

Monitoring of trends in prices on residential market in the Czech Republic

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Abstract

Institute for Regional Information (below IRI) established a system of monitoring bid prices and bid rents for surpassing unavailability of adequate precise information about market prices and rents in the Czech Republic. There has been set a system, which is engaged in data collecting and evaluation, under the name Comprehensive Information System of Housing Economy (CISHE). Data collection and evaluation are orientated on selected standard residential property, which is a

„standard older flat, in common locality, floor space 68 sq meters“.

The area of investigation includes 335 major cities, and forms a wide monitoring of the market with older flats.

The current results of CISHE monitoring enable a continuous evaluation of the variations of prices in the crucial part of housing market of older flats in the Czech Republic. General and long-term variations of prices of residential market of older flats in the Czech Republic, detected through the price index of the monitored type of standard flats will be presented in the paper.

The main goal of the paper is to present the system described above, which has been running almost for ten years, practically, the most loyal image of the residential property market in the useful territorial details and results of which are widely exploited by the public and specialists as well.

Introduction

The residential market is a part of everybody's living. Czech households prefer to own their property more than rental form of living in the family houses or flats. Cooperative way of housing is also quite frequent. Only one quarter of Czech households use rental way of housing. Great deal of Czech households invested and have been investing in buying houses or flats and they consider it one of the best and safest investments of all.

Unfortunately, the residential market has agonized what is about a low availability of adequate exact information of regular local market prices and rents. This information is of a high importance and necessity for everyone, not only for public and investors, but also for researchers and politics to comprehend behaviour of households during acquisition of their housing, that's why IRI established a system of monitoring bid prices and bid rents, under the name of Comprehensive Information System of Housing Economy (CISHE) in 2000. This system describes the market in 335 chosen cities of the Czech republic and its content **covers c. 90% of market with rental housing.**

Main goal of CISHE.

The main goal of CISHE is to find out the market value and open market rent of comparable flat. However the residential properties are distinguished by a higher variability, we decided to create a standard unit which was set at the beginning. Considering the fact that at that time mostly older three rooms flats were offered on the market, we decided to define this unit as a standard for our monitoring. That's why the data collection and evaluation are orientated on selected standard residential property, which is a „*standard older flat, in common locality, floor space 68 sq meters*“.

Territorial cover.

The concerned area of investigation includes 335 major cities, and forms a wide market monitoring of older flats. There are 6,7 mil. inhabitants in these 335 chosen cities. It represents two-thirds of inhabitants of the Czech republic in the year 2001. According to the results of population census proclaimed in the same year, there were found 89 % of flats in the flats houses. As we take into consideration, that the big attractive cities have faster moving on the housing market, we can say that monitoring of IRI covers 90% of the existing market with older residential properties. Significant changes in proportion of inhabitants number to flats in flats houses have not been changed in monitored indicators yet.

Source of information.

As the most suitable source of information a wide public accessible advertising in reality press, and its internet modification were taken, because it is used everyday by everybody, covering public as well as experts. So there is nothing easier than to record current prices of offered properties in certain locality and create the line time database out of them. The advantage of these sources is free availability of information contained in the reality advertising, which is available for all territory and covers all spectrum of residential properties, the older and new ones, the small and big ones, the family houses and the secondary residence as well. The disadvantage of bid prices is that sometimes the seller expresses own wishes into the price. The finally realized price should be different, generally lower, but in some solitary cases higher (the seller can hit unforeseen demand). Further more there is a possibility of duplicity of information, it frequently happens that one property is being offered by several estate agencies at the same time. The simplicity of advertising, lack of property's important characteristics or the missing price information have negative effect as well.

Data expurgation.

Described disadvantages have to be surpassed. To get a reasonable and accurate information about an average price of standard flat and open market rent too, we need to collect 30 credible data of each monitored city and of each of two indicators as well. The credible data means the data without influence of incomparable cases. For instance new flats, luxury flats, flats above standard furnishing or inadequate different bid prices are omitted. The conditions

for process of data expurgation have gone through the certain time changes, setting of these conditions affects the final value. Mainly the extreme prices are cut out. The limit values considered as excessives were changing in the time between the years 2001 and 2006 when the lowest and then highest border were between 50% - 150% of an average price which was found in previous period. As the price growth of older flats was significant in 2007, the upper border was moved up to 200 % of an average value in 2006. This happened just in certain attractive cities.

The average market value detection of older flat

The detection is done for all of the 335 chosen cities in these steps:

- The prices database processing
 - data expurgation, incredible or duplicate data elimination
 - standart flat's value determining
- Gradual evaluation according to geographical model
 - average value detection for big cities to the level of country cities
 - average value detection for the countryside property reaching the big cities (it means cities belonging to the 335 chosen cities).

In case there is a sufficient amount of information for that certain chosen city (sufficient means 30 figures for each from two indicators – price and rent after the process of data expurgation), the market value is stated directly statistically using data provided by the city database.

In cases there is not a sufficient amount of information, the price is derived from the expert's model of housing attractivity. This way is also used for price derivation in localities where there is no data at all.

The expert's model of housing attractivity

The expert's model of housing attractivity on the level of settlements was developed for surpassing the insufficient amount of data in some of chosen cities. The expert's model allows to evaluate the influence of locality and other characteristics of the locality on the flat price or chosen standard property wherever in the Czech Republic. The expert's system can evaluate not only the main valuable poles inside of each chosen region according to housing attractivity but also to set the strength of the neighbouring cities linkage relations to their's poles (based on transport distances, quality of transport connections, relations of the city size, recreation attractivity and other raising or limiting factors).

Detection of the average bid rent of older flat

The open market rent was determined the same way as the average market value of older flat separately for each of chosen city.

Reduction of the average bid values to a market value

The bid prices from the current advertising are a specific group of prices in the common conditions one-sidedly deflected up in comparison to the prices on the open market. IRI made

in the cooperation with the Civic Syndicat of Owners the Houses, Flats and others Properties in Czech republic (bellow only CSOHFP) the local investigation based on a question form for the members of the CSOHFP concerning the agreed market rents in their's flats in Prague. (Tlapáková E., P.Karfík 2000, *Monitoring of open market rents in the capital Prague, Ministry for regional development.....*, Tlapáková E., P.Karfík 2001, *Monitoring of open market rents in the capital Prague, Ministry for regional development*, Tlapáková E. at al. 2004, *Monitoring of open market rents in the capital Prague, Ministry for regional development...*, Tlapáková E. at al. 2005, *Monitoring of open market rents in the capital Prague, Ministry for regional development...*, Tlapáková E. at al. 2006, *Monitoring of open market rents in the capital Prague, Ministry for regional development...*).

Comparism of results collected from questionnaires and of collected rental prices from common advertisements enabled to find out the real difference between market and offered rents in the capital city Prague. This price was 15% below the average of offered prices in the year 2003. This was proved by repeated researches done between the years 2004 – 2006. These repeated researches were working with 200 cases of real reached rentals and comparism of these cases to KISEB database proved overvaluation 15 % of offered prices provided by estate agencies. That's why all years KISEB results were adapted – less 15 %.

CISHE results publication.

Within the Czech Republic, the results of CISHE are presented:

- a) in a year time period in the middle of November (the deadline is 15th November of the current year)
- b) quarterly on the most widely read Internet portal iDNES.cz, since 2004 (<http://cenybytuidnes.cz>)
- c) IRI publishes the mirrors of housing rents for 335 selected cities on its own web pages [www. kiseb.cz](http://www.kiseb.cz) since 2006.

Index of older flats market in the Czech republic.

The important issue from the CISHE, which hasn't been published yet, is the long-term period index and annual index of older flats market in the Czech republic which is shown by the next two tables. Index was set on the basis findings of the average price of defined standard flat. The estimable average was used for its computation. As the scale a number of flats in flats houses was used. The table below shows, that the flat prices have grown up since 2000 and in the year 2008 were on the triple of their original value. As we can see on the graph in appendix 1, the growth was different region by region. The highest dynamic range of prices was marked in Moravia-Silesia region, there were the prices in the year 2008 on the quadruple of their's original value in the year 2000.

The long-term period Index of older flats market in the Czech Republic (standard IRI)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
CZ	1,0	1,03	1,16	1,44	1,55	1,54	1,73	2,25	2,86

From the next table below the annual changes of prices of older flats can be seen. There are no doubts about the higher growth between the years 2003 and 2004. The market was warming because of the Czech Republic entering EU. The expectations were too high, the prices calmed down in the next two years and till the year 2004 were basically on the same level. The displayed high expectations which were reflected into the property prices were postponed till 2006. The next substantial growth of the prices happened in the year 2007, when the Czech economy retrieved its power. The absolutely highest growth of prices was recorded in the year 2008, see the table.

The annual Index of older flats market in the Czech Republic (standard IRI)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008
CZ	100,0	103,0	112,1	125,0	107,3	99,3	112,4	130,3	126,8

The trends in prices on residential market in chosen cities

The market prices of older flats are given in the graph n.2 which also shows the review of the trends in prices on residential market of older flats in the period 2000 – 2008 (standard IRI, older flat 68 sq meters, in common locality). There is a clear difference between the absolute price of the standard flat in Prague and the same flat in other regions in the Czech Republic. The prices in Prague were the prices of standard unit at minimum about 1/2 and 1/3 higher than in most of other cities in the Czech Republic. So we can say, that the trends in prices on residential market in Prague are the leaders of in whole Czech, the trends in the other regional cities follow this trend (generally growth or downturn) like in Prague but always with some latency.

It is also brightly discoverable that there was a rising of price of older flats in 2007, when the prices of defined standard unit pop forth into their absolutely highest amount in all the regional cities over 1million czech crowns. Even in Ostrava, where it was possible to get a standard unit flat for about 535 thousand czech crowns in 2006, the prices approximate the magic milion bound. In case of Ostrava the prices didn't increase only in the city itself, but in whole wide region grace to the flood of new investment, mainly the new car company and also the approaching motorway connection of Ostrava. Published prices doesn't mirror the quality changes.

The trends in open market rents of flats in the regional cities in the Czech Republic in the period 2000 – 2007

While the prices were increasing the whole monitored period excepting little swing in the year 2005 the trends of open market rents of flats in every regional cities grew only till the year 2004. The open market rents were stopped in the 2005 after the four years increasing. The long-terms increasing of open market rents of older flats amount c. 36% was more significant than the common inflation.

The trends of open market rents were significantly regionally different. Overall the decrease of open market rent was seen namely in the regions surrounding Hradec Králové, Karlovy Vary, Zlín, Plzeň and the capital city Prague including the regions which had been significantly increasing before. The open market rents of the older flats has been stagnating in almost all regions so far. The significant growth was proved in the years 2007 and 2008 in Ostrava and their wide region. The settings could be seen mainly in the big start of the new economic development of region, which was done with the new investment and improvement of the transport connection.

The Project „The regional disparities in the accessibility of housing, their socioeconomic consequences and the proposals for disparition of the regional disparities

Institute for regional information became one of resolvers of the research project under the name „The regional disparities in the accessibility of housing, their socioeconomic consequences and the proposals for disparition of the regional disparities“ (bellow only „Regional disparities“ in the 2006. The project is a part of research platform of The Ministry for regional development under the name WD – THE RESEARCH FOR SOLVING THE REGIONAL DISPARITIES – HOUSING.

The main project goals are:

- Monitoring of the trends (since the 2000) in owned and rented housing and regional disparities of the housing accessibility in the Czech Republic
- Statistic analysis of factors' influence affecting the possible socioeconomic consequences in the accessibility of housing, mainly the consequences on the demographic behaviour of young generation and spatial mobility of households caused by commuting to work, and size of group endangered by social exclusion.
- Introduction of proposals presenting particular measures so that on one hand the general housing accessibility could be higher and on the other hand disparition of the accessibility of housing could be lower.

Performed calculation using the KISEB data verifies the trends in market prices and open market rents, these are very significant factors in accessibility of housing, more significant than the income of households. This way was verified the importance of the accurate precise information of trends in price and open rent market housing.

Conclusion

The objective information about the trends in market prices and open market rents gain a high importance in the present time, when the prices are being effected by the economic depression. The long-term monitoring favourably influences the calming situation, which is mostly dramatized by different special-interest groups. Not only private sector but also banks' sector and other state institutions are very interested in KISEBS's objective information. The KISEB results are in the centre of interest of press which is shown by the number of articles in the daily papers in the Czech Republic.