Empirical Project: Could interest rate hikes burst the housing bubble?

Over the recent years, studying the relationship between the housing market and the economy has been gaining traction, as it provides key implications for conducting appropriate policy making in the fields of fiscal, macroprudential and monetary authorities. A filed of research that piques my interest and – although not entirely untapped – has room for developing literature is studying the monetary transmission mechanism in relation to the housing market.

Based on the recent years’ development in the housing market and monetary policy trends, some intriguing questions arise, such as ‘Is the housing market a bubble?’, ‘Could the large-scale monetary easing programs have contributed to the creation of it?’ and most recently ‘Could the sharp monetary tightening cause the housing market to crash?’.

During the next few years of my PhD, I might embark on pursuing all of the empirical questions above, however in this project – as the title implies – I will primarily be focusing on the latter one. In order to investigate if interest rate hikes can potentially burst the housing bubble (or cause major decline in the currently soaring housing prices), I will employ a Threshold Vector Autoregression model with two regimes, which are determined by the house price index. Preliminary, I expect to find evidence for monetary policy shocks having a more severe impact on housing prices when the market is rather heated. I will conduct my analysis on US data, as it is most widely available. The main aggregates I will be using will be the Federal Funds Rate, the Real House Price Index, the interest rate paid on 30-year mortgages and some real macroeconomic aggregates in order to have a rich model framework.