

The Housing Market Impacts of Noise Pollution: Evidence from a Natural Experiment

Abstract

In 2002, the US Federal Aviation Administration's has started implementing new flight procedures that introduced performance-based satellite navigation to consolidate air traffic with the intent to improve airspace safety and efficiency. This change resulted in a higher concentration of aircraft traffic on narrower, denser, areas. People living in such areas experienced an increased frequency of planes flying over their homes and were thus exposed to higher noise than before. Exploiting this exogenous variation in anthropogenic noise we seek to identify a causal relationship between noise pollution and the housing market. Specifically, using data on sales of properties located in counties surrounding Washington D.C., we compare sales prices for properties that sold before and after the implementation of the new procedures, between areas in the proximity of the new flight paths and those farther away to identify the impact of noise on property values. We find that properties located in affected areas decreased in value; we also uncover general equilibrium feedback effects following changes in noise exposure.

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