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**The financialization of rental housing:
A comparative analysis of New York City and Berlin**

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Abstract

This paper compares how recent waves of private equity real estate investment have reshaped the rental housing markets in New York and Berlin. Through secondary analysis of separate primary research projects, we explore financialization's impact on tenants, neighborhoods, and urban space. Despite contrasting market contexts and investor strategies, financialization heightened existing inequalities in housing affordability and stability, and rearranged spaces of abandonment and gentrification in both cities. Conversely cities themselves also shaped the process of financialization, with weakened rental protections providing an opening to transform affordable housing into a new global asset class. We also show how financialization's adaptability in the face of changing market conditions entails ongoing, but shifting processes of uneven development. Comparative studies of financialization can help highlight geographically disparate, but similar exposures to this global process, thus contributing to a critical urban politics of finance that crosses boundaries of space, sector and scale.

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The financialization of rental housing:

A comparative analysis of New York City and Berlin

In the 1980s, the rise of financial services, an expanded real estate industry, and state redevelopment of city centers began making urban real estate more amenable to capital flows, leading to theorizations of 'land as a financial asset' (Harvey, 1982; Haila, 1988; Weber, 2002). These dynamics were most apparent not in housing but in commercial property, as growing financial and business services sectors increased demand for prime commercial real estate and local governments remade downtowns into elite consumption spaces. Multifamily rental housing is an important segment of the urban real estate market, but was historically difficult to treat as a financial asset because of perceived difficulties and cost of management; small portfolio size; lack of data on returns, loans and loan performance; and the small secondary mortgage market for commercial loans (DiPasquale and Cummings, 1992). However global financial integration transformed the political economy of housing, especially when central banks drastically reduced interest rates after the 2000 stock market crash, which added liquidity to the economy, pushed up asset values and improved profitability (Downs, 2009; Joint Center for Housing Studies, 2011). By the end of the 1990s multifamily rental housing could be treated more like a financial asset (cf. Bradley et al., 1998).

While housing's capital-intensive nature has always linked it closely to finance, the broader financialization of the economy taking place in recent decades has transformed the way mortgage markets work. The increased prominence of institutional investors, greater emphasis on transforming assets into liquid and tradable commodities, and the financial sector's expanded role in the overall economy (cf. Engelen et al., 2010) have redefined the role of mortgage markets from facilitating borrowers' access to credit to facilitating processes of global investment (Aalbers, 2008). This shift raises questions about the distribution of risk versus benefit between financial actors and local urban sites they target for investment. Despite an emerging body of social science research on the financialization of owner-occupied housing, scholars have not attended to these dynamics in the multifamily rental market, and much extant research on the financialization of housing focuses on the United States, rarely

addressing differences within and between cities and/or national contexts (cf. Engelen et al., 2010 for an exception). Although today's financial markets are globalized, variations persist in national and local housing markets, policies and regulations. Thus financial actors' penetration of specific urban contexts is likely to differ in process, pace, extent and outcomes.

This article responds to the underappreciated relevance of rental housing to debates about financialization, and the need for comparative perspectives on how this process unfolds in different market and regulatory contexts. In this paper, financialization is understood as the role of private equity investors owning rental housing portfolios. Based on separate original studies of private equity real estate investment in rental housing (Fields, 2013, in press; Uffer, 2011), we document the entrance and impact of private equity actors in New York City and Berlin. This secondary analysis highlights the importance of local context to the emergence, historical construction and thus the contingency (cf. Robinson, 2011) of global trends like financialization. Beyond highlighting similarities or differences between cities, such research may aid efforts to challenge the role of finance in urban development, by building an understanding of how global processes manifest at (and are connected across) the local level.

The remainder of this paper is organized into four parts. We begin by discussing the financialization of rental housing in relation to changes to state-funded housing provision in the U.S. and Germany, and to real estate private equity strategies. In part two, we explain how methods and data from the original projects figure in this analysis. In part three, we present the political economic context of each city's housing markets that led to the entrance of private equity firms; discuss firms' motivation, strategies, and scale of investment in each city; and analyze their impacts on renters and urban space before and after the 2008 crisis. While investors had different motivations and strategies based on New York and Berlin's contrasting market contexts, financialization worsened housing conditions and intensified uneven development in both cities. The 2008 global financial crisis, and investors' attempts to cope with its fallout, complicated these outcomes. In the final section, we conclude that local housing markets and regulations create the necessary conditions by which the global process of financialization reproduces urban space: the roll-back of state protections on rental housing in New York and Berlin provided an opening to create

a new asset class for global institutional investors, which heightened existing inequalities by rearranging spaces of abandonment and gentrification.

FINANCIALIZING RENTAL HOUSING

Marketization of rental housing

As states turned responsibility for affordable rental housing over to the private market in various ways, new markets have opened for financial actors. The globalization of capital markets heightened competition among governments, under pressure to both maintain social welfare and supporting domestic business, and attract foreign investment, a pressure they often seek to resolve by entrepreneurial means (Held and McGrew, 2002; Harvey, 1989). In this context state-funded affordable housing may not offer strategic significance for advanced capitalist states (Harloe, 1995), leading governments to transfer public loans to private loans; demolish or privatize public or social housing; reduce supply-side subsidies in favor of housing allowances; promote home ownership; and deregulate rents (cf. Aalbers and Holm, 2008; Crump, 2002; Turner and Whitehead, 2002; Wyly et al., 2010).

Public housing has only ever constituted a minor portion of the U.S. overall housing stock, and similar to many developed countries, subsidies for homeowners outweigh funding of public rented housing in the U.S. (Vale, 2007). Starting in the 1970s federal policy imposed sharp funding reductions and a moratorium on new public housing construction and more recently has incentivized demolition of older developments. Today affordable housing production is more marketized, with the Treasury's Low Income Housing Tax Credit program indirectly subsidizing construction costs; the same is true at the point of consumption, with households receiving Section 8 Housing Choice Vouchers for use in the private rental market (Schwartz, 2010).

Germany's housing policy also became more market-oriented throughout the 1980s and 1990s, increasingly promoting homeownership and market approaches to social housing and shifting from supply-side to demand-side subsidies (Egner et al., 2004, Kuhn, 1999). Germany traditionally provided a considerable amount of publicly subsidized housing. Housing companies owned by state or local government and churches, unions, or corporations received federal and municipal subsidies in exchange

for rent ceilings and allocation priorities. Under the principle of the 'common public interest' (Gemeinnützigkeit), companies limited their profit orientation in exchange for tax exemption, which meant that units were often offered at below market levels even after their 30-year maximum subsidy period ended and they entered the free market (Droste and Knorr-Siedow, 2007; Egner et al., 2004). However the government abandoned the principle of common public interest in the late 1980s, allowing for profit orientation (Stimpel, 1990). Starting in the mid-1990s but peaking in the early 2000s, corporations and municipal governments across Germany privatized their housing stock. Corporations wanted to refocus on core activities while municipal governments, especially in East Germany, sought to increase municipal income (Müller, 2012).

Private equity real estate investment

While affordable rental housing presents several risks (capital risk on property value, rental yield risks, and political risk associated with changing policies) (Berry and Hall, 2005), financial liberalisation and changes in state housing policies in the U.S. and Germany have created market conditions favourable to risk-oriented investors. A focus on high returns makes private equity funds an especially attractive vehicle (Rottke, 2004). Investment banks, private firms or other real estate players create and manage real estate private equity funds by collecting money from institutional investors and leveraging credit capital from banks. Funds invest in real estate directly, e.g. purchase of housing estates, or indirectly, through shareholding of housing companies (Linneman 2004). Typically operating with little equity and leveraging credit capital to make high returns (which also puts them at higher risk for default if property values decrease or interest rates increase), real estate private equity funds follow different strategies depending on market conditions. Areas of high demand afford a strategy of upgrading, modernizing or otherwise developing properties, yielding profits from increased rental income and/or the sale of upgraded properties to tenants or new investors. Additionally, or sometimes alternatively, equity funds can take advantage of low interest rates to maximize the return on equity. When the interest rate is lower than returns on the total investment, profit is less dependent on a particular investment project than on the proportion of capital effectively leveraged through credit. This makes a property's location and conditions of negligible importance: "even a property with little or no residual value can still be extremely valuable"

(Linneman 2004: 126); a lower-value portfolio may be sought for its low purchasing prices. Ultimately, funds aim to sell or exit their investment through a rate of return in excess of the price paid, usually within one to seven years (Rottke, 2004).

While private rental housing is always a commercial endeavor, private equity's high yield targets may adversely affect tenants. In the corporate sector, private equity funds often implement cost-cutting measures to maximize short-term value because they prioritize high returns over risks (Evans and Hubbard, 2008); in housing such measures could include cutting back on services, repairs, and maintenance. Higher rents and/or the imposition of surcharges could result from efforts to augment returns. For individual tenants, these measures may cause declining living conditions and increased housing insecurity; the loss of affordable units due to either physical deterioration or increased rents could pose a challenge to lower-income renters collectively. To build on Wyly and colleagues' (2009) argument about tenant-landlord relations in the subprime era, the replacement of local landlords by globalized investors also presents potential difficulties for holding distant investor-landlords' socially, legally and politically accountable at the local level.

METHODOLOGY AND DATA

This article analyzes data drawn from two separate, original studies carried out by the authors—one of New York City, the other of Berlin—of private equity investment in multifamily rental housing. Both projects addressed the entrance of private equity investors in the early 2000s, and their impact on tenants and urban space before and after the 2008 financial crisis. Considering complementary data from the original projects side-by-side allowed us to draw broader inferences about the financialization of rental housing. A key challenge of researching real estate private equity investments is the lack of systematic and accessible data.¹ While data on property transactions is typically public record in the U.S., using this information for research purposes can be costly, challenging and time-consuming. Privatization and sales contracts from the Berlin case are not public information, making details of purchases difficult to obtain. In addition, private equity funds' continuous adaptation of investment strategies makes it difficult to 'pin

¹ Financial analysts studying the institutional single-family rental market in the U.S. note the same issue (Rahmani et al., 2013).

down' a particular investor's strategy. Despite obstacles to securing data on sales volumes, geographic location, and rent levels before and after the entrance of private equity, several other data sources inform our analysis of investment strategies and their impact on tenants and the housing stock more generally.

To shed light on investment strategies, in the New York case we draw on interviews with housing advocates and community-based organizations and secondary data on private equity purchasers' business model; for the Berlin case interviews with private equity investors, property managers and public officials serve this purpose. These data sources allow us to understand the motivations and assumptions behind the investment strategies pursued, and how this differed from the realities of operating affordable rental housing in each city. To analyze the impact investments had on tenants and the housing stock more generally, the New York case relies on focus groups with tenant associations; a database of some 52,000 housing units in overleveraged,² investor-purchased multifamily properties; and data from the Building Indicator Project, an index of physical and financial distress based on housing code violations and liens in multifamily properties. The Berlin case uses interviews with tenant associations, public officials and neighborhood management teams, and social impact studies and housing market reports to analyze the impact of investments. These data sources offer insight into the subjective experiences of tenants, corroborated where possible by quantitative indicators of change in the housing stock.

REAL ESTATE PRIVATE EQUITY IN NEW YORK AND BERLIN

Context for private equity

Transformations in New York City's real estate market in the 1990s and early 2000s set the stage for private equity investment. After struggling with severe disinvestment and property abandonment in the 1970s, the city invested over \$5 billion to restore the housing market and revitalize neighborhoods (Ellen et al., 2003). This reduced vacant land and housing and improved housing conditions, increasing housing demand, rents and property values (Ellen et al., 2003). Several other factors contributed to revitalizing New York's real estate market in the 1990s, including the inflow of almost a million immigrants and

² Here, "overleveraged" is defined as debt service in excess of net rental income. The database is based on properties identified by community organizations in their tracking of market activity, research on property owners, and responses to tenant complaints. Their lists were compiled and cross-referenced with public data sources on housing code violations, liens, ownership, property value, and debt (see Fields, in press for a fuller description of this process).

employment and income growth in financial and business services, the latter entailing gentrification of working class areas near Manhattan's urban core (e.g. Harlem, the Lower East Side, and Williamsburg) by affluent professionals (Bram et al., 2003; Newman and Wyly, 2006). Changes in fair lending laws and the financial services industry increased mortgage and investment capital flow to inner city neighbourhoods (Cummings, 2002; Wyly et al., 2004).

The late 1990s and early 2000s economic expansion and global credit boom intensified gentrification (Wyly et al., 2010) as landlords took advantage of new market opportunities when 20-40 year affordability restrictions on privately-owned government-subsidized housing units expired (DeFilippis and Wyly, 2008). From 1997 to 2007 exits from assisted housing programs spiked, lifting income and rent limits from 40,000 apartments (Furman Center for Real Estate and Urban Policy, 2011). While formerly subsidized housing often meets criteria for rent stabilization,³ these state laws were weakened under pressure from the real estate lobby and Republican lawmakers in the 1990s (Dao and Perez Pena, 1997). This created deregulation provisions that return rent-stabilized units to the open market, most importantly the high rent/vacancy decontrol provision, under which units renting for \$2000 or more may be deregulated entirely when they become vacant (this ceiling was raised to \$2500 in 2011). Additional changes such as "vacancy bonuses" (allowing a 20% or more rent hike upon vacancy) and the 1/40th program (allowing landlords to pass on 1/40th of the cost of major capital improvements to tenants in permanent rent increases) helped landlords move rents toward the deregulation ceiling. Of nearly 200,000 units deregulated between 1994 and 2008, high rent/vacancy decontrol was the leading source (Citizens Budget Commission, 2010). Together with a surge of new residential development (much of it luxury housing) and expanded home mortgage financing (particularly subprime loans), the city's low-cost rental market was "pressured and surrounded by overheated, highly leveraged ownership" by the mid-2000s (Wyly et al., 2010: 2611; Furman Center for Real Estate and Urban Policy, 2010b). Amidst such

³ Stabilization mainly applies to pre-war buildings with 5+ units when the rental vacancy rate is below 5%, and limits rent increases to a percentage the Rent Guidelines Board sets annually. As of 2011, 45% of the city's private rental stock was rent-stabilized (Lee, 2013).

market saturation, rent-regulated housing emerged as a new frontier for capital in search of investment opportunities.

Like New York, Berlin's political economy of housing changed in the 1990s, setting the stage for real estate private equity in the early 2000s. Traditionally, housing in West and East Berlin was heavily state-supported. In West Berlin lack of private investment necessitated state financing of post-war housing provision: between 1952 and 1970, over 85% of new housing construction was publicly subsidized, and frequently constructed by state-owned housing companies operating under the principle of common public interest (Hanuske, 1999). In East Berlin, private landownership was almost entirely abandoned and state-led housing associations provided housing, which became part of Berlin's state-owned housing stock following reunification. In 1991, Berlin owned 19 housing companies holding approximately 480,000 housing units – 28% of the entire housing stock (Holm, 2008).

Following reunification, re-establishing Berlin as Germany's capital shaped expectations that the city would become another nodal point, like London or Paris, in the European or global economy. Berlin's government invested heavily in housing construction and modernization (especially in the East), offering subsidies and tax deductions for new social and private housing development (Strom, 2001) including subsidies for 60,000 new housing units from 1990-1995 (Investitionsbank Berlin, 2002). However growth expectations were overestimated, and Berlin suffered a mid-1990s economic decline and population loss, creating a fiscal crisis.

Berlin's fiscal instability motivated privatization of its state-owned housing stock and abandonment of social housing subsidies. In 1995, the city government instructed its housing companies to sell 15% of their housing units, preferably to tenants (Investitionsbank Berlin, 2002). According to interviews with government officials, the aim of privatization was to improve Berlin's budgetary situation and stimulate private investment in housing rehabilitation (high debts prevented state-owned housing companies from executing rehabilitation). In 1998, the government of Berlin ended subsidies for new social housing construction. In 2003 it curtailed follow-up subsidies, which typically added another 15 years to the initial 15-year period, making the newest housing, built from 1987 to 1997, enter the private

market much sooner than it would before the end of follow-up subsidies (Senatsverwaltung für Stadtentwicklung, 2011).

While privatization created expectations that private investors would contribute their financial resources to modernize the housing stock, Berlin's housing demand was low. In contrast to New York, which had a rental vacancy rate of 3.19% in 1999 (Lee, 2009), Berlin's housing market was more relaxed in the late 1990s, with a citywide vacancy rate of 7.1% in 1997 (Investitionsbank Berlin, 2002).⁴ The macro-economic situation was also less favorable: the sale of industrial enterprises to West German and western European companies rapidly de-industrialized East Berlin, while West Berlin's industries and outdated economic structure collapsed after state subsidies were discontinued (Heeg, 1998). In 1999 Berlin's economic situation was stagnating, with a GDP growth rate of 0.5%; in 2003, the GDP contracted by 0.7% (Statistische Ämter des Bundes und der Länder, 2011). This led to the loss of half a million industrial jobs, only partially replaced by service and creative industry positions (Droste and Knorr-Siedow, 2007): in 2003, Berlin's unemployment rate was 18.1% (Amt für Statistik Berlin-Brandenburg, 2013). In this market context, state-owned housing companies encountered difficulties privatizing housing directly to tenants: according to interviews with managers of state-owned housing companies, the inability to significantly increase owner-occupancy motivated the sale of entire housing developments as investment objects en-bloc – this created ideal conditions for private equity funds newly interested in rental housing.

Entrance of private equity

Despite markedly different rental market conditions, both New York and Berlin's contexts encouraged the entrance of private equity real estate investment in the 2000s. New York's weakened rent regulation laws, intensified gentrification, and luxury development pointed to rent-stabilized housing's high profit potential. The real estate bubble had saturated much of the housing market by the mid-2000s, but the on-going flood of mortgage financing facilitated private equity funds' high-leverage strategy. Deregulating rent-stabilized properties would enable investors to capitalize on the wave of new development and high rental

⁴ Up to 12.3% in mostly state-owned housing developments at East Berlin's outskirts (Investitionsbank Berlin, 2002).

demand, either by closing the gap between lower, stabilized rents and higher, market-rate prices through promoting tenant attrition and upgrading units until they were released from rent regulations; or flipping properties to other investors or developers aiming to assemble parcels of land. Booming property values gave longtime local operators who had amassed large property holdings over decades an incentive to sell their portfolios at the height of the market (Haughney, 2009).

While multifamily housing has long faced a financing gap in the U.S., partly because financial institutions see the individual owners and small investors who typically own rental property as a greater credit risk than corporate owners (Donovan, 2002; Savage, 1998), by 2005 commercial loan underwriting and equity requirements had loosened substantially (Congressional Oversight Panel, 2010). Private equity firms were well-positioned to benefit from high credit liquidity and low interest rates, accessing financing to secure economies of scale through large package deals involving multiple buildings. The geography of New York City's housing stock facilitated this approach, as multifamily dwellings (particularly mid-size properties with 20-49 units) are densely concentrated in upper Manhattan, the west Bronx and central Brooklyn (Furman Center for Real Estate and Urban Policy, 2010a).

Thus private equity firms began aggressively targeting the city's rent-regulated housing. Whereas this segment of the market had long been the domain of local real estate operators rather than financial investors, affordable housing advocates estimate that from 2005 to 2009 private equity firms purchased 100,000 units, or about 10% of all rent-regulated housing (ANHD, 2009). As advocates explained in interviews, the purchases stood out because of their scale, involving package deals as large as 50 buildings, and because of the inflated prices firms paid, based on "frothy" appraisals, overestimated rental income, and underestimated operating expenses. The aim was to reduce maintenance expenses and use vacancy bonuses and major capital improvements to reposition under-market units, thereby releasing untapped value. Firms used high-risk leveraging to meet these expectations: in a group of ten major investment portfolios covering 27,000 rental units, properties had an average of only 55 cents of income for every dollar of debt service (ANHD, 2009).

Geographic analysis of a database of such purchases (covering 1000 buildings/52,000 units) shows that of 59 community districts, 11 districts, located in in upper Manhattan, the west Bronx and

central Brooklyn, stood out for having 5-10% of their rental stock financially overleveraged (with debt service outweighing net rental income) following purchase by investors as of 2011.⁵ Compared to the city as a whole, these 11 community districts also have higher rates of poverty (26% vs. 18% citywide) and unemployment (13% vs. 10%), and greater shares of Black (30% vs. 23%) and Hispanic (50% vs. 29%) residents (based on racial/ethnic share and poverty and unemployment rates from the 2008 American Community Survey). The uneven geography of investment patterns in such neighbourhoods raises concerns about housing security and stability of low-income and minority New Yorkers.

In Berlin the main trigger for the surge in private equity investment was en-bloc privatization, which favored investors able to access the financing needed for such large-scale investment, and shut out potential purchasers with lower capital access, like housing co-operatives. Interviews with investors showed two motivations for funds purchasing in Berlin. First, they were speculating on a rising market in which comparatively low rent levels⁶ and relatively high turnover rate of 9.4% in 2003 (Senatsverwaltung für Stadtentwicklung, 2005) represented an opportunity to increase rents through modernization and luxurious upgrading. Where social housing developments were about to exit their subsidy period, funds could potentially close the gap between lower, subsidised rent levels and market rents. Different from New York's housing boom, Berlin had little new construction, creating expectations that anticipated demand would outstrip supply and increase rents. Private equity funds also aimed to increase home-ownership through re-selling single housing units in a traditionally renter-dominated market (86.5% in 2008) (Investitionsbank Berlin, 2010). Second, a capital leveraging strategy would allow funds to achieve capital gain independently from increased housing demand (Linneman, 2004). Large masses of available housing provided the volume needed to speculate and trade, pooling them together to sell on to investors (Müller, 2012). According to investors, when Goldman Sachs' real estate arm Whitehall Funds entered the market in 2004, it created a herd-like movement of international investment firms following the money

⁵ 27 community districts had 1% or less, 11 had 1-2%, and six districts had 2-5% of their rental units overleveraged as of 2011. Calculations based on district's number of occupied rental units as of 2008 per the New York City Housing and Vacancy Survey.

⁶ Rent levels were more than 100% higher in Munich and more than 50% higher in Hamburg (Investitionsbank Berlin, 2002).

to Berlin's rental housing. The hype fostered a self-reinforcing speculation in which capital gains on highly leveraged purchases could be realized by re-selling to other investors, as shown by increased en-bloc sales of large (800+ units) housing estates between 2004 and 2007 (BBSR, 2012). Here, availability of cheap credit capital was more important than specific housing market conditions such as opportunities to increase rents.

Since 1991, Berlin has privatized over 200,000 housing units. Between 1998 and 2004, the city government sold two entire state-owned housing companies with approximately 40,000 and 65,000 units respectively (representing half of all units privatized since 1991) and state-owned housing companies sold numerous estates in their portfolios en-bloc. In 2007, the government moved to halt, or at least slow, sales due to both popular opposition and the credit crisis (Abgeordnetenhaus Berlin, 2009; Claßen and Zander, 2010); 270,000 units (constituting 14.3% of the city's housing stock) remained in state-owned housing companies at that time.⁷ Whereas New York's "hot" housing market led firms investing there to pay inflated prices for package deals, initial purchasers of state-owned housing in Berlin were able to negotiate discount prices (Holm, 2010).

Since state-owned housing companies owned free market and social housing, private investors did not necessarily buy exclusively low-income housing. In general, state-owned housing companies owned two types of properties: primarily social housing built in the post-war era at the outskirts of East and West Berlin, some no longer socially regulated due to phasing-out of the subsidy period; and, a smaller amount of free-market pre-war inner-city properties (Häußermann and Kapphann, 2002). Large investors that took over entire housing companies received a portfolio with units distributed across the city and these different market segments. A portfolio overview of the largest privatized housing company shows that the consortium of investors got hold of housing estates distributed across all districts; the majority (around 55%) in the outskirts but also some well-regarded inner-city estates (Zinnöcker, 2009). Interviews with portfolio managers explained that initial purchasers later unloaded housing estates of poor quality, unfavorable location, or problematic tenant structure onto smaller investors more likely to pursue a

⁷ Sales of housing units – primarily re-sales, not initial privatization of state-owned units – has only recently started again (BBSR, 2012).

capital leveraging rather than a spatial upgrading strategy (Kofner, 2012; Landtag Nordrhein-Westfalen, 2013).

Impact on tenants and cities

In 2006, as community-based organizations in New York City began tracking investments and researching buyers, complaints of tenant harassment surged in properties private equity funds had purchased. An analysis of the prospectuses filed with the Securities and Exchange Commission for mortgage security offerings from several major portfolios (covering nearly 30,000 apartments) showed profit expectations and debt leverage predicated on tenant turnover rates of 20% to more than 30% a year (ANHD, 2009), whereas typical annual turnover for rent-stabilized units is 5-10% (Rent Guidelines Board, 2009). In interviews, housing advocates argued that these underwriting assumptions motivated systematic harassment as a means of promoting tenant attrition in order to secure vacancy bonuses and eventual deregulation. Conversations with representatives from community-based non-profit organizations, as well as investigative reporting highlighted tactics like building-wide eviction notices, baseless lawsuits for unpaid rent, aggressive buy-out offers, refusal to make repairs inside units and threats to call immigration authorities (ANHD, 2009; Morgenson, 2008; Powell, 2011).

The legal system was also a mechanism of harassment, with investors such as the Vantage fund gaining notoriety for the volume of complaints brought against tenants in Housing Court. From 2006 to 2008 Vantage, with a 2000-unit portfolio, typically brought charges against 50 tenants a month, and in 2010 settled an illegal harassment lawsuit (Pincus, 2008; Fung, 2010). Because defendants in Housing Court aren't entitled to a lawyer, and low-income New Yorkers are overrepresented in multifamily rental properties (Furman Center for Real Estate and Urban Policy, 2010a), tenants such as those in Vantage properties are unlikely to secure legal representation in Housing Court. Accordingly housing advocates from community-based non-profit organizations observed increased vacancies and tenant turnover, followed by renovations and more affluent tenants in buildings funds purchased, especially in areas with large immigrant populations, such as Mexican and Ecuadorian communities in Queens.

In the changeover from longtime local owners to private equity funds, housing organizers explained how previous owners' laxness in documentation and leasing (e.g. failure to register tenants with NY State Division of Housing and Community Renewal) became strategic for investors. The relative informality of private rental housing provision can be a barrier to capital entry (cf. Donovan, 2002), but here private equity firms repurposed informality as leverage to evict "illegal subletters". Firms framed their strategy with positive rhetoric, arguing "revitalization would occur" with "an improved tenant base and increased rental income", as seen on the website of Milbank Real Estate, which was responsible for a large distressed portfolio in the west Bronx (Milbank Real Estate, 2007). However tenants and community organizers described how efforts to improve the tenant base heightened turnover and destabilized communities that existed within buildings.

Private equity funds had an uneven impact on Berlin's housing market because funds followed diverse investment strategies depending on the type and location of properties they acquired. Firms also adapted their strategies to changing financial and housing market conditions. Interviews with private equity fund managers showed that investors generally followed a strategy of upgrading to increase rent levels on housing in central, higher demand locations such as Mitte or Prenzlauerberg. The apartments, often in substandard conditions, were renovated, sometimes to a luxurious standard, and modernization costs transferred onto tenants.⁸ According to interviews with tenant associations and analysis of social impact reports of individual housing developments, rent levels often doubled, displacing long-term residents. In one inner-city pre-war development in former East Berlin, investors announced modernization that would increase the rent for a moderate-size 59 square meter apartment from 264 to 444 Euros per month (Bezirksverordnetenversammlung Pankow von Berlin, 2006). With only a 36% employment rate (Mieterberatung Prenzlauer Berg, 2007), most of the development's residents could not afford increased rents. The government's privatization initiative aimed to improve Berlin's housing stock, but also created processes of gentrification, displacing long-term tenants and excluding low-income households from moving into newly renovated housing. While investors did attempt to sell individual units

⁸ The housing owner can transfer 11% of the modernization costs onto the rent. Even when the costs are amortized, the rent remains at the higher level.

to tenants; however, this strategy was difficult to accomplish because Berlin's rent levels are still considerably lower than financing homeownership (Holm, 2010).

Where investors bought properties with low development potential, such as estates at the outskirts (Neukölln, Spandau, Marzahn) with high vacancy and sometimes still socially regulated rent levels, investors pursued a capital leveraging strategy rather than spatial upgrading, as portfolio managers of privatized housing companies discussed in interviews. While credit was easily available and demand for investment high, funds speculated on the potential to rapidly flip the property, neglecting the housing and contributing to the rapid physical and social deterioration of these neighborhoods. Similar to what took place in New York prior to 2008, these investors focused on minimizing costs. Interviews with tenant associations showed that property maintenance was often reduced: for example janitors were abandoned; garbage was no longer collected; and common areas neglected. In Berlin's market, tenants who could afford to move out did so and vacancy rates rose (Keller, 2008). This process contributed to deteriorated living conditions and increased social segregation: neighborhood managers described how households with the resources to secure better housing often left, concentrating low-income households without other options.

The financial crisis

Soon the market crash and credit freeze drove home concerns about financial risks on private equity real estate investment in New York City: housing organizers explained that conditions stabilized somewhat under greater public scrutiny, but once debt service payments became unsustainable, rapid physical deterioration ensued in many properties private equity funds had purchased. Building Indicator Project data shows that the rate of distress on all multifamily properties in New York increased from 2.8% in 2008 to 5.5% in 2010, suggesting the credit freeze contributed to deterioration on a widespread basis. However private equity purchases concentrated in low-income and minority neighbourhoods started with a much higher rate of distress, which then skyrocketed from 7% in 2008 to 21% by 2010, indicating investors targeted downmarket, poorly managed housing and were unable to support both property maintenance and debt service once credit tightened. Property deterioration was more extreme and rapid than when investors neglected maintenance and repairs as a means of promoting attrition (cf. Powell, 2011). In focus

groups, tenants described lack of heat and hot water, unrepaired damage from burst pipes and electrical fires, other severe declines in living conditions, and the failure of major building systems. They explained how this compromised their health, safety and psychological well-being. The city strengthened housing code enforcement in response, but has little power to hold investors accountable for underlying financial distress. Upon regarding the de facto abandonment of overleveraged properties⁹, seasoned community organizers, who had been directly engaged in developing tenant associations and managing and rehabilitating abandoned properties in the city's 1970s urban crisis (brought on in large part by disinvestment and capital flight), expressed fears of returning to the widespread distress of the earlier crisis. Moreover, banks' reluctance to write down debt on the properties⁹ prevented them from acquiring buildings to rehabilitate and manage themselves, as low property values and lack of demand allowed them to do in the 1970s.

The 2008 financial crisis aggravated the polarization of different market segments and the segregation of tenants in Berlin. Short-term leveraging strategies came to a halt as capital markets dried up. Investigative reporting showed that investors either declared insolvency or, where possible, shifted to longer-term strategies requiring increased income streams by reducing vacancies. As the CEO of a management company for a post-war housing development in southern Berlin explained, the company sought to reduce the development's 35% vacancy rate by offering units at rents below socially regulated levels, and giving prospective tenants vouchers for media stores (Du Chesne Immobilien GmbH, 2009). This created what Holm (2010) calls 'discount housing', leading to a concentration of low-income households, often on social welfare. With rents for these tenants often directly paid by the state, investors were guaranteed a steady income (Holm, 2008). This reinforced the socio-spatial inequalities within Berlin as upmarket housing in central city areas was further upgraded (albeit more selectively due to the crisis), leading to higher rent levels and exclusion of low income households while down-market housing at the outskirts was neglected; however the state is less able to influence these issues because privatization diminished state control of large amounts of its housing stock.

⁹ Tenant advocates have suggested this is due to pressure to perform well on post-crisis Treasury-imposed stress tests.

CONCLUSIONS

This analysis, based on data collected in New York and Berlin, showed both the motivations of investors and the consequences for tenants, while also critically assessing the state's role in facilitating and moderating financialization and thereby contributing to urban inequality. Global expansion of finance capital and favorable market conditions created through the roll-back of affordable housing regulations increased the involvement of financial actors in both New York City and Berlin's housing markets.

Contrasting histories of social welfare provision and housing market (de)regulation, as well as economic and housing market conditions created the specific local contexts in which financialization occurred. This translated to differences between New York and Berlin in how private equity funds entered, assembled economies of scale, and deployed and adapted spatial upgrading and capital leveraging strategies before and after the 2008 financial meltdown. Berlin's en-bloc sale of major housing companies and housing estates created immediate economies of scale for private equity funds. Meanwhile those investing in New York's rent-regulated housing had to assemble portfolios themselves, often through buying out longtime owners with large property holdings, and in a more competitive market context that prevented acquiring properties at a discount.

Beyond mediating its effects (Engelen et al., 2010), national, state and local institutions enable financialization. To attract and retain capital, city and state governments often promote growth-oriented strategies that actively invite financial actors' participation in local urban contexts (Weber, 2010). However financialization can also emerge as an unintended consequence of policy choices (Krippner, 2011), including those made in response to the imperative for economic growth. For example, the 1990s loosening of New York's rent regulations resulted from a coalition of free market advocates among Republican state lawmakers and major New York City property owners (Dao and Perez Pena, 1997) who stood to benefit from weaker regulations in the city's gentrifying rental market. Rent-regulated housing, long seen as a "financial backwater" (ANHD 2009),¹⁰ would not be targeted by private equity for nearly a decade after the reforms of 1993 and 1997, but the potential to rapidly deregulate stabilized units was

¹⁰ Due to its low returns of 7-8% annually, taken as income, not capital gains (ANHD 2009).

crucial to the mid-2000s entrance of private equity. In Berlin, the federal government's deregulation of housing companies under the common public interest happened in the late 1980s, when Germany's long-term housing shortage seemed reversed (Stimpel, 1990). This decision allowed municipalities like Berlin to privatize state-owned housing and extract profits to balance public budgets. Berlin's government, selling en-bloc and focusing on the highest bidder, favoured – intentionally or unintentionally – short-term risk-oriented investors.

Despite different contexts, financialization heightened inequality and often worsened housing conditions in both cities, especially as investors attempted to cope with the fallout of the 2008 global financial crisis. Spatial upgrading strategies aiming to realize potential ground rent depended on increasing rents and improving properties in more desirable developments and areas with greater housing demand. This tended to jeopardize housing security for low-income tenants, also excluding them from the benefits of improved housing quality. In New York this strategy was also associated with systematic harassment of tenants in order to promote turnover of units and deregulate rent-stabilized apartments; in Berlin turnover in desirable developments happened more subtly, through transferring modernization costs onto tenants unable to bear them. Meanwhile higher-risk capital leveraging strategies predicated on using credit capital (rather than the value of the properties themselves) to increase returns on equity were associated with reduced maintenance, physical and social deterioration, and the increasing isolation of low-income households unable to move to better housing. Considered from the perspective of concerns about housing and neighbourhoods, this development suggests the potential for a prolonged period of deterioration as new owners embark on leveraging strategies that load struggling properties with additional debt. This could affect both current tenants as well as renters more broadly as physical decline removes affordable units from the market.

Financialization however does not lead to one final outcome; instead it continuously reshapes the urban landscape. Capital adapts to changing global and local market conditions by shifting to different places (spatial adaptation) or market sectors (sectoral adaptation, as seen in the rush to position foreclosed single family properties as a new investment asset (cf. Molloy and Zarutskie, 2013)), or undertaking a reversal of strategy. Beyond the ability to buy or sell, upgrade or increase rents of the

underlying asset (the property itself), investors can also make rents on the financial terrain, through buying and selling mortgage-backed securities or participating in the market for distressed financial assets, adding to the adaptive power of financialization. This adaptive quality of financial strategy means that as global finance capital searches out new strategies of accumulation, processes of uneven development also undergo change. Thus attempts to address the negative externalities of financialization at the local level may simply set in motion an adaptive strategy creating a new set of problems—in the original location, or a new one. Efforts to contest the financialization of urban space therefore cannot be limited to the local level. More potential lies in developing political connections that, like global capital, cross boundaries of space, scale and sector (Sites et al., 2007). Comparative research connects geographically distinct places and populations by analysing their shared exposure to global trends like financialization, and can potentially contribute to a political agenda that contests the financialization of urban space. Creatively designed, comparative urban research (cf. Robinson, 2011) on financialization is needed to help forge a critical urban politics of finance focused on common welfare rather than short-term objectives of growth and competition.

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