

Market Risk Exposure of Building Societies in Germany

Bertram Steininger --- Melanie Sturm

Mar. 3, 11

Extended Abstract

The affordability of homeownership is frequently discussed among policy and economic decision makers. An owner-occupied house is mostly the largest asset a household invests in and often requires the household to take out a mortgage. High or volatile interest rates can limit the households' access to a mortgage or hamper the household to make the interest payments. Therefore, homeownership is often promoted by offering various contract designs that maximize homeownership affordability by loading the interest rate risk on the borrower. In contrast, building societies in Germany guarantee a low mortgage rate during the mortgage life.

Even though the system of collective saving for mortgage lending has basically existed for hundreds of years, the first modern building society was created in UK in 1775. Afterwards, the idea of collective building society savings that offer mortgage lending was adapted in other countries; e.g. the USA in 1831 and Australia in 1832. In Germany, the first building society debuted in 1885. Currently, there are 24 building societies in Germany --- 11 are managed by savings banks or cooperative banking institutions and 13 by private banks and insurance companies. Their business model is based on mortgage rates that are uncoupled from the market rate. This allows granting mortgages at low and stable interest rates and thus provides the households with access to a mortgage while minimizing the interest rate risk. The business model of the building societies comes with further advantages for the household as well as the society itself: First, the mortgage can be prepaid at any time without any prepayment costs. Second, the business model involves a saving period. Households that are able to save constantly are prioritized in getting a loan. This means that due to the business model bad risks are screened out and the borrowers in general have positive equity at mortgage origination because the savings are used to pay down a portion of the loan. Third, the building society savers with an income

below a certain amount are entitled to government incentives in the form of a housing bonus and in the case of investing the capital accumulation benefits to an employee savings allowance during the saving period, Salaried savers can also use their payments during the saving and repayment period for their government-sponsored retirement plans. Fourth, the savings accumulation period implicates behavioral components so that the building savers are prepared and fiscally disciplined for the repayment period.

However, the various options offered to the building society savers like the prepayment option make it difficult for the building societies to predict future cash flows and regulate their interest rate risk. For example, the business model of building societies is especially attractive to households in a high market rate environment. The high market rate limits the access to a mortgage on the capital market and the households benefit most of the low mortgage rate offered by the building societies, which is uncoupled from the market rate. Contrary, in a low market rate environment the households are more likely to afford a mortgage on the capital market. This probably reduces the business of building societies because fewer households ask for mortgages resulting in lower saving rates and higher prepayments.

We use a unique panel data set of the Deutsche Bundesbank to empirically examine the impact of market rate risk on the business model of building societies. First, mortgage defaults are expected to be less sensitive to the market rate because the mortgage rate is uncoupled from the market rate and the business model of building societies screens out bad risks. In contrast, mortgage origination and prepayment are expected to be linked to the market rate, since in a low market rate environment the households are more likely to fund their housing investment on the capital market and, vice versa, in a high market rate environment the households are attracted by the low mortgage rate offered by the building society. Last, the exposure of the overall profitability of building societies to market risk is examined. According to Petersen (2009), this research examines different standard error estimating techniques to control for heteroscedasticity of residuals across building societies or across time. The intent is to provide more robust coefficients for the estimation interpretation.