

# Housing over the Life Cycle and Across Countries: A Structural Analysis\*

Julia Le Blanc<sup>†1</sup> and Jiri Slacalek<sup>‡2</sup>

<sup>1</sup>Central Bank of Ireland

<sup>2</sup>European Central Bank

December 31, 2015

## Abstract

Micro data document striking differences in household wealth across European countries: the median net wealth in Italy and Spain exceeds more than three times that of Germany. The bulk of this variation is driven by the home-ownership rate and house prices. For example, while more than 80 percent of Spanish households own the house they live in, the median household in Germany, where the home-ownership rate is only 44 percent, is a renter.

Using a life-cycle model of housing, non-housing consumption and saving à la Li and Yao (JMCB, 2007), we study the determinants of differences in home-ownership rates, holdings of wealth and household saving behavior across large European countries.

The model incorporates the dual feature of housing as a consumption good and as an investment device. Households face idiosyncratic shocks to income and house prices. They either rent or buy, and save in liquid assets to smooth consumption, to make the down-payment for the house and to bequeath wealth. Countries differ in the dynamics of house prices, loan–value ratios, tax-deductibility of mortgages as well as costs of buying, selling and maintaining a house. We calibrate the model using country-specific labor income profiles, mortality rates and family sizes over the life cycle. Following Cagett (JBES, 2003), we estimate several key parameters of the model by minimizing the distance between the simulated profiles and their empirical counterparts from the Household Finance and Consumption Survey.

In policy experiments we change the house price developments and institutional factors of one country to mimic the institutional framework of another country in order to investigate to what extent these factors and individual preferences can explain the differences in home-ownership and wealth accumulation across Europe.

**Keywords:** Household Finance, Housing, Life-Cycle Model, Structural Estimation

**JEL classification:** D14, D31, D91, E21

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\*The views presented in this paper are those of the authors, and do not necessarily reflect those of the Central Bank of Ireland or the European Central Bank.

<sup>†</sup>leblaju@gmail.com

<sup>‡</sup>jiri.slacalek@ecb.europa.eu, <http://www.slacalek.com/>