Investment attractiveness of the Czech Republic regions in a period of economic crisis

MILAN DAMBORSKÝ, GABRIELA ŘÍHOVÁ

University of Economics, Prague

Churchilla sq. 4, 130 67 Praha 3

The Czech Republic

mdamborsky@centrum.cz, rihg01@vse.cz

Abstract

Investments are the principal factor of the regional and municipal development. Coming or leaving of the significant foreign investor can significantly influence the whole municipal, regional, possibly national economy. Bosch Diesel Ltd. is an example of such an investment which significantly influences competitiveness of the Vysočina region and partly all Czech Republic. In connection with investment attractiveness, not only the problems of investors coming and related decision-making process are important, but also the problems of so called "rooting". "Rooting" can be seen as a formation of the intensive connections of given investment with a given region or location which keeps from "delocalization". Last but not least, the problems of given investment economic development is also important, which can be proved by the fact that the highest direct foreign investment inflow source into the Czech Republic is reinvested profit.

Key words: region, investment, attractiveness, localization, competitiveness

JEL Classification: D21

1 Introduction

Investment attractiveness is openly connected with presence of the localization factors (the factors of investment attractiveness) in the given area. Each place has the specific sources at disposal and each investment is distinguished by the specific needs. Searching for the localization factors (the factors of investment attractiveness) is one of the traditional areas of the regional science. J. H. von Thünen and A. Weber, whose models are put into the concept of perfect competition, are considered to be the first theorists in this field. T. Palander, who occurs with the prize, which is determined by the market position of a seller and extent of the market dominated by him, carried out of these concepts the out-coming modification set into the concept of the monopolistic competition. The sales market comes into focus of the localization factors research, respectively of the investment attractiveness research. Also A. Lösch worked with the concept of monopolistic competition. E.g. Hotteling's model is one of the modern concepts following up these pieces of knowledge.

The theories of city-forming and city-serving services (W. Sombart) and the central place theory (W. Christaller) focused on the field of services localization and relating localization factors. The Christaller's central place theory is topical even in present. E.g T. Mori, K. Nishikimi, T.E. Smith [1] use it practically in the connection with identification between the extent of towns and industry localization.

The considerable specifications show the polarization theories. The author of the general polarization theory is F. Perroux. He says that the economic growth does not arise equally. There are branches driving and driven. The driving branch is characterized by the significant

extent and the intense growth. The branch becomes driving as long as the entrepreneurial subjects can realize the internal and external savings. Particularly as for the savings from the extent. The influence of the driving branch is not only positive, but also negative, e.g. the driving branch takes the factors of production from the other branches [2]. G. Myrdal, A.O. Hirschman or the French developing school representatives J.R. Boudevill, L.E. Davin of J. Paelinck [3] developed this theory in spatial (regional) dimension.

The institutional and behavioral approaches, which question some assumptions of rational behaviour of individuals and companies, represent the unique movement. They point out, that there are high transactional costs, that there is no plan or sufficient knowledge. The result of these considerations is the innovative theories which are very close to the neoclassical ones in their structure or are very different in their content. To institutionalism belong e.g. T. Veblen, J. R. Commons, W. C. Mitchell, J.M. Clark, C. E. A. A. Berle, G. C. Means, K. Polanyi, J. A. Hobson, J. K. Galbraith a G. Myrdal etc. The behavioural approaches also respect the influence of the environment, where there is a risk and uncertainty. A. R. Pred [4] is one of the people who occupies with the question of knowledge. His considerations result from the assumption that each decision, e.g. about the business localization, depends on the amount and quality of information of those people who decide, i.e. owners and managers. They have e.g. the opportunity to learn from their mistakes and their competitor's mistakes.

Furthermore e.g. Wolpert works on this behavioural paradigm and highlights especially some "soft" factors of decision-making and localization. The integral part of the institutional approach represents the theory of learning regions. In connection with localization, it is necessary to mention particularly the contribution of P. Cook who distinguishes globalization I and globalization II. The globalization I represents the effort of big companies to search for the cheapest sources on the global level with a goal to minimize the production costs. The globalization II means the present trend when big companies attempt to find out in the global scale where there is knowledge which would allow the business competitiveness to be stronger and then attempt to approach this knowledge by either localization of their research centre or obtaining the local key talents, etc. [5]

The problem of the localization behaviour of supranational corporations is one of the topics in the localization (investment) behaviour research. S. Holland, who is considered to be the theory author of mesoeconomics theory, concerned with this problem of supranational corporations behaviour. Also the product life-cycle theory concerns indirectly with the problem of localization behaviour of supranational corporations (R. Vernon). D. Massey gives the critical view on the classic localization research of big firms as the individual spatial issues in his spatial divisions of labour theory. The author mentions within this theory, that there are many spatial changes in the time of big economic changes. The significant contribution for the localization activities of supranational corporations theory gives also the "new economic geography". P. Krugman, Nobel Price winner, is considered to be the most important representative of this theory. The new economic geography also concerns with the problems of industrial regions specialization. Very important are also the traffic costs and the costs on labour mobility. The cumulative mechanism is also considered to be an important factor, i.e. "success causes another success" [5], [6].

Within the solving of the economic activities of supranational corporations localization problems, the problem of consequences of big investors existence in region is solved very often. There are mentioned particularly 3 positive effects, e.g. contribution of new technology, demand formation, opening of new markets, etc. [7]. The existence of big firms so influences small firms localization both positively and negatively [8]. In this connection, there is very often mentioned the importance of economies of agglomeration. The economies

of agglomeration in general identified Alfred Marshall. The economies of agglomeration arise at the spatial interaction of companies, households and public sector. The agglomerative savings can be divided on internal and external effects. The internal effect can be understood as the dependencies between the activities, which already exist in the region and the newly arising. These dependencies occur not only between companies, but also within them. The internal effect can be for example the profits from the scope. The external effects arise among the economic participants (companies, households, public sector). These effects can be further divided on location and urbanization effects. The localization effects are dependencies, which arise between the firms of one field. They are external for the companies, but internal from the perspective of the field (branch). The urbanization effects arise between the companies of different fields and between the different activities [4], [9].

The economies of agglomeration grounded the research of the cluster problems. The clusters are defined as reciprocally connected branches concentrated geographically on the demarcated areas.The firms have easier access while searching for the business partners, finances, workers and localization in a cluster increases a firm's renown in the clusters [10], [11], [12].

The agglomerative effects are the frequent topics for research of direct foreign investment localization, ranged from the Japanese automobile industry and USA to localization factors of direct foreign investment determination in the form of laboratories for research and development in the field of pharmaceutics and electrical engineering industry. The agglomerative effects can however differ according to the different field of study [13].

Apart from the factors influencing towards the concentration, they influence also towards the deconcentration. Fujita mentions 3 concentration factors, which are the supplier-customers bonds, strong market, knowledge diffusion, and 2 deconcentration factors, which are factor immobility and concentration costs [13]. The deconcentration processes are supported by the opportunities, which provide information and communication technology. On the basis of this fact, the importance of the clusters is questioned. While questioning the clusters it is mentioned that the clusters do not have anything in common with the geographical proximity, respectively with the spatial relations, but only when the participants in a specific locality have the common codes, projects, language and similar perception of the world [14].

All these theories have one common factor (denominator). This denominator means the direct or indirect searching for the localization factors, respectively the factors of investment attractiveness. From the theories mentioned above it is possible to select out these possible key localization factors (the factors of investment attractiveness): cost of transport (respectively transport accessibility), work (human resources), raw material, distance/proximity of sales market, distance/proximity of the competition, distance/proximity of suppliers, the complementary services, regional economic growth, personal interests of managers and owners, following the conduct of the successful competitors and image of the region.

The following short regional analysis attempts to identify the possible factors increasing investment attractiveness of the regions in the Czech Republic.

Methodology and regional analysis data of investment attractiveness of the regions in the Czech Republic

In this work the methods of the plain analysis, synthesis, which is used in the end of the contribution, and the expert method for category of individual indicators determination are used. The limited number of statically observed economic indicators on the regional level in

the Czech Republic is a very important limiting factor. The considerable part of these indicators is published with significant time delay.

The index including 8 indicators – unemployment rate (source: MoLSA - Ministry of Labour and Social Affairs), long-term unemployment share (more than 5 months) on overall unemployment of the region (source: MoLSA), the average hourly earnings in entrepreneurial sector (MoLSA), the number of the registered economic subjects per 1 000 inhabitants (RISY – Regional Information System), development of the number of the registered economic subjects per 1 000 inhabitants (RISY), gross national product per 1 inhabitant (CSO), formation of gross fixed capital per 1 inhabitant (CSO, Czech Statistic Office), direct foreign investment (CNB).

On the basis of the expert discussion (discussing group consisted of Milan Damborský, Gabriela Říhová, René Wokoun and Jana Kouřilová), the following indicator expert method) was drawn up:

$I_x = 0,2 * UN_x + 0,05 * UNL_x + 0,15 * INCB_x + 0,1 * NRL_x + 0,1 * NRLD_x + 0,1 * GDRR_x + 0,15 * RFC_x + 0,15 * FDI_x$

UN_x - unemployment rate of the x-region,

UNL_x – share of the long-term unemployment (over 5 months) on the overall unemployment of the region of the x-region

$INCB_x$ – average hourly earning in the entrepreneurialsector of the x-region,

NRL_x – the number or the registered economic subjects per 1 000 inhabitants of the x-region,

$NRLD_x$ – development of the number of the registered economic subjects per 1 000 inhabitants of the x-region,

$GDRR_x$ – gross national product on 1 inhabitant of the x-region,

RFC_x – formation of the gross fixed capital on 1 inhabitant of the x-region,

FDI_x – direct foreign investment of the x-region.

Values of the individual indicators at the individual regions are relativized to a region with the highest values (see chart No. 1 and 2)

With help of the standard deviation, the values of the individual indicators are corrected (the value given by an expert is divided by the standard deviation). In this way the value of the indicators with the lower standard deviation is increased (see the chart No. 2)

The modified index looks like this:

$I_{xu} = 0,164 * UN_x + 0,0639 * UNL_x + 0,2328 * INCB_x + 0,1319 * NRL_x + 0,0903 * NRLD_x + 0,0982 * GDRR_x + 0,1247 * RFC_x + 0,0942 * FDI_x$

The results after the recount are mentioned in the chart No. 3. The overall results are the component of the chart No. 4.

Chart No. 1: Statistical data for assessment of investment attractiveness

	Region	Unemployment rate (May 2009)	Share of long-term unemployment rate(more than 5 months) on overall unemployment of the region (March 31st 2009)	Average hourly earnings in entrepreneurial sector (1 quarter 2009, in Czech crowns)	The number of the registered economic subjects per 1 000 inhabitants (2008)	Development of the number of the registered economic subjects per 1 000 inhabitants (2008/2005)	Gross national product per 1 inhabitant (2007, in Czech crowns)	Formation of gross fixed capital per 1 inhabitant (2007, in Czech crowns)	Direct foreign investment per 1 inhabitant – accumulated total up to December 31st, 2007 (in thousand of Czech crowns)
Statistical date									
1.	Capitol City of Prague	2,80%	31,60%	205,47	361	5,82%	709 125	201 713	1698,4
2.	Jihočeský	6,40%	32,50%	123,27	230	3,91%	300 158	64 092	112,6
3.	Jihomoravský	8,60%	45,50%	139,34	229	5,24%	318 863	73 832	73,4
4.	Karlovarský	10,10%	41,10%	126,79	249	5,22%	240 901	61 073	58,7
5.	Královéhradecký	6,70%	32,50%	124,98	226	3,98%	291 472	55 692	54,5
6.	Liberecký	10,20%	40,60%	132	255	2,75%	279 775	55 630	121,9
7.	Moravskoslezský	11,30%	49,40%	133,39	183	4,92%	286 580	72 813	131,7
8.	Olomoucký	10,10%	36,30%	128,4	202	3,96%	257 069	75 840	42,3
9.	Pardubický	7,70%	33,70%	129	205	3,90%	290 693	50 694	79,4
10.	Plzeňský	6,80%	37,80%	134,84	231	3,90%	322 162	97 485	106,3
11.	Středočeský	5,60%	34,80%	146,92	233	2,15%	322 364	74 972	194,8
12.	Ústecký	12,40%	50,90%	135,59	202	3,96%	275 837	59 475	127
13.	Vysočina	8,50%	37,80%	124,1	187	5,35%	287 879	50 577	124,4
14.	Zlínský	8,90%	42,40%	123,87	219	3,65%	283 366	59 385	62,4

Source: CSO, MoLSA, RISY, CNB

Chart No. 2: Percentual value towards the best region and importance of the indicators

	Region	Unemployment rate (May 2009)	Share of long-term unemployment rate(more than 5 months) on overall unemployment of the region (March 31st 2009)	Average hourly earnings in entrepreneurial sector (1 quarter 2009, in Czech crowns)	The number of the registered economic subjects per 1 000 inhabitants (2008)	Development of the number of the registered economic subjects per 1 000 inhabitants (2008/2005)	Gross national product per 1 inhabitant (2007, in Czech crowns)	Formation of gross fixed capital per 1 inhabitant (2007, in Czech crowns)	Direct foreign investment per 1 inhabitant – accumulated total up to December 31st, 2007 (in thousand of Czech crowns)
Percentual value towards the best region									
1.	Capitol City of Prague	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
2.	Jihočeský	43,75%	97,23%	59,99%	63,71%	67,18%	42,33%	31,77%	6,63%
3.	Jihomoravský	32,56%	69,45%	67,82%	63,43%	90,03%	44,97%	36,60%	4,32%
4.	Karlovarský	27,72%	76,89%	61,71%	68,98%	89,69%	33,97%	30,28%	3,46%
5.	Královéhradecký	41,79%	97,23%	60,83%	62,60%	68,38%	41,10%	27,61%	3,21%
6.	Liberecký	27,45%	77,83%	64,24%	70,64%	47,25%	39,45%	27,58%	7,18%
7.	Moravskoslezský	24,78%	63,97%	64,92%	50,69%	84,54%	40,41%	36,10%	7,75%
8.	Olomoucký	27,72%	87,05%	62,49%	55,96%	68,04%	36,25%	37,60%	2,49%
9.	Pardubický	36,36%	93,77%	62,78%	56,79%	67,01%	40,99%	25,13%	4,67%
10.	Plzeňský	41,18%	83,60%	65,63%	63,99%	67,01%	45,43%	48,33%	6,26%
11.	Středočeský	50,00%	90,80%	71,50%	64,54%	36,94%	45,46%	37,17%	11,47%
12.	Ústecký	22,58%	62,08%	65,99%	55,96%	68,04%	38,90%	29,48%	7,48%
13.	Vysočina	32,94%	83,60%	60,40%	51,80%	91,92%	40,60%	25,07%	7,32%
14.	Zlínský	31,46%	74,53%	60,29%	60,66%	62,71%	39,96%	29,44%	3,67%
	Standard deviation	0,1937	0,1242	0,1023	0,1204	0,1759	0,1616	0,1910	0,2528
Importance of the indicator – determined by the expert method									
100%		20%	5%	15%	10%	10%	10%	15%	15%
Modification of the importance of the indicators with help of standard deviation (importance/standard deviation)									
629,82%		103,27%	40,25%	146,63%	83,09%	56,86%	61,87%	78,53%	59,34%
Recount – sum of the importance of the indicators = 100									
100,00%		16,40%	6,39%	23,28%	13,19%	9,03%	9,82%	12,47%	9,42%

Source: CSO, MoLSA, RISY, CNB, recalculation by the author

Chart No.3: Points evaluating investment attractiveness by the regions for the individual territories

	Region	Unemployment rate (May 2009)	Share of long-term unemployment rate(more than 5 months) on overall unemployment of the region (March 31st 2009)	Average hourly earnings in entrepreneurial sector (1 quarter 2009, in Czech crowns)	The number of the registered economic subjects per 1 000 inhabitants (2008)	Development of the number of the registered economic subjects per 1 000 inhabitants (2008/2005)	Gross national product per 1 inhabitant (2007, in Czech crowns)	Formation of gross fixed capital per 1 inhabitant (2007, in Czech crowns)	Direct foreign investment per 1 inhabitant – accumulated total up to December 31st, 2007 (in thousand of Czech crowns)
Point evaluating investment attractiveness by the regions for the individual territories									
1.	Capitol City of Prague	16,40%	6,39%	23,28%	13,19%	9,03%	9,82%	12,47%	9,42%
2.	Jihočeský	7,17%	6,21%	13,97%	8,40%	6,06%	4,16%	3,96%	0,62%
3.	Jihomoravský	5,34%	4,44%	15,79%	8,37%	8,13%	4,42%	4,56%	0,41%
4.	Karlovarský	4,55%	4,91%	14,37%	9,10%	8,10%	3,34%	3,77%	0,33%
5.	Královéhradecký	6,85%	6,21%	14,16%	8,26%	6,17%	4,04%	3,44%	0,30%
6.	Liberecký	4,50%	4,97%	14,96%	9,32%	4,27%	3,88%	3,44%	0,68%
7.	Moravskoslezský	4,06%	4,09%	15,11%	6,69%	7,63%	3,97%	4,50%	0,73%
8.	Olomoucký	4,55%	5,56%	14,55%	7,38%	6,14%	3,56%	4,69%	0,23%
9.	Pardubický	5,96%	5,99%	14,62%	7,49%	6,05%	4,03%	3,13%	0,44%
10.	Plzeňský	6,75%	5,34%	15,28%	8,44%	6,05%	4,46%	6,03%	0,59%
11.	Středočeský	8,20%	5,80%	16,65%	8,51%	3,33%	4,47%	4,63%	1,08%
12.	Ústecký	3,70%	3,97%	15,36%	7,38%	6,14%	3,82%	3,68%	0,70%
13.	Vysočina	5,40%	5,34%	14,06%	6,83%	8,30%	3,99%	3,13%	0,69%
14.	Zlínský	5,16%	4,76%	14,04%	8,00%	5,66%	3,93%	3,67%	0,35%

Source: CSO, MoLSA, RISY, cNB, recalculation by the author

Chart No. 4: Order of the regions according to the evaluating of investment attractiveness

Order of the regions		Points
1.	Capitol City of Prague	100,00%
2.	Plzeňský	52,94%
3.	Středočeský	52,68%
4.	Jihomoravský	51,45%
5.	Jihočeský	50,57%
6.	Královéhradecký	49,44%
7.	Karlovarský	48,46%
8.	Vysočina	47,74%
9.	Pardubický	47,71%
10.	Moravskoslezský	46,78%
11.	Olomoucký	46,66%
12.	Liberecký	46,01%
13.	Zlínský	45,56%
14.	Ústecký	44,76%

Source: author

Features of investment attractiveness of regions

The most attractive region in the Czech Republic is, without any doubts, the Capitol City of Prague which reached the most the highest values in all observed indicators. Plzeňský, Středočeský, Jihomoravský, Jihočeský and Královéhradecký regions are the next investically attractive regions determined by the expert method.

The most investically attractive region in the Czech Republic is the Capitol City of Prague. It is the region with the highest social-economic level. In this respect it makes the individual category. The Capitol City of Prague gains from its status the capitol city of the Czech Republic. Positive development does not threaten a single fact that in comparison with other regions it has limited possibilities to obtain the public means of subsidies because this region does not belong to the Goal I of economic and social cohesion politics in EU for the period from 2007 till 2013.

Prague is the capitol and the biggest city in the Czech Republic and the cohesion region and territory simultaneously, it is the natural center of economics, culture, education (8 universities), politics, social-economic urban structure of the country, health service (25 hospitals) therefore we determine its status as considerably specific. The region area is also characterized by the location on the important transit routes. Prague is a central point for most of the motorway routes, it is also a very important railway junction, goods waterway transport and air junction.

Prague has a specific position in economics of the Czech Republic, it makes almost one-fourth of the national GNP. The level of GNP is more than twice higher over the national

averages, Prague is the biggest regional labour market in the Czech Republic, the region is characterized by the high degree of the workforce qualification, in Prague there lives move than one-fourth academically educated population of the Czech Republic, the typical feature is the difference of the regional economic structure within the Czech Republic, the primary and secondary sector has a wider extent than the national average, on the contrary, the tertiary sector of services is highly developed. Tourism belongs to the sectors with the highest dynamics which significantly contributes to the regional GNP formation and its overall development, significant development achieved also the service and building industry sector. But there is a strong science potential. On the contrary, the low permeability of city communication, lack of alternate roads, i.e. transport infrastructure, belongs among the weaknesses.

According to the conducted analysis (on the basis of the given index), the Plzeňský region is the second investically most attractive region of the Czech Republic. It gains from its economic localization, especially from its good traffic approach to the most significant growth pole in the Czech Republic (the D5 highway), the capitol Prague and near the economically strong federal country, Bavaria. The economically important centre Plzeň is the region centre. The region is characterized by the relatively low density of population (the second lowest after the Jihočeský region). The economic deployment of the economic activities in the territory is uneven – almost one-third of the industry subjects are found in Plzeň. In Plzeň, there is also a quality network of schools, i.e. the network of elementary and high schools, two universities. Among the weaknesses belong neglected network of communication and low level of regional facilities by the technical infrastructure, insufficient services in the countryside and in some border areas [15])

The Středočeský region achieved the third highest index value. The regional centre comprises of the capitol Prague. The whole location is predetermined to the close socio-economic dependency to the capitol (high daily migration of population heading to work in Prague, etc.) thanks to its proximity to Prague. The trend of regional demographic development shows in a long term the growth of population. In the Středočeský region, there is a very dense network of communication (the main railway and highway transit system). The production of this region has a complementary character to the production of the capitol Prague. In the region, there is an important modern industry complex – ŠKODA CAR, Inc. in Mladá Boleslav, TPCA Czech, Ltd. in Kolín, Aero Vodochody, Spolana Neratovice. Among the strength of the region belong, apart from the already mentioned, the favourable geographical location in the centre of the Czech Republic, closeness to Prague (the biggest local market and the most dynamically growing centre in the Czech Republic), high road and speed communication density, an existence of the developing areas for business, the diversified economics with the potential of job production, qualified manpower, created network of schools.

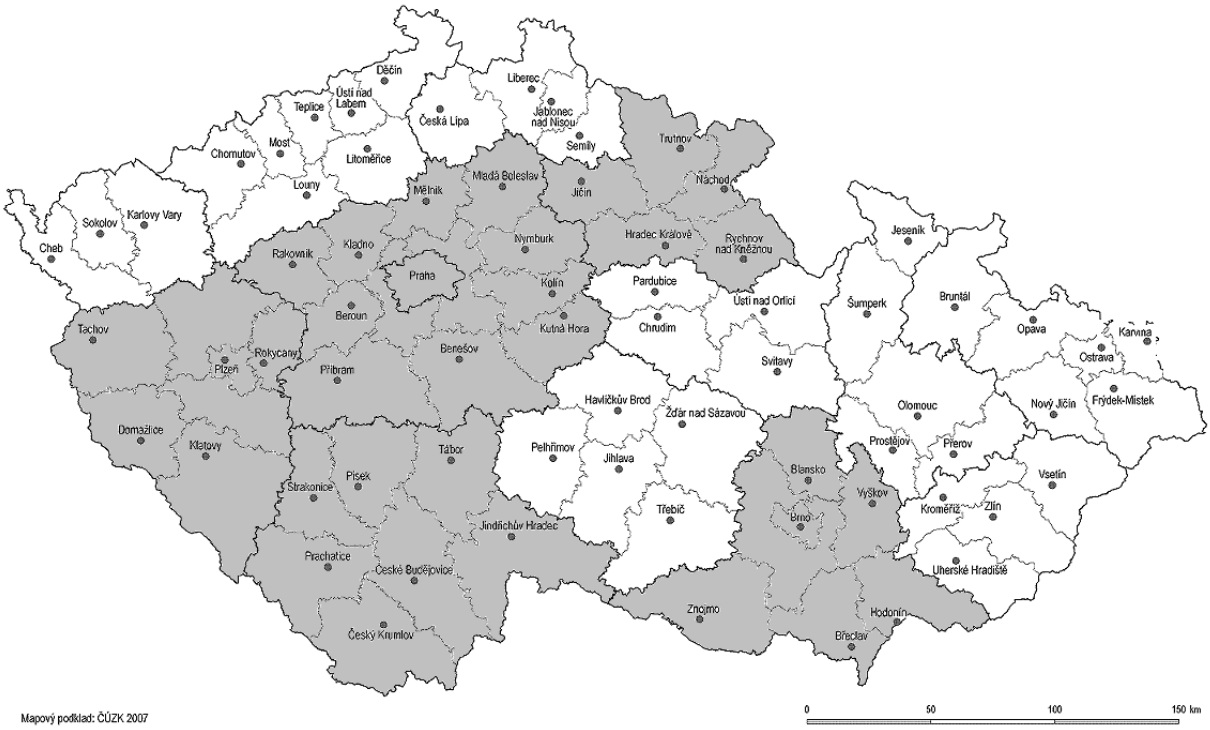
According to the given index, the Jihomoravský region was determined as the fourth most investically attractive region. The region is well connected with the railway and road system not only of the Czech Republic but also of the Austria and Slovakia road system. It belongs to the agricultural areas but with developed basis of services and industry, especially manufacturing industry. The centre of the Jihomoravský region, Brno, is one of the main centres of tertiary education, fairs and judiciary. The Jihomoravský region is characterized by the technically educated population. The problem of the Jihomoravský region is marginalized areas, especially Znojmo and Hodonín.

The fifth member of the investically attractive regions is the Jihočeský region. There is a high share of the primary sector. Because of the absence of the highway network (incomplete D3 highway) and the slow progress of modernization of the IV transit railway corridor in the

stage Prague – České Budějovice, economics of the region is significantly limited. The strength of the Jihočeský region is the favourable geographical location [15]. It has borders with highly developed Austria and Germany. The Jihočeský region is characterized by the low crime rate.

The Královéhradecký region is the fifth region which is the last region in the group of investically attractive regions. It belongs to the most industrialized areas in the Czech Republic and has industry with long-term tradition. The favourable location for transportation of agglomeration Hradec Králové including heavy road and railway system of the region belong to the strengths. The region has the sufficient amount of developing areas at disposal (industrial zone, brownfields) [15].

The map No. 1 defines the group of the specific investically attractive regions



The map No. 1: Demarcation of entrepreneurially (investically) attractive regions
Source: the authors

Conclusion

The investically attractive regions are characterized by the good connection to the most important growth pole of the Czech Republic, i.e. the capitol Prague. The exception is the Jihomoravský region, where there is the second most important growth centre, the city Brno. Closeness to transport of the well accessible economic pole can be determined as the possible important factor of investment attractiveness of the region. This also support the fact that in given regions there are present the important regional growth centers – for the Středočeský region it is the capitol Prague, in the Plzeňský region it is the city Plzeň, in the Jihomoravský region it is Brno and in the Královéhradecký region it is the city Hradec Králové. The exception is the Jihočeský region. České Budějovice belong to the less important regional metropolis. This all is compensated by the good strong connection to the capitol Prague.

The demarcated investically attractive regions are also characterized by the developed complementary services (financial institutions, schools, cultural facilities, shopping malls and campuses, etc.), therefore also this factor can be determined as the possible factor of investment attractiveness.

The demarcated regions (except the Jihočeský region) are characterized by the high level of the regional demand (measured by the average hourly earnings in the entrepreneurial sector). But according to the methodology of the investically attractive region demarcation, we can't deduce any conclusions considering the sales market factor.

The given regions have a very positive image among economists [15]. Therefore we can speculate in this situation about the image of a region factor. This factor can be significant in connection with the importance of intuitive decision-making.

In connection with the region demarcation we can also consider the importance of the localization factor of transport accessibility. The good transport accessibility also have the capitol Prague, the Jihočeský region, The Plzeňský region, the Jihomoravský region and partly also the Královéhradecký region. On the contrary, transport accessibility of the Jihočeský region is relatively poor.

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