

Nominal Loss Aversion and Household Mobility

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This paper studies the effect of homeowners' prospective loss on the propensity to move using administrative data on Finnish housing transactions matched with detailed household and apartment characteristics. Understanding the behavioral biases that affect sellers' decision-making is important as housing markets have a significant impact on the economy as a whole. The behavior of owner-occupier households is of particular interest for policy design as home ownership is subsidized heavily through the tax code in most countries. Loss aversion can reduce the mobility of homeowners, leading to a misallocation of both the housing stock and the labor force.

Although nominal loss aversion in housing market has been widely studied (Genesove and Mayer (2001); Anenberg (2011); Bokhari and Geltner (2011); Bracke and Tenreyro (2021); Greenaway-McGrevy and Sorensen (2021); Andersen et al. (2022)), the direct evidence on the implications of loss-aversion on the likelihood of moving is however limited. A rare exception is Engelhardt (2003), who uses small survey data with self-estimated house values, and instruments expected gain with a regional price index to deal with measurement errors. The findings are consistent with nominal loss aversion reducing mobility. Einiö et al. (2008) analyzes loss aversion in the Finnish housing market, but their data is limited to the Helsinki area and lacks information about homeowners' credit positions. This deficiency may have affected their conclusions on the impact of loss aversion.

Our main data resource is the transfer tax register for 2006-2018 provided by the Finnish tax administration. We complement household transfer tax data with apartment, property, and household characteristics from administrative data provided by Statistics Finland. Our restricted estimation data consists of households living in roughly 250 000 apartments that were sold on average 1.5 times during the panel years.

In our analysis, we follow the two-stage estimation strategy used in earlier literature with some additional tweaks. For the estimation of market price, we apply the stacked ensemble machine learning model proposed by Laan et al. (2007). Our final ensemble model uses estimates from a gradient boosting machine, random forest, and bagging. In the second stage, we plan to estimate the impact of expected loss on mobility by comparing mobility rates in bins of expected capital gain, and in an event study framework, where we compare households switching from expected gain to expected loss with otherwise similar non-switchers. We control for loan-to-value ratio to disentangle loss-aversion from equity constraints.

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