Impact of Interest Rates on the Real Estate Market in Prague

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Abstract

The development of housing prices and interest rates is among the key issues influencing housing affordability and the stability of the real estate market. The aim of this thesis was to examine the impact of interest rates on the development of average apartment prices in Prague over the period 2015–2025 and to assess whether this impact occurs immediately or with a time lag. To achieve this objective, correlation analysis and Granger causality analysis were applied to quarterly secondary data. The results confirmed the existence of a statistically significant relationship between the examined variables and demonstrated a one-way, time-lagged effect of interest rates on apartment prices, with the strongest impact occurring approximately after one year. The contribution of the thesis lies in identifying the temporal dynamics of the effect of interest rates on housing prices, which may be useful for decision-making practice. A limitation of the study is the use of aggregated data for the territory of the City of Prague and the exclusion of other factors influencing housing price development.

Keywords: Housing price, interest rates, real estate market, correlation analysis, Granger causality, Prague

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Introduction

Real estate is a form of immovable property that allows individuals to exercise ownership rights while providing a tangible guarantee through its economic value. The economic value of real estate, which is reflected in its market price, is emphasized in all countries today. The determination of purchase and sale values takes place in market conditions that seek to distance themselves from speculation and rumors associated with large-scale projects (Yalpir and Bünyan Ünel, 2022).

The importance of real estate is not limited to individual ownership, but extends to a wide range of economic actors. Real estate is a key topic of study for various stakeholders, particularly the public sector, households, and businesses. In many countries, taxation of real estate transactions is a significant source of government revenue. In addition, the real estate and construction sectors are major employers and contribute to the growth of direct investment (Cunha, Borges, and Ferreira, 2024). Households perceive real estate price developments as a factor affecting their budgets, while businesses take prices into account when deciding on expansionary investments. For this reason, real estate market studies and estimates of the impact of price changes are important for a wide range of economic entities The real estate market is one of the key sectors of the national economy, contributing significantly to gross domestic product (GDP) growth and constituting a dominant part of households' fixed assets. Its development is closely linked to the economic cycle, the level of investment activity, and the overall financial stability of the state (Zhao and Liu, 2023). Fluctuations in real estate prices have significant macroeconomic impacts, as they affect the output of individual sectors, household incomes, and public institutions, with the real estate sector being one of the most sensitive areas of the economy (Jie and Qi, 2023).

The real estate market is an important segment of the economy that can have a significant impact on overall economic activity, financial stability, and the quality of life of individuals. Residential real estate prices often fluctuate, which can be caused by macroeconomic developments such as changes in interest rates, inflation, or the level of economic growth (Mostofi, Toğan, and Başağa, 2022). These factors influence both the demand for housing and the investment decisions of households and businesses. Therefore, understanding the impact of macroeconomic variables on these changes is very important for various economic entities, as it allows them to better predict market developments, make more informed decisions, and respond more effectively to economic fluctuations. (Okunevičiūtė Neverauskienė, Linkevičius, and Andriušaitienė, 2025). Interest rates are the main instrument of central banks' monetary policy (Cochrane, 2024). Changes in interest rates have a direct impact not only on the level of inflation and investment activity, but also on the availability of credit for households and businesses (Ruiz Bravo De Mansilla, 2023).

The aim of this thesis is to determine the impact of interest rates on the development of average apartment prices in Prague in the period 2015–2025 and to assess whether this impact is immediate or delayed.

In connection with this objective, the following research questions have been formulated:

Answering this question will provide an overview of the development of the Prague real estate market and enable us to understand the main trends that have shaped the development of apartment prices and interest rates in recent years.

RQ1: How did interest rates and average apartment prices in Prague develop between 2015 and 2025?

The results of this question will make it possible to determine whether there is a statistically significant relationship between the development of interest rates and apartment prices in Prague.

RQ2: Is there a statistically significant relationship between interest rates and average apartment prices in Prague?

The answer to this question will make it possible to determine whether the impact of interest rate changes on apartment prices is immediate or delayed.

RQ3: Is the impact of interest rate changes on apartment prices in Prague immediate or delayed?

Literary research

Zhao and Liu (2023) state that the real estate market is linked to a whole range of economic aspects and to multiple businesses in the pre-production and production phases. At the same time, they point out that the factors influencing the real estate market are complex and variable, and that its fluctuations have a significant impact on the overall functioning of the economic system. This issue is followed up by a study by Matějková and Tichá (2025), which focused on trends in housing affordability in Central Europe, specifically in the Czech Republic, Slovakia, Austria, and Poland, in the period from December 2022 to March 2023. Using an analysis of the ratio of real estate prices and rents to incomes, spatial mapping, and econometric tests, they examined how the COVID-19 pandemic, the energy crisis, and the war in Ukraine affected housing affordability. The findings reveal that the lowest housing affordability was recorded in Czech cities, particularly in Prague, where property price growth significantly exceeded wage growth, while in Vienna the situation was more favorable thanks to higher incomes. The study concludes that rising real estate prices are the result of a combination of limited housing supply, growing demand, migration pressures, and insufficient wage adjustments, and emphasizes the need for targeted policies to support housing affordability.

Using panel regression of regional data, Votava, Komárková, and Dvořák (2021) identified regional differences in the direction and strength of the influence of individual factors on real estate prices. The results showed that in Prague, the number of inhabitants, the number of inhabitants per completed apartment, and the number of applicants for one job had the greatest influence on price developments. The study thus confirmed that regional specifics play a key role in real estate price developments and highlighted the untapped potential of economic policy in regulating the housing market. Similarly, Hromada and Čermáková (2021) focused their research on housing price developments in the Czech Republic, using data from EVAL software, which collects information from real estate advertisements. The results show that the price-to-income ratio has been rising in all major cities over the long term, with the most significant increase in Prague. The study confirms that home ownership is becoming less affordable even for middle-income households, which is related to the long-term rise in real estate prices.

Rashad (2025) used correlation analysis to find that no significant price correction is expected in the near future, which is crucial given the increased cost of financing and the potential impact of rising interest rates.

Using statistical and regression analysis, Montvydaitė (2024) assessed the relationship between real estate price growth and consumer decisions to buy or build a house. He found that there is a positive relationship between real estate price growth and the intention to purchase real estate—consumers perceive rising prices as a signal of investment opportunity or confidence in economic stability and are therefore more motivated to buy. Hromada (2024) compared the impacts of the economic crisis on the real estate market in two different regions of the Czech Republic—Prague and the Karlovy Vary Region—between 2018 and 2022. Using statistical analysis of data from the EVAL application, he tracked apartment price trends, housing affordability, sales volume, and mortgage loans. The analysis revealed that in 2022 there was a significant decline in the volume of mortgages granted, which led to a decrease in the total number of real estate transactions. The study also suggests that the decline in lending activity caused the market to cool down, with potential buyers advised to wait for prices to fall.

Krulický, Proboštová, and Lorencová (2024) examined key factors influencing price changes in the real estate market in the period 2016–2022, focusing on developments before, during, and after the COVID-19 pandemic. Using time series and correlation analysis, they analyzed the relationships between real estate prices, inflation, GDP, construction output, and interest rates. The analysis showed that there is a strong positive correlation between inflation and real estate prices ($r \approx 0.8$) and a moderately strong dependence between GDP and the prices of apartments sold ($r \approx 0.63$). In contrast, the relationship between construction output and interest rates was rather moderate ($r \approx 0.4$). The study confirmed a significant increase in average apartment prices in the Czech Republic, which rose from approximately CZK 57,900/m² to CZK 93,300/m² between 2019 and 2022.

Comparable statistical reasoning is also applied in traffic safety research. Řezníček and Kovač (2025) analyzed Czech accident data (2011–2023) and used normality testing followed by Pearson/Spearman correlation to quantify the relationship between demographic factors (age, gender) and specific accident causes, while noting the limitation of centralized aggregated data.

In contrast, Fokin (2025) also used econometric analysis to examine the impact of changes in the key interest rate on real and nominal apartment prices in the period from July 2023 to December 2024. His findings point to a statistically significant negative impact of monetary policy tightening on real apartment prices – the hedonic price per square meter in the secondary housing market fell by approximately 4–5%, while nominal prices rose in the short term and then stagnated. I Okunevičiūtė Neverauskienė, Linkevičius, and Andriušaitienė (2025) also used multiple regression analysis and Pearson's correlation analysis to conclude that there is a strong correlation between macroeconomic indicators and residential property prices. Similarly, Sharma (2022) found in his research using correlation analysis that returns on private real estate investments are positively correlated with interest rate developments.

Mazáček and Panoš (2025) focused on the relationship between the price of new apartments in Prague and macroeconomic factors in the period 2005–2021. They used an econometric model based on quarterly data, combining LASSO regularization and Bayesian model averaging (BMA) methods. The results of their research showed a similar outcome to Fokin (2025), namely that the development of prices of new residential units can be well explained by a set of variables such as disposable household income, GDP per capita in Prague, unemployment rate, mortgage interest rates, and the impact of the COVID-19 pandemic. The model achieved a high explanatory power (over 90% of the variance explained), confirming that interest rates are among the key determinants of the price development of new apartments in Prague. Similarly, Latorre and Peš's (2024) fixed effects (FE) model shows that GDP growth, inflation, interest rates, and unemployment rates are statistically significantly associated with the real estate price index.

Using time series analysis on quarterly data from 1995 to 2024, Ruiz Bravo De Mansilla (2023) examined the relationship between interest rates, real estate prices, and transaction volume in the Spanish housing market. They found a negative causal relationship between interest rates and real estate prices, with rising interest rates leading to a decline in apartment prices. The results also showed that the strength of the relationship increases with a longer time lag (1–4 quarters), confirming that the impact of rate changes on housing prices is felt after a certain delay.

The use of content analysis combined with statistical hypothesis testing is not limited to real estate research and is commonly applied in transport-safety studies. For example, Kovač et al. (2023) assessed shared e-scooter safety using deep-learning supported content analysis and complemented it with observational data evaluated through the Wilcoxon test, concluding that safety equipment is systematically underused.

The data will be obtained through content analysis of secondary sources and evaluated using correlation analysis, linear regression, and Granger causality analysis.

Data and methods

In order to achieve the set research objectives, it is necessary to select appropriate methods of data collection and evaluation. First, the procedure for obtaining the data needed to answer the individual research questions will be described. Subsequently, these data will be analyzed using selected methods, on the basis of which it will be possible to formulate answers to the research questions and thus fulfill the objective of the work.

The data for answering the first and second research questions will be obtained through content analysis of secondary sources. Data on the development of average apartment prices in Prague will be drawn from publicly available databases of the Czech Statistical Office (ČSÚ, 2025) and supplemented with data from real estate portals providing long-term time series of real estate prices (Sreality, 2025). Data on interest rate developments will be obtained from the public portal Kurzy.cz (Kurzy, 2025), primarily from data on the base interest rate and mortgage financing.

Data will be collected every month from January 1, 2015, to October 1, 2025, to enable a comparison of the long-term development of both variables under review. The values obtained will be recorded in Microsoft Excel, where they will then be organized into a clear, structured database.

For the first research question, two line graphs will be created to show the development of average apartment prices in Prague and the development of interest rates in 2015–2025. The graphical representation will allow us to track long-term trends in both variables and visually compare their development over time.

The second research question will examine whether there is a statistically significant relationship between interest rates and apartment prices in Prague. Pearson's correlation analysis will be used for this purpose, which will allow us to assess the strength and direction of the linear relationship between these variables. The correlation coefficient takes values from -1 to 1, where -1 expresses a perfect negative correlation, 1 expresses a perfect positive correlation, and 0 indicates the absence of a linear relationship.

The formula for calculating Pearson's correlation coefficient (Edelmann, 2021):

$$r = \frac{\sum_{i=1}^{n} (Xi-\bar{X})\,(Yi-\bar{Y})}{\sqrt{\sum_{i=1}^{n}(Xi-\bar{X})^2}\,\sqrt{\sum_{i=1}^{n}(Yi-\bar{Y})^2}}$$

where:

- $\bar{X} = \frac{1}{n}\sum_{i=1}^{n} Xi$ - arithmetic mean of the first measurements
- $\bar{Y}$ - arithmetic mean of the second measurements
- x and y – values of variables
- $\bar{x}$ and $\bar{y}$ – average values of variables
- $\sum -$sum
- √ – square root

In Excel, the = CORREL function will be used to calculate the correlation coefficient r.

The resulting strength of the correlation will be considered as follows for better interpretation in the subsequent results:

r = 0 – 0.15 "very weak correlation"

r = 0.16 – 0.30 "weak correlation"

r = 0.31 – 0.45 "moderately weak correlation"

r = 0.46 – 0.55 "average correlation"

r = 0.56 – 0.69 "moderately strong correlation"

r = 0.70 – 0.84 "strong correlation"

r = 0.85 – 1 "very strong correlation"

If the resulting r is, for example, r = 0.7, it will be interpreted as a "strong positive correlation."

After obtaining the correlation result, the hypothesis will be verified, either confirmed or rejected, and at the same time its alternative hypothesis will be confirmed or rejected.

The significance level α will be 5%.

H0: There is a statistically significant relationship between interest rate developments and average apartment prices in Prague.

H1: There is no statistically significant relationship between interest rate developments and average apartment prices in Prague..

If the calculated correlation coefficient reaches statistical significance at the α=0.05 level, the null hypothesis about the existence of a relationship between the observed variables will be confirmed. Otherwise, the null hypothesis will not be confirmed and the alternative hypothesis will be accepted.

To answer the third research question, Granger causality analysis will be applied, which makes it possible to verify whether the development of one time series (interest rates) helps to predict the future values of the second variable (apartment prices). This method is suitable for determining the direction and time lag of the influence between economic indicators and is commonly used in analyzing the relationship between interest rates and the real estate market.

General formula for Granger causality (Lam et al., 2023):

$$Y_t = \alpha_0 + \sum_{i=1}^{p} \alpha_i Y_{t-1} + \sum_{i=1}^{p} \beta_i X_{t-i} + \varepsilon_t$$

where:

- Y_t – dependent variable
- X_t – independent variable
- α_0 – model constant
- α_i – coefficients of autoregressive terms
- β_i – coefficients of lagged values of variable X_t
- p number of lags included in the model
- ε_t – random component

The analysis will be performed using Gretl software, which allows the Granger causality test to be applied to time series. First, monthly data on interest rates and average apartment prices in Prague will be imported into the program in CSV format. Subsequently, the time structure of the data will be set in the range from January 2015 to December 2025. Before the test itself, the stationarity of both variables will be checked using the Augmented Dickey–Fuller (ADF) test. If the time series prove to be non-stationary (p-value ≥ 0.05), both variables will be converted to a stationary form using first differentiation. If stationarity is confirmed after differentiation, the analysis will be performed with these transformed values. After adjusting the data, a vector autoregressive (VAR) model will be estimated to determine the optimal number of lags between variables. The number of lags will be selected according to the AIC and BIC information criteria so that the model best captures the dynamics of the variables under observation. Subsequently, a Granger causality test will be run to assess whether past interest rate values contribute to the prediction of apartment prices in Prague. The test will be performed for different numbers of lags (1–4 periods) in order to determine the time lag with which any effect manifests itself.

H0: Interest rates do not affect apartment prices in Prague (there is no Granger causality).

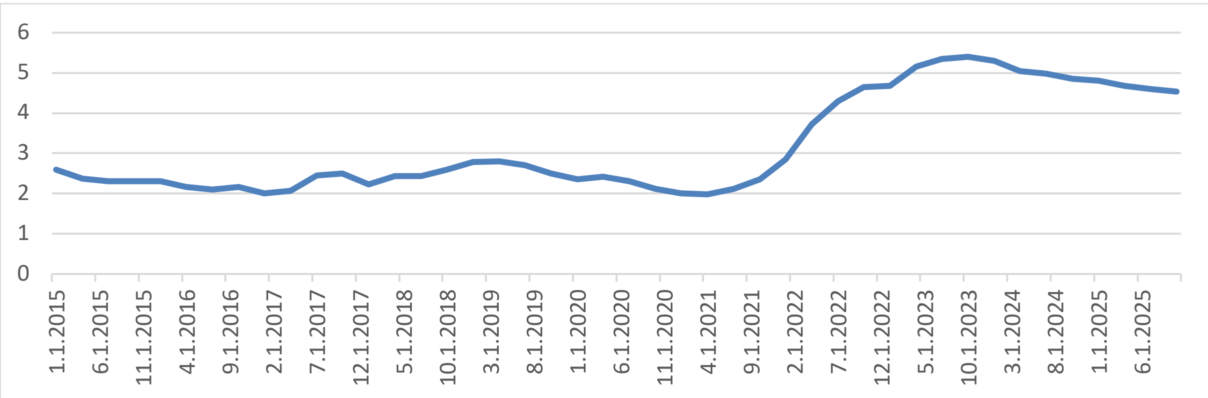
H1: Interest rates affect apartment prices in Prague (there is Granger causality).

The test result will be interpreted at a significance level of $\alpha = 0.05$. If the p-value is lower than 0.05, the null hypothesis will be rejected and it will be possible to conclude that changes in interest rates cause Granger-style developments in apartment prices. Otherwise, the relationship will not be confirmed. The final interpretation will be supplemented with information on the strength and direction of the observed effect and on the lag with which changes in interest rates are reflected in apartment price developments. The test results (F-statistic, p-value, number of lags) will be presented in a table.

Results

After obtaining the data and entering it into Excel, the following graphs were created to answer the first research question:

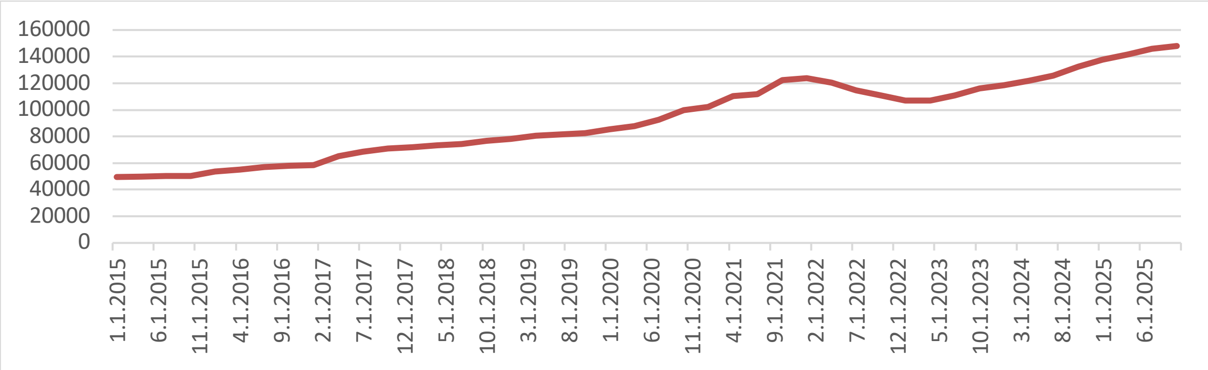
Chart 1: Development of mortgage interest rates in %



Source: Own processing based on data from the Czech Statistical Office.

Chart 1 tracks the development of mortgage interest rates in the period 2015–2025. The chart shows that rates were initially very stable. Between 2015 and 2019, they ranged mainly between 2.1% and 2.8%, with the lowest values reached in 2017 (2.0%) and the highest in 2019 (2.8%). The year 2020 brought a slight decline, with rates hovering around 2.1–2.4%. The lowest rate for the entire period occurred in April 2021, when it fell to 1.98%. However, a sharp increase began in the second half of 2021. In 2022, rates rose to 4.64%, and in 2023, the increase continued to 5.4% in October 2023, the highest rate in the period under review. Since 2024, there has been a gradual decline – from 5.3% at the beginning of the year to 4.86% at the end of the year. The year 2025 continues to see a slight decline, with rates falling to 4.54%.

Chart 2: Development of apartment prices in Prague in CZK/m2



Source: Own processing based on data from the Czech Statistical Office.

Chart 2 shows the development of average apartment prices in Prague in the period 2015–2025, with prices showing a long-term upward trend with significant changes, particularly in the years 2020–2023. In 2015, the average price was around CZK 49,500/m² and rose slightly during the year. In 2016, the gradual growth continued, with the price rising from CZK 53,602/m² to CZK 57,915/m². A more significant acceleration in growth occurred in 2017, when the price rose from CZK 58,691/m² to CZK 70,869/m² within a year. Growth continued in 2018 and 2019, when prices rose steadily, reaching approximately CZK 82,500/m² at the end of 2019. The year 2020 brought a further acceleration in growth, with prices rising to CZK 99,563/m² at the end of the year. This trend continued in 2021, when prices exceeded CZK 110,000/m² and even exceeded CZK 122,000/m² at the end of the year, representing one of the fastest year-on-year increases in the entire period under review. In 2022, there will be a change in the trend. Prices peak in January 2022 (CZK 123,821/m²), but then begin to fall to CZK 110,758/m² in October 2022. The decline continues into early 2023, when the price falls to CZK 106,992/m². From mid-2023, the market begins to stabilize gradually and prices rise again. At the end of 2023, they reach CZK 116,290/m² and continue to rise gradually throughout 2024, reaching CZK 132,618/m² in October 2024. The trend continues in 2025, with prices rising again and reaching CZK 148,005/m² at the end of the period under review, which is the highest value for the entire period under review.

After applying correlation analysis to the collected data, the following correlations were found.

Table 1: Correlation of interest rates with apartment prices

	Mortgage Interest Rates (%)	**Average Apartment Prices in Prague (per m²)**
Mortgage Interest Rates (%)	1	
Average Apartment Prices in Prague (per m²)	0.720579412	1

Source: Own processing

The resulting correlation between interest rates and average apartment prices in Prague is 0.720579412. According to the defined intervals, this value falls into the category of strong positive correlation. This means that changes in both variables move in the same direction over time – when interest rates rise, apartment prices rise at the same time, and when interest rates fall, prices fall. The significance level α was set at 5%. Since the calculated p-value is 3.34257E-43, which is lower than α, p<α applies, leading to the rejection of the alternative hypothesis and confirmation of the null hypothesis that there is a statistically significant relationship between the variables under observation.

In the Gretl environment, the direction of the relationship between interest rates and average apartment prices in Prague was first tested. The test showed a causal effect in only one direction. It confirmed that changes in interest rates cause changes in apartment prices in a Granger sense, while the opposite direction (that apartment prices cause changes in interest rates) was not confirmed.

Subsequently, it was examined whether the impact of interest rates on apartment prices is immediate or delayed. An overview of the results is provided in Table 2.

Table 2: Impact of interest rates on apartment prices in Prague

Test	**F-statistic**	**p-value**	**Conclusion**
Immediate effect	–	> 0.05	No proven effect
Lag 1 (1-quarter delay)	0.683	0.414	No proven effect
Lag 2	4.43	0.019	Prices respond after 2 quarters
Lag 3	3.667	0.022	Prices respond after 3 quarters
Lag 4	5.611	0.002	Strongest proven effect after 1 year

Source: Own processing using Gretl.

The results of Granger's causal analysis were tested for delays ranging from one to four quarters. With a delay of one period, the impact of interest rate changes on subsequent apartment price developments was not statistically significant ($F=0.683$; $p=0.414$). A statistically significant effect only appears after two quarters, when the test indicates that changes in interest rates begin to affect apartment prices with a lag of six months ($F=4.430$; $p=0.019$). The significance persists even with a lag of three quarters ($F=3.667$; $p=0.022$). The strongest relationship was identified after a delay of four quarters, i.e., approximately one year ($F=5.611$; $p=0.002$), which represents the strongest statistical evidence of a delayed response of apartment prices to interest rate developments.

Discussion of results

RQ1: How did interest rates and average apartment prices in Prague develop between 2015 and 2025?

The results show that interest rates and average apartment prices in Prague fluctuated significantly between 2015 and 2025. Interest rates remained low and stable between 2015 and 2019, generally ranging between 2.1% and 2.8%, while apartment prices showed a gradual but steady increase during this period, from CZK 49,500 per square meter to CZK 82,000 per square meter. Low financing costs thus supported demand for housing despite rising prices.

The most significant increase in apartment prices occurred between 2020 and 2022, when the average price per square meter rose from CZK 85,500 to CZK 123,000. During this period, the market responded to increased demand, limited supply, and economic uncertainty associated with the COVID-19 pandemic. This development is also confirmed by Hromada and Čermáková (2021), who point to the long-term growth in apartment prices in Prague and the deteriorating affordability of housing.

Since 2022, there has been a significant change in the dynamics of both indicators. Mortgage interest rates rose sharply during this period, reaching their peak in 2023 at 5.4%. In the following years, 2024 and 2025, a gradual decline is evident, but the level of rates remains significantly higher than in the previous period of 2015–2020.

The development of average apartment prices in Prague has been characterized by a slowdown in growth since 2022. In 2022–2023, prices fell slightly to around CZK 107,000 per square meter, representing a departure from the previous significant growth trend. Since 2024, however, apartment prices have been gradually rising again, albeit less dynamically than in previous years. Overall, apartment prices in the period under review reached historically high levels exceeding CZK 148,000 per square meter, but their development was more stable in the final part of the period.

RQ2: Is there a statistically significant relationship between interest rates and average apartment prices in Prague?

The results show that there is a strong positive relationship between interest rates and average apartment prices in Prague, as confirmed by the correlation coefficient $r = 0.720579$. This result means that changes in interest rates are closely linked to changes in apartment prices. Based on a p-value of less than 0.05, the existence of a statistically significant relationship between the two variables was confirmed.

However, this result must be interpreted with some caution. A positive correlation does not mean that rising interest rates automatically cause apartment prices to rise, but rather indicates that both indicators respond to broader economic conditions such as inflation, the economic cycle, and monetary policy. During periods of low interest rates, apartment prices rose significantly, while during periods of rising interest rates, price growth slowed or temporarily reversed.

The findings correspond to the conclusions of Mazáček and Panoš (2025) and Fokin (2025), who also state that interest rates are one of the main factors shaping price developments in the real estate market. Similarly, Ruiz Bravo De Mansilla (2023) confirms the close link between monetary policy and real estate price dynamics. Krulický, Proboštová, and Lorencová (2024) also point to the connection between interest rate growth and real estate price growth.

The finding of a strong correlation between interest rates and apartment prices can significantly influence the decisions of investors and real estate specialists regarding the timing of the purchase or sale of real estate.

RQ3: Does the impact of interest rate changes on apartment prices in Prague manifest itself immediately or with a certain time lag?

The results of Granger's causal analysis demonstrated the existence of a unidirectional relationship between interest rates and apartment prices in Prague. It was confirmed that changes in interest rates cause changes in apartment prices in Granger's sense, while the opposite direction of the relationship was not demonstrated.

A subsequent analysis of the time lag in this relationship showed that changes in interest rates do not have an immediate impact on apartment prices, but only become apparent after a certain time lag. A test for a one-quarter lag did not reveal any statistically significant effect, which means that apartment prices do not respond immediately to changes in interest rates. Significance only appears after two quarters, with the strongest effect recorded after a four-quarter lag. This means that the real estate market reacts more slowly to monetary conditions and the full impact of interest rate changes is reflected in apartment prices gradually and may only become apparent after approximately one year.

This conclusion is consistent with the findings of expert studies, which point out that the response of real estate prices to interest rate changes tends to be delayed. Fokin (2025), for example, states that monetary policy tightening is reflected in real apartment prices gradually. Ruiz Bravo De Mansilla (2023) confirms that the impact of rate changes tends to be strongest after several quarters. Votava, Komárková, and Dvořák (2021) also argue that several factors simultaneously influence price developments, and therefore an immediate market response is not typical.

Conclusion

The aim of this thesis was to determine the impact of interest rates on the development of average apartment prices in Prague in the period 2015–2025 and to assess whether this impact is immediate or delayed. The set objective of the thesis was achieved through a combination of time series analysis, correlation and regression analysis, and Granger causality analysis. To achieve the objective, publicly available secondary data on the development of interest rates and average apartment prices in Prague were used, which were processed in Microsoft Excel and Gretl statistical software.

The first research question examined the development of both variables over time. The results showed that interest rates were relatively stable in 2015–2019 and remained at low levels, while apartment prices in Prague showed a long-term upward trend during this period. The most significant increase in apartment prices was recorded in 2020–2022, when the average price per square meter rose from around CZK 85,000 to more than CZK 120,000. Since 2022, there has been a change in the dynamics of development, with interest rates rising sharply and apartment prices slowing down and temporarily declining. At the end of the period under review, apartment prices rose again, reaching historically high values exceeding CZK 148,000 per square meter.

Furthermore, it has been proven that there is a statistically significant relationship between interest rates and average apartment prices in Prague. Correlation analysis confirmed a strong connection between the two variables.

The key finding of the study is that the impact of interest rate changes on apartment prices is not immediate. Granger's causal analysis demonstrated the existence of a one-way relationship, whereby changes in interest rates affect apartment prices, while the opposite direction of the relationship was not confirmed. At the same time, it was found that this effect manifests itself with a time lag, with the strongest effect occurring approximately one year later. This finding is consistent with the conclusions of foreign and domestic studies and confirms that the housing market's response to changes in monetary policy is gradual.

The contribution of this work lies in the comprehensive combination of descriptive analysis of housing market developments with causal analysis, which made it possible not only to confirm the existence of a relationship between interest rates and apartment prices, but also to determine its temporal dynamics. At the same time, however, it is necessary to mention certain limitations of the work, which are the use of aggregated data for the entire capital city of Prague and the focus of the analysis on only one macroeconomic factor, even though a wider range of factors influence real estate price developments. These facts represent an opportunity for further follow-up research.

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