

Study 4/2023

Would Real House Prices Risen More Slowly if More New Housing Had Been Built in 2013–2021? Probably Not²

MARCH 2023

ROMAN ŠUSTEK, LUCIE ZAPLETALOVÁ

Summary of key issues

- This study presents an easily applicable method for the study of price trends in residential property markets and the factors that affect them. The study describes the basic reasoning behind the method and presents results of using it to analyse house price increases in the Czech Republic during the period of 2013–2021, and to analyse various future housing market scenarios.
- Between 2013 and 2021, real residential property prices in the Czech Republic rose by 63%. The income effect, i.e., growth of real household income, was responsible for 32 percentage points (p.p.). A further 20 p.p. of growth was due to increasingly affordable mortgage financing. The implicit costs of mortgage financing decreased during the observed period, particularly as a result of expected further growth in real household incomes, which allowed faster amortisation of mortgage payments in relation to household income.
- During 2013–2021, the rate of new housing construction remained at approximately the historical average, when expressed in percentage growth. Even if new housing had been constructed more intensively, this would not have limited rising real estate prices, because they were driven by other factors. For new housing construction to have reached a level sufficient to compensate for the increase in property prices that resulted from the drop in the implicit costs of mortgage financing, construction would have had to exceed 100,000 residential housing units per year in this period; a rate that exceeds the historical record high for housing construction reached in 1975.

² The authors are grateful to Daniel Münich and Martin Lux for their valuable comments and advice both on the original academic study and on this shortened version. This study presents the authors' own views and not the official position of the Czech Academy of Sciences Economics Institute nor of the Charles University Center for Economic Research and Graduate Education (CERGE). Any remaining ambiguities or errors are the authors' own. This study was produced with support from the Czech Academy of Sciences within its Strategy AV21 Research Programme Society in Motion.

- This study presents several hypothetical scenarios as regards future trends. If the Czech National Bank's basic interest rate stabilises within the next three years at the expected 3% level, mortgage interest rates are around 4.9%, and the inflation target of 2% is met, then the implicit costs of mortgage financing will increase by 20% even if real household incomes rise by 3.2% (as they did in the boom years of 2013-2021). Although the impact on residential property prices would be partially reduced by the income effect, it would still take more than 6 years for that effect to fully compensate for the increase in the costs of mortgage financing.
- This analysis relates to the Czech Republic as a whole and does not reflect regional differences or region-specific influences.
- This study is based on Roman Šustek's academic paper "*A back-of-the-envelope analysis of house prices: Czech Republic, 2013-2021*" (2022), which includes a detailed description of the method used and the study's mathematical calculations. The method described in the study combines approaches currently used by the Czech National Bank and is capable of explaining house price movements 2013–2021. Although the study uses the latest, often complex, approaches to analysing the property markets, it offers a simple, practical method for approximating how individual factors affect price movements.