

Abstract: At this moment, reverse mortgages are relatively new products on the Czech market and this thesis deals with their problematics. In this thesis, we describe the main risks related to reverse mortgages, namely, longevity risk and adverse evolution of property prices. Analyzing these risks we are modelling the underlying property prices, their future behavior, discount factors along with studying the risk models such as vector autoregression, hedonic model, repeat-sales and Wills-Sherris model. In practical part, we focus on estimating the parameters of Lee-Carter model and autoregression model of zero-coupon government bond as well as applying the results of the estimation to calculate various characteristics of reverse mortgages.