Working papers economics - Monetary Policy Effectiveness and Price Elasticity of Housing Supply in an Emerging Economy

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Regarding the impact of monetary policy on housing prices, we find that it is significant: a one-unit monetary policy surprise shock (in the index) leads to a decline in housing price growth of approximately 6 percentage points as supply elasticity decreases.

Publication Date: Wednesday, 12 of November 2025 **Approach**
Product elasticities are widely considered in microeconomic theory. In advanced economies, one of the most studied sectors in terms of price elasticity of supply is the housing sector. However, in emerging economies, such studies are scarce. Moreover, research on the role of this elasticity in the effectiveness of monetary policy on housing prices is even more limited. The literature on housing supply price elasticities is extensive. Nevertheless, only recently has the possibility that such elasticity may vary over time—and the implications this has for monetary policy—been considered. Using a Bayesian time-varying parameter vector autoregression (TVP-VAR) methodology, this paper presents estimates of the price elasticity of housing supply in an emerging economy such as Colombia. This methodology also allows us to capture the fact that developments in the housing market are gradual. For example, changes in land use regulations, demographics, and migration affect the market progressively. Additionally, using the local projections methodology of Jordà (2005), we assess the impact of monetary policy on housing prices in Colombia.

Contribution
First, we estimate the price elasticity of housing supply in an emerging economy such as Colombia. The study is conducted at the level of the six largest cities in the country. We use a methodology that allows for time-varying parameter estimation. The sample period spans from 2011Q2 to 2024Q4. Second, we contribute to the literature on housing supply elasticities by analyzing the impact of the COVID-19 pandemic—an analysis that has not yet been conducted in either advanced or emerging economies. Finally, once the housing supply elasticities are estimated, we assess the impact of monetary policy on housing prices in Colombia, depending on these elasticities, considering both the full sample period and the pre-pandemic period only.

Results
Our results show that housing supply elasticity declined across all cities between 2011Q1 and 2019Q4, ranging from 5.7 to 18.1 at the beginning of the sample. During the COVID-19 pandemic, however, elasticities were

high, peaking between 7.7 and 27.9. After the pandemic, supply elasticities declined again but have not yet returned to pre-pandemic levels. The downward trend in supply elasticity over time is related to population growth in cities.

Regarding the impact of monetary policy on housing prices, we find that it is significant: a one-unit monetary policy surprise shock (in the index) leads to a decline in housing price growth of approximately 6 percentage points as supply elasticity decreases. However, in the pre-pandemic period, when supply elasticities were lower, the impact of monetary policy on housing prices was greater—a one-unit monetary policy surprise resulted in a 7.8 percentage point drop in price growth.

Fuente: https://www.banrep.gov.co/en/publications-research/working-papers-economics/monetary-policy-effectiveness-price