Gentrification, market failures, and landlords

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1 Introduction

By 2050, 2.5 billion more people will live in cities (United Nations, 2018). As urban centres across the world continue to transform, it is becoming increasingly urgent to understand how urban policy can support or impede the welfare of communities contending with the forces of gentrification. I argue that, following Huber and Wolkenstein (2018), gentrification in uncontrolled rental markets lead to suboptimal housing outcomes that threaten occupants' means to pursue their located life plans (Huber and Wolkenstein, 2018, p. 385). However, this paper departs from Huber and Wolkenstein (2018) to further argue that markets are not inherently insensitive to the values that ground occupancy rights. Instead, I propose that this undersupply of occupancy rights is a result of market failures arising from the tendency of landlords to accumulate monopoly power in unregulated rental markets. Overall, I make the case that market failures and the fundamentally asymmetric landlord-tenant relationship are closely interdependent – and as such, that there is a pro-market case for housing decommodification policies.

2 Gentrification and the case for decommodifying housing

'Located life plans' are the idea that often, a person's participation in economic, social, and cultural life is intrinsically tied to a certain geographic area (Stilz, 2013, p. 336). According to Stilz (2013, p. 335), individuals implicitly assume a measure of geographic stability in establishing these located life plans, and as such this is sufficient to ground a weak form of "occupancy rights". Huber and Wolkenstein (2018) bring Stilz's concepts to bear upon the adverse consequences of gentrification. They argue that these "restricted-use" rights predicate a right for individuals to be protected against expulsion in cases of gentrification-led displacement (Huber and Wolkenstein, 2018, p. 384). Despite this, the process of gentrification often violates these rights. Huber and Wolkenstein (2018, p. 385) conclude that this occurs due to the inability of markets to "commodify" occupancy rights and as such, policymakers should aim to restrain market forces through policies that decommodify housing (Huber and Wolkenstein, 2018, p. 385).

Huber and Wolkenstein (2018) are right in that in gentrifying neighbourhoods, uncontrolled markets do infringe upon individual occupancy rights. Across the world, empirical evidence has demonstrated the potential for gentrification to displace residents (Couture et al., 2019; Elliott-Cooper et al., 2020; Qiang et al., 2020; Zuk et al., 2015). This can come through direct channels (through selective eviction by landlords) and indirect channels through political marginalisation and disorientation (Elliott-Cooper et al., 2020, p. 495 and Guillery and Zimmer, n.d. p. 6). As such, without policies aimed at limiting the worst effects of gentrification, the benefits of urban renewal predominantly accrue to the wealthy, while poor and marginalised communities disproportionately shoulder the costs (Couture et al., 2019). Indeed, there is newer evidence that gentrifying neighbourhoods may not produce the purported income and employment gains for existing residents as previously thought (Meltzer and Ghorbani, 2015, p. 4). Consequently, as argued by Huber and Wolkenstein, 2018, housing decommodification policies such as social housing and rent control can play an important role in limiting unexpected disruptions to individuals' located life plans and improving housing outcomes (Rajasekaran et al., 2019; Zimmer, 2017).

Yet, while Huber and Wolkenstein (2018) are correct in suggesting that there are often good policy reasons to decommodify housing, they misdiagnose the mechanism by which uncontrolled markets produce suboptimal housing outcomes. Contrary to Huber and Wolkenstein, 2018, p. 385, I argue there is no *inherent* feature of market mechanisms that renders it insensitive to the values that ground occupancy rights. From an economic theory standpoint, in a well-functioning market, prices reflect the collective preferences of individual market actors. In this way, tenants' housing demand functions already implicitly incorporate their desire to live out their respective life plans. Tenants are willing to pay a premium for stable and secure long-term housing that meets their preferences and desires – whether or not they are able to. As such, the fact that individuals' housing demand functions reflect this 'willingness to pay' suggests that, in well-functioning markets, price mechanisms *are* able to commodify occupancy rights and that market forces are not fundamentally insensitive to these values.

Instead, I argue that the inability of markets to bring about socially optimal outcomes arises from a market failure that results in the undersupply of occupancy rights. Market failures are characterised by situations where market forces do not efficiently allocate resources to the people who value them the most (Phang, 2013). In the context of gentrification and occupancy rights, this means that market failures obstruct the proper functioning of the market, in turn hindering the ability of market forces to adequately respond to the desires of occupants to carry out their located life plans. Consequently, these market failures can lead to artificially inflated rental prices and lower housing supply, culminating in the negative consequences of gentrification highlighted by Huber and Wolkenstein (2018): the violation of occupancy rights and the

displacement of long-term residents.

3 Market failures

But how do these market failures arise? I contend that these market failures largely arise from landlords' tendency to accumulate monopoly and bargaining power in uncontrolled housing markets. Empirical evidence indicates that there is often a large degree of concentration in rental property ownership in cities with uncontrolled rental markets (Basu and Emerson, 2003; Ferrer, 2021; Scanlon and Whitehead, 2016). This is particularly acute in high-demand gentrifying housing markets like Washington D.C. (see Table 1), where 70 per cent of rental housing in each segment is owned by one landlord (Cronin, 1983, as cited in Basu and Emerson, 2003, p. 224). Moreover, Basu and Emerson (2003) finds evidence that even in less-concentrated rental markets, there is a significant amount of market collusion between individual landlords through landlord associations.

Similarly, there is strong theoretical backing for the non-competitiveness of rental markets too. Unlike many other goods, rental housing is immobile, indivisible, and heterogeneously segmented by geography, price, and type. This means that monopoly power only needs to hold 'locally' within these segments (Arnott, 1989, p. 23). Likewise, rental markets also feature high search and moving frictions, significant barriers to entry from zoning restrictions and building regulations, and various other capital market imperfections – all hallmarks of non-competitive markets (for more see Arnott, 1989, p. 5-6 and Greater London Authority, 2003).

I contend that the ability of landlords to accumulate market and bargaining power is rooted in the underlying relational asymmetries between landlords and tenants. Relational egalitarians emphasize equitable

Table 1: **The concentration of rental property ownership**

Locality	**Concentration**
Across the UK	40% of rental housing owned by 7% of landlords
Los Angeles, CA	67% of rental housing owned by mega-corporate investment vehicles
Washington, DC	70% in each housing submarket owned by 1 owner
Cambridge, MA	70% of rental housing units controlled by 6% of households
Isla Vista, CA	50% of the rental housing stock controlled by 27 owners
Santa Barbara, CA	50% of the rental housing was owned by 60 owners, 20% by 7 owners
Orange, NJ	33% of the rental housing controlled by 10 owners
Thousand Oaks, CA	30% of rental housing controlled by 1 owner

Source: Basu and Emerson, 2003; Ferrer, 2021; Scanlon and Whitehead, 2016

socio-economic and political relationships between actors – objecting to relationships characterised by exploitation and domination (Voigt, 2020). The landlord-tenant relationship epitomises these objections. The ideal-typical landlord, by definition, actively exploits and instrumentalises power imbalances to extract greater benefits from tenants (Zimmer, 2017, p. 20). This renders tenants relationally subordinate to landlords, in violation of the principles of relational egalitarianism (Zimmer, 2017, p. 3). In this way, these market and relational imbalances are intimately connected. These market failures stem from underlying relational egalitarian failures – but these market failures themselves serve to further entrench the relational asymmetries between landlords and tenants.

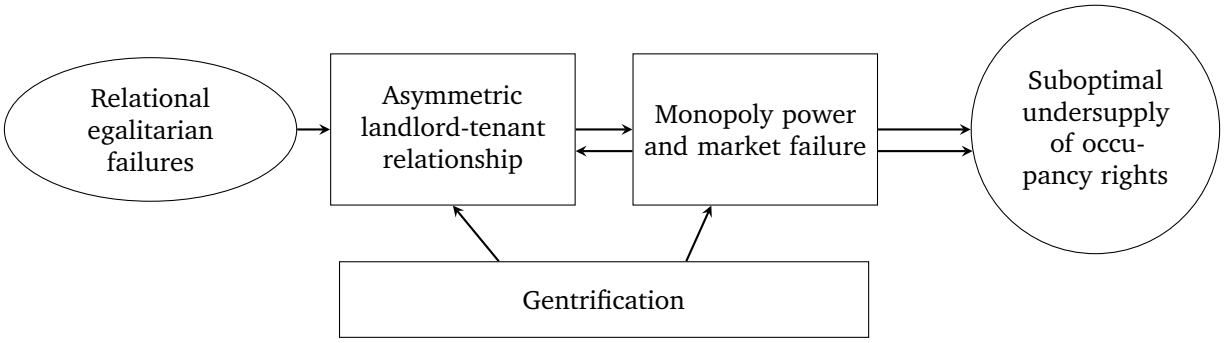
Gentrification deepens these market and relational asymmetries. Gentrification pushes rents higher, further strengthening the monopoly power of landlords while simultaneously decreasing tenants' exit options (Zimmer, 2017, p. 20). Likewise, gentrification also reinforces landlords' political influence while diminishing lower-income tenants' political power (Guillery and Zimmer, n.d. p. 6). This means that the more gentrification progresses, the more landlords can exert greater control over rents and lease terms – widening the power asymmetries between landlords and tenants (Zimmer, 2017, p. 19). Consequently, landlords face strong incentives to wield their growing political influence to promote further gentrification and entrench these power imbalances by restricting the building of new public housing and engaging in anti-competitive behaviour like enforced displacement (Chong, 2017; Colenutt, 2020; Elliott-Cooper et al., 2020).

Overall, market failures – particularly those that engender relationships of domination – are relationally inegalitarian. Accordingly, by understanding how market failures can account for the negative consequences of gentrification identified by Huber and Wolkenstein (2018), I argue that housing decommodification policies work by re-balancing both power asymmetries between landlords and tenants. As I demonstrate using a sandbox model in the following section, popular housing decommodification policies like the provision of public housing, and/or rent control or stabilisation act to dilute market power accumulation by landlords and give tenants greater bargaining power to compensate for the fundamentally inegalitarian landlord-tenant relationship. Put differently, in cases of market failure, housing decommodification policies can put the rental housing market closer to a perfectly competitive ideal – and this converges with the relational egalitarian case for housing decommodification Guillery and Zimmer (n.d.) and Zimmer (2017).

4 An illustrative model of rental gentrification

To provide theoretical structure to my arguments, I present a model of a gentrifying housing market with a monopolistic landlord. While it is well-established that monopolistic markets are inefficient, this model

Figure 1: How Market power infringes upon occupation rights



contextualises the case of a rental housing market which, as discussed in Section 3, has numerous differences from a general goods market monopoly. While some of its assumptions are guided by empirical observations from the literature (Arnott (1989), Basu and Emerson (2003), and Scanlon and Whitehead (2016)), the purpose of this model is not to be an exact reflection of a real-life housing market. Rather, it acts as an illustrative device to frame and analyse the main ideas in this essay.

The model serves three key purposes. It demonstrates the market mechanisms by which landlord monopoly power and market failures can lead to the suboptimal housing outcomes identified by Huber and Wolkenstein (2018). Furthermore, the model demonstrates how gentrification worsens the relational-egalitarian asymmetries in the landlord-tenant relationship. Lastly, the model's structure enables the testing of the impacts of different housing decommodification policies using standard comparative statics (see Appendix A.3 - A.5). This has the benefit of allowing me to show that housing decommodification policies can indeed improve housing outcomes for tenants in line with my main thesis.

4.1 Model setup and solution

Consider a *local* housing market with a profit-maximising landlord who has *local* monopoly power.[1] In line with empirical evidence of the concentration of rental markets (Arnott, 1989, p. 5-6 and Ferrer, 2021; Scanlon and Whitehead, 2016), I follow the lead of Basu and Emerson (2003, p. 224) in moving away from conventional assumptions of perfect competition in rental markets. Next, assume that existing tenants and newcomers have heterogeneous linear housing demand functions of the form:

1. Existing tenants: $D_E(P) = \alpha_E - \beta_E P$
2. High-income newcomers: $D_N(P) = \alpha_N - \beta_N P + \delta_N G$

[1]As discussed above, because rental markets are segmented markets, the monopoly power of landlords only have to hold "locally" within a geography and price range, further reducing the restrictiveness of this assumption

Here, P is the rental price and α, β, and δ are all non-negative constants. α can be interpreted as the baseline level of housing demanded by each type of tenant when the rental price P is zero, while B and δ_N can be interpreted as the sensitivity of housing demand to the rental price (P) and gentrification (G) respectively.[2] G is a parameter representing the degree of gentrification of the local housing market, where $0 \leq G \leq 1$. This term helps to capture the empirical observation that gentrification increases housing demand (Wilhelmsson et al., 2021). Next, the landlord chooses the optimal rental price P^* to maximise their profit $\pi = (P - C)Q$, with Q being the total demand for housing of the two types of tenants, i.e. $Q = D_E + D_N$. [3]

4.2 Policy implications

The solution to this sandbox model of a housing market with a profit-maximising monopolistic landlord provides several key insights into the nature of the landlord-tenant relationship, and the role of housing decommodification policies in balancing the relational asymmetries between landlords and tenants.

Monopoly power leads to suboptimal housing outcomes. In a perfectly competitive housing market (subscripted by $_{pc}$), the landlord would have to set the rental price equivalent to their marginal cost, $P_{pc} = C$, but this model illustrates how profit-maximising landlords can exploit accumulated monopoly power in local housing markets to set rental prices above the competitive market price, i.e. $P^* > P_{pc}$. Through the landlords' exploitation of their market power to raise rental prices, the model indicates several effects on housing outcomes for tenants.

The first is reduced affordability and lower effective supply of housing. As rental prices increase from monopoly power, housing becomes less affordable, contributing to the displacement of existing tenants. At the same time, by choosing this higher rental price, the landlord restricts the effective supply of rental housing, which leads to a waste of scarce housing resources and worsens housing affordability. Additionally, as discussed in Section 3, this monopoly price induces artificially higher rents that are not a reflection of individual preferences to pursue their located life plans, thus impeding the ability of markets to efficiently allocate housing. That is, this market failure leads to the rental price no longer being reflective of individual willingness to pay. These predictions from the model are in line with empirical evidence from Arnott (1989) on concentration in rental markets in the real world and with the suboptimal housing outcomes discussed by Huber and Wolkenstein (2018). Similarly, the model also supports Zimmer (2017, p. 27)'s claim that the landlord-tenant relationship is relationally inegalitarian due to the ability of landlords to instrumentalise their power imbalances to extract greater rents from tenants.

[2] see Appendix A.1 for a longer discussion on model functional form assumptions
[3] see Appendix A.2 for full model solutions and derivation of optimal price P^*

Gentrification exacerbates landlord-tenant power asymmetries. The model's predictions support the idea outlined above that gentrification intensifies the power imbalances between landlords and tenants. Within the model's framework, as gentrification (G) in a local market increases, housing demand for potential gentrifying newcomers (N) rises. Subsequently, this creates greater market power for the landlord, allowing them to exploit this increased demand to further increase rental prices P^*.[4] This is in line with empirical evidence that shows that gentrification can increase the eviction filing rate of landlords – a clear marker of growing power imbalances (Laniyonu, 2019, p.744-745).

Decommodification policies can help reduce relational and market asymmetries between landlords and tenants. In line with Huber and Wolkenstein, 2018, this model suggests that housing decommodification policies can reduce the pricing power of landlords and promote greater competition, thus mitigating market failures and re-balancing landlord-tenant power relationships. I explicitly consider two such policies within the framework of the model: public social housing and rent control.

1. *Public Housing:* within the framework of the model, I simulate the provision of public social housing as an alternative supply of housing that is supplied at a price lower than the monopolistic landlord's profit-maximising rental price.[5] This model predicts that the provision of social housing will decrease demand from both existing residents and newcomers for private rental housing supplied by the landlord, as there is now greater competition in the rental market. As the proportion of public social housing increases, the pricing power of the landlord diminishes such that their profit-maximising rental price P^* will now be closer to the competitive market price for rental housing.

2. *Rent control/ceiling:* consider the imposition of a rental ceiling denoted by P_{rc}. The model suggests that any rental price ceiling P_{rc} that is lower than the monopolistic rental price P^* but greater than or equal to the perfectly competitive rental price P_{pc}, such that $P_{pc} < P_{rc} < P^*$, will reduce rental prices whilst *increasing* effective rental housing supplied by the monopolistic landlord.[6] Put differently, any rental ceiling that is higher than the landlord's marginal cost will diminish the markups charged by the monopolistic landlord while also bringing the rental market closer to perfectly-competitive conditions and improving housing outcomes. This is analogous to how minimum wages in labour markets characterised by market failures from monopsony can lead to both higher wages and employment (Manning, 2003).

These implications demonstrate that popular housing decommodification policies like social housing

[4] see Appendix A.3 for a formal derivation of comparative statics
[5] see Appendix A.4 for a more detailed derivation of the effects of public social housing within the model
[6] see Appendix A.5 for more on rent control within the model's framework

and rent ceilings work to improve housing outcomes in uncontrolled markets specifically because it reduces both the market failures and relational asymmetries between landlord and tenants. Additionally, by balancing the landlord-tenant relationship, these policies can restore the ability of the market to reflect the desires of tenants and make it sensitive to occupancy rights.

5 Concluding remarks

Contrary to Huber and Wolkenstein (2018), I have argued that market mechanisms are not inherently insensitive to the values that ground occupancy rights. Rather, I have shown that landlord monopoly power and market failures in uncontrolled rental markets can account for suboptimal housing outcomes identified by Huber and Wolkenstein (2018). Overall, I presents two novel ideas that have been hitherto under-explored in the literature. The first is that these market failures are deeply rooted in the fundamentally inegalitarian landlord-tenant relationship and that gentrification reinforces these imbalances. The second is that beyond the rights-based arguments for housing decommodification (Huber and Wolkenstein, 2018), there is a pro-market case for housing decommodification policies.

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[2500 words]

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A Appendix

A.1 Further discussion of model functional form assumptions and explanation

1. Linear gentrification parameter and demand functions

This model assumes that the housing demand functions of gentrifying newcomers increase linearly with gentrification: $D_N(P) = \alpha_N - \beta_N P + \delta_N G$. This linear assumption was made to keep the model tractable and reduce its length (word count constraints), while still capturing the idea of a "demand effect" of gentrification – that higher gentrification increases demand from gentrifiers. This assumption allows the model to focus on the main arguments and relationships instead of specifying the exact functional form of a non-linear relationship between gentrification G and $D_N(P)$. However, this assumption is likely not overly-restrictive – data suggests that house prices and demand rises due to gentrification (Wilhelmsson et al., 2021), and anecdotal observations of housing prices in gentrifying markets suggest that they do not seem to decrease even after decades of late-stage gentrification.

2. Income gains for existing residents from gentrification

The model does not explicitly model incomes and the budget constraints of residents. As such, the sandbox model may not capture purported local wage and employment gains that gentrification may bring for existing residents. While this is also a simplification made for the sake of clarity and length, there is some newer evidence from the literature that may suggest that existing residents (who aren't displaced) do not experience meaningful local employment and wage gains from the process of gentrification (see Meltzer and Ghorbani, 2015).

A.2 Model setup and solution

Set up the landlord's profit function

$$\pi = (P - C)(Q)$$

$$= (P - C)(D_E + D_N) \qquad \textit{substituting constraint } Q = D_E + D_N$$

$$= (P - C)([\alpha_E - \beta_E P] + [\alpha_N - \beta_N P + \delta_N G] \qquad \textit{from demand functions } D_E \textit{ and } D_N$$

Then we can frame the profit-maximisation problem

$$\max_{\{P\}} \pi = (P - C)([\alpha_E - \beta_E P] + [\alpha_N - \beta_N P + \delta_N G])$$

$$\frac{\partial \pi}{\partial P} = \alpha_E + \alpha_N - 2P(\beta_E + \beta_N) + C(\beta_E + \beta_N) + \delta_N G = 0 \qquad \textit{set F.O.C. to 0}$$

$$P^* = \frac{\alpha_E + \alpha_N + C(\beta_E + \beta_N) + \delta_N G}{2(B_E + B_N)}$$

A.3 An increase in the gentrification parameter (G):

$$\frac{\partial P^*}{\partial G} = \frac{\delta_N}{2(\beta_E + \beta_N)} \qquad \textit{Take derivative of optimal } P^* \textit{ with respect to } G$$

$$\frac{\partial P^*}{\partial G} > 0 \qquad \textit{since } \delta_N, \beta_E, \beta_N \textit{ are all positive}$$

Since the derivative of P^* with respect to G is positive, then it follows that as G rises, P^* also increases – i.e. as gentrification progresses, the optimal rental price set by the profit-maximising landlord will also rise. This model shows how gentrification increases the pricing and bargaining power of landlords to the detriment of tenants.

A.4 Public housing provision:

Assume that a proportion of housing, denoted by h where $(0 < h < 1)$, are provided as public/social housing at cost (C). This would change the demand functions for each tenant group, such that: existing tenants: $D_E(P) = (1-h)*(\alpha_E - \beta_E P)$; high-income newcomers: $D_N(P) = (1 - h) * (\alpha_N - \beta_N P + \delta_N G)$.

Then the optimal profit-maximising price for the monopolistic landlord (P^*) becomes:

$$P^* = \frac{\alpha_E + \alpha_N + \delta_N G - C(\beta_E + \beta_N)(1 + h)}{2h(\beta_E + \beta_N)}$$

Comparative statics for how the optimal rental price P^* changes as the supply of public housing provided (h) rises:

$$\frac{\partial P^*}{\partial h} = \frac{h(\beta_E + \beta_N)(-C((\beta_E + \beta_N)) - (\alpha_E + \alpha_N + \delta_N G - C((\beta_E + \beta_N)))^2}{(2h(\beta_E + \beta_N))^2}$$

$$\frac{\partial P^*}{\partial h} < 0$$

Because $\beta_i, \alpha_i, \delta_N, G, h, C$ are all positive $\forall i \in \{E, N\}$. Then, as the proportion of public housing supplied h rises, the optimal rental price set by the monopolistic landlord is forced downwards – reducing the market power asymmetries and bringing rental prices closer to a competitive equilibrium.

A.5 Rent control:

Let a binding rental ceiling be denoted by P_{rc}, where $P_{rc} \leq P^*$,then the profit-maximisation of landlords is further constrained, such that now $P^* = min(P^*, P_{rc})$. As long as $P_{rc} < P^*$ insofar as $P_{rc} \geq C$, i.e. the rent ceiling is still above or equal to the landlord's marginal cost, the rental price set by the landlord is forced down, indirectly increasing the effective supply of rental housing through the demand functions of tenants D_E and D_N.