Mapping the Greek Housing Market Uncertainty: The HMU Index and Evidence-Based Policy Actions

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Executive summary

This policy brief underscores the importance of tracking and understanding housing market dynamics in Greece. We introduce, for the first time, the Housing Market Uncertainty Index for Greece, a housing-specific measure designed to monitor risks and sectoral dynamics. Housing uncertainty has significant effects on housing-related variables in Greece, with impacts that vary depending on the state of the domestic economy, foreign uncertainty, time, geographical area and dwelling type. By providing targeted and timely insights, the index offers policymakers a practical tool to design more effective and tailored interventions in the future.

Highlights:

- We construct, for the first time, a housing-market-specific uncertainty measure for Greece - the Housing Market Uncertainty index - which can serve as a valuable tool for policy makers in monitoring risks in the housing sector.
- Housing uncertainty has a clear and measurable impact on the Greek housing market.
- The impact of housing uncertainty depends on the current state of the domestic economy as well as on foreign conditions.
- Recognising geographical and dwelling-type heterogeneity is equally important.
- Housing market responses to uncertainty shocks are not constant but change over time.

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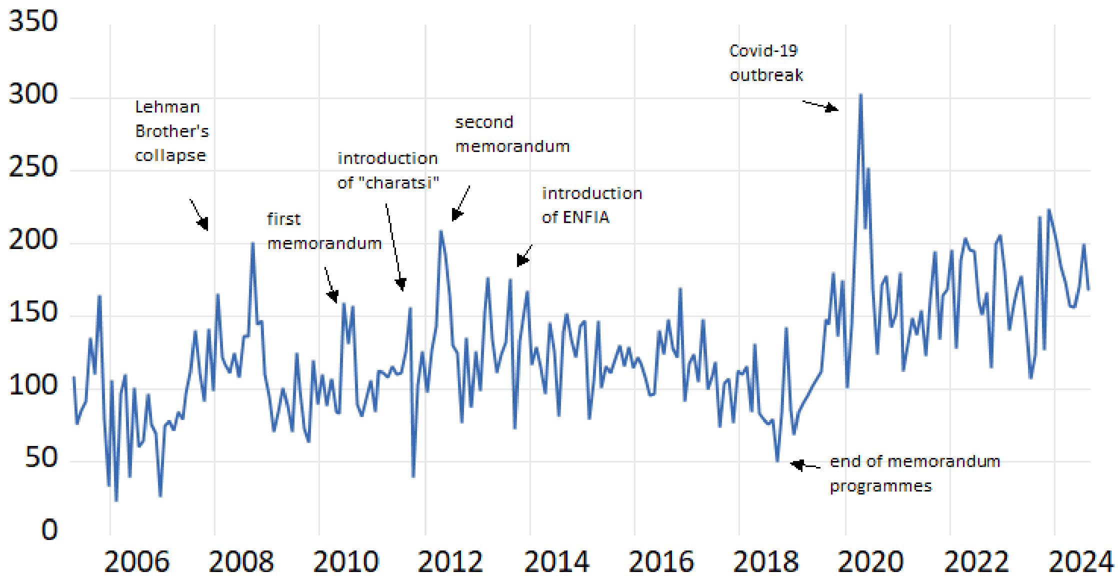

Figure 1: The Housing Market Uncertainty Index

Insights from Figure 1

- The Housing Market Uncertainty (HMU) index is constructed from newspaper articles that simultaneously mention uncertainty, housing, and policy terms.
- The index reflects monthly fluctuations in housing-sector uncertainty in Greece from April 2006 to August 2024.
- Peaks align with major economic and political events - e.g., the 2008 global financial crisis, the 2011–2013 property tax reforms, and the 2020 COVID-19 pandemic.
- Periods of relatively low HMU (2013–2018) coincide with political turbulence but limited housing market activity.
- Recent increases follow the Russia–Ukraine war and the subsequent energy crisis, highlighting the index's sensitivity to macroeconomic shocks.

Policy recommendations

The results arising from this project lead to several important policy implications, outlined below:

- **Integrate housing-specific uncertainty into policy monitoring**
  Policymakers should integrate the HMU index into their regular monitoring toolkit for decisions affecting the housing market. Evidence shows that shocks in the HMU significantly influence housing variables. Existing uncertainty indices for Greece fail to fully capture housing-specific risks, whereas the HMU is tailored to the sector and better reflects its dynamics. The HMU data are publicly available, enabling policymakers and researchers to incorporate them in policy design and analysis.

- **Design regime-sensitive policy interventions**
  As the impact of housing uncertainty depends on the state of the economy and external conditions, policies should avoid a uniform approach. Evidence shows that uncertainty has stronger negative effects on house prices when economic growth is weak and foreign uncertainty is high. In these regimes, prices tend to fall, while they rise under stronger growth and lower foreign uncertainty. Policymakers should therefore design housing measures responsive to these regimes.

- **Recognise the time-varying nature of uncertainty effects**
  The impact of housing market uncertainty is not constant over time but time-varying. Negative effects on house prices are stronger at longer horizons as well as during turbulent periods. Policymakers should remain vigilant for potential crisis periods and adjust their policies accordingly over time.

- **Account for geographical and dwelling-type heterogeneities in the housing market**
  The effects of uncertainty vary across regions and dwelling types. House prices in larger cities such as Athens and Thessaloniki are more vulnerable to uncertainty shocks than in smaller or rural areas. New dwellings are also more sensitive than older ones. Policymakers should avoid "one-size-fits-all" approaches and instead apply targeted regional measures and support for more affected dwelling categories.

Introduction

The investigation of the housing market is of vital importance due to its connection to social well-being, public health, and economic growth. On top of that, it comes as no surprise that the United Nations have prioritised access to adequate, safe, and affordable housing as a key priority of the Sustainable Development Goals. Alongside this, the European Union has launched a range of initiatives to address housing challenges, while national-level strategies remain equally crucial.

Greece has not escaped housing challenges. Following decades of crises, austerity measures, policy reforms, political events, and external shocks, the housing market landscape has been considerably shaped, triggering heightened uncertainty in the sector. Housing market prices have started to soar over the last few years, after a period of downturn associated with the Greek crisis, while foreign direct investments in the real estate sector have shown signs of a slowdown, starting to recover only after the implementation of the Golden Visa Programme. At the same time, the construction activity and the number of mortgage loans remain stable and relatively low.

While significant attempts have been made towards understanding and solving these challenges, an important question remains: is the persistence of housing market challenges in Greece due to a lack of targeted monitoring tools or because existing measures fail to capture the dynamics and uncertainty of the sector? Thus, there is an urgent need for a nationally tailored monitoring tool to capture the unique housing market volatility in Greece.

To this end, we construct a measure that, for the first time, quantifies housing-market-specific uncertainty on a monthly basis, namely the **Housing Market Uncertainty (HMU) index**, in Greece. So far, no index measures uncertainty in the Greek housing market. Existing studies or tools usually refer to broader measures, such as the Economic Policy Uncertainty index, which do not fully capture the specific risks and dynamics of housing. Importantly, the HMU index is publicly available online, enabling other researchers and policymakers to incorporate it into further analyses of housing market dynamics and uncertainty.

In addition, we employ advanced econometric methodologies to study how uncertainty affects key parts of the housing market, such as residential property prices, lending, and construction. Our approach allows us to see how these effects change depending on the state of the local economy, foreign conditions and over different periods of time. At the same time, it enables us to examine differences across geographical areas and dwelling types.

Overview of the Greek Housing Market

Over the past two decades, the Greek housing market has experienced a series of important transformations. The pre-2008 period was characterised by rapid expansion, with credit growth, rising household incomes, and favourable financing conditions. The global financial crisis and the subsequent

Greek sovereign debt crisis brought about a reverse turn. After 2008, real house prices fell dramatically, construction activity collapsed, credit fell severely, and demand was affected accordingly. This period of decline was also accompanied by austerity measures and new housing-related taxes, specifically the "charatsi" and "ENFIA", introduced in 2011 and 2014, respectively.

After 2018 and the end of the memorandum programmes in the country, the scene reverses, and the housing market shows signs of gradual recovery. Since then, the market has experienced several consecutive quarters of price growth. This recovery has also been supported by foreign capital inflows, triggered by the implementation of the Golden Visa Scheme. Foreign direct investment in real estate has been a major driver of demand, while mortgage lending remains at relatively low levels, with interest rates on the rise. Construction activity is recovering very gradually, while building costs have risen sharply in recent years, driven by high inflation rates.

The post-crisis recovery has also been formed by a series of external shocks, which have triggered uncertainty and insecurity in the housing market. One such global event was the Covid-19 pandemic, which negatively impacted economic growth and housing demand, both in the domestic and also in globally. The Russia–Ukraine war and the consequential energy crisis, followed by high inflation levels, raised housing costs and construction expenses. At the same time, housing affordability has worsened, with evidence from Eurostat showing that Greek households spent more than one-third of their disposable income on housing, one of the highest rates in Europe, while home ownership in Greece continues to stand at very high levels as well.

The Housing Market Uncertainty Index

So far, the literature has quantified uncertainty with several indicators, yet these do not all capture the same underlying concept. For instance, some indicators relate to financial uncertainty, others measure macroeconomic uncertainty, while several focus on economic policy uncertainty. Notably, sector-specific indices have also been developed, including measures of housing market uncertainty, such as the Real Estate Uncertainty index for the U.S. (Nguyen Thanh et al., 2020) and the House Price Uncertainty index for the U.K. (Yusupova et al., 2020).

So far, to the best of our knowledge, no index quantifies uncertainty specifically for the housing market in Greece. Even though broader measures of policy uncertainty exist, such as the Economic Policy Uncertainty index (EPU), constructed by Fountas et al. (2018) or by Hardouvelis et al. (2018), they may fail to fully capture the complexities and risks of the housing market dynamics.

To address this gap, we introduce the HMU index, the first measure specifically designed to capture housing-sector uncertainty in Greece. The index is constructed by utilising the digitalised archives of the printed version of the daily newspaper Kathimerini, a nationwide and high-circulation daily newspaper in Greece, following the newspaper-coverage-frequency approach of Baker et al. (2016). In particular, it is based on the share of articles that simultaneously contain at least one keyword from each of three categories: (a) uncertainty, (b) housing market, and (c) policy. Further details on the construction of the index can be found in our working paper *"Mapping the Greek Housing Market Uncertainty"*. The series is available at a monthly frequency from April 2006 to August 2024, is publicly accessible, and will be updated regularly.

We present the time series of the HMU index in Figure 1. A higher index value indicates a greater level of uncertainty in the housing market. We identify that uncertainty peaks during periods of economic distress, following the introduction of new property-related taxes, or during global disturbing events. In particular, uncertainty is elevated and volatile, leading up to and during the early stages of the global financial crisis. The peak observed in 2012 coincides with a period of significant political instability. Moreover, we observe sharp rises in HMU in 2011 with the introduction of a new property tax called *charatsi*, and in 2013, when *ENFIA*, another property tax, was announced in July of that year and applied in January of the next year. HMU remains relatively low between 2013 and 2018, during politically turbulent years without significant housing market movements, underscoring its specificity. Finally, housing uncertainty peaks during the Covid-19 pandemic and again gradually increases after the Russia-Ukraine war as the energy crisis drives up living costs, reflecting the direct impact of these events on housing demand, supply, and affordability. The resulting HMU index provides a time series that effectively reflects shifts in housing market sentiment as it spikes during periods of significant housing-related developments.

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