Comparative analysis of real estate in Beroun and Kladno

Komparativní analýza nemovitostí v Berouně a v Kladně

Abstract

The aim of this bachelor thesis is to carefully analyse the real estate residential market in districts Kladno and Beroun, to estimate which value creating factors affect the price the most by doing a multiple linear regression analysis and consequently accomplish a price comparison of these two villages. It was discovered that Beroun is more expensive in prices of houses as well as in prices of apartments. The regression analysis processed by a statistical software has indicated that price is affected by the real estate condition, flooring area, land area around the estate (in the case there is some), distance from Prague, number of rooms and also by the presence of garage.

Introduction

Generally, real estates are one of the most important investments. But in fact it fulfils a dual role of an investment. It could be a part of a portfolio and also one of the main elements of one´s life. For many people their house or apartment is the largest investment that they will ever make. When comparing it with other types of investments, real estate investing includes a quite convenient risk/reward profile with relatively low liquidity. It was decided to compare Kladno and Beroun, districts closely adjacent with Prague. Nowadays, it is very common for families to buy a residential buildings in some of the Prague satellites, because Prague standards of living tends to be very high and people like to live in cheaper and silent places, nearby the source of employment, culture and all kinds of stores. The transportation availability there is also very good. Mainly there is a question of residential buildings prices: which district is cheaper, which one more expensive and why? Also it will be interesting to see how much different value creating factors affect the price of the real estates. When doing an analysis of the real estate residential market in Prague surroundings, we should know something about late development of the real estates in the Czech Republic.

The financial crisis had an unexpected impact on the real estate market in the Czech Republic. Economic and real estate boom in recent years has changed the prices of new and older housing. Price differences between new and old housing have slowly disappeared. This development was economically incorrect, totally illogical and unsustainable in a long term. Demand has fell by cooling the economy and real estate prices have declined. This resulted in a proper price relations alignment and in the market equilibrium restoration. The real estate prices decline will bring vitalization, but it is not an assumption for an economic miracle. The Real Estate Market has to take into account also the qualitative differences between living in new and old and a lot of other factors, family houses, residences, blocks of flats. Furthermore infrastructure, location, civic amenities, parking or social structure of the population. Since 90s of the 20th century, the Czech Republic became the centre of Europe. Interesting centre for foreign business and real estate investments. Investing in real estate in the Czech Republic has become one of the surest investments of all. The real market value for certain types of property doubled from 1990 to 2000. The Czech Republic has experienced a huge boom on lease market during these years (both residential as well as commercial). However price level is affected by the real estate parameters, such as regions and localities, real estate type and property type. An important role in the real estate price plays the availability of its financing. The question is whether mortgages are available and economically attractive form of financing for a wide range of buyers in this period. After the joint-stock bubble deflation, the real estate investments have become an alternative to shares investments. Not only households invested in real estates, because of the cheap mortgages, but also many investment funds inserted capital there. The value of real estates in developed countries is 80% of their gross domestic product. In the developed world has been created a huge real estate bubble. Then it declined and there was a significant decline in consumer spending.

There happened a series of changes in the Czech Republic residential market compared to 2012. The situation in the real estate market is quite volatile and changeable. Very low mortgage rates, which have been the domain of the previous year 2014 were very convenient for all those which wanted to have their own housing. Interests below 2% level literally challenged to negotiate an advantage mortgage loan with 3 or 5 year fixation. This fact was naturally good for the dynamics of the real estate market, which after quite unavailing year 2012 and 2013 slightly began to recover again. Thanks to low interest rates and stable economic situation, which is forecasted by experts for the upcoming year 2015, it is

expected a slow growth in the number of sold properties. Optimistic forecasts of analysts and real estate agents for 2015 also result from the favourable position of the Czech Republic compared with other countries in the region. It is understandable that an extensive interest in buying properties from the side of clients will be immediately reflected in the prices of sold estates. According to expectations, price growth will be mainly in lower price categories apartments, which remained in a stable price level so far. The most dynamic growth in the real estate market is expected to be in Prague. According to forecasts, the residential market in the Czech Republic will be increasing during the years 2015 and 2016, but this growth will not be any significant. Usually it is discussed a height of 1.9% in 2015 and 2.1% in 2016. An exception will be our capital city, not to say in the entire Central Bohemian Region, where the growth will be between 4-6%, which would represent about 5,000 sold flats.

Objectives and methodology

Objectives

The main target of the bachelor thesis is a conduction of the real estate price analysis and a comparative analysis of Kladno and Beroun. The main goal of the analytical part is a comparison and evaluation of Beroun and Kladno according to prices of the real estates. Partial goal is the characteristics of the basic value creating factors of the real estate prices and a determination of basic statistical factors. Equally important is an evaluation of figures and tables, displaying prices comparisons and resulting evaluation of results. Sub goal of the theoretical part is a clarification of the current real estate situation in the Czech Republic and its development to the reader and consequently a literature review conduction.

Methodology

Methodology of the thesis is based on the statistical analysis techniques and quantitative research methods that generate quantitative data. In the analytical part, there is an implementation of a multiple linear regression analysis, comparative analysis and numerical analysis of data. There is a general manipulation of pre-existing statistical data by using computation techniques. Based on a synthesis of theoretical knowledge and the results of own solution, the conclusions of the thesis will be formulated.

Software use: Microsoft Word, Microsoft Excel

Evaluation of results

Conclusion

Results of the bachelor thesis led to the main conclusion of a comparative analysis, that houses and apartments are much cheaper in Kladno than in Beroun. The average price of house in Kladno is only 3 124 190, 37 CZK, while in Beroun it is 5 321 551 CZK and the average price of Kladno apartment is 1 461 949,83 CZK, while in Beroun it is 2 370 096,31 CZK. This can be explained by the fact that Kladno is more industrial city (and urban area), with older types of residential buildings and on the other hand in Beroun there is nowadays constructed more residential buildings for living. The distance from the centre of Prague is quite similar in both cases.

Considering the regression analysis of value creating factors, in the case of Kladno houses there was pretty good fit of collected data, the price was explained by 59,8 % by a coefficient of determination. There was performed a statistical significance with the help of p-value (on the 0,025 level of significance) of the particular variables, which marked land area, condition of the real estate and availability of garage as statistically significant variables. After evaluation of the economic signification we have obtained following variables: land area, flooring area, floor number, transportation availability, number of rooms, condition of the estate, location, present of basement, garage and parking place. That means the real estate prices of houses in Kladno are influenced the most by the condition of the real estate, availability of garage and also by the land area around the estate.

In the case of Kladno apartments there was a very good fit of collected data, the price was explained by 85,5 % by a coefficient of determination. There was also performed a statistical significance with the help of p-value (on the 0,025 level of significance) of the particular variables, which marked distance from Prague, flooring area, number of rooms and condition of the estate as statistically significant variables. After evaluation of the economic signification we have obtained all variables except the location and the present of a balcony. That means the real estate prices of apartments in Kladno are influenced by the distance from Prague, flooring area, number of rooms and condition the most, because these factors are both statistically and economically significant.

Considering Beroun houses there was not very good fit of collected data, the price was explained by 38,1 % by a coefficient of determination. It may be caused by selection of variables which do not influence price the most. There was also performed a statistical significance with the help of p-value (on the 0,025 level of significance) of the particular variables, which didn´t marked any of the them as statistically significant. After evaluation of the economic signification we have obtained all variables except transportation availability. But anyway the real estate prices of houses in Beroun are

influenced by the present of garage, balcony and the real estate condition, even if these are not statistically significant.

In the case of Beroun apartments there was a very good fit of collected data, the price was explained by 86,2 % by a coefficient of determination. There was also performed a statistical significance with the help of p-value (on the 0,025 level of significance) of the particular variables, which marked flooring area, number of rooms, the real estate condition, the present of basement and garage as statistically significant variables. During evaluation of the economic signification we have obtained all variables except floor number, location and the present of balcony and basement. That means the real estate prices of apartments in Beroun are influenced by the flooring area, number of rooms, the real estate condition and the present of garage the most, because these are both statistically and economically significant.

Not confirmation of some hypothesis was surprising, it has been proved that not all the value creating factors have an impact on the final price. But on the other hand most of them do. But still it is very difficult to rigorously estimate data, because there are many different factors affecting the real estate prices in Kladno and Beroun and in the thesis there has been calculated only with some of them.

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