

High rises and housing stress

A spatial big data analysis of rental housing financialization

Cloé St-Hilaire, Mikael Brunila, and David Wachsmuth



Abstract

The financialization of housing is a rapidly growing concern for planning researchers and policymakers, but the opacity of property ownership in most cities has hampered efforts to rigorously measure the phenomenon. Here we introduce a new approach based on big data methods.

By combining web scraping of property assessment, business registry, and rental advertisement data, we reliably identified the networks of property ownership lurking behind anonymous numbered companies and established the extent of financialized rental housing ownership. We demonstrate the effectiveness of this approach with a quantitative case study of the financialization of rental housing in Montreal (Canada).

Using spatial regression and clustering analyses, we found that there are two distinct types of financialized rental housing ownership in Montreal: one characterized by precarious and student tenants and another characterized by affluent tenants. In general, high proportions of financialized ownership are associated with higher levels of housing stress and dense housing typologies.

Conceptualization of financialization

Financialization refers to "the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies" (Epstein, p. 3). Research has connected financialized landlords to gentrification and displacement, through aggressive practices of rent increases and evictions (August & Walks, 2018; Crosby, 2020; Teresa, 2016). August and Walks (2018) found a concentration of financialized landlords in Toronto inner-city and suburban neighborhoods with higher percentages of visible minority and foreign-born populations.

A spatial big data approach

We wrote custom web scrapers for the property assessment database (PAD), the Registraire des entreprises du Québec (REQ), and the housing rental sections of Craigslist and Kijiji, two popular platforms for posting rental apartment advertisements in Montreal.

Once we had established the identity, type, and size of each landlord in Montreal, we assessed their level of financialization. We defined financialized landlords as property owners whose companies operate directly in the financial sector (such as pension funds or private equity firms) or who are indirectly involved in the financial sector through being publicly listed or through having partners or shareholders who operate directly in the financial sector or who are publicly listed firms.

The spatial distribution and social impacts of Montreal's Financialized Landlords

In 2020, the top 600 landlords (0.46% of the 129,960 residential property owners) in Montreal owned 31.7% of the city's 566,582 rental units. The top 600 landlords owned 300 rental units on average, with the top private landlord owning 5,680 and the 600th owning 73. Landlords not in the top 600 owned three units on average. 11.7% of all rental units were owned by financialized landlords (66,452 out of 566,582).

Financialized rental ownership exhibits strong spatial concentration (Figure 1). In the central-city boroughs of Ville-Marie and Le Plateau-Mont-Royal, 31.8% and 17.9% of rental units were financialized, respectively, whereas in the peripheral boroughs of Villeray–Saint-Michel–Parc-Extension and Ahuntsic–Cartierville, the figures were only 2.5% and 3.3%.

Figure 1. Percentage of financialized rental ownership by census tract as a map and a histogram.

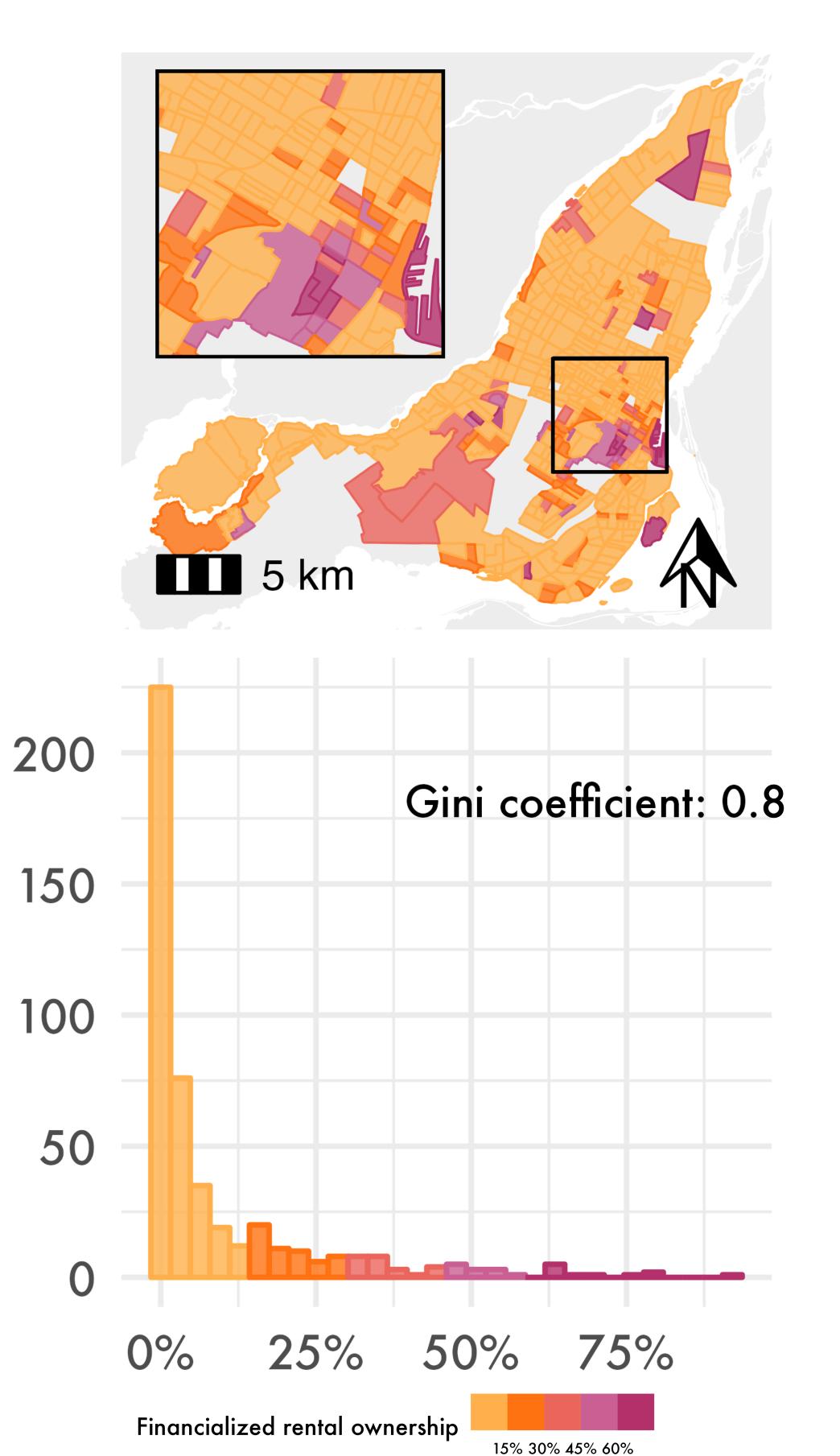
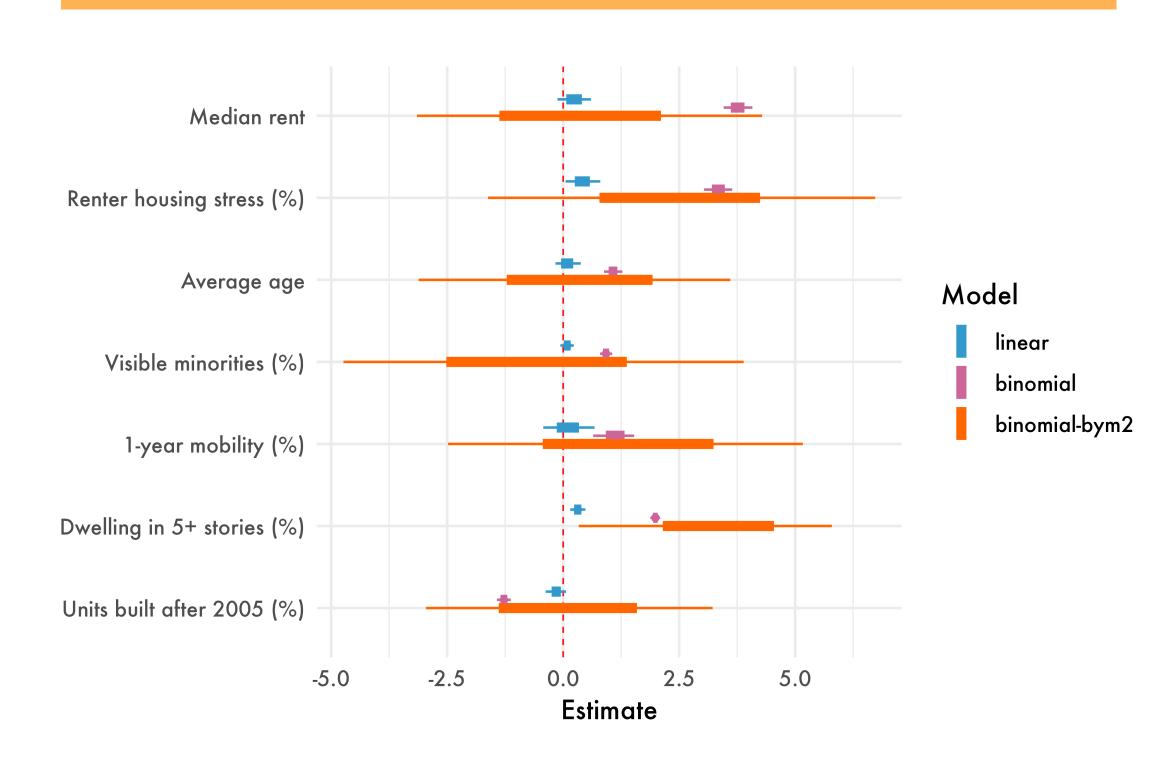


Figure 2. Point estimates and credible intervals for regression models. Thick bars are 95% credible intervals, and thin bars are the remainder of the estimate distribution.



Across all three regression models (Figure 2), the most important covariates were the percentage of renters experiencing housing stress and the percentage of dwellings in buildings with five or more stories.

The BYM2 model further provides more tentative evidence for a connection between rental housing financialization and three variables whose credible intervals include zero but where most of the probability mass is above zero: renter mobility, average age, and median rent.

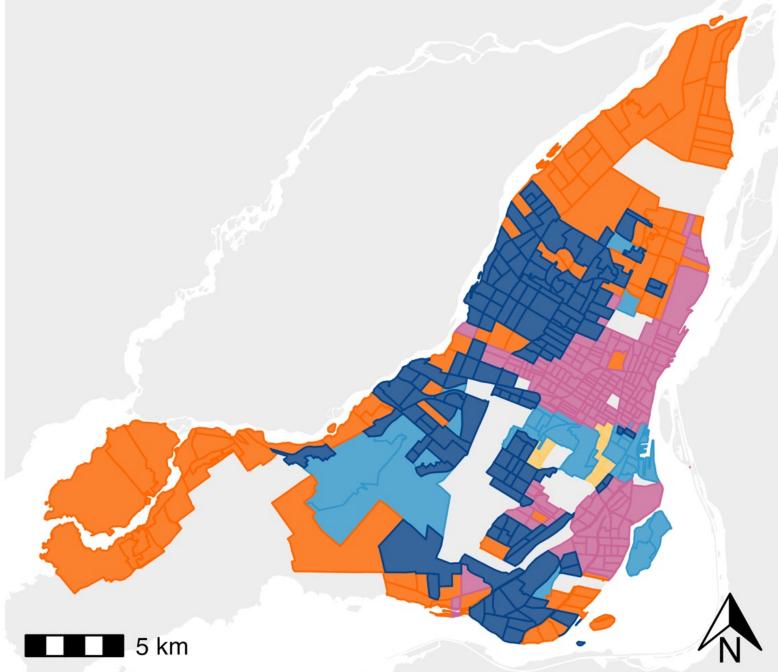
Five distinct clusters of rental housing

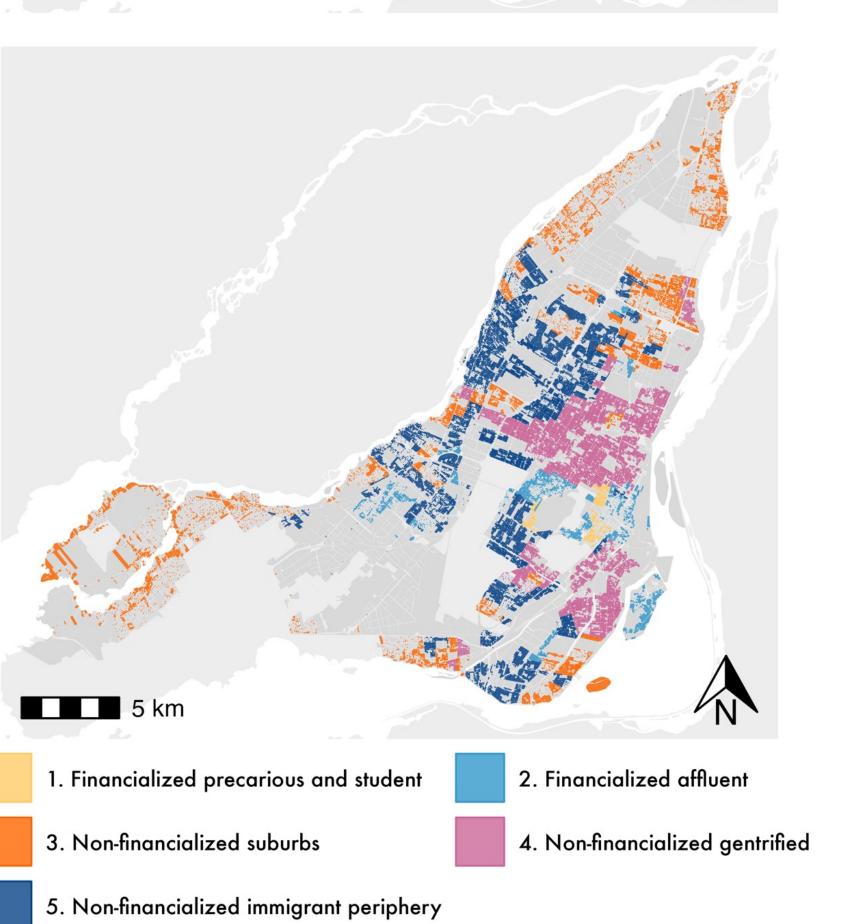
We conducted a k-means clustering analysis on all Montreal census tracts. The clustering gathered groups of observations (in our case, census tracts) based on their reciprocity with each other. We conducted this analysis excluding financialized rental ownership to determine whether there were patterns of housing market and land use variation that help explain patterns in financialization yet can be identified independently of the latter. Figure 3 shows the results.

Cluster 1 has the highest percentage of financialized ownership, with a unit-weighted tract average of 47.1% (compared with 10.4% citywide). This cluster had the highest percentage of renter households experiencing housing stress (62.2% compared with 35.8% citywide). The cluster also had the highest percentage of renter households (87.5% compared with 62.7% citywide) and households living in buildings of five stories or more (69.0%, more than five times the citywide proportion of 12.8%). We called it 'Financialized and precarious student'.

In cluster 2, 32.0% of rental units were owned by financialized landlords. Cluster 2 can be described as financialized affluent: residents of this cluster experienced an above-average rate of financialized rental housing ownership, housing stress, and rents, but these households had higher incomes and were located in newer buildings.

Figure 2. Point estimates and credible intervals for regression models. Thick bars are 95% credible intervals, and thin bars are the remainder of the estimate distribution.





Takeaways for practice

The results of our research demonstrate that ownership data would help planners better understand the presence and impacts of financial actors in housing and help tenants better organize to protect their collective interests.

To address the information asymmetry within rental housing markets, municipal officials could establish rental registries that require the identification of beneficial ownership: the actual human beings who own or who have controlling interests in a company. Increased landlord information could then help ensure proper application of rent control measures, reduce unlawful eviction practices, and ultimately act as a catalyst for policies on rental housing ownership.

Acknowledgments

This work was supported by the Social Sciences and Humanities Research Council of Canada and the Canada Mortgage and Housing Corporation under the Collaborative Housing Research Network-Balanced Supply of Housing Node and by the Social Sciences and Humanities Research Council of Canada Insight Grant (no.435-2019-0720). Mikael Brunila has also been supported by the Kone Foundation (no.201905914).







