

Proposal: Short-Term Rentals and Housing Prices in Panama

Airbnb has become an important part of the tourism economy in many countries, but most existing research focuses on large Western cities. Much less is known about how short-term rentals affect housing markets in developing countries, where tourism often plays a bigger role in the local economy. Panama is one example where tourism has grown steadily over the past fifteen years, and Airbnb listings have increased during the same period. This raises a natural question about whether the rise of short-term rentals has influenced long-term housing prices. Recent work on Panama also shows that Airbnb can grow quickly even outside traditional tourist centers. A study on Bocas del Toro found that short-term rentals expanded into areas shaped by outside property investment and created new housing patterns described as “Airbnb burbs” (Mach et al., 2025). These findings suggest that Airbnb’s impact in the Global South may look different from what has been observed in the United States or Europe. To help fill this gap, our project compares housing price trends in tourist and non-tourist areas before and after Airbnb became popular in Panama, aiming to better understand how short-term rentals shape housing markets in a developing-country setting.

The study focuses on the housing market in the Republic of Panama, a Central American country that has experienced strong growth over the past couple of decades. From 2000 to 2019, Panama was the fastest-growing economy in Central America (World Bank, 2020). Panama is a popular destination for vacationers, businesses, and expats, especially retirees and remote workers, creating a strong demand in the real estate market. The country’s geographic location, stable economy, minimal investment restrictions, and use of the U.S. dollar, and scenic beaches make it an appealing place for property investment (Kumar, 2025).

Panama's population is concentrated in the metropolitan region of Panama City and its surrounding districts (World Bank, 2023). Urban migration, foreign investment (particularly in real estate), and tourism-driven demand have all placed pressure on housing availability and pricing. The country's construction sector has experienced rapid growth, with strong interest from expatriates and international investors (Kumar, 2025).

In recent years, short-term rental platforms, such as Airbnb, have expanded significantly in Panama. In Panama City alone there were roughly 2,512 Airbnb listings in 2025 with a median occupancy rate around 67% and average annual revenue around USD 19,000 (Airbtics, 2025). This growing short-term rental market suggests that more property owners may be shifting from long-term residential rentals to short-term rentals, which has implications for housing availability and pricing for residents. By shifting units from residential use to tourism, short-term rentals such as Airbnb reduce the supply of housing available to local residents and contribute to rising housing and rental prices (Barron, Kung, & Proserpio, 2020).

The objective of this study is to measure the impact of Airbnb on long-term housing prices in Panama by comparing price trends in tourist areas to those in non-tourist areas before and after Airbnb became widespread. To do this, the study uses a difference-in-differences (DiD) approach, which allows for isolating the effect of Airbnb by examining changes over time between treated and untreated groups. The treatment group consists of major tourist destinations with significant Airbnb activity, Panama City, Bocas del Toro, Boquete, and Santa Catalina, while the control group includes a comparable set of similarly sized towns with lower levels of tourism and limited Airbnb presence.

The dependent variable in this analysis is real housing prices, adjusted for inflation, and the independent variable is Airbnb presence, captured by differences between tourist and

non-tourist areas and between pre- and post-Airbnb periods. Housing price data are collected at the city or district level for each area for the years 2009 (pre-Airbnb) and 2025 (post-Airbnb expansion), resulting in a panel of observations across treatment and control groups. Housing price data are obtained from national housing statistics, real estate market reports, and government records, while Airbnb presence is measured using available platform data and secondary sources documenting Airbnb expansion in Panama. All prices are adjusted for inflation to ensure comparability over time.

The analysis compares the average change in housing prices in tourist areas to the average change in non-tourist areas between 2009 and 2025. The causal effect of Airbnb is estimated by calculating the difference-in-differences: the change in housing prices in tourist areas from 2009 to 2025 minus the corresponding change in housing prices in non-tourist areas over the same period. This study relies exclusively on secondary data and does not involve original surveys, as the focus is on long-term housing price trends rather than individual housing preferences.

Although our design allows us to compare housing price changes across different parts of Panama, several limitations should be kept in mind. One challenge is that early Airbnb data is limited, which makes it hard to clearly understand housing price trends before Airbnb became popular. Because the pre-period information is incomplete, we cannot perfectly determine whether tourist and non-tourist areas were already following different trends. Another limitation is the relatively small sample size. Panama does not have many cities, and only a few can be clearly classified as tourist or non-tourist areas, so our estimates may not be very precise. In addition, housing prices in both types of areas were already rising over time for reasons unrelated to Airbnb, such as economic growth, new construction, and foreign investment. These natural

upward trends mean that some of the price increases we observe might have happened even without the growth of short-term rentals.

Even with these challenges, the project still provides useful insights for understanding housing markets in developing countries. Studies from Panama show that Airbnb can reshape local housing and attract outside investors into new areas (Mach et al., 2025). If our results show that tourist areas experienced larger price increases after Airbnb expanded, it would suggest that short-term rentals may reduce long-term housing availability for residents. This could encourage the government to consider steps such as registration rules, limits on full-time short-term rentals, or zoning adjustments to protect housing affordability. Overall, this study helps explain why the growth of Airbnb matters for local communities and why governments in developing countries may need to pay closer attention to these platforms.

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