have worked with 5,000 tenants whose landlords would not accept assistance (Parker 2021). At the same time, dozens of lawsuits around the country have been filed against the eviction moratoria, with an increasingly sympathetic ear from conservative jurists. Federal District Court judges have halted the moratorium in parts of Ohio, Tennessee, and Texas (Pendered 2021). Those who wish to improve this market will need to consider and confront this change in perspective brought on by the current devastation. They will also have to realize that the frustration runs both ways. Diane Yentel, CEO of NLIHC, reacted in disgust on Twitter when reading about landlords refusing to take assistance money:

Absolutely maddening. Landlords spend a year yelling that eviction moratoriums are unfair b/c they need to be paid rent. Advocates mobilize & Congress provides an unprecedented \$46.5B for rent arrears - and landlords refuse to take it.
(Yentel 2021)

8.7. Responding to the New Market

As we exit the pandemic, the low-income housing market will be in a process of shifting ownership and shifting preferences. While these may represent the trends set in motion based on the COVID-19 crisis, we can also make use of what we now understand about the low-income housing market to respond to these trends in a way that can strengthen the low-income market for the long term. A market that is more concentrated is a double-edged sword. We know from the portfolio analysis that larger players can create the economies of scale to be more economically viable. A single, larger firm gives cities a clear player to work with. However, dominance of a rental market by large landlords furthers the market power already existing in the market. Cities should engage directly with these landlords to further housing quality interests and work for affordability. Cities should be prepared to deal with a chastened landlord class, too, not to mention a frustrated housing advocacy community. A focused, activist city leadership will be needed to identify the best path forward for engagement on housing quality policy. Later, I outline solutions all cities can take to do that and create stronger communities as they emerge from crisis.

9. Incentives and Implications: A Common Framework for Understanding the Economics and Finances

Having established the basic economics and finances of this understudied market and evaluated how the market is responding to the COVID-19 crisis, we can meld the sociological and economic literature into a common and comprehensive framework for understanding how the private low-income housing market functions. We can confront what incentives exist within the market and what the implications are for improving the quality of low-income housing, increasing the quantity of private housing for the poor, and promoting minority homeownership. This section seeks to summarize what these incentives mean for housing condition, how they should inform policy, and how they relate to a broader discussion of the housing market in the academic literature.

There are seven fundamental elements of the framework that help us understand current conditions and design future policy and research:

1. Scale matters in this market. Small and large landlords have different financial structures and incentives. Small and large buildings result in different financial management approaches.
2. Market concentration, in the hands of LLCs and SFR investors, has meaningful implications for market power and neighborhood control.
3. Building-level economics are bounded by the costs to provide housing and the amount that low-income people can afford to pay. Whether landlords *can* invest in these properties to preserve quality depends on the whether there is enough rent-paying potential in the neighborhood. Whether they *do* depends on whether they might face a market penalty to do so.
4. Building-level economics behave differently in the sub-market of low-income, racially segregated neighborhoods. These sub-markets are still inextricably tied to the broader market and economy of the community.
5. The limited “good” financing in the market makes it hard for more socially-minded landlords to acquire and maintain small, low-income properties. The lending that does exist reinforces property degradation and, more broadly, social inequality.
6. In particular, the conditions of the market have created a world where “cash is king” and where the entities with quick deal flow dominate.
7. The ability of large landlords to buy properties quickly and aggressively provides challenging competition to working-class potential homeowners of color, affecting wealth creation in working-class neighborhoods looking for stabilization.

These elements are summarized further below.

Scale matters in this market.

Small landlords, who own a few properties and may be using the properties as a secondary form of income, are substantially more liable to shocks, like a broken furnace, than large, professional landlords. Large landlords are able to bring together professional management resources and scale to turn low-income properties into big business. The distinction between small and large buildings is similar, with the scale of the building being a substantial indicator of both the risks associated with investment and the opportunity and necessity for more professional

management. The pandemic has laid bare these distinctions, but all analysis of the low-income housing market should carefully evaluate how differently-sized actors and buildings will fare under a new policy regime.

Market power drives change and flow in the market.

When evaluating the function of a market, economists also concern themselves with the question of market power. In the context of this market, the organizational form of the LLC and the SFR investor have relevance for consolidation in the local and national low-income markets. The anonymity and the limited liability that the LLC creates has meaningful implications for the condition of housing in the low-income market and for the creation of an oligopolistic market structure that increases landlord power. Three outcomes rise to the top:

- First, the anonymity that the LLC provides makes it hard to hold a property owner responsible for their actions (Badger 2018).
- Second, the limited liability makes it challenging for the landlord to be sufficiently punished when they are in violation of housing codes or in arrears on taxes or the mortgage. They have the ability to dump the property when code enforcement or taxes become too onerous (Travis 2019).
- Third, as Desmond and Wilmers (2019) put forward, the LLC is a useful vehicle for “merchants of the poor,” a special class of capitalist to which the poor are shunted who may engage in more exploitative or extractive behaviors. The two above features of the LLC make it easy for those that seek to serve the low-income market to abuse the properties and tenants with relative impunity. Those willing to work in this market may desire the anonymity that an LLC can provide.

While the LLC may be a generally legitimate means of organizing an entity to invest in real estate, the structure creates a permissive set of incentives for landlords that wish to do ill in the underbelly of the housing market. It can also help them acquire market power surreptitiously, creating a *hidden oligopoly* within communities as activists have recently explored in the wake of the COVID-19 crisis (Myklebust et al. 2021).

The SFR market, meanwhile, has ballooned from an essentially non-existent industry pre-2008 to a market where multiple players have hundreds of thousands of units across the country. The “SFRization” of the market has its own implications for market structure and policy reform. The management of more small-scale units for working-class people is becoming systematized. Algorithms decide when to evict and when to raise rent. The scale of these enterprises also means that code enforcement and other forms of regulation of this market may need to increasingly shift from the local to the national if policymakers wish to make serious changes to how these firms behave.

Limited Building Resources and a Bounded Market

This paper has shown the limited resources that small buildings in low-income markets generate. The income available within a housing sub-market determines the upper bound of the rent that landlords can charge, naturally quite low in low-income contexts. The lower bound is set by what the landlord can reasonably afford to rent for while still handling the costs of doing so.

The resources that are available fundamentally shape landlord decision-making and have substantial implications for housing quality. Some buildings may not be profitable when responsible strategies for maintenance and management are employed. This situation, found in more depressed markets, means that any landlord will be forced to underinvest in housing conditions. In other market circumstances, disinvestment appears to be a choice. It is a choice that depends on whether they pay a real penalty from tenants for doing so.

The issue of this market penalty brings this paper regarding housing quality into direct conversation with the broader literature regarding housing supply for low-income Americans. As I will discuss further in the *Solutions* section, a key implication of landlord decision-making regarding quality is that the creation of more outside options for lower-income tenants is fundamental to reshaping this dynamic. Tenants with limited choice have limited market power to push back against the poor quality of their homes.

Housing behaves differently in low-income sub-markets.

Housing economists generally agree that the housing market itself is made up of sub-markets. There is widespread agreement that there are sub-markets on the basis of the physical characteristics of the housing and more tentative agreement on sub-markets based on spatial location (Galster 1996). This paper illuminates the multiple ways that low-income markets do appear to function differently from the broader market. The types of actors differ, the “merchants of the poor” operate here, the dynamics of housing prices in response to shocks differ, and the types of finance differ. As indicated above, the issues related to building size mean that the small buildings within the sub-market should be understood separately. Housing policy must necessarily recognize the characteristics and function of these sub-markets. Economists and sociologists should better employ the sort of models developed by Leishman (2009) and others that help us to better define these sub-markets.

The discussion of sub-markets in the current housing discourse has centered on the debate about how to address regional affordability concerns. For example, Damiano and Frenier (2020) argue that sub-markets matter because new construction, designed to curb overall market needs for housing, can drive local rent increases in low-income communities. Policymakers will want to consider some strategies, described later, that can help to materially invest in communities and improve quality, while tracking their disparate effects in and out of low-income neighborhoods.

The market is defined by limited good financing.

While the fundamental building economics can result in property degradation, the financial context pushes landlords to further “milk” properties. Financing costs can push otherwise profitable buildings underwater. The high interest rates demanded by the market require a high hurdle rate for investment and property operation. These high rates represent the market’s assessment of both the actual risks in the market and the reputational or social risks with engaging in the low-income economy. With the upper bound of the market set by tenant incomes, these high rates result in further incentive to invest less in the property to serve the needs of investment capital. In that way, inequality is exacerbated through the transfer of value out of poor neighborhoods and into investor returns. The COVID-19 pandemic has brought the inequality into sharp relief, as the billions in outstanding rent debt compare against the \$21

billion in increased wealth that has accrued to the largest landlords since the start of the pandemic (Myklebust et al. 2021).

At the same time, there are limited good sources of capital for those who desire to take a different approach. That leaves few options for those who might want to invest in the 1-4-unit space in the low-income market in a positive way. Instead, financing itself is a market failure, reinforcing extractive practices to meet demands for high yields.

Cash is king.

We live in an era of so-called “financialization.” The financialization literature suggests that the economy has increasingly become dominated by finance as a major form of economic activity and wealth accumulation (Kreppner 2005). Indeed, the larger real estate market and especially the LIHTC market are notable for complicated and multifaceted financial structures for advancing real estate development. In this part of the market, cash is king. The landlord blogs, the hard money lenders, and those studying the *flows* of housing in these communities all see the ability to purchase with cash and purchase quickly as the driving force for competitive advantage in this market.

On the one hand, this dynamic further buttresses the idea that the absence of other quality financing options seems to benefit an actor who can generate both high levels of initial cash and quick cash returns. It also suggests that housing finance policymakers need to take a more deliberate view of the financing structures in this market.

Investors are crowding out minority homeowners.

A typical view of the rental housing market is that investment seeks to meet the market demand for rental housing specifically. In this market, what we see instead is a competitive market for buildings that can serve either homeownership or rental needs. In this competition for buildings, those without cash are crowded out. This unequal competition raises questions about the future of homeownership, particularly for communities of color and working-class individuals. When properties go up for sale, cash investors are able to out-bid and out-manuever the working-class person of color who wishes to own a home in these neighborhoods (Herbert et al. 2013a).

Homeownership has served as the principal public policy tool for building mass wealth in the United States. The unevenness of homeownership due to racial discrimination has driven the white-black wealth gap, and the disaster of the Great Recession particularly affected first-time homeowners in communities of color (Schuetz 2020). In the wake of the Great Recession, there have been reasonable questions as to whether homeownership should be an active housing policy goal (see, for example Davis [2012] and Chappell [2017]). Social norms continue to promote homeownership as an approach to providing stability and control for families (Herbert et al. 2013b). Homeownership has been seen as a means of stabilizing neighborhoods themselves through committed long-term residents (Rohe and Stewart 1996). To the extent that minority homeownership and associated wealth accumulation remains an important public policy goal, we have to confront the actors in the market competing against it. As Dezember’s (2021) article framed the question, if minority prospective homeowners are betting against large investment funds, who should win? If the answer is not just the highest, fastest bidder, how can policy help the homeowner?

In total: A different model for residential housing markets

These implications and incentives, borne out by the literature, data, and reporting, offer a transformative view of how to think about the competitive dynamics of housing in low-income neighborhoods. The market is described by oligopolistic players with market power over their low-income tenant and also within the overall nature of the neighborhood. Whether these players are financed by Wall Street or an individual hard money lender, their bidding power puts them at odds with the interests and goals of would-be homeowners and, of course, housing non-profits. Whereas we might typically think of a rental and a homeowner market as two discrete ideas, their presence in working-class communities is being mediated by the investment decisions made by large financial institutions. At this moment in time, many of these actors are making decisions to reduce the available supply of affordable homeownership opportunities and stable, quality rental housing for the poor. They are also extracting value and profit from dollars that should and could be going into improving the condition of housing for the poorest Americans. Since American wealth creation is so tied to homeownership, failing to correct for the failures of this market will continue to exacerbate wealth inequality. And since so many public health and social outcomes are tied to the quality and stability of our homes, failure to act will exacerbate the variety of unequal outcomes in our society.

Solutions

The private, small-scale, low-income housing market is challenged by poor conditions, and exacerbated by an economic and financial structure that rewards behavior counter to public policy goals of abundant, affordable, high quality housing for all. Meanwhile, the economics of this market are being further wracked by the devastating conditions of the COVID-19 pandemic. In this section of the paper, I turn to a menu of solutions for addressing the day-to-day challenges of the market, as well as the new wrinkles of COVID-19. These solutions lay out policy and business approaches to:

- Improve housing code enforcement;
- Introduce more socially responsible landlord strategies to the market;
- Develop a stronger overarching policy framework around private housing for the poor, including better tracking and understand this market; and
- Meet the current challenges of housing in the wake of COVID.

The goals of these solutions are to (a) create a cohesive policy approach for this segment of the market; (b) improve the regulation of the low-income market around housing quality policy to force improved behavior from bad actors, (c) encourage and support better actors to enter the market, and (d) reshape the fundamental economics that make improving housing quality so challenging.

10. Housing Code Enforcement and How to Improve It

The principal governmental line of defense against bad housing is the code enforcer. While code enforcers should be the heroes of the story about how we undo the consequences of milking, they have deficiencies in their current powers and activities in at least four key ways.

- First, the resurgence in interest in landlord behavior has coincided with a period of severe resource constraints for local governments. Code enforcement agencies have limited resources to conduct code enforcement. For example, Detroit and Cleveland cut their code enforcement budget by 50 percent from 2005 to 2013, in the middle of the housing devastation from the Great Recession (Mallach 2013).
- Second, housing code enforcement is generally complaint-driven, creating a “whack-a-mole” approach of responding to only those properties where tenants or neighbors have sought the city’s enforcement muscle. Code enforcement agencies are resource constrained, limiting their ability to broaden their enforcement scope (Mallach 2015).
- Third, landlords may see code enforcement as a cost of doing business, and generally not respond to small fines (Powers Kinning 1994).
- Fourth, proactive code enforcement may result in negative consequences for tenants. Condemnation of properties may lead to displacement, improvements may lead to rent increases, and complaints can lead to retribution. As a result, a substantial literature developed on code enforcement in the 1970s and 1980s expressed opposition to its use as a result of these potential effects to tenants (See, for example, Komesar 1973).

With these deficiencies in mind, policymakers can take two types of approaches to create better code enforcement in most American cities. Through more **innovative policy strategies**, they can reshape the day-to-day of code enforcement to a proactive vision of productive change.

The mantle then turns from the urban bureaucrat to the politician. Using **non-regulatory strategies**, elected officials can take advantage of the public interest in housing improvement and the numerous ways in which property owners interact with the state in order to drive a more meaningful pro-quality dynamic in urban environments.

10.1. Embracing Innovative Code Enforcement Strategies

In light of the challenges posed by low-quality housing and landlord power in the context of an uneven housing code enforcement landscape, researchers and policymakers have proposed some responses to increase the city's ability to do battle with bad landlords masquerading behind their corporate structures. Below, I highlight four proposed or implemented tactics that merit further adoption. These approaches can be implemented cost-effectively for the cash-strapped city agency.

- **ROCCI** – The Repeat Offender Code Compliance Initiative was a program in Minneapolis in the early 1990s to raise the stakes for bad landlords. Under this program, the City identified the landlords that had the most egregious code violations over the preceding five years. After the City developed a standard for identifying these landlords, a list of five landlords was developed.²³ These landlords were subject not only to additional fines, but also to jail sentences in their personal capacities. This added personal penalty had a successful track record in achieving greater code compliance (Powers Kinning 1994). While this policy was successful and often cited as a model, it is important to note that it was implemented prior to the broad arrival of LLCs in the market, which may pose challenges for assessing criminal penalties.
- **Strategic Code Enforcement** – Moving away from Minneapolis, another tactic that reshapes code enforcement is so-called “strategic enforcement.” Like ROCCI, this approach replaces a complaint-driven process with a proactive approach informed by existing information about the worst landlords, so that resources can be prioritized on those causing the greatest damage (Mallach 2015). Travis (2019) recommends prioritizing LLCs in enforcement activities to overcome the baseline accountability deficit associated with the LLC structure.
- **Owner Transparency** – As discussed earlier, Travis (2019) outlines two fundamental aspects to the LLC structure with relevance for this conversation. LLCs provide limited liability, as their name suggests, and anonymity. Many states allow LLCs to be registered to P.O. Boxes or registered agents. Some housing activists have called for legislative changes to eliminate the anonymity aspect of LLC ownership (Badger 2018). Both the District of Columbia and Philadelphia have now passed legislation that seeks to tackle the anonymity issue of LLCs, by requiring LLCs engaged in rental activities to disclose owners. In the case of DC, any owner with more than 10 percent share of the LLC must be disclosed (Koma 2020). This measure could help to improve accountability for LLC owners and improve the effectiveness of LLC mapping activities to track and understand landlord ownership. Owner transparency can also be increased through policies that allow regulatory agencies to more easily “pierce the corporate veil,” so that enforcement can focus on the individuals and not the LLC itself (Garcia-Gallont and Kilpinen 2015).

²³ These landlords had hundreds of code violations over a five-year period.

While New Haven provides substantial ownership information and Connecticut LLCs must disclose member interests, the data landscape is not complete. For example, certain LLCs register their addresses at a rental address unaffiliated with the actual owner. When this LLC is part of a larger network, it is usually possible to discern who the true owner is, as discussed above. When that network does not appear to be particularly active in the city itself, this single-address LLC can be a dead end. Additionally, LLC registration can fail to provide meaningful ownership information. For example, certain Ocean Management LLCs have circular ownership structures. One of LLC A's members is another Ocean-affiliated LLC (LLC B). One of LLC B's members is LLC A.

These issues can be exacerbated in jurisdictions where even less information is required about landlords. Moreover, many savvy landlords register their LLCs, not surprisingly, in Delaware. Delaware's lax policies toward LLC enforcement, therefore, stand as a broader impediment toward the improvement of housing quality in poor cities across the country.

- **Borrowing from Other Regulatory Frameworks** – In a thought-provoking approach, Horner (2019) recommends applying the common control liability rules from the Employee Retirement Income Security Act (ERISA). The common control doctrine places liability on not only an entity that sponsors the plan, but the employees of trades or businesses under common control of that entity. By applying this same, or a similar, standard to the owners or subsidiaries of property-holding LLCs, code enforcers could substantially reduce the limits on liability that LLCs otherwise afford.

10.2. Non-Regulatory Strategies

In addition to the potential for reforms identified above, I seek to evaluate the opportunity for a set of “non-regulatory” strategies implemented by a city's chief executive. Why? The mayors of cities increasingly face public pressure for the actions taken by landlords in the community. The power of large landlord networks makes it hard for individual code enforcers to make a significant difference beyond the whack-a-mole nature of reactive code enforcement. Even more proactive approaches may be seen as just the cost of doing business in the market. While some of the reforms described above can provide new tools to cities to give their enforcement more teeth, the mayor, or a major department head, is in the best position to ensure that regulatory changes are met with real commitments for action and to marshal broader political pressure to make landlords act. The mayor is also working at the citywide level, a necessary consideration given the scale of the networks of LLCs that major landlords control, as mapped above.

Given that context, I recommend three themes for strategies to force landlord compliance: **expectations setting**, **regulatory expansion**, and **public accountability**. The idea of expectations setting comes from a variety of public regulatory contexts where regulators seek to engage more closely with potentially unscrupulous large actors. With major landlords, the approach would focus on the city establishing a set of core city policy priorities. The major landlords, whose growth and investment activities suggest that they have resources to make housing improvements, would be informed of these policies and told that the city desires to have the landlords report regularly to the city on progress toward these goals. Likely policy issues would include:

- **Guaranteeing safety features like fire alarms;**

- **Testing for, and removal of, all lead;**
- **Activities to address household contaminants, like mold; and**
- **Activities to address rats, mice, and roaches.**

Should landlords fail to show continued progress, increased mechanisms for policy intervention, like those deployed in the ROCCI program, would come into play. However, such drastic measures as jail sentences would be implemented only after the landlords had had an opportunity to respond and demonstrate progress, improving the legal strength and fairness of the program.

A second avenue is to make use of other regulatory processes to benefit housing quality, expanding the regulatory scope of code enforcement. Code enforcement's teeth can be sharpened if failure to comply is tied to an inability for landlords to continue to expand and grow the business. Two principal examples involving New Haven landlords help to tell the story. Ocean Management is expanding into redevelopment work, and it has identified a small project in the Dixwell neighborhood as their first dip in the developer waters in New Haven (Glesby 2020). Even if the project is developed on a by-right basis, there are key permits that will be required for implementation. The ability for the city to tie these permits to resolution of code enforcement issues would strengthen the code enforcers' hands. Similarly, Netz/Mandy makes clear that a major piece of their acquisition strategy is the ability to gobble up property at low prices from bank and municipal foreclosure. On Netz's own website, they articulate that a key element of their strategy is: "Identification and purchase of assets (mainly apartments) at a low price (such as from banks) with the potential to increase yield from rent and reduced costs resulting from efficient management methodology." Exploring avenues for making it more challenging for non-compliant landlords to do so would again put more pressure on landlords, even outside of the traditional regulatory confines of code enforcement. The opportunity for successful non-regulatory strategies would also give activists a clearer outlet for winning progress on housing quality issues from city leadership.

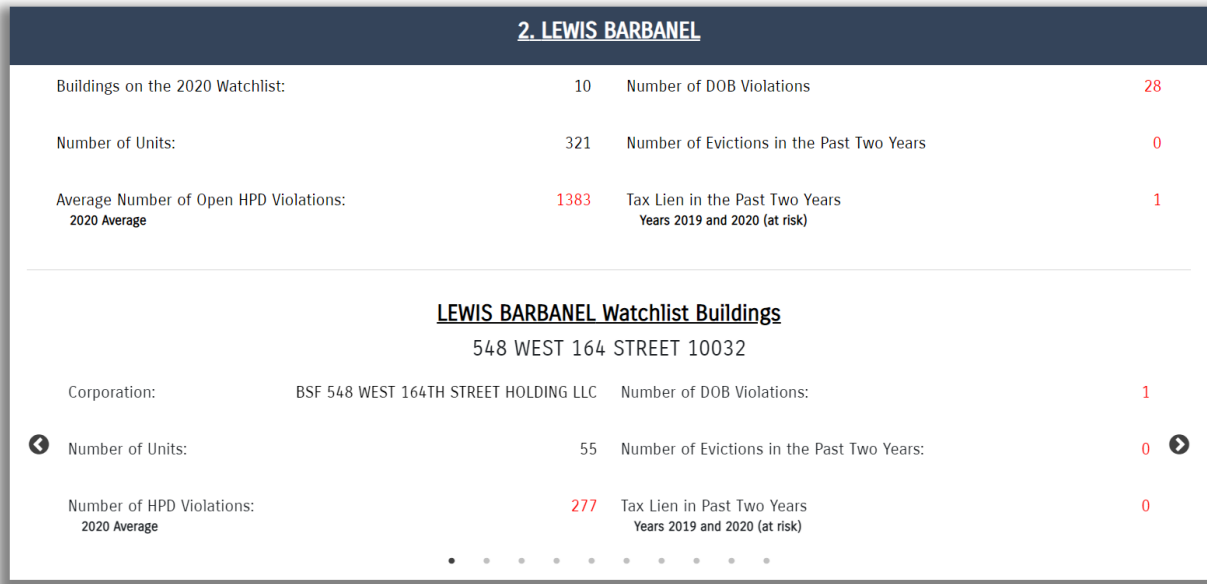
While the landlord market has consolidated considerably in New Haven over 2013-2020, there remains well over one thousand small-scale LLCs in the city. Small-scale landlords have particular challenges covering expenses (Garboden and Newman 2012) and, as a result, may struggle to meet obligations imposed by the city. For such landlords, I recommend a more targeted public accountability approach. Similar to the New York City Public Advocate's "Landlord Watchlist," a public documentation of the worst small landlords—informed by our ability to use LLC mapping to get a better understanding of who these landlords actually are—creates an incentive for these landlords to improve, if possible, or to sell their interests. This unmasking can help to limit the incentives for bad behavior among small-time landlord interests.

Such a list can also be used for the enhanced penalties of an effective code enforcement program modeled after the Minneapolis ROCCI approach. **Figure 11** below shows the latest snapshots of the New York City landlord watch list, providing high-quality and actionable information about landlords for the broader public.

However, the design of the policy has to consider its unanticipated consequences, as well. The downside risk of this form of activity mirrors that of more traditional code enforcement: to the extent that improvements require increases in rents or the short- or long-term displacement of residents or causes landlords to exit the market or further conceal their identity, then the net

effect of regulatory reform could be neutral or even negative. Such an equation needs to be considered as these policy efforts are developed.

Figure 11. Images from the NYC Landlord Watchlist



11. Socially Responsible Landlord Strategies

From code enforcement to better regulate the actors in the market, we can turn to how we improve the quality of the actors themselves. The housing quality issues in the market are generated and exacerbated by the incentives of landlords and the financial capital flows in the market. As discussed above, the lack of sufficient income from small properties in this market (Garboden and Newman 2012) drive landlords to strategically degrade their property, a process often referred to as milking (Kennedy 1987; Mallach 2014). Less frequently examined elsewhere, but now covered in depth in this paper, is how the sources of capital in the market further work against the goal of decent housing for the poor, due to a lack of competitive traditional mortgage financing and a resulting reliance on, and preference for, high-yield SFR and hard money lending that reinforces the incentive to milk.

Therefore, we see poor quality in the lower end of the market not only because rents are so low, but also because the structure of ownership and finance are fully incentivized to make it to be so. While these “financiers of the poor” currently dominate the market, can “better capital” drive better outcomes? *Better capital* would mean a system of ownership, management, and finance that allows for reasonable market returns while also permitting greater investment in the condition of housing. To explore this topic, I build on the portfolio and firm-level analysis approach above to analyze how a responsible approach could manifest itself financially in a group of New Haven properties and compare those results to the implied returns that the actual property owner’s activities suggest, results originally shown in *Section 6* of this paper.

This section outlines approaches for new, better *private* actors to reshape the market. While these actors’ success will depend on policy reform, the long-standing role of private landlords using private finance to purchase homes whose rent is paid with private dollars means that, absent a major investment in social housing, a scalable private model will be essential to achieving widespread improvements in housing condition for low-income Americans.

11.1. Previous Suggestions for New Landlord Models

Despite the interest in improving housing conditions for the poor, only two approaches are routinely cited as strategies for restructuring finance in the segment: management consolidation and the so-called “S-REIT.”

In their work on the subject, Garboden and Newman (2012) conclude that providing professional property management of small buildings and consolidating their ownership may help to make their preservation viable. They note that the property management approaches would only be most useful in a subset of low-income properties that have high rates of vacancy. The emergence of large-scale ownership of scattered site single family units by institutional investors, once thought to be impractical, suggests that the means exist to manage small-scale properties effectively. Consolidation of ownership would seek to achieve maintenance economies of scale across a portfolio of projects, allowing cash reserves to develop, a major weakness of individual small properties.

Another proposal in this market is the S-REIT (Narasimhan 2001; Apgar and Narasimhan 2006). Under the S-REIT framework, Narasimhan proposes a congressionally chartered mechanism for transferring small-scale properties to a larger REIT that is able to issue tax-exempt bonds. As a result of its status, it would be able to access the larger institutional capital

market. It would achieve the transfer by trading the property for a 1:1 share in the REIT and provide professional property management. To improve its financial wellbeing, the S-REIT would receive local government tax abatement, exemption from recording taxes and SEC and state registration costs, and federal subsidies.

The specific mechanics of the S-REIT are questionable—why and how would 200 individual existing landlords become shareholders in a REIT? Would we want some of these individuals to have an ownership stake in such housing? However, both of these proposals resonate with the fundamental skeleton of the SFR market. SFR investors have been able to create a massive industry through the use of consolidated management, access to the capital markets including rent-backed securities, and the ability to acquire appreciating properties at low cost. Can we build on the “success” of the SFR market to push a better social outcome?

The proposed Social Real Estate Investor (REI), described below, would take the useful lessons from these proposals and precedents and seek to achieve an approach and product that can get better capital into the bottom of the market. It also takes advantage of recent changes in favor of the crowdfunding of real estate to promote an innovative capitalization approach.

11.2. The Social REI Model

A Social REI would manage multiple small-scale properties in low-income neighborhoods. Its fundamental principles would be to provide a higher quality housing offering, thereby helping to rebuild neighborhoods, while also offering sufficient threshold returns to attract investment to permit continued improvements to occur. In order to meet these principles, the Social REI would work in the following way:

1. It could be structured as a REIT or another corporate form to access institutional investor markets and provide opportunities to issue financial instruments to grow.
2. It would seek to develop a portfolio of properties in order to establish sufficient cash reserves and achieve relevant economies of scale. It may rely on a senior REIT or affiliate to cross-subsidize the initial capitalization. It may also make use of crowd funding, as described further below.
3. It would work with the GSEs to support the securitization of a more socially minded small rental housing product.
4. It would contract with a non-profit property management organization in order to provide streamlined, cost-effective property management services. Such an organization might carry with it a workforce development mandate to both increase coordination with local government and receive outside financial support to undergird the non-profit mission.
5. It would use the foreclosure process and public property disposal process to acquire properties at low costs that would make appropriate levels of maintenance economically feasible.
6. It would seek to receive project-based Section 8 vouchers from local public housing agencies in order to create a stronger and more regular source of income.
7. In order to access the advantages in Items 5 and 6, it would create agreements with city governments to receive preferential treatment for Section 8 vouchers and foreclosure auctions.

The Social REI would also present unique opportunities for innovative capitalization and ongoing funding strategies. While there is an attractiveness to accessing the public markets as a

REIT, the pressures to maximize returns for shareholders may make this entity better suited for private operations. The emergence of new regulations around crowdfunding could form a basis for acquiring resources from individuals interested in different approaches to housing development. The new regulations regarding real estate crowdfunding could permit this entity to raise up to \$1 million from non-accredited individuals (Cartier 2021). As a result, the Social REI could also offer residents an opportunity to buy-in, providing them an opportunity to gain equity that would be portable even after they departed the property. Other changes to the law about publicizing this private investment to accredited investment could make such an entity an attractive recipient for both traditional investors looking to increase their social returns, as well as community development financial institutions (CDFIs). The Social REI would serve as a strong partner for both of these players, within a portfolio of for- and non-profit actors, because of its ability to gain financial returns and reinvest those in creating a meaningfully-sized portfolio that can begin to reshape neighborhood and community-level outcomes.

11.3. Financial Analysis of the Social REI Model

To test the potential viability of a “Social REI,” I returned to the portfolio-level analysis of small-scale rental buildings in New Haven conducted in *Section 6.3*. As a reminder, the descriptive statistics of this portfolio are summarized in **Table 18** below. All properties are listed in **Appendix C** at the end of the paper.

Table 18. Summary of Property Descriptive Statistics

Category	Data
Number of Properties	30
Average Rent/Unit	\$1,476
Average Number of Bedrooms/Unit	3
Average Rent/Bedroom	\$546
Total Number of Units	98
Units/Building	3.3
Total Number of Bedrooms	247
Average Number of Bedrooms	8
Average Monthly Rent/Building	\$4,339
Total Appraised Value of Portfolio	\$6,252,500
Total Assessed Value of Portfolio (est.)	\$4,376,750

To analyze the financial viability of the Social REI approach, I compared a potential management approach for the Social REI with the management strategy used by large landlords like Mandy modeled previously. Under the Social REI strategy, the management would incorporate a higher level of the monthly management costs for a small property (as estimated by Garboden and Newman [2012]) and would rely on traditional mortgage finance, at slightly higher interest rates than in the prime market versus hard money lending. The assumptions of

these two approaches are summarized in **Table 19** below. For the purposes of financial analysis, I assume that under both approaches the portfolio would be sold after ten years.

Table 19. Assumptions for Two Modeled Management Strategies

Criterion	Traditional Assumption	Social REI Assumption
Annual Rental Growth		3%
Vacancy Rate		5%
Capital Expenditures (Percentage of NOI)	5%	10%
Monthly Maintenance per Unit	\$214	\$641
Debt Interest Rate	12%	7%
Loan Term	10 Years	30 Years
Debt Loan to Value		70%

I then compared these approaches on a before-tax-and-financing basis and then on an after-tax-and-financing basis. In doing so, we can simulate two point of comparisons related to the extant financing models in the low-income space. The pre-financing, unlevered, results provide a comparison with the SFR investor using cash to purchase properties. The post-financing, levered, results provide a comparison with hard money lending. The results of analysis are shown in **Table 20** below.

Table 20. Financial Performance of Traditional Landlord Approach and Social REI

Criterion	Traditional Landlord	Social REI
Net Operating Income (Year 1)	\$994,307	\$441,258
Net Operating Income (Year 10)	\$1,381,675	\$1,009,307
Initial Value of Portfolio	\$6,252,500	\$6,252,500
Terminal Value of Portfolio	\$11,694,557	\$11,541,196
Net Present Value	\$3,635,269	\$3,408,725
Unlevered IRR	20.29%	13.02%
Levered IRR	23.28%	17.49%

As shown in the table above, it seems evident that at a portfolio level a more responsible management approach is capable of earning robust financial returns. The Social REI earns 13.09 percent unlevered IRR and 17.49 percent levered IRR. The approach is particularly competitive with the hard money-financed traditional landlord who achieves 23.28 percent levered IRR. The ability to access more traditional mortgage lenders at a relatively favorable interest rate allows the Social REI to offer a reasonable return for investors. Indeed, as shown in **Table 21** below, the Social REI is highly sensitive to shifts in the mortgage rate that it faces. The ability to de-risk the market's perception of the low-income housing (see below) is fundamental to the Social REI's comparative competitiveness against hard money lending.

Table 21. Mortgage Interest Rate Sensitivity Analysis

Interest Rate	Levered IRR	Cover Annual Debt?
12% at 10 years	10.96%	No
10% at 30 years	13.87%	Only After Year 2
7% at 30 years	17.49%	Yes
6% at 30 years	18.58%	Yes
5% at 30 years	19.59%	Yes

Table 13 makes clear that further efforts to lower the interest rates that a Social REI might face would substantially close the gap with traditional approaches. The comparison with the SFR institutional investor is more sobering, though. The comparison of unlevered IRRs, where the Social REI reaches 13.02 percent but the traditional landlord hits 20.29 percent, points to a central conundrum facing this proposed approach. As long as there is no market penalty for substantially reducing the maintenance of property that houses the poor, it will be easy to chase returns in this sector that can far outstrip what the Social REI can reasonably offer.

However, the returns earned by the Social REI are still respectable. To the extent that the Social REI can attract a set of like-minded investors, it appears that it can be viable. As discussed below, that viability is benefited by a set of policies that make investing in this segment of the housing market more reasonable.

Beyond the pure financial returns, the social benefits of the Social REI are substantial. Over ten years, this small 30-building portfolio returns **\$5 million in economic value** to the maintenance and preservation of the condition of housing for 247 low-income residents. If a similar reinvestment were made in just the homes owned by SFR investors, that would result in a **\$3.5 billion annual wealth transfer** from private equity owners to the condition and quality of housing for Americans.

However, there are clearly limits to where and how this approach to housing could be implemented. As one piece of sensitivity analysis, I examined more conservative market conditions. In **Table 22**, I look at how the Social REI performs with annual rent growth of 1.5 percent or 0 percent versus the 3 percent initially modeled.

Table 22. Rent Growth Sensitivity Analysis

Rent Growth	Unlevered IRR	Positive NPV?
0%	8.43%	No
1.5%	10.77%	Yes
3%	13.02%	Yes

Not surprisingly, as rent growth stalls, the economic viability of a more tenant-oriented approach becomes challenged. Very weak housing markets may require larger structural shifts to bring about better management outcomes. Nevertheless, stable low-income markets may provide a strong opportunity to divert properties from undercapitalized small landlords and large-scale traditional landlords to owners who will emphasize housing quality.

11.4. De-Risking Housing for the Poor

Under the right conditions, a Social REI can earn acceptable levels of financial return while reinvesting millions in low-income communities. Making these levels of return acceptable to the capital market will depend in part on the ability to reduce the perceived risk associated with this housing market. As the capital asset pricing model indicates, the lower levels of risk, the lower return that an asset needs to earn to achieve market investment. A major source of the absence of better capital in this market is the perceived risk associated with serving the poor (Desmond and Wilmers 2019). “De-risking” in a housing context is a process of reducing the risk factors associated with the execution and financing of housing (Sharam et al. 2015). Building on the strategies that are foundational to the Social REI above, the enterprise would be aided by the following policies and practices that could help to *de-risk* the small-scale, low-income market in a way that would make the Social REI approach more viable:

- **Partnerships with local governments.** Local governments can provide lower cost properties through the tax foreclosure process, reducing the cost of acquisition for Social REIs. Local governments can also affect the comparative risk profile of the Social REI by more actively enforcing local housing code against the traditional landlords who fail to comply.
- **Real partnerships with the GSEs and Federal Home Loan Bank system.** To create a workable financial model, the large-scale lending institutions with directives to provide community lending products could create lower-cost products to help grow more viable small-scale products. Even though the GSEs have begun to securitize in the SFR market, there are substantial equity issues with that work to-date. As noted previously, only one percent of the Fannie Mae SFR securitization properties were affordable to renters under 60% AMI (Goodman and Kaul 2017b).
- **Credit enhancements through CRA-eligible banks.** Similarly, banks with obligations to lend under the Community Reinvestment Act (CRA) could incorporate credit enhancements to the REI, which would allow it to better access the capital market, into their community investment portfolio.
- **Mechanisms for de-risking tenants.** The greatest source of perceived risk in the low-income market is risk associated with tenants. The logic of this concern is sensible. Lower-income individuals have less money to pay rent and therefore less margin when things go wrong (Fessler 2016). Low-income tenants also move a lot, with perhaps half of all low-income renters moving per year (Desmond et al. 2015). In New York City, 82 percent of evictions cite nonpayment of rent as the cause (Collinson and Reed 2018).

The question of how to de-risk tenants is not without ethical dilemmas. Tenant “screening” can exclude deserving tenants and past history of eviction can unnecessarily penalize tenants with children or victims of domestic abuse (Adams 2012). However, innovative methods of showing the reliability of prospective tenants could help, again, to make a lower return more attractive. For example, online real estate websites could provide rent history accreditation to “back” renters in this space. Such a program could

help to verify tenants while reducing the potentially negative consequences of traditional screening practices.

- Proving how greater investment reduces maintenance risk.** Investments in maintenance undercut the expected annualized return associated with a property. However, there is a credible case that they also reduce the financial risk associated with those returns. Property ownership in the low-income market is understood to have long tail risks associated with large maintenance expenses. An unsound roof or new plumbing system can render a building uneconomical. In other years, the building will be expected to make more modest returns (Desmond and Wilmers 2019). To the extent that more regular maintenance reduces the incidence of catastrophic loss, this regime should serve to reduce risk associated with low-income housing. Secondly, low-quality housing is associated with tenant mobility. Per Desmond et al. (2015), poor housing conditions are the predominant source of “involuntary moves.” When low-income tenants move, however, their precarious situation and lack of options leads to them being more likely to move into a property in even worse shape than before. This effect results in a downward spiral, where tenants become increasingly likely to move as conditions worsen, increasing the velocity of tenant turnover. Well-maintained properties can retain tenants longer, reducing the risk of investing in the low-income market. Below, I provide the results of a sensitivity analysis in **Table 23** to show how vacancy rates affect the above financial analysis. A higher-quality market is a more stable one. Financial markets should incentivize its creation.

Table 23. Vacancy Rate Sensitivity Analysis

Vacancy Rate	Unlevered IRR
2.5%	14.00%
5%	13.02%
10%	10.91%
15%	8.58%

11.5. The Viability of Alternative Approaches

As the country enters a period of economic upheaval, it seems not wholly unlikely that the housing market will be reshaped, as well. The previous housing crisis, only a decade ago, led to a massive and largely unexpected shift in the marketplace through the explosion of the SFR market. It is interesting to read Mallach’s (2007) description of the model of an early SFR firm, in terms of both the conditions that permitted the rise of the market and the fundamental challenges that the SFR industry had to overcome to become dominant:

A radically different model is offered by Redbrick Partners, LP, which describes itself as managing “the only institutional-class funds in the U.S. dedicated to single-family housing – a particularly attractive asset class that has been largely overlooked by professional investors.” ...It targets its acquisition activities to urban areas which have medium to low property values but significant appreciation potential, based on a proprietary economic model that they have developed. Within each geographic area it attempts to acquire at least 200

properties, in order to be able to support the cost of an on-site office... the principal apparent constraint on its growth would appear to be the difficulty of establishing an effective organizational structure for centralized management and quality control of a fundamentally decentralized product. While difficult, that task would not appear to be beyond the capabilities of sophisticated management and systems design talent.

As we know now, Redbrick and others took substantial advantage of the downside of the Great Recession to acquire property at scale and used emerging technologies to make acquisition and management of these properties possible (Immergluck and Law 2014). From this Recession, we hope to learn from that explosive growth of the SFR market to create an SFR product that is more equitable and socially minded. Above, we have shown that a more conscientious housing ownership arrangement can make a profit while driving more money into properties. This redistribution of the profits from low-income housing has an important broader economic value. The current shift of spending on housing from maintenance to investor profits undercuts the industry of the people who maintain and repair homes, including working-class tradespeople and repairmen. Underinvestment in maintenance deprives tenants of high-value improvements in their living condition. Realigning these cash flows could help address the issues of inequality in an era of financialization.

To realign incentives in the market and create the space for a Social REI, we can learn certain lessons from the rise of the broader SFR market. Scale of management can be achieved. There is a market for securitization, which can help to free up cash for acquisition. As with the non-profit affordable housing market, the ability to acquire properties at low cost remains significant. Therefore, partnerships with local governments to advantage Social REIs in the market and innovative capital investments will be critical to the deployment of Social REIs in communities across America. The benefit could be substantial. In our small test set, **the value of the potential maintenance that could be reinvested in the quality of houses and communities represented 43 percent of the total value of the properties themselves.** We can create more social value in the low end of the housing spectrum through a different type of management operation. We further explore the policy apparatus that could make such alternatives more viable in the next section.

12. A Stronger Policy Framework for Improving Housing Quality

Better code enforcement can regulate this market more effectively. Better landlords, and policies to prioritize them, can improve conditions in certain contexts. Building on those approaches, I evaluate broader policy approaches for improving the quality of housing in the low-income housing market for the poor by more thoroughly revamping the economic incentives and the public policy framework.

12.1. Developing Tools to Better Understand the Market

If a major housing policy failure is our collective inability to monitor and understand this critical market, then a compelling strategy for beginning to improve the market may emerge from better tools and strategies for tracking the financial activity occurring at the bottom of the rental market. Below, I outline a few approaches that I began to document earlier in this paper. These approaches can be taken on by different levels of government, from municipalities to federal agencies at the GSEs. Importantly in our age of APIs, hackathons, and website scraping, some of these tactics can be employed by citizen activists and non-profits to begin to raise awareness of how their local market works.

12.1.1. LLC Mapping

LLC mapping is the previously described tactic for comprehensively mapping out what properties in low-income neighborhoods are owned by LLCs and then using property records and corporate data to tie together various anonymous LLCs into webs of common ownership. This approach can help us understand who owns the neighborhood, how properties are being transferred among interests, and how focused and improved code enforcement can address the worst scofflaws who are also most able to make real changes to their buildings. While code enforcers raise the concern that they “can’t arrest an LLC,” the process of LLC mapping can build enforcers’ knowledge of what is really happening in their territory and can help policymakers truly understand who owns the neighborhoods where they aim to improve conditions.

The LLC mapping represents a way to better visualize ownership trends in a way that is accessible to almost all city governments. The use of GIS tools is ubiquitous in city government and property tax records have largely been digitized to provide information and access to taxpayers. This mapping builds on other policy mapping efforts in the urban realm, including work in criminal justice reform, crime, and health care. However, some cities may have less specific information on certain LLCs as a result of state-level LLC law and limited landlord licensing programs, which may limit their ability to implement such a tool. The owner transparency strategies identified in *Section 10.1* can help to address this issue and improve the information that LLC mapping can provide.

12.1.2. Track Neighborhood Property Transactions

Property records can also help us track how ownership of communities is changing over time in response to economic shocks and booms. Recorded property transactions can present a systematic view for how financial flows are occurring in low-income neighborhoods. While I have come across some reporting that seeks to monitor property transactions,²⁴ it does not appear

²⁴ Such as a regular feature in the *New Haven Independent*.

that many city or state agencies are closely following how properties in distressed and vulnerable communities are being transferred. That said, these government entities do have ready access to the updated property records and, with some focused attention, they can begin to leverage this information into a more useful tracker for understanding how properties are being bought and sold, and for what purpose, within low-income markets. Such a resource can help communities better understand issues of market power and competition between the rental and homeownership space and catch property degradation or displacement before it begins.

12.1.3. Systematically Monitor the Private Lending/Hard Money Space

As noted above, we know very little about hard money lending. While the industry has worked to limit regulation, a \$59 billion financial services sector with meaningful consequences for the real estate market deserves a higher level of scrutiny and monitoring. Real estate and financial regulators should begin tracking financial activity in this space so that we can better understand deal volume and deal concentrations. If other sources of finance are any guide – such as SFR or CFD activity – the concentration of hard money lending will lead us to places where high levels of real estate activity at interest in this paper is taking place. Whether the hard money is advancing flipping or milking, we cannot truly understand low-income housing until we have a handle on all its sources of finance. As I will describe further below, the monitoring and evaluation of the sort of financial flows unique to this market could be a role that a focused team at HUD plays to bring more attention to this market.

12.2. Reforming the Economic Structure of the Market

As we come to better understand the market as a result of improved tracking, we can also begin a reform agenda focused on the fundamental economics and incentives of the market. The necessary policies to reshape the economics of the market can occur at the local, state, and federal level.

12.2.1. Giving Financial Resources and Rental Options to Tenants

The fundamental resource constraints in the low-income housing market are the lack of income and options for low-income tenants. Different proposals have been put forward for reforming the nature of housing assistance in the United States. While the Section 8 Housing Choice Voucher (HCV) program is currently a woefully oversubscribed lottery system, for \$20 billion annually the program could be transformed into an entitlement program for all Americans making under 30% of Area Median Income (Bipartisan Policy Center 2012). Such a policy change would give more poor Americans the resources to comfortably afford housing, giving them more choice and access in the market. However, there should be careful consideration to the structuring of the HCV program in seeking to expand it. As Desmond and Perkins (2016) found, the current fair market rent (FMR) system results in voucher holders being overcharged relative to local market tenants. In Milwaukee alone, they found 620 additional individuals could receive assistance if this issue were addressed. HUD has now implemented small area FMRs in 24 jurisdictions, which Desmond and Perkins believed could address the overcharging. However, early evaluations of the small area rule have been mixed, with most communities not yet fully balancing the overcharging and equity goals of providing more remunerative rental assistance in high-rent areas (Patterson and Silverman 2019). As these implementation considerations are further explored, getting more rental assistance to the poorest Americans should continue to be prioritized.

The lack of options for renters can be acute even for those who have rental assistance. In many communities, landlords can decline to rent to HCV tenants. Many Section 8 tenants are subject to discrimination as a result of their “source of income” and often steered to low-income neighborhoods (Beck 1996; Tighe et al. 2017). In addition to discriminatory practices, landlords oppose taking on Section 8 tenants due to inspection requirements (Tighe et al. 2017). Source of income anti-discrimination would achieve multiple important goals in the low-income housing market. It would increase the market penalty for poor housing, as Section 8 leaseholders would be better able to move to a better property in the same or different neighborhoods. It would also increase the federalization of house codes, with the Section 8 inspection regime taking hold in more units across the country. Additionally, to the extent we desire to also address issues of racial and income segregation, there is strong recent evidence in support of providing tailored support to Section 8 recipients to help them identify a quality home in a neighborhood that has services and amenities that they desire. Bergman et al. (2020) found that search assistance for recipients, landlord engagement, and moving assistance helped more tenants find the right home and community for their needs.

In light of current landlord dissatisfaction with the existing rental housing policy framework, they are unlikely, in aggregate, to take kindly to the additional mandate for source of income non-discrimination. Proactive approaches are needed to bring the landlord community on board. Policy that aims to impose this critical reform can take a few steps to enhance landlord acceptance and adoption:

- Create a statewide advisory committee to inform adoption of the program and provide a forum for landlord concerns.
- Engage with landlords regarding the new law, and remind them of the rights that they retain, including the ability to screen tenants and the ability to charge security deposits.
- Agree to streamline the operations of the local implementing Public Housing Authorities (PHA) and improve their customer responsiveness (Bell et al. 2018).

12.2.2. Better Use of the Foreclosure Process

When cities foreclose on homes due to tax delinquency, these sales represent opportunities of substantial value to landlords, with the ability to acquire exceptionally low-cost property on the table. Cities are motivated to move properties to recover the tax debt.²⁵ This can lead to properties going to investors interested in quickly flipping or milking the property. In the case of mortgage foreclosures, at least, Immergluck (2012) found that 63 percent of properties in Fulton County, Georgia went to investors. Researchers have found that properties sold at mass tax foreclosure auctions are of lower quality than those sold directly and individually by city government agencies, including land banks (Dewar 2009). Communities have found that placing these tax foreclosed properties into a land bank with a clear public mission and strategy for housing development goals and efficient and simple approaches to transferring property, like clean title, can lead to more effective disposition of these properties (Dewar 2006).

Access to low-cost housing could substantially alter the nature of the landlord market in poor communities, provided the rents are sufficient to attract higher quality landlords. With lower costs, non-profit developers are more likely to be able to enter. Local residents and first-

²⁵ Some states also make use of a tax sale process, instead of the tax foreclosure process. Similar policies could be targeted towards tax sale investors.

time homeowners could get access to the property, too. Social REIs could stand as good for-profit partners in this process. To affect this change, cities and states should develop policies that give these non-profit and homeowner purchasers preference in the foreclosure sale process. Others have indicated that moving away from the auction process to a real estate agent listing could further improve the quality of the purchaser with limited impact to the timely sale of the property (Burkhart 2018).

Given the evidence above, cities should begin to reframe their tax foreclosure process. States should similarly regulate the mortgage foreclosure process so that it creates opportunities for these more productive owners to be in a leading position to acquire property to take the unfortunate outcome of a foreclosure and turn it into an opportunity for neighborhood revitalization.

12.3. Reforming the Financial Structure of the Market

As discussed throughout the piece, it is not just the fundamental building-level economics that drive undesirable outcomes for low-income housing. Financial incentives reinforce the push against quality and sustainable investment in communities. Again, government at all levels can play a meaningful role in reframing the financial incentives.

12.3.1. GSE and Systemic Financial Reform

This paper has outlined a fundamental financial market failure in the small-scale, low-income rental housing market. Traditional forms of finance are expensive and uncompetitive. The market is, not entirely incorrectly, perceived of as risky and priced accordingly. Market actors who wish to improve the condition and quality of properties have generally lamented the role that Fannie and Freddie do (or more accurately don't) play in supporting the functioning of this market. The major role that these market actors have played instead has been to support the securitization of the SFR market. As mentioned previously, the wisdom of this choice is highly questionable, as the securitization of the SFR market has exacerbated market consolidation and homeowner competition issues. The portfolios that the GSEs engaged in also failed to meet the entities' affordability goals, with nearly all focused on the higher-end market.

During the Trump Administration, "reform" of Fannie and Freddie focused primarily on the quixotic effort to "recapture and release" the GSEs to allow them to exit the conservatorship they were placed in following the housing crisis and convert to a private operation (Maranz 2020). Now that the Trump Administration has departed the scene, what should "GSE reform" actually look like, presuming that the current case before the Supreme Court regarding the Federal Housing Finance Agency retains the status quo?²⁶

At least in the context of the small-scale retail housing market, the answer seems clear: the GSEs should begin to care about what the incentives of the existing financing mix, including the SFR securitization boom they helped foment, mean for a stable, quality housing market and the efforts of working-class minorities to access homeownership. Two actions that the GSEs can take are to reassess their existing lending standards and develop new products. Research by the Urban Institute indicates that the GSEs could increase the LTV standards for two-to-four-unit buildings back to their pre-Great Recession levels, either 95 percent for two units or 80 percent

²⁶ See Lang (2020).

for three-four units, with limited increased in risk (Goodman and Zhu 2016). At the same time, by helping to support financial products that allow positive actors to compete with those who seek to degrade properties and to improve property conditions, the GSEs can align their mandate within the tremendous needs in the private low-income market. These financial products can include credit enhancements that reduce risk for investors in the small-scale market who commit to balancing improvements and housing affordability. Specific products could include SFR securitization focused on community developers or financing to support the acquisition of vacant, distressed, or low-quality housing by the same type of actors (Goodman and Kaul 2017a). As discussed in the previous section, Social REIs would stand as compelling recipients for this type of support.

12.3.2. Low-Interest Loans for Property Improvements

A major challenge in the market is the lack of accessible and low-cost finance for landlords. Some communities have begun to pilot programs that allow for property owners to take out small, low-interest loans to improve their property, though these have been focused mostly at homeowners seeking to improve condition and health issues in their home, as with Philadelphia's new program (McCabe 2019). The Joint Center for Housing Studies at Harvard has seen low-cost financing tools as essential for guaranteeing the preservation of affordable units and HUD under President Obama considered subsidizing the costs of underwriting, servicing, and securitization for small multifamily buildings (Reiss 2009). A program that lowers the upfront costs associated with major maintenance may play a role in reducing burdens for landlords and, in particular, for small landlords especially hurt by the pandemic.

Taken together with a renewed focus on code enforcement, these policy levers adopted at each level of government can create the regulatory and financial incentive to invest in quality rental housing for the poor.

12.3.3. Property Tax and Assessment Reform

A series of recent analyses have shown a profound inequality in how property taxation and assessment are conducted in the country. Lower-income, minority residents face a compounding set of costs associated with property tax. They tend to live in poorer communities that have more limited tax bases. As a result, their property tax rates are high, which is both a direct penalty on their finances and a disincentive for the type of investment needed to rebuild the community (Dye et al. 2002). Even more jarringly, they appear to see their properties assessed at a far higher rate than similarly situated whites and than more affluent individuals (Wiltz 2020).

As a result of this inequality, both poor homeowners and landlords in these markets face a disproportionate taxation burden. In the already cash-strapped market, this burden incentivizes further property degradation and underinvestment. Its reform depends on the one hand on erasing the structural inequality in property assessment. However, 47 percent of all local government revenue nationwide comes from property tax (Tax Policy Center 2020). In such a property tax-based system, a change in incentives without a change in the financial resources available to cities could leave poor cities even further hobbled. Therefore, assessment reform should be accompanied by a broader set of state-level reforms for how the work of government is funded.

12.4. Investing in Housing Quality in the Infrastructure Plan²⁷

As HUD Secretary Marcia Fudge (2021) has stated, housing is a key piece of America's infrastructure. The currently-proposed American Jobs Plan seeks to make major investments in housing quality. At the heart of the nexus between poor quality housing and human health outcomes is childhood lead exposure. As one study put it: "Among environmental chemicals, lead's reputation as a "bad actor" is confirmed in study after study. Over the past 30 years, we have learned that its toxicities are expressed in many forms, and, unfortunately, at levels of exposure that are still prevalent in the general population" (Bellinger 2008). Children are exposed to lead in private low-income housing both through chipping paint, but also through old water lines, some public and some private. The President's version of the Plan calls for the removal of all lead pipes and service lines in the country (White House 2021).

The Biden Administration has an ambitious agenda to invest in America's infrastructure and has made commitments to deliver in particular for communities of color. They are right that investment in America's infrastructure should include housing and should focus substantially on lead and other household contaminants as a strategy to improve the conditions of those living in the poorest housing.

The current version of the American Jobs Plan also proposes substantial dollars to improve quality in public housing units and invest in rehabilitation and new affordable units. If history is a guide, these resources may largely avoid the 1-4-unit market. Policymakers should make the dollars sufficiently flexible to partner with new and existing actors in the 1-4-unit space to address the quality and financial sustainability issues in this market. A mix of public, non-profit, and for-profit actors could serve as partners to diversify the recipients and build bipartisan support for the effort. The Cleveland Housing Network, whose work is described further below, represents one such existing actor well-poised to do more in our target market.

12.5. Larger Transformations of the Housing Market

America's approach to the low-income housing market has generally been more weighted toward the private sector than much of the developed world. At the same time, it is substantially more formalized than in lower-income nations. Proposals to more profoundly transform the market look in both directions to either create more government or non-profit ownership or to de-regulate the current housing market to permit more and different types of housing production.

12.5.1. New Community and Social Ownership Approaches

Some have argued that the fundamental obstacle to affordable, quality housing in this segment is the reliance on for-profit, private housing. Efforts to "decommodify" housing have been proposed. Community land trusts (DeFillippis 2001), limited equity cooperatives (Saegert and Winkel 1998), and mutual housing associations (Hovde and Krinsky 1997) have been lauded as potential changes to broader ownership structure within this market that could aid housing conditions and reduce housing price pressures for the poor. Laws that give tenants right of first refusal when their landlord looks to sell, known as "Tenant Opportunity to Purchase Acts" (TOPA), can help yield more tenant-centric management and reduce rent increases (Gilgoff 2020). More recent proposals gaining traction in some circles simply call for an embrace of more

²⁷ This thesis was completed in May 2021. Details of the American Jobs Plan may have shifted following completion.

European approaches to the provision of social housing (Gowan and Cooper 2018). These fundamental market shifts occurring at a large scale seem distant given the political economy of low-income housing, which has broadly favored approaches that create more space for private interests (von Hoffman 2012). However, if new efforts to repeal the Faircloth Amendment, which limits new public housing units in the country were to gain steam, that could create an opportunity for further social housing expansion.

There are a number of small-scale victories aligned with these alternative approaches that show their usefulness as a *piece* of an overall reform agenda. One modest transformation of typical ownership and financial structures is the Cleveland Housing Network (CHN) approach. CHN uses Low-Income Housing Tax Credit (LIHTC) equity to build new single-family rental units with a non-profit ownership model. Over two decades, CHN created 2,300 new rental units (Mallach 2007). This approach is admirable, but ultimately slow and in competition with other worthy LIHTC-seeking projects. Washington, DC’s TOPA law preserved 1,400 affordable units in a decade and shifted them to tenant management (Gilgoff 2020). Desmond (2020) has recently highlighted a tenant organization that successfully had an abusive landlord’s rental license revoked and took control of a series of affordable buildings in Minneapolis.

City leaders should see these opportunities to restructure ownership as a piece of the puzzle that successfully diversifies the ownership mix away from the most problematic landlords. They should recognize too that these reforms do not, on their own, erase the economic and financial incentives that other policies seek to address. Therefore, creating better policy and supporting better actors in the private, low-income market should remain central even for leaders seeking to reshape the nature of property ownership in these communities.

12.5.2. Increasing the Quantity and Type of Housing Available

Giving tenants opportunities and choice also relates centrally to the type of housing that can be provided in the market. Restrictive land use policies have limited housing options and increased prices (Glaeser and Gyourko 2003). Two types of housing that could be of particular benefit to low-income individuals, accessory dwelling units (ADUs) and single-room-occupancy units (SROs) have been heavily regulated and banned in many neighborhoods and communities. There is substantial debate about how quickly new housing “filters” toward the poor. However, this paper’s analysis of the low-income market makes clear that any efforts that could create a market penalty for bad landlords and a market opportunity for good landlords stands to benefit tenants and housing quality more broadly, at least on the margin. Policymakers largely focused on the current dilemma of inadequate housing supply should begin to better analyze and model how approaches could improve the average housing condition experienced by residents, as well.

12.6. Advancing this Policy Agenda with a Federal Focus in a Biden HUD

This section outlines a broad set of activities to advance reform of the low-income rental market that, when tied with code enforcement strategies and new private sector actors, could meaningfully address the major public policy challenges that confront housing quality in this market. But these efforts need a home and this market needs a voice within the larger federal housing policy discussion. As part of Secretary Fudge’s efforts to put a stamp on the agency she now leads, she should prioritize a new role for small-scale rental housing. Multiple divisions across HUD could advance new financing, support for new entities and new approaches to code

enforcement and new metrics for measuring the economic activity. Developing a cross agency working group that evolves into its own office to address the unique considerations of this market could help the country achieve these reform goals in a timely manner.

13. Conclusion

Improving the housing conditions for our poorest and most vulnerable begins with a better collective understanding of how the low-income market works. In this paper, I have sought to bring together work in sociology and economics to explain the unique characteristics of low-income housing in the US. This approach helps us to better understand the nuanced incentives of the principal actors, the impact of property-level decisions on neighborhoods, and the implications of the financial flows in this market.

And what do we find from digging into this market? On its face, this is a financially-constrained market with many small players. Small landlords struggle to capitalize their investments and small properties struggle to produce enough rent to yield profitable outcomes. At the same time, larger forces are at work. Major landlords are able to conceal their oligopolies through various LLCs and large-scale SFR investors are buying thousands of properties. These investors have found ways to make money in these communities, through economies of scale and more aggressive strategies toward both rent increases and maintenance decreases.

The apparent risk, and lack of high-quality financing, in the low-income market drives large required returns for the host of financial actors playing in the space. Those needed returns drive milking, the systematic underinvestment in housing quality and condition. This financing means that the direction of this market is toward worse property conditions, with the resulting implications for human physical and mental health and neighborhood stability.

At the same time, the attractiveness of those returns for those seeking yield in a period of low-interest rates also means that this market can be understood as one where competition is occurring not only within the rental space, but also in conflict with lower-income Americans seeking to own a home in many poorer neighborhoods in this country and with our broader goals to reduce inequality in society.

What this paper has also shown is that higher quality housing in these neighborhoods is possible. The innovative approach to portfolio modeling shows that landlords with higher standards can succeed. It will require a capital market and public sector willing to partner, though. But the impact on millions of renters would be meaningful if we can up the standard for landlordism for the poor.

And that brings us to another critical aspect of this paper. The small-scale low-income rental housing market is large, with 25 million units (Richardson 2018) and millions of renters living in those units. Understanding its details – why the 1-4-unit size matters, for example – is critical to unlocking improved outcomes for millions of urban residents. We cannot ultimately solve the market failures here unless we more directly grapple with the economic decisions that actors face. Unfortunately, it has been understudied and, crucially, the policy arena has been lacking, even a decade after Reiss (2009) argued as such. For good reason, much of the current debate in the private housing market is how to increase the quantity of housing to address affordability concerns. Given the severe social consequences of poor-quality housing and given the potential consequences of housing quality policies on housing quantity, policymakers should couple these two critical policy goals in their legislative agendas. Academic researchers should dig deeper into the policy ideas laid out here, treating them as the center of the debate, not a hastily drawn up list to place at the end of a descriptive paper. They should do so because it matters.

The current COVID crisis makes reform of this market ever more urgent, but also more challenging. Many tenants are thousands of dollars behind on rent, resulting in even larger declines in maintenance from landlords. Landlords are feeling the pinch and even less likely to accept pro-tenant and pro-quality reforms. And yet, a commitment to economic recovery, and increasingly, an *equitable* approach to how we rebuild, means that housing must be on the agenda. Above all, we must continue to work to align incentives at the bottom of the housing market so that all might have a decent place to live.

Hope also comes from new approaches to employment policy, at the White House, Congress, and the Federal Reserve. From all parties, policy leaders are rejecting austerity measures that would have low-income and minority individuals experience systematically higher levels of unemployment. There are renewed pushes for a larger social safety net. Relaxing the resource constraint at the bottom of the market would not guarantee quality, affordable housing for all. But, armed with the viable policy reform and innovative business models articulated here, leaders should work to marry economic recovery with housing policy reform that guarantees healthy, stable, and available homes for the poorest among us.

14. Appendices

14.1. Appendix A. Property-Level Before Tax Discounted Cash Flow Analyses

The below table summarizes the financials of the studied 3-unit, 9 bedroom property in Dixwell, New Haven, CT.

Year of Holding Period	Stable – Hold Strategy		Stable – Milk Strategy		Declining – Hold Strategy		Declining – Milk Strategy	
	Year 1	Year 10	Year 1	Year 10	Year 1	Year 10	Year 1	Year 10
Potential Gross Income (PGI)	\$42,559	\$55,530	\$42,559	\$55,530	\$41,319	\$41,319	\$41,319	\$41,319
Vacancy Loss	(\$2,128)	(\$2,776)	(\$2,128)	(\$2,776)	(\$4,545)	(\$4,545)	(\$4,545)	(\$4,545)
Effective Gross Income (EGI)	<u>\$40,431</u>	<u>\$52,753</u>	<u>\$40,431</u>	<u>\$52,753</u>	<u>\$36,774</u>	<u>\$36,774</u>	<u>\$36,774</u>	<u>\$36,774</u>
Operating Expenses	(\$24,096)	(\$27,551)	(\$17,875)	(\$20,438)	(\$23,058)	(\$27,556)	(\$15,679)	(\$18,738)
Property Tax	(\$3,613)	(\$4,131)	(\$3,613)	(\$4,131)	(\$3,559)	(\$3,559)	(\$2,669)	(\$2,669)
Insurance	(\$1,200)	(\$1,200)	(\$1,200)	(\$1,200)	(\$1,200)	(\$1,200)	(\$1,200)	(\$1,200)
Total Operations Costs	(\$29,775)	(\$33,868)	(\$23,368)	(\$26,541)	(\$27,817)	(\$32,316)	(\$19,549)	(\$22,608)
NOI	\$10,656	\$18,886	\$17,063	\$26,212	\$8,957	\$4,459	\$17,226	\$14,167
Capital Expenses	(\$532)	(\$944)	(\$341)	(\$524)	(\$447)	(\$222)	\$0	\$0
Property Before Tax Cash Flow (Ops)	\$10,123	\$17,941	\$16,722	\$25,688	\$8,509	\$4,236	\$17,226	\$14,167
Sale Revenue		\$163,161		\$223,891		\$29,457		

14.2. **Appendix B.** Property-Level After Tax and Financing Analyses

The below table summarizes the after-tax financials of the studied 3-unit, 9 bedroom property in Dixwell, New Haven, CT. **In this table, all figures are reported in 000s of dollars.**

Year of Holding Period	Stable – Hold Strategy		Stable – Milk Strategy		Declining – Hold Strategy		Declining – Milk Strategy	
	Year 1	Year 10	Year 1	Year 10	Year 1	Year 10	Year 1	Year 10
PBTCF	\$10.12	\$17.94	\$16.72	\$25.69	\$8.51	\$4.24	\$17.23	\$14.17
Annual Finance Charge	(\$8.42)	(\$8.42)	(\$8.42)	(\$8.42)	(\$6.51)	(\$6.51)	(\$6.51)	(\$6.51)
Subtotal	\$1.70	\$9.52	\$8.30	\$17.26	\$2.00	(\$2.28)	\$10.71	\$7.65
Amortization	\$0.96	\$1.84	\$0.96	\$1.84	\$0.56	\$1.17	\$0.56	\$1.17
Plus Reserves	\$0.51	\$0.51	\$0.84	\$0.84	\$0.43	\$0.43	\$0.86	\$0.86
Depreciation	(\$3.84)	(\$3.84)	(\$3.84)	(\$3.84)	(\$2.31)	(\$2.31)	(\$2.31)	(\$2.31)
Taxable Income	(\$0.6737)	\$8.03	\$6.255	\$16.10	\$0.676	(\$2.99)	\$9.8277	\$7.38
Taxes Payable	\$0.00	(\$1.69)	(\$2.19)	(\$5.64)	(\$0.24)	\$0.00	(\$3.44)	(\$2.58)
After Tax Cash Flow	\$1.699	\$7.83	\$6.109	\$11.63	\$1.759	(\$2.28)	\$7.2723	\$5.07
Net Cash from Sale		65.67		117.40		(32.18)		37.72
Total Return	\$1.70	\$73.50	\$6.11	\$129.03	\$1.76	(\$34.46)	\$7.27	\$42.79

14.3. Appendix C. Portfolio Analysis Studied Portfolio

Address	Beds	Rent	Rent/Bed	Units	Total Bed	Rent/Building	Fair Market Valu	Assessed Value
77 Truman St	2	1150	\$ 575	3	6	\$ 3,450	\$ 149,400	\$ 104,580
112 Maple St	2	1295	\$ 648	3	6	\$ 3,885	\$ 316,900	\$ 221,830
396 Ellsworth Ave	2	1450	\$ 725	3	6	\$ 4,350	\$ 227,300	\$ 159,110
409 Norton Pkwy	5	2995	\$ 599	1	5	\$ 2,995	\$ 188,700	\$ 132,090
92 Carmel St	4	1650	\$ 413	2	8	\$ 3,300	\$ 146,900	\$ 102,830
339 Sherman Ave	3	1250	\$ 417	2	6	\$ 2,500	\$ 175,700	\$ 122,990
688 Dixwell Ave	3	1250	\$ 417	3	9	\$ 3,750	\$ 166,800	\$ 116,760
210 Wolcott Ave	1	875	\$ 875	7	7	\$ 6,125	\$ 437,800	\$ 306,460
210 Burwell Ave	3	1450	\$ 483	8	24	\$ 11,600	\$ 441,700	\$ 309,190
942 State St	3	1995	\$ 665	3	9	\$ 5,985	\$ 467,800	\$ 327,460
162 Ivy St	4	1450	\$ 363	2	8	\$ 2,900	\$ 150,500	\$ 105,350
248 W Hazel St	3	1100	\$ 367	3	9	\$ 3,300	\$ 155,800	\$ 109,060
745 Dixwell Ave	3	1250	\$ 417	3	9	\$ 3,750	\$ 133,200	\$ 93,240
185 Thompson St	1	950	\$ 950	11	11	\$ 10,450	\$ 425,800	\$ 298,060
78 Cherry Ann St	3	1595	\$ 532	3	9	\$ 4,785	\$ 89,800	\$ 62,860
320 Winthrop Ave	3	1500	\$ 500	3	9	\$ 4,500	\$ 211,400	\$ 147,980
375 Winthrop Ave	4	1475	\$ 369	3	12	\$ 4,425	\$ 253,200	\$ 177,240
Miller St	3	1850	\$ 617	3	9	\$ 5,550	\$ 145,200	\$ 101,640
32 Vine St	1	850	\$ 850	4	4	\$ 3,400	\$ 133,800	\$ 93,660
94 Arch St	3	1499	\$ 500	3	9	\$ 4,497	\$ 179,000	\$ 125,300
84 Dewitt St	3	1250	\$ 417	6	18	\$ 7,500	\$ 361,400	\$ 252,980
Howard at 3rd	3	1095	\$ 365	3	9	\$ 3,285	\$ 150,300	\$ 105,210
Greenwich at 5th	2	1050	\$ 525	2	4	\$ 2,100	\$ 94,400	\$ 66,080
Trowbridge						\$ 3,000	\$ 164,500	\$ 115,150
18 Castle SF	4	1500	\$ 375	1	4	\$ 1,500	\$ 97,700	\$ 68,390
22 Wolcott St	2	1095	\$ 548	3	6	\$ 3,285	\$ 133,600	\$ 93,520
222 Chapel St	3	1400	\$ 467	3	9	\$ 4,200	\$ 183,700	\$ 128,590
467 Blatchley Ave	3	1500	\$ 500	3	9	\$ 4,500	\$ 168,700	\$ 118,090
30 Henry St	3	1700	\$ 567	1	3	\$ 1,700	\$ 102,800	\$ 71,960
26 Tilton St	3	1800	\$ 600	2	6	\$ 3,600	\$ 198,700	\$ 139,090
Totals	3	1,423	\$ 539	97	8	\$ 130,167	\$ 6,252,500	\$ 4,376,750

14.4. Appendix D. Portfolio Analysis Key Financials

The below table summarizes the before-tax financials of the traditional and Social REI models on a portfolio basis.

	Traditional Management		Social REI Approach	
	Year 1	Year 10	Year 1	Year 10
Year of Holding Period				
Potential Gross Income (PGI)	\$1,562,004	\$2,038,061	\$1,562,004	\$2,423,181
Vacancy Loss	(\$78,100)	(\$101,903)	(\$78,100)	(\$121,159)
Effective Gross Income (EGI)	\$1,483,904	\$1,936,158	\$1,483,904	\$2,302,022
Operating Expenses	(\$248,402)	(\$284,020)	(\$764,181)	(\$954,357)
Property Tax	(\$190,934)	(\$218,312)	(\$192,816)	(\$240,800)
Insurance	(\$36,000)	(\$36,000)	(\$36,000)	(\$36,000)
Total Operations Costs	(\$489,596)	(\$554,483)	(\$1,042,646)	(\$1,292,715)
NOI	\$994,307	\$1,381,675	\$441,258	\$1,009,307
Capital Expenses	\$49,715	\$69,083	\$44,125	\$100,930
Property Before Tax Cash Flow (Ops)	\$944,592	\$1,312,591	\$397,132	\$908,376
Sale Revenue		\$11,694,657		\$10,711,745

The below table summarizes the after-tax financials of the traditional and Social REI models on a portfolio basis. Figures are reported in 000s of dollars.

	Traditional Management		Social REI Approach	
	Year 1	Year 10	Year 1	Year 10
Year of Holding Period				
Before Tax Cash Flow	\$944.59	\$1,312.59	\$397.13	\$908.38
Annual Finance Charge	(\$774.62)	(\$774.62)	(\$284.71)	(\$284.71)
Subtotal	\$169.98	\$537.98	\$112.42	\$623.66
Amortization	\$249.41	\$691.62	\$65.88	\$102.20
Plus Reserves	\$47.23	\$47.23	\$39.71	\$39.71
Depreciation	(\$181.89)	(\$181.89)	(\$181.89)	(\$181.89)
Taxable Income	\$284.72	\$1,094.94	\$36.12	\$583.68
Taxes Payable	(\$59.79)	(\$229.94)	(\$7.58)	(\$122.57)
After Tax Cash Flow	\$110.19	\$308.04	\$104.83	\$501.09
Net Cash from Sale		\$9,893.86		\$5,453.55
Total Return	\$110.19	\$10,201.90	\$104.83	\$5,954.64

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