The analysis of household finance has a non-negligible implication in asset pricing literature, but the empirical research on this topic is challenging. I construct the incomplete market model with limited stock market participation and implement the Bayesian likelihood-free structural estimation algorithm which enables us to estimate the structural parameters characterizing dynamics only with the static cross-sectional data via stationary distribution. In consequence, the relative risk aversion estimate takes a plausible value and thus, I can interpret the well-known equity premium puzzle as a biased estimate caused by the representative agent specification error.