

INTERNATIONAL NETWORK FOR ECONOMIC RESEARCH

El Clásico of Housing: Price Explosiveness in Madrid and Barcelona's Real Estate Markets

Adrian Fernandez-Perez¹, Marta Gómez-Puig², and Simón Sosvilla-Rivero³

¹ Department of Banking and Finance, Michael Smurfit Graduate Business School, University College of Dublin, Ireland, ² Department of Economics and Riskcenter, Universitat de Barcelona, Barcelona, Spain, ³ Complutense Institute for Economic Analysis, Universidad Complutense de Madrid, Madrid, Spain

This paper examines the dynamics of housing rental and sale prices in Madrid and Barcelona between 2007 and 2024, focusing on episodes of explosive price behaviour and their underlying determinants. The findings reveal that, although such episodes were relatively infrequent, they tended to persist over long periods and exhibited contagion effects across market segments. In particular, explosive movements in rental prices often preceded similar developments in house sale prices, highlighting the central role of the rental market in housing market pressures. Population growth increases the likelihood of rapid price escalation, whereas higher unemployment, rising interest rates, and greater hotel occupancy reduce it. The results suggest that housing policies should prioritise the rental sector and promote measures to ease demand pressures and expand housing supply to mitigate the risk of future price surges.

Introduction and Context: The housing sector is a cornerstone of macroeconomic stability and a frequent source of systemic financial risk. Since the 2008 global financial crisis, which triggered a severe banking and economic recession in Spain, monitoring real estate market exuberance has become a top public policy priority. Recently, Spanish real estate has experienced a massive resurgence

driven by strong structural demand, migratory inflows, and macroeconomic changes. By mid-2025, public concern over housing affordability reached historic peaks, with house prices rising at more than double the European Union average. To design effective macroprudential strategies, it is essential to analyse the rental and sales sectors separately, as they operate on different

timelines and under different regulatory frameworks. This brief examines disaggregated monthly house sale and rental price data from 22 districts in Madrid and 10 in Barcelona between May 2007 and December 2024 from Idealista.com (the largest online real estate platform in Spain) to detect and understand periods of explosive price growth.

Key Findings and Discussion: By applying advanced econometric tests and principal component analysis to filter regional data (Chen *et al.*, 2023 and Phillips *et al.*, 2015), this research (Fernandez-Perez *et al.*, 2026) provides three critical insights:

- 1. *High Persistence of Price Exuberance:* Table 1 shows that, while episodes of explosive price growth are rare (only 3 to 5 episodes in 17 years), they are highly persistent. On average, once a market becomes explosive, the regime lasts for 26 months. Madrid’s rental market showed the highest vulnerability, accumulating 80 months of positive (upward) explosiveness.
- 2. *The Rental-to-Sales Contagion:* Price acceleration does not happen simultaneously in both sectors. Instead, there is a clear sequential spillover: explosive growth in the

rental market systematically acts as a leading indicator for subsequent spikes in sales prices. When rental costs become prohibitive, demand shifts toward homeownership, transferring the pressure to the sales segment

3. *Drivers and Stabilisers:* Population growth is the strongest driver of explosive price increases. On the other hand, rising interest rates (monetary tightening) and local unemployment naturally cool the market. Interestingly, hotel-based tourism acts as a stabiliser: a higher volume of hotel stays reduces the probability of explosive housing prices by keeping tourist demand within professional infrastructures rather than displacing residents through short-term holiday rentals.

Table 1: Summary of Explosive Price Dynamics (May 2007–December 2024)

Market Segment and City	Explosive Episodes	Total Months Explosive	Months of Upward Growth	Average Duration (Months)
Rental Madrid	3	104	80	34.67
Rental Barcelona	5	57	26	11.40
Sales Madrid	4	118	71	29.50
Sales Barcelona	3	91	50	30.33

Policy Implications:

The empirical findings suggest four direct guidelines for urban planners and macroeconomic policymakers: i) Stabilise rents to prevent price spillovers into the sales market; ii) Support hotels to protect residential housing from holiday rentals; iii) Invest in high-speed regional transit to shift demand to the peripheries; and iv) Speed up building permits to meet demographic demands quickly.

Key References

Chen, Y., Phillips, P. C. B., & Shi, S. (2023). Common bubble detection in large dimensional financial systems. *Journal of Financial Econometrics*, 21(4), 989–1063.
<https://doi.org/10.1093/jjfinec/nbac022>

Fernandez-Perez, A., Gómez-Puig, M., & Sosvilla-Rivero, S. (2026). El Clásico of Housing: Price Explosiveness in Madrid and Barcelona's Real Estate Markets (INFER Working Paper Series). International Network for Economic Research.

Phillips, P. C. B., Shi, S., & Yu, J. (2015). Testing for multiple bubbles: Historical episodes of exuberance and collapse in the S&P 500. *International Economic Review*, 56(4), 1043–1078.
<https://doi.org/10.1111/iere.12132>.



Website:

<https://infer-research.eu/>



Contact:

publications@infer.info