# Regional Disparities in Availability and Affordability of Housing

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## 1 ABSTRACT

"Regional disparities in availability and affordability of housing, their socio-economic consequences and tools directed to increase availability and affordability of housing and decrease the regional disparities" (in this paper called "Regional Disparities" only) is the official title of project, supported by the Ministry of Regional Development of the Czech Republic under the program "WD – Research on Regional Disparities". The five-years project have started officialy in April 2007 and will be finished in December 2011.

Within the scope of the project we focused our paper on reveal, quantify and anlyze actual regional disparities (among NUTS 3 regions) in availability and affordability of housing in the Czech Republic. The time series describing the development of such disparities are provided. We also analysed the influence of changes in housing conditions, in general, and the changes in regional disparities in housing conditions (availability and affordability of housing), in particular, on their potential selected socio-economic consequences. In this respect we use the original new methodology for measurement of availability and affordability of housing that reflects the particular situation in transitional countries.

The goal of the project is also to identify such factors that, on one side, influence the level of availability and affordability of housing and their regional disparities, and, on the second side, may be effectively shaped by public interventions. The goal is to propose such effective and efficient measures (tools) that would inter alia increase availability and affordability of housing; decrease the regional disparities in availability and affordability of housing and increase availability of particular types of housing especially in regions where there is high discrepance between housing supply and housing need (housing demand) of particular types of housing.

In addition to tools presented later in paper, these are used in this project:

- Monitoring of the trends (since 2000) in owned and rented housing and regional disparities of the housing accesibility in the Czech Republic.

- Statistic anlalysis of factors´ influence affecting the possible socioeconomic consequences in the accesibility of housing, mainly the consequences on the demographic behaviour of young generation and spatial mobility of housholds 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 accesibility could be higher and on the other hand disparition of the accesibility of housing could be lower.

Three institutions from different regions of the Czech Republic are involved in the project solution. In addition to the *Institute for Regional Information, these are namely*:

*the Socio-economics of Housing Research team from the Institute of Sociology, Academy of Sciences of Czech Republic* as the project co-ordinator,

the Department of Urban Engineering of the Faculty of Civil Engineering, Technical University of Ostrava as project participant.

## 2 INSTITUTE FOR REGIONAL INFORMATION

The Institute for Regional Information, Ltd. (herein IRI) is an independent private company oriented on housing issues activities since its establishment. IRI provides since 2000 monitoring of housing prices (as data source for monitoring are used advertisements in newspapers, journals and specialised internet servers) and market rents due to lack of reliable house price data in the Czech Republic. The outcomes of the monitoring are necessary inter alia for housing affordability evaluation. IRI provides also other services for municipalities, regional and central governments, especially in following fileds: consultancy services, regional and urban planning, development services, processing of price-maps etc. IRI project team consists of experts with practical experiences in above mentioned topics.

## 3 SCHEDULE OF PROJECT

### 3.1 Project duration

As already mentioned, "Regional Disparities" is five-years project that have started officialy in April 2007 and will be finished in December 2011. According to project proposal, within the duration of project solving there must be met 12 milestones.

All milestones are logically linked so as to achieve the main objectives of the project. The specific methods and processes through which the objectives are to be achieved are described in the methodology of the project.

### 3.2 Project milestones

#### 3.2.1    The goal 001

Charting the trend of regional disparities as well (among NUTS 3 regions) in the financial affordability of housing for different legal types of housing, market segments and types of Czech households in 2000 – 2006.

#### 3.2.2    The goal 002

Analysis of effects of trend in financial housing affordability and regional disparities in housing affordability among NUTS 3 regions on households potentially threatened by financial nonavailability of housing.

#### 3.2.3    The goal 003

Analysis of impact of trend in financial housing affordability and regional disparities in housing affordability among NUTS 3 regions on demografic bevaior of the young generation threatened by financial inaccessibility of housing compared with the influences of other relevant factors.

#### 3.2.4    The goal 004

Analysis of impact of trend of regional disparities in housing affordability among NUTS 3 regions on the spatial mobility of households to work compared with the influences of other relevant factors.

#### 3.2.5    The goal 005

Analysis of influence of trend of financial and physical housing affordability and regional disparities in the housing availability on the size of groups acutely affected by social exclusion, their social reintegration and the quality of housing in chosen Czech regions.

#### 3.2.6    The goal 006

Charting the trend current regional disparities as well (at NUTS 3 regions level) in the physical availability of housing for different legal types of housing, types of housing, disparities in housing and upgrading of dwellings in 1990 - 2006.

#### 3.2.7    The goal 007

Analysis of trend of physical housing affordability, respectively disparities among NUTS 3 regions in the physical housing availability, especially in relation to the general need for housing, the need for housing of young people and the need for rehabilitation of housing and living environment.

#### 3.2.8    The goal 008

Proposal of possible tools by the state, regions or municipalities that could lead to increased financial housing affordability and thus positively influence the demographic behavior of the young generation and reduce the process of social exclusion.

#### 3.2.9    The goal 009

Proposal of possible tools by the state, regions or municipalities that could lead to a reduction of regional disparities in financial housing affordability and thus positively influence the demographic behavior of the young generation and lead to greater spatial mobility of households to work.

### 3.2.10  The goal 010

Proposal of possible tools by the state, regions or municipalities that could lead to an increase in physical availability of housing and reduce regional disparities in the physical availability of housing.

### 3.2.11  The goal 011

Analysis of regional disparities in the financial and physical housing availability among regions on district level and municipalities chosen inside four Czech regions in 2010. Finding local specifics and clarification of the proposed measures.

### 3.2.12  The goal 012

Continuous updating of development and regional disparities in the financial and physical availability of housing on the main project website.

## 4  PROJECT TOOLS

### 4.1 Comprehensive Information System of Housing Economy (CISHE)

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 that is engaged in data collecting and evaluation under the name *„Comprehensive Information System of Housing Economy" (CISHE)*.

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 availibility 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 housholds 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 wiht 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 creat a standard unit which was set at the begining. 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 residental 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 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 residental 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 availibility 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 same solitary cases higher (the seller can hit unforseen 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 informatic about an average price of standard flat and open market rent too, we need to collect 30 credibles 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 exessives 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 happend just in certain attractive cities.

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 CISHE ´s objective information. The CISHE 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.

## 4.2 Personal field research

Within the scope of the project we also focused on people acutely threatened by loss of home and the related social exclusion.

This research was divided into two parts: in the first one we spoke to welfare officers that work with homeless people and households acutely threatened by social exclusion, in the second part we organized a group discussions with homeless people or people who have gone through the loss of home. Such way of research tried to capture the causes of loss housing but also possibilities of successful reintegration these people to society and-requiring their long-term housing from two different perspectives.

After colection and analysis of all information from many respondents a study was completed (Investigation of groups acutely affected by social exclusion in Prague, Central Bohemia Region, South Moravian Region and Moravian-Silesian Region) which shows what type of people are homeless and excluded from society or acutely threatened by loss of home, it shows reasons why it happened and considers the possibilities for them to obtain and maintain long-term housing.

## 5 PROJECT OUTPUTS, NEW TOOLS DESIGNED FOR IMPROVING AFFORDABILITY OF HOUSING

### 5.1 Urban Calculator (in Czech called "URBANKA")

This tool builds on the analytical results of previous works and also focuses on special problems of physical availability of housing – effect of a new housing by offer of equally supply overhang of new areas for housing in urban planning system in Czech Republic. It is a part of urban problem that generally received little attention to this time.

The tool includes also software that allows to balance the need of areas when creating urban plans and urban analytical supports. The adequacy when preparing the proposal of areas for housing in villages allows firstly to save funds mainly from public sources and secondly to reduce level of market prices for land. The proposed tool takes into account not only individual development options of municipalities but general trends in the housing system in the Czech Republic too.

REGIONAL DISPARITIES IN HOUSING AVAILABILITY AND AFFORDABILITY IN CZECH REPUBLIC
## INTENSITY OF HOUSING IN 2001 - 2008 (TOTAL DWELLINGS)
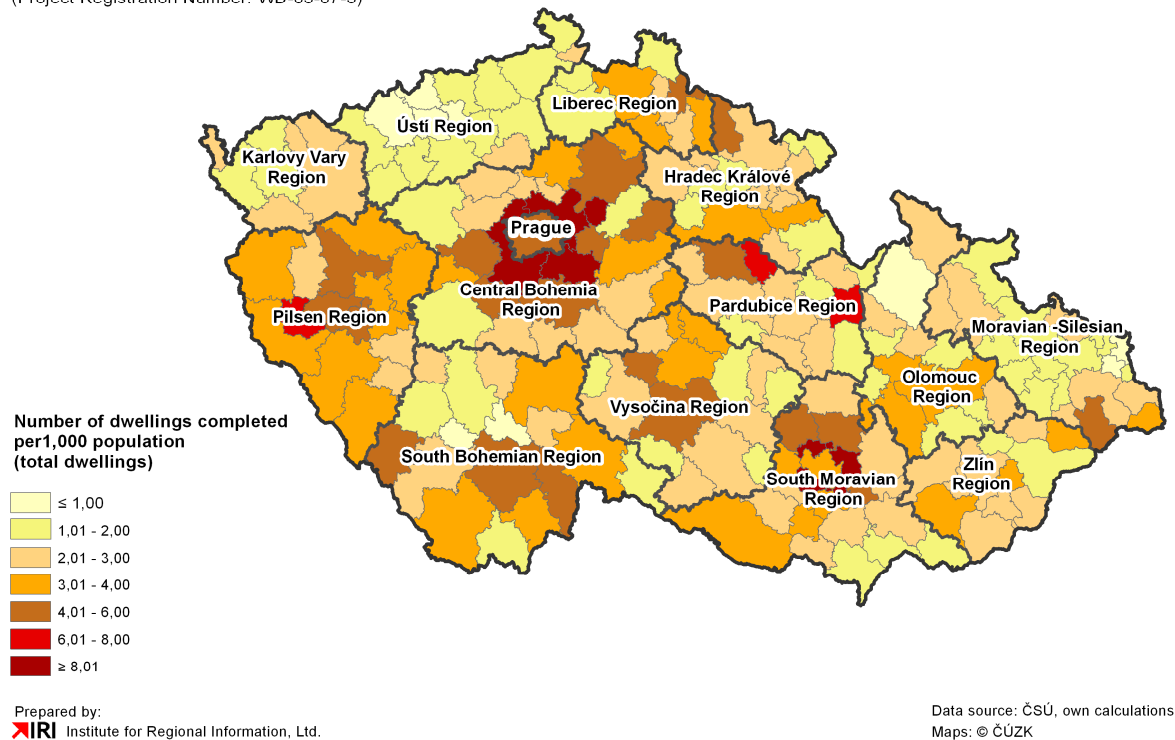(Project Registration Number: WD-05-07-3)

Fig. 1: Intensity of housing in 2001 – 2008 (toal dwellings).

## 5.2 Learning project for careful maintenance of housing stock

Under the project „Regional Disparities" the Department of Urban Engineering of the Faculty of Civil Engineering, Technical University of Ostrava has issued a publication "*Skills upgrading of managers of residential buildings as a tool to sustain the benefit of the housing stock and physical availability of housing*" which should serve as a basis for training managers of the housing stock. It is the output of one of sub-project activities leading to increase physical affordability of housing and reduce regional disparities in the physical availability of housing.

## 5.3 Tools for supported housing

There are several forms of supported housing in Czech Republic. IRI focused on *increase of variability in* residential properties and has developed a new tool to increase the availability of housing with respect to the elderly people.

The goal of this study is to increase variability of residential properties by "cutting large flats". We wanted to verify if the appropriate structural modifications can:

Increase the variability of the existing housing stock by increasing offer of smaller dwellings as a response to current demand by the reversible structural changes that allow re-merge of housing units in future in connection with changed need for space

create social housing for seniors in existing property and municipal housing/residental homes and thus reduce the cost of housing for seniors (reduce the area housing, reduce the cost for services)

maintain housing for older people in the current location ("don´t replant an old tree")

improve the quality of existing housing stock.

Within the scope of the project was developed also the *system of guaranteed housing* that should help to people acutely threatened by social exclusion and loss of home. It is three-staged system of housing for households that are unable in present economic conditions to reach and maintain standard and spatially satisfactory long-term rental housing. These are especially elderly people, young couples, single parents and other people with law incomes or between jobs.
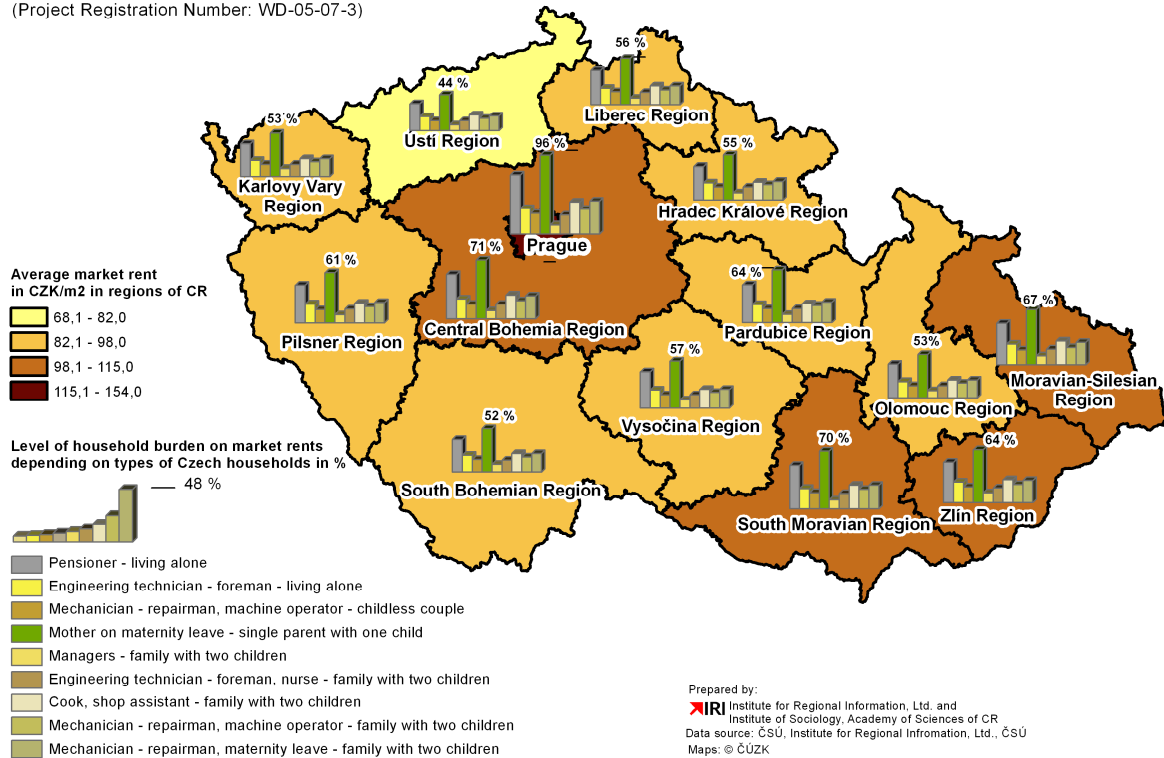
Fig. 2: Level of household burden on market rents in regions of Czech Republic in 2008.

## 5.4 Estimated housing needs for the whole country

Thanks wide range of long-term experience and tools IRI can estimate housing needs for the Czech Republic. Except data obtained by CISHE system, the data from Czech Statistical Office are used for it (Census of Housing, Household Budget Survey) as well as data from Ministry of Labour and Social Affairs (Regional Prices of Labor Statistics).

## 5.5 Others

Within the scope of the project many publications, journal articles, conference papers and cartogramms were created, all of them were presented at the workshops organized by the participant of project.

## 6 CONCLUSION

Housing is a basic human need, its function and level are the result. It is likewise a prerequisite of complicated social, economic and technical relations in the development of society. Housing is a phenomenon closely connected to locality and local needs. It has been connected to the occurance of constructions determined for housing since the time of the foundation and permanent settlement of inhabitants. The localized dimensions of housing are then an essential attribiute to housing analysis.

## 7 REFERENCES

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