

Abstract

This thesis examines the effects of the debt service-to-income ratio (DSTI), debt-to-income ratio (DTI), and loan-to-value ratio (LTV) on credit risk. The dataset includes monthly loan-level data from around 250 thousand mortgages in the Czech Republic from July 2013 to July 2023. Using logit regressions, we confirm a positive effect of the level of DSTI, DTI and LTV on loan delinquency. Furthermore, we discover that the effects of these key lending variables are heterogeneous depending on the income and wealth classes as well as on the region of the client. Other explanatory variables align with general assumptions: a higher level of education, number of co-debtors, and GDP growth reduces the risk, whereas a higher interest rate increases the probability of delinquency. The thesis contributes to the debate on how effective macroprudential policy instruments using caps on DTI, DSTI and LTV are at employing a unique dataset.

Keywords

mortgage loans, credit risk, DSTI, LTV, microdata, Czech banking sector