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The Unintended Consequences of Short-Term Rental Regulation: Evidence from New York City's Local Law 18

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Abstract. The rapid expansion of short-term rental platforms such as Airbnb has sparked intense debates about its impact on urban housing affordability. The rapid development of the short-term rental market in New York has brought great economic pressure to the local homeless residents. This paper uses the implementation of Local Law 18 in New York City in September 2023 as a natural experiment to investigate whether short-term rental regulations can effectively achieve stated goal of improving long-term residents' housing affordability. Through the analysis of internal data from Airbnb and housing market statistics, this study found that although the regulation successfully reduced approximately 90% of short-term rental supply, the expected improvement in long-term housing affordability was not achieved. The research results indicate that the housing affordability crisis in major cities is mainly driven by fundamental supply constraints rather than short-term rental platforms. This paper provides empirical evidence on the effectiveness of regulation and proposes evidence-based policy alternatives.

Keywords: Short-term rentals,, housing affordability, urban regulation

1. Introduction

Over the past decade, the rise of platform-based economic models has fundamentally changed the way people obtain goods and services. From transportation to accommodation, digital platforms have created new markets, enabling suppliers to directly connect with consumers, bypassing traditional intermediaries. Looking at this overall, the short-term rental platforms that Airbnb is heading up have grown especially fast. Airbnb got its start back in 2008, and by 2024, it has given accommodation services to more than 1.5 billion guests all over the world, and the business works in over 100,000 cities across the globe. This kind of quick growth shows that consumers really do like accommodation that is different from the usual, fits the local area, and it is many times cheaper than the options consumers get from regular hotel chains [1].

Even with that, all this fast growth has caused a lot of arguments between people. People who criticize this trend say that short-term rental platforms have made the problem of being able to afford housing much worse in big cities, turning normal long-term rental homes into short-term stays that make more money for owners [2]. In big cities like New York, San Francisco, Barcelona and Amsterdam, people that live there have said rents are going up, there is less housing available to rent, and the whole feeling of the neighborhood has changed — changes that most people link to

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more and more short-term rentals popping up Listings on the Airbnb platform. These worries have led governments to put new rules in place all over the world. These rules include things like needing to register listing, setting hard limits on how many nights people can rent out, and in some places, almost completely not allowing people to do this kind of short-term rental

New York City is a highly instructive case study. As one of the most expensive regions in the United States, the average rent in Manhattan has exceeded $4,700 per month, and the city has long faced housing affordability issues. In September 2023, the city began implementing Local Law 18, which requires short-term rental landlords to register in the city, prohibits rentals of entire properties for less than 30 days, limits the number of guests per person to two, and requires landlords to be present during occupancy [1]. This regulatory measure is one of the strictest short-term rental policies in the Western world.

This article explores three research questions. First, does the expansion of short-term rental platforms like Airbnb lead to a reduction in long-term rental supply and an increase in rents in New York City? Second, it still unknown what real effect the Local Law 18 rule actually has on housing affordability and how the housing market works after it. Third, what kinds of rule strategies can do a better job of balancing the good things the platform economy brings with the goal of keeping housing stable? This study isn't just important for New York City, it matters elsewhere too. Because cities all around the world are dealing with the same kinds of housing problems right now, knowing what works and what doesn't work for short-term rental rules is really important for making policy based on actual evidence.

2. Literature review

2.1. Debate on the short-term rentals

Academic studies about short-term rental platforms and the housing market have grown a lot over the past ten years. The first studies looked mostly at how Airbnb affects the hotel industry. Most of this early work generally agreed that short-term rental activities put more competition pressure on traditional places to stay, which ended up giving consumers lower prices and more options to pick from [2]. More recently, a lot more studies have shifted the focus to what these rentals do to the housing market itself, but researchers still don't agree on what the conclusions are.

A lot of different studies show that Airbnb listing density and overall housing costs have a positive connection with each other. In work by Barron, Kung, and Prospiero, people found that across the United States, when the total number of Airbnb listings goes up by 1%, average rents go up by 0.018%, and overall housing prices go up by 0.026% [3]. A different study done on San Francisco used multi-scale geographically weighted regression, and it found that how dense Airbnb listings are changes what rent families pay when making 50,000 to 75,000 US dollars every year. Commercial landlords have a bigger effect on this change than other groups [4]. When researchers looked at cities in Portugal, it got basically the same outcome, which means the link between Airbnb and higher rents can show up across many different kinds of housing markets [5].

Other research has raised questions about how big these effects actually are, and where people show up. A study by Carder-Wang discovered that even though Airbnb did make rents go up, this change was mostly seen in areas with lots of tourists, and for people who are high-income, well-educated and white - it did not really hit disadvantaged groups [6]. According to the study, it can be seen that short-term rentals are probably not the main thing driving the housing affordability problem for low-income people. One specific study done in New York City worked out that Airbnb

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actually saved renters around $125 each year on the rent. That number is only about 1% of the total rent increase that happened over the last ten years [7].

2.2. Regulatory measures and the effectiveness

Different regions have really different rules for how to manage short-term rentals. Benítez-Aurioles looked over a few common ways to regulate this area: registering and getting a license is essential, there are caps on how long these houses can be rented out (like London's 90-day cap and Amsterdam's 30-day cap), limits on what zones allow rentals, and even full bans in some places. People still don't agree on whether any of these ways actually work well [8].

Research done on cities across Europe has not reached a single clear conclusion. Back in 2016, Berlin put a full ban on short-term rentals of entire properties which followed by a reversal after legal challenges. Paris went with a registration system instead, but how well it actually worked has not been consistent across the area [9]. Barcelona chose stricter rules； it make hosts get licenses and stop handing out new licenses in neighborhoods that are already over-saturated. This did cut down the number of available listings, but the city still deals with pressure on housing affordability. Recent research using difference-in-differences methodologies suggests that well-designed caps may be more effective than bans, as preserving occasional hosting while disincentivizing commercial operators [10].

Looking at past research overall, existing studies don't have enough real-world data on whether rules meant to cut down on short-term home rentals can actually make long-term housing more affordable for local people. This research fills that gap, it takes New York City's 18th Local Law as a natural case experiment, and gives direct proof about how restrictions on short-term rentals connect to what happens in the wider rental market.

3. Analytical framework and methodology

3.1. The New York housing market context

To understand the potential impact of short-term rentals on housing affordability, it is necessary to first understand the size of the housing market in New York City. As of 2024, there were approximately 2.2 million rental units in the city, serving 8.4 million residents. The vacancy rate of rental properties has remained below 5% - according to state law, this percentage is typically regarded as the warning line for a housing crisis - and by mid-2025 it had dropped to 2.45% [1]. The median monthly rent in Manhattan reached $4,700, an increase of 32% compared to the past decade. As shown in Table 1, the housing market conditions vary significantly across different boroughs.

Table 1. New York housing market indicators (2024-2025)

Borough	Median Monthly Rent	Vacancy Rate	Short- Term Rentals (Pre-Law 18)	Short -Term Rentals as % as stock
Manhattan	$4,700	2.45%	~15,000	2.8%
Queens	$2800	3.80%	~8,000	1.6%
Brooklyn	$3,200	3.10%	~12,000	2.1%
Bronx	$2,400	4.20%	~2,500	0.9%

Data sources: NYC Housing Preservation and Development and Inside Airbnb [1, 7].

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Before the implementation of the 18th Local Regulation, short-term rental housing accounted for approximately 2% of the total rental housing in the city - the proportion in the most popular tourist area of Manhattan was 2.8%, while on Staten Island it was 0.5%. Even if all short-term rental units were reclassified as long-term rental purposes, the impact on the overall vacancy rate would be very small. The vacancy rate in Manhattan would increase from 2.45% to approximately 2.55%.

3.2. Implementation and immediate effects of the 18th local regulation

The local 18th Regulation, which was passed in 2022 and implemented from September 2023, is one of the strictest short-term rental regulations in the United States. Its main provisions include: (1) registration requirements - all landlords must register with the Special Enforcement Office of the Mayor and provide proof of main residence and compliance with building regulations; (2) occupancy restrictions - landlords must be present during guests' stays, which effectively prohibits short-term rentals of entire houses for less than 30 days; (3) guest number restrictions - a maximum of two guests per booking; (4) platform responsibility - platforms like Airbnb must verify that the listings have valid registration numbers; otherwise, it will be fined.

If some people want to get how short-term rentals actually affect housing affordability, firstly it should figure out how big the housing market in New York actually is. As of 2024, there's around 2.2 million rental units in the city, and these units house about 8.4 million people. This change directly affects how much short-term rental property is available, and the effect is really big. Before the city started putting rules into action, Airbnb guessed that there were around 38,500 fully up-and-running short-term rentals across the five boroughs. After just one year, the number of rentals that are allowed to operate legally dropped to around 3,000 - that's a cut of more than 90% [1].

3.3. Price competition and market adjustment

When the total number of available rentals dropped a lot, this gave researchers a good chance to look at how price competition works among the short-term rentals that stayed open. Voltes-Dorta used fixed-effects panel regression to look at around 16,000 whole residences between July 2023 and January 2024, and found clear proof that price competition has a big effect here [1].

The study used average daily room rate for each guest as the dependent variable, and counted how many competing listings were in the same area as the main independent variable. What it found was that after the supply got hit, price competition got much stronger in Manhattan and Brooklyn. Daily room rates went up by about 40% in Queens and Brooklyn, while Manhattan saw a 6% increase — though the research team said part of that increase came from seasonal changes. What is worth pointing out is that the host listings interaction term had positive signs, which means professional landlords who own multiple properties don't react as strongly to price changes compared to private individual landlords. This goes to show that higher market concentration might actually make price competition weaker instead of stronger [1].

3.4. Evidence of real estate market results

Even though there was a big drop in the number of short-term rental units, the long-term housing market still didn't get better the way people thought it would. Information from several different sources shows three main points. Rents kept going up, for one thing.

By July 2025, the middle rent price in Manhattan hit $4,700, which broke the previous record. After the new rules were put in place, New York City's yearly rent growth was faster than what other

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similar cities in the US saw [1, 7]. Next, how many empty apartments there are stayed really low, way lower than what history shows. As shown in Table 2, by the middle of 2025, the residential vacancy rate for Manhattan sat at 2.45%, which was almost exactly the same as it was before the regulation went into effect. That number is far below the 5% mark that people use to say a housing market is healthy. The last big change was that hotel prices jumped up a lot. The average price for one night at a hotel went up 7% to $283, and during the busy travel season, prices hit $417 per night. For most months of the year, hotel occupancy rates were higher than these had been before the new regulation [7].

Table 2. Post-regulation market outcomes (July 2025)

Indicator	Pre-Law 18 (July 2023)	Post-Law 18 (July 2025)	Change
Short-term rental listings	38,500	3,000	-92%
Manhattan median rent	$4,200	$4,700	+12%
Manhattan vacancy rate	2.50%	2.45%	-0.05%
Average hotel nightly rate	$265	$283	+7%
Tourist arrivals (annual)	63M	68M	+8%

Data sources: Inside Airbnb, CoStar and NYC Tourism Board [1, 7].

These research results indicate that the supply of short-term rentals is not a key factor influencing housing affordability. Even if approximately 35,000 short-term rental units are removed from the market, the impact on long-term rental supply is negligible - because these units do not actually compete directly with long-term rental units. Many of these units are located in mixed-use buildings, underground apartments, or are units that cannot legally be used as long-term rentals due to zoning or building regulations [1, 7].

4. Limitations and future outlooks

4.1. Limitations

It is important to note that there are some limitations. Firstly, this study relies on publicly available data from "Airbnb internal" and government channels, and these data may have measurement limitations. Airbnb itself has not released official data, and the web scraping method used by "Airbnb internal" may have missed some listings or double-counted some listings. Secondly, the period after the implementation of regulation is relatively short (approximately two years), and the housing market adjustment is relatively slow. Therefore, the long-term effects on investment decisions, new building construction, and community composition may not yet be observable.

Moreover, this study focuses only on New York City, which has unique characteristics - extremely tight housing supply, dense tourism, and well-developed hotel facilities, etc. These characteristics may limit the general applicability of its results to other cities. Fourthly, this analysis did not fully consider the substitution effect between Airbnb and hotels, which may have absorbed some of the demand previously met by short-term rentals.

4.2. Future research directions

Future research should address some unanswered questions. Firstly, longer panel data will help examine whether the housing market can adapt to regulatory changes within a time frame of five to

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ten years. Secondly, comparative case studies of multiple regulatory systems (including night-time restrictions, registration systems, and zoning restrictions) will help determine which policy designs are the most effective. Thirdly, different effects across income groups and communities can also give a clear foundation for building policy that targets specific problems. Fourthly, cost-benefit analysis can put numbers on the costs (like fewer options for tourist accommodation, lower income for property owners) and benefits (better housing affordability for local people, more stable communities) of different regulation types, and this helps policy makers make decisions based on actual evidence.

When it comes to research methods, future work should use natural experiments that come from regulatory changes across multiple cities. It can also use difference-in-differences or synthetic control approaches to find clear causal links between regulation and outcomes. Also, if studies separate occasional hosts (people who rent out own main home for just short periods of time) from full-time commercial businesses (people who own multiple properties specifically for short-term renting), this will help make more specific and accurate regulatory rules [6, 8].

5. Conclusion

This paper looks at how short-term rental platforms connect to housing affordability, and it focuses on Local Law 18 in New York City and what it did to outcomes in the housing market. The evidence have shows that even though this law cut the number of short-term rental listings by more than 90% (it went from around 38,500 listings down to just 3,000), it did not make housing more affordable for people. The middle rent price in Manhattan hit a new record high of $4,700, and the share of empty apartments stayed near the historically low 2.45%. At the same time, hotel room prices jumped up by 7% and averaged out to $283 for each night. This added extra costs for people who travel to visit, but it gave no real advantage to people who rent apartments long term.

What this research found shows that the housing affordability crisis in large cities comes mostly from basic problems with supply- years of really strict zoning rules, not enough new housing being built, and more people moving in- not from short-term rental platforms. In New York City, short-term rentals only make up around 2% of all rental housing there. Even if people got rid of short-term rentals entirely, this would not fix the city's housing shortage, which adds up to tens of thousands of missing units. When it comes to people who make policy, this study backs up suggestions that rely on hard data: change zoning rules to build more long-term housing, treat small occasional landlords differently from big commercial landlord businesses in rules, and just put in place night-time limits or need people to register rentals instead of banning everything completely.

The platform economy isn't going to disappear, and that isn't something people should want anyway. Short-term rental services give clear, real benefits to people traveling, people who own property to rent out, and even the local economy where the rentals happen. When it comes to making urban policies, the main point isn't getting rid of these platforms completely. Instead, it is needed to make rules that use good points while still keeping housing stable for local people. To reach that goal, the governments have to build approach on actual evidence, think through all the small details, and be clear about what short-term rentals can do and what can't do for a city.

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