Debt and Taxes: Long-run determinants of the Sale-Rent Housing Price Ratio in Dublin, 1948-2018

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Extended Abstract

Housing matters. It is the dominant asset in household balance sheets and the single largest component of household expenditure. The importance of housing was underscored by its central role in the recent Great Recession – with many high-income countries, such as the US, UK and Spain, experiencing substantial housing markets boom-bust cycles. Yet despite the importance of housing in the broader macroeconomy, there remain few reliable time series for housing prices, either sale or rental, that extend back before the 1980s that would allow putting the recent episode into perspective.[1] This is in part due to the illiquidity of the sales market and the high dimensionality of housing as a good: each dwelling is unique and infrequently traded.

This paper examines the determinants of the ratio of sale to rental prices of housing, the "housing price ratio", in Dublin, Ireland, from World War II until today. Ireland was home to the world's most extreme housing market cycle of the 1990s and 2000s, with nominal sale prices rising by a factor of four in ten years to 2007, before falling by almost 60% in the following five years. But as with other countries, there remains a paucity of research examining the structural factors at work over the long run that created the conditions for housing to drive a national boom and bust. Using a new and detailed dataset of sale and rental listings, and hedonic methods, we build an annual panel of the housing price ratio, a key barometer of housing market conditions, for 25 major areas in Dublin. In line with economic theory (Poterba, 1992), we find the user cost has a significant effect on the housing price ratio over time and across markets. We also find a limited role for credit conditions prior to the 1990s, consistent with Offer's (2014) hypothesis that specialised financial institutions (in Ireland's case, building societies) were associated with more stable housing markets. The results also suggest an important difference in the ratio for land compared to structures.

The research here connects to existing work that examines the housing price ratio, including Ambrose et al. (2013), who examine the ratio since the mid-17th Century, and Himmelberg et al. (2005), who incorporate user cost to reassess the performance of housing prices across U.S. cities in the decade to 2005. It is also related to a growing literature using real estate listings, and occasionally other sources, to examine the performance of housing, either as an asset (sales) or as part of the cost of living (rental); see, for example, Shiller (2005), Officer and Williamson (2018) or Kholodilin (2016). Lastly, it also connects to the literature examining the performance of the Irish housing market, in particular its recent extreme cycle (see, for example, Lyons 2018).

[1] For an overview of existing data series for many countries, including descriptions of their limitations, see Knoll et al (2015).

This paper makes three principal contributions, beyond existing research. The first is cliometric and relatively specific: the new rental series for Dublin suggest important limitations to the existing series used to calculate Irish CPI, particularly in the 1970s. The second is much broader: it is the first to estimate the limited variation in and role for credit conditions, prior to the 1990s. This stems from the period's Goldilocks length: the very-long-run dataset of Ambrose et al. (2013) does not allow the inclusion of a modern measure of non-price credit conditions, while the short-long-run examined by Himmelberg et al. (2005) cannot put the Great Moderation/Great Recession episode in context. The final contribution relates to the role of land: results here suggest different sale-rent ratios for land and structures, a potentially fruitful future research avenue given the renewed interest in urban land values.

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