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COMPARISON OF THE DEVELOPMENT OF PURCHASING POWER IN THE PURCHASE OF RESIDENTIAL UNITS IN SELECTED LOCATIONS IN BOHEMIA AND GERMANY

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Abstract

Purchase of residential units represents one of the greatest cost in life of average people. This title solves differences between flats purchaising for different nations which live in different standard of living. This title compares price level of flat units in year 2013 and 2014 in selected areas in Bohemia and Germany and compares this price level to net wage. This comparison should bring basic idea about situation on housing markets in selected areas. From evolving costs of properties we can notice slight increase of them during the period. But this increase is more significant than increase of salaries. Inflation is the next factor that can have an influence on the demand of properties and in the last decade is getting higher. According to increasing difference between the evolving costs of flats and the salaries, we can determine unequal development of each of them. From amount of demands, amount of sales and the highest price of properties in 2007-2008 is noticeable that there are other factors than inflation, for example a demographic change of inhabitants. In the last few years, specially from 2006, there is also increasing number of mortgages.

Keywords

Price level; compare; housing markets; net wage.

Introduction

Comparison of the actual amount of the price level in the Czech Republic and the Federal Republic of Germany provides a comprehensive view of the purchasing power of the population in the selected areas, over border of the Czech Republic.

Methodology

Basic recap developments in the housing market are closely linked to developments in the Czech Republic between 1989 and 1991. Specifically, for Germany it was a date of October 3, 1990, when there was a reunification of the divided after World War II. Until then divided East Germany, which belonged to the so-called. "Eastern bloc", included in the economic development generally at the level of the former Czechoslovakia. In contrast, West Germany, with a market capitalist regime was after the Second World War rehabilitated to independent market functioning state in which, despite the high amount of repatriations took place, meaning the trend growth, high boom in the economy. After the reunification of Germany in 1990 was the relocation of the population from the already former eastern to the western part, which was at the level of the overall economy and the political-economic situation in the diametrically higher level. According to published estimates from the eastern to the western part of the Federal Republic of Germany moved roughly 9% of the population. This development is reflected in the significant developments in the housing market. [1]

To compare the monitored sites were selected German city of Dresden. The city belongs to the former East Germany. According to data from 2012, lives in Dresden 529,781 inhabitants, is generally 4 times greater compared to reference sites. Dresden is its development of the housing stock and the development of the whole city in 1990 on a similar trend in line with the observed locations. Geographically - Dresden contour are located 120 km from Liberec and 60 km from Usti nad Labem. These considerations above, Dresden selected for the comparison.

To compare the offer price of housing units was selected advertising server in real estate: http://kleinanzeigen.ebay.de/. For the selection of housing units for comparison was processed like in the selection of the flats in the investigated locations. The city of Dresden is currently undergoing a massive building development, both for the infrastructure as well as in terms of housing construction. In advertisements, which are published on the server, it is clearly evident significant difference between the already completed apartments and condominiums planned in current development projects. The first group is the dwellings completed in 2007, which consists of a database specifying the price level bid prices of residential units in Dresden. The second group are apartments that are currently under construction or with their construction plans. For this second group is the bid price higher order twice and above. The housing units, however, do not fit into the reporting segment. A similar situation is of course also a similar segment of construction in the Czech Republic.

Results

From the following tales and figures show comparison of bid prices for housing units in 2013 in Ústí nad Labem and Liberec. The sites are compared with the German locality of Dresden.

Tale 1: A comparison of bid prices of residential units in two areas of the Czech Republic and one area of Germany for 2013 and 2014 (Source: own processing)

| | average values for the region of Liberec | | The average values for the region of Ústí | | Federal Republic of Germany - City Dresden - Values in CZK (calculated using the exchange 26Kč / 1 Euro in 2013 and 27,5Kč / euro in 2014) | |
|---|---|-----------|---|-----------|--|-----------|
| | year 2013 | year 2014 | year 2013 | year 2014 | year 2013 | year 2014 |
| The mean value (Kč) | 20 219,94 | 20 925,89 | 10 655,51 | 9 794,96 | 32 747,87 | 32 877,24 |
| error of the mean (Kč) | 1 253,32 | 750,87 | 732,27 | 614,92 | 999,30 | 807,07 |
| Median (Kč) | 18 354,88 | 20 451,43 | 10 932,45 | 8 931,82 | 31 579,78 | 31 685,50 |
| Modus (Kč) | 16 947,02 | 21 654,17 | 9 895,83 | 10067.67 | 27 300,00 | 27 500,00 |
| standard deviation (Kč) | 6 118,61 | 4 221,92 | 3 864,28 | 3 314,12 | 7 206,07 | 6 354,86 |
| Minimum (Kč) | 13 673,92 | 12 586,81 | 4 285,71 | 3 821,43 | 15 583,38 | 13 991,23 |
| Maximum (Kč) | 36 326,49 | 34 250,00 | 19 572,07 | 17 672,55 | 54 983,61 | 54 407,60 |
| amount | 74,50 | 33,50 | 56,00 | 33,50 | 52,00 | 62,00 |
| confidence level (95,0%) | 2 603,42 | 1 544,57 | 1 511,09 | 1 266,49 | 2 006,18 | 1 613,83 |
| Model housing unit size of 60m2 (Kč) | 1 101 293 | 1 227 086 | 655 947 | 535 909 | 1 894 787 | 1 901 130 |
| The average wage in area(Kč) | 22 029 | 23 046 | 21 792 | 22 581 | 73 178 | 78 723 |
| The average net salary in area (Kč) | 16 522 | 17 285 | 16 344 | 16 936 | 44 199 | 47 549 |
| Expression of the rate of wages required to buy a model flat unit the size of 60m2. | 66,66 | 70,99 | 40,13 | 31,64 | 42,87 | 39,98 |

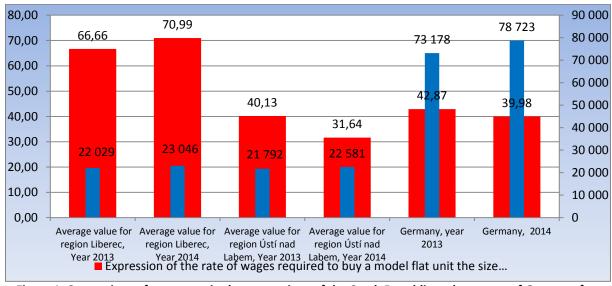


Figure 1: Comparison of net wages in the two regions of the Czech Republic and one area of Germany for 2013 and 2014 necessary to purchase a model housing units of 60 m2 in the location (own processing)

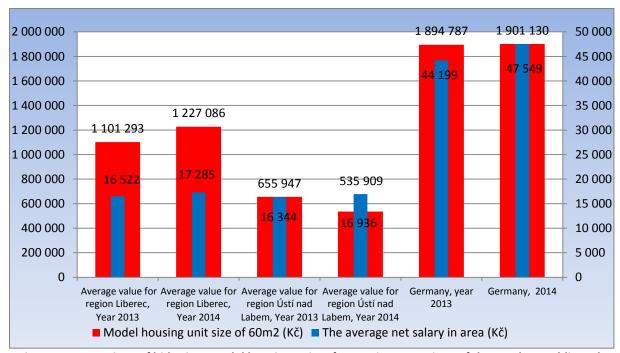


Figure 2: Comparison of bid prices model housing units of 60 m2 in two regions of the Czech Republic and one area of Germany for the 2013 and 2014s the output of the average gross wage in the area (own processing)

From the above tables and graphs are clearly evident disparities in purchasing housing in specific localities. Overall, the availability of housing in the study area is higher in Germany compared to reference sites in the country. For the partial determination of outputs should be considered advanced and correction factors leading to concrete outputs in the area of Dresden. The correction relating, in particular, achieved wage in the locality. City of Dresden belongs to the Federal Republic of Germany, which he joined after the unification of Germany and the German Democratic Republic in 1990. In addition, the development over time has passed events mentioned above. Over 23 years of development is generally reported (according to Eurostat outputs) that the GDR is in the level of average wages at 83% of the Federal Republic of Germany. Given disproportion is factored into the calculation. To calculate the ratio of the offer price of the property is used for relevance outputs net wage, which is calculated based on the model of a free citizen without children. The net salary is calculated according to the legislation in force for the year 2013 and 2014.

For the selected model apartment of 60 m2 in Dresden bid price 1,894,786 CZK. In descending order, is in second place in the monitored sites Liberec with a bid price of 1,101,293 CZK. Lowest price per housing unit model is in Ústí nad Labem, in this area will come out of the acquisition of housing units to 655,947 CZK. When comparing denominations prices of residential units is clearly evident that the price of housing units in Dresden is about 72% higher compared to Liberec and 288% higher compared with the Ústí nad Orlicí site. The question is what is the nominal bid price explanatory power for the overall demand for residential units. For the relevance of the outputs is desirable to ensure a comparison of housing affordability. One of the clearest indicators, which has a relatively high explanatory value, the ratio of the price of the property to the number of net wages needed to purchase the units. The net salary is necessary in this case because it represents real disposable income. Gross wages would not provide meaningful comparisons, due to different taxation in comparison States.

When comparing the ratio required net wages needed to purchase housing units can find some interesting facts. Firstly, the output shows that the ratio researched based almost similarly for Dresden and area for the site Ústí nad Labem. In both sites is necessary for the acquisition of a model housing units spend roughly 40 monthly salaries. In the analysis based on the ratio of the least

accessible location Liberec, where is the model for the acquisition of housing units must expend almost 67 wages. The site is therefore shows a 59.7% worse than the reference ratio at other sites.

Conclusion and discussion

Expression ratio necessarily incurred net wages needed to purchase a model housing units, of course, does not represent the full availability for purchase of housing and demand, but provides basic trend indicator of purchasing power, or the purchasing power of the population - employees. To determine the actual demand would be particularly necessary to extend the range of candidates to legal persons and sole traders who make significant purchasing power, and it would also be necessary to include a comparison factor of debt financing, which represents a significant extent, the way the acquisition of property in all the locations. The rate of utilization of debt financing, however, is dependent on the current economic situation, the cost of debt financing and then the purchasing power of the population. Furthermore, there are other factors that the extent of debt financing to a greater or lesser extent involved.

The original plan was to assess the median wage for the reference sites. Due to the difficulty of tracing for Germany, however, has been chosen, the average wage.

It can be a certain amount of generalization to say that we can congratulate the Czech Republic as for the achievement of the average price level of Western Europe, is just a shame that the income we stayed in Eastern Europe.

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