

Peer Review

Review of: "Are We in a Housing Bubble? Empirical Evidence From Portugal"

Adrian Wende¹

1. Business Cycles, Growth and Public Finances, Institut für Höhere Studien – Institute for Advanced Studies, Vienna, Austria

Summary

The paper studies housing market dynamics in Portugal between 2011 and 2022. It makes three contributions: (i) documenting sharp increases in affordability indexes across municipalities between 2017 and 2022, (ii) attempting to identify housing bubbles using a single indicator, and (iii) exploring spatial spillovers from Lisbon and Porto to surrounding municipalities through Granger causality tests.

Major Comments

1. Conceptual Framework

- The paper claims to integrate affordability analysis, bubble detection, and spatial contagion into a single framework. However, the three parts appear as separate exercises rather than components of a single theoretical structure. A clearer conceptual link would strengthen the contribution.
- The author positions the paper as filling a gap by “combining affordability metrics, bubble detection indicators, and causal spillover testing in a single framework.” At the same time, the paper refers to the present value model of asset pricing, which offers a natural foundation to derive hypotheses linking affordability, yields, bubbles, and spillover effects. To strengthen the contribution, the author should formalize how affordability metrics and bubble indicators follow from this model, thereby providing a unified analytical framework. Alternatively, the paper could build more explicitly on an existing framework in the literature. Currently, several papers are cited, but it remains uncertain whether their conclusions stem from a single coherent framework or from distinct and separate approaches.

2. Relation of Research Questions

- Two distinct research questions are posed: (i) the presence of housing bubbles in Lisbon and Porto, and (ii) the spatial spillovers of price changes to neighboring municipalities. The connection between the two remains unclear. Are spillovers from bubble-driven increases different from spillovers from fundamental-driven increases? The paper should clarify this relationship.
- Reporting the estimated coefficients from the Granger causality tests would help assess whether spillovers differ in magnitude between Lisbon and Porto.

3. Bubble Detection

- The analysis relies on a single indicator to identify bubbles. This is not entirely convincing, especially given the rich literature proposing multiple complementary measures.
- Moreover, the author cites some literature that defines bubbles, yet he never specifies which definition he uses or whether it is based on a present value model or something else. Does his testable hypothesis follow from a bubble definition combined with a model?
- The Case and Shiller reference emphasizes that falling yields are a strong signal of speculative price dynamics. It seems natural to test explicitly for declining rental yields as part of the bubble analysis.
- The restriction to a single quarter (Q4 2022) for bubble identification is problematic. Bubble conditions should persist over multiple periods; a one-quarter observation cannot establish sustained divergence from fundamentals.
- Mortgage rates are taken from the ECB. But these are averages and vary substantially across countries (see <https://data.ecb.europa.eu/blog/blog-posts/comparing-bank-interest-rates-across-countries>) and potentially across municipalities. Given differences in household risk profiles and local financial conditions, assuming uniform rates may bias the results. The paper should at least discuss this limitation.
- Affordability indexes rise mainly in Lisbon and Oeiras, plausibly because house prices increased faster than rents, which adjust more slowly. This interpretation seems to me to be a natural alternative to the bubble interpretation and, in contrast to the latter, it uses the affordability indicator as additional information.

Minor Comments

- There are missing words in the sentence on page 3: “Glaeser et al. [6] also found that locations with lower elasticities to higher house price increases.”

- On page 4, the author states that four hypotheses are tested, but only three are actually presented.

Recommendation

The paper tackles an important and policy-relevant topic, but its contribution is weakened by the lack of a unifying framework, reliance on a single bubble indicator, and insufficient treatment of data limitations. I recommend major revisions. Strengthening the theoretical foundation, expanding the empirical strategy to include multiple bubble tests, and clarifying the connection between bubbles and spillovers would substantially improve the paper.

Declarations

Potential competing interests: No potential competing interests to declare.