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INNOVATION OF THE COURSE REGIONAL STRUCTURES AND DEVELOPMENT OF THE CZECH REPUBLIC

Studying Text

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INTRODUCTION

Dear students,

welcome in the course Regional Structures and Development of the Czech Republic. You have a background text material relevant for the course in your hands now. This text is intended to help you orient in our common lessons. The fundamental findings, formulated in the text, will be more deeply discussed during our lessons. Moreover, a number of tasks are prepared for you. Please, enjoy your reading. ©

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1. Regions of the Czech Republic

There are various viewpoints how to deal with regions in the Czech Republic. Our focus is oriented towards two partial aspects:

- position of the Czech Republic in transnational territorial structures,
- factors of internal differentiation of the Czech Republic territory.

1.1 Czech Republic in Transnational Territorial Structures

The Czech Republic is a rather small state located in the Central Europe territory. In this context, the location of the Czech Republic may be evaluated in two dimensions. The geopolitical dimension is the first one, the economic dimension the second one.

From the geopolitical viewpoint, the Czech Republic is located in the territory which is historically affected by interests of global superpowers – Germany, Russia, or the United States. This fact is naturally connected with a number of induced implications. Thus, a first question for you may be formulated: "How would you evaluate the geopolitical location of the Czech Republic?" The following box should be used for noting your comments. Such an approach will be strictly used in the following text.

Question 1:









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It is noteworthy that the Czech Republic is an integral part of several geopolitical theories. Its location in Central Europe is the main motive of this fact. The theories formulated by *Halford J. Mackinder* and *Nikolas Spykman* belong to the most influential ones. The both authors distinguish two types of power in their theories – continental and sea powers. Note that the continental power is geographically situated in Central Asia, in the so called *Heartland* and there is no influence of the sea power over the continental one. In addition, there is a persistent conflict between the two powers.

Subsequently, *Mackinder* claims that the sovereign over the continental power tends to dominate the whole world. To dominate the Heartland, Central Europe is an extremely important territory. On this basis, *Mackinder* accentuates the need to prevent domination of one state over Central Europe. After the WW1 *Mackinder* recommended formation of a number of small states to prevent the creation of any superpower in Central Europe which could have joined Russia to dominate the world. On this basis Czechoslovakia as an independent state was founded.

On the contrary, *Spykman* reacts at the events of the WW2. His thinking was the main inspiration for the post-war U.S. foreign policy. It is noteworthy that also the Soviet Union followed the same path. *Spykman* claims that the conflict between the continental and sea powers proceed in a transition zone (the so called *Rimland*) and that Central Europe is a part of the *Rimland*. Subsequently, *Spykman* claims that the sovereign over the *Rimland* may gain global dominance. Based on these ideas, a number of political negotiations on the future of Central Europe were led after WW2.

Case Study – Radar in the Brdy Highlands

The roots of the radar case study in the Brdy Highlands may be followed in the year 1972 when the United Stated and the Soviet Union signed the ABM agreement on prevention of antimissile protection. Ten years later, the United States initiated considerations on a new strategic antimissile system against the Soviet Union – the so called Star Wars Strategy. However, the end of the Cold War changed the U.S. approach once again. The so called Rogue States became the main perceived enemy of the United States. But the situation of the









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Soviet Union and the Rogue States is completely different. In the latter case, there are only limited missile threads. Moreover, the U.S. policy anticipates that it is not possible to negotiate with the Rogue States. Altogether, there is a need of a rather limited National Antimissile Protection. Consequently, the United States abolished the AMB agreement.

The question of the "Czech radar" was first posed in 2002 when consultations on the role of the Czech Republic in the U.S. Antimissile Protection System were initiated. In these consultations, technical and spatial aspects of the radar were emphasised. Note that the military areas of Brdy, Libavá a Bolatice were the most often cited sites where to locate the radar and the Brdy Highland were chosen in final decision. Subsequently, the Czech Government received the official requirement by the U.S Government to join the U.S. Antimissile Protection System in 2007. And just in this year, the official negotiations were initiated. The destiny of these negotiations is a different story.

Source: BÁRTEK, T. Americký radar v ČR: Obsahová analýza procesu konstrukce mediálních sdělení. Brno: Masarykova univerzita v Brně, 2009.

Let us turn our attention to a second question for you. How would you evaluate economic location of the Czech Republic? Are there any difference compared with the geopolitical location?

Question 2:









1.2 Territorial Differentiation of the Czech Republic

There are a number of economic, social and environmental factors of territorial development in the Czech Republic. However, some typical spatial patterns of various aspects of development may be identified in the Czech Republic. Subsequently, regional typologies may be defined based on these spatial patterns. If you know the essence and nature of them, then it is not a problem for you to explain development disparities in the Czech Republic. So let us look a bit closer at spatial patterns of development in the Czech Republic. The book written by professor Hampl¹ will be our guidebook on this way.

Altogether, we may distinguish three fundamental factors of territorial differentiation in the Czech Republic:

- Settlement hierarchy is the first factor. What does it mean? Easy said, the outside positives first flow into the capital city of Prague in the Czech Republic. Subsequently, the other large cities are impacted, then smaller cities and so on.
- Location in geographical zones is the second factor. What does it mean? Easy said, the outside positives first flow to the Western part of the Czech Republic and only later the are diffused into the Eastern part (the so called West-East gradient).
- The inherited specialization is the third factor. What does it mean? Easy said, inherited specialization changes the spatial patterns of the two abovementioned factors by the lagging position of the regions which inherited structural economic problems from the past. In the case of the Czech Republic, the inherited specialization in heavy industries from the socialism era is the most striking anomaly of this kind.

It is possible to define regional typologies at various spatial levels. The so called "kraje" represents the most relevant regional level in the Czech Republic when the administrative viewpoint is followed. Development disparities measured by the variable GDP per capita are

¹ HAMPL, M. Regionální diferenciace současného socioekonomického vývoje v České republice. *Sociologický časopis/Czech Sociological Review*, 2007, 43(5), 889-910.









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often discussed on the "kraj" level in the Czech Republic. What are the specifics in this regard? We may summarize them as follows:

- The dominant position of the Prague Capital is the most striking feature of "kraj" differentiation in the Czech Republic, if measuring the variable GDP per capita. If the whole Czech Republic is the level of 100 then the Prague Capital reaches the value of almost 220, thus 2.2 times more.
- All other regions on the "kraj" level are below the 100 value of the Czech Republic, if measuring the variable GDP per capita. It is noteworthy that some disparities may be followed also in this respect. Central Bohemia and South Moravia are traditionally given as more developed regions on the "kraj" level. On the other side, Karlovarský, Ústecký a Moravia-Silesia Regions have rather lower figures of the GDP per capita variable. Please think about explanation of these disparities using our three fundamental factors of territorial differentiation in the Czech Republic.

Based on the abovementioned findings we formulate the third question: "What is the secret of the Prague Capital to be so dominant in regional development of the Czech Republic?"

Question 3:











1.3 Relations between natural and administrative regionalization of the Czech Republic

Our attention has been oriented on the questions related to natural regionalization of the Czech Republic so far. However, administrative regionalization is not fully compatible with natural regionalization of the Czech Republic. So what are the main features of administrative regionalization of the Czech Republic?

The Czech Constitution, article 99, divides the Czech territory in municipalities – the so called fundamental territorial self-governed units – and "kraje" – the so called higher territorial self-governed units. There are also other administrative levels between the two ones given. They include the so called administrative counties of the municipalities with extended power and the so called administrative counties with responsible municipal office. There is also one special regional level, the so called "okresy". "Okresy" used to be an administrative level in the Czech Republic in the 1990s. However, this function was abolished in 2003 and replaced by the other administrative levels – especially "kraje" and administrative counties of the municipalities with extended power. "Okresy" are used for statistical purposes now.

Besides the "Czech version" of administrative regionalization, the European system of territorial organization, the so called NUTS and LAU system, is also important for the Czech Republic. In this regard, the levels NUTS 1, NUTS 2, NUTS 3, LAU 1 and LAU 2 are of relevance. The importance of the NUTS 2 level, the so called cohesion regions, should be especially emphasised. Why? There is close relationship between the NUTS 2 level on one hand and the opportunities to draw funds from the most generous objective of the EU cohesion policy. Finally, the fourth question for you: "Could you explain relations between the "Czech" and "European" system of administrative regionalization of the Czech Republic?"

The relationship between natural and administrative regionalization of the Czech Republic is anything else than straightforward. Borders of the regions delimited according to natural regionalization on one hand and administrative regionalization on the other are not the same. A number of problems are caused by this fact. Le us mention at least two of them:









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- 1. The first problem is related to the fact that natural regions of the Czech Republic are defined on the basis of spatial mobility of people for employment, schools, or commercial services. On the contrary, administrative regions of the Czech Republic are defined artificially, though spatial mobility of people is highly important. However, there are several other factors in the decision-making process. Consequently, differences between natural and administrative regions may cause that people from some border municipalities (e.g. Rožnov pod Radhoštěm) go for job to other regional city (e.g. Ostrava) than for public services (e.g. Zlín).
- 2. The second problem is connected with an extremely high number of municipalities in the Czech Republic. Consequently, a complicated structure of partial levels has to be created. Professor Hampl claims that the optimal theoretical model is consisted of 1 thousand municipalities. In fact, there are more than 6 thousand municipalities in the Czech Republic.

Question 4:	









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Finally, our fifth question is related to the so called regions with a concentrated state support. This type of regions is mentioned in the most relevant legislative and conceptual documents related to regional development in the Czech Republic – the Law on Regional Development Support and Regional Development Strategy. The question for you is simple: "What types of regions with a concentrated state support are given in these two documents? What special levels are relevant for their determination?"

Question 5:











2. Settlement and Regional Development of the Czech Republic

Also the theme of Czech settlement may be viewed from several stances. Our focus is on three aspects of this kind:

- trends in settlement development and regional specifics of Czech settlement,
- evaluation of urbanization processes and actual problems of Czech urban settlement,
- trends in development and actual problems of Czech rural settlement.

2.1 Trends in settlement development and regional specifics

There is a long history of settlement development in the Czech Republic. Natural conditions were the main location factor of the oldest settlement. Thus, the main historical settlement centres need to be found in lowlands of Central Bohemia and South Moravia, and in the Labe, Ohře and Morava valleys. On the contrary, mountainous areas were rarely settled in this time. In this regard, situation changed in the 12th century when German colonization started. Note that foundation of cities in the preindustrial era was conditioned by a good trade location or by a decision of sovereigns, aristocracy or church. However, the advent of industrialization in the 19th century brought another shift in this situation. The newly industrialized regions experienced heyday of their development. Their factories became a magnet for immigrants. Consequently, the position of cities in settlement hierarchy changed markedly.

The socialist era substantially changed settlement development of the Czech Republic. The main goals of central planning were reduction of regional disparities and state support to selected industrial cities and regions in North Moravia and North Bohemia regions. In this way, however, the natural migration flows, including suburbanization, were suppressed. Some cities and regions experienced inadequate development and this fact created assumptions for their structural problems later. In addition, close geographical areas on the "okres" level related to people mobility became a typical feature of Czech settlement. Finally, loss of German population in border areas substantially influences Czech settlement system. A









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number of small municipalities were completely depopulated and subsequent movement of people could not offset the losses.

It is obvious that settlement system of the Czech Republic is substantially determined by migration processes. In this way, the first question of this chapter is formulated: "Which size categories of municipalities gained population from migration in the socialist era? On the contrary, which size categories of municipalities lose population from migration in the socialist era? Are there any changes after 1989?"

	Question 1:
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To deeply understand changes in migration balance for particular size-categories of municipalities, the determinants of settlement development must be recognized. The following ones should be mentioned:

- the so called central settlement system strategy in the socialist era and its abandonment after 1989,
- new housing construction concentrated in housing estates of cities (the so called complex housing construction) and restrictive policy related to individual housing construction, including strict protection of agricultural soil,
- non-existence of land market, mortgage market, and generally lack of capital for housing construction in the socialist era with changes after 1989,
- changing lifestyle after 1989 resulting in intensified suburbanization processes and new individual housing construction on the urban fringe.

How to describe the Co central settlement system strategy in the socialist era? Easy said, the so called central municipalities were supported in this strategy. These municipalities included especially medium-sized cities where financial means were oriented. Thus, industrialization, complex housing construction, infrastructure construction, civic services were preferentially directed in these cities. It is noteworthy that central settlement system determined 11 regional agglomeration and 23 urban regions but a lack of money prevented a more generous development of these areas. Moreover, non-central municipalities were rather neglected with respect to their development needs.

To conclude this subchapter let us focus on some typical features of Czech settlement system:

- 1. The average population density of the Czech Republic is 130 inhabitants per km². Population is distributed unevenly in accord with the settlement hierarchy.
- 2. A limited number of settlement units have a decisive share on all settlement functions. Economic activities in quarter sectors have the highest level of spatial concentration, followed by other economic activities, jobs and housing.
- 3. Prague has a dominant position as the core city of Czech settlement system. Its position is less strong if metropolitan areas are considered. In this regard, the dominant position of Tento projekt je spolufinancován Evropským sociálním fondem a státním rozpočtem České republiky.









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Prague is more counterbalanced by the strength of metropolitan areas in Northern Moravia and Northern Bohemia. Note that the Prague's dominant position prevents creation of another dominant city as is the case of Moravian settlement centres – Brno and Ostrava.

4. There are a number of regional specifics on the "*kraje*" level.

Followed the abovementioned findings, we formulate the second question for you: "How

would you characterize the settlement hierarchy of the Czech Republic?"

Question 2:		









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The last theme of this subchapter deals with changing number of municipalities in the Czech Republic. In this regard, the number of Czech municipalities had been decreasing until 1989. After 1989 this trend was reversed and there are a stable number of municipalities now. Our third question asks: "What are the reasons of these changes?"

2.2 Actual problems of urban settlement in the Czech Republic

Current urban system of the Czech Republic is historically created as a combination of concentration (urbanization) and deconcentration (suburbanization) processes. These processes were strengthened especially during industrialization period. When a new manufacturing production was initiated the number of inhabitants increased substantially. Thus, metropolitan area of Czech cities was extended until the end of the WW2. Note that











migration of inhabitants to the hinterland of cities was also motivated by the goal to escape the unhealthy, overcrowded inner cities and to live in sites with better environment.

Socialism brought an important change in this regard. Suburbanization processes were suppressed substantially in favour of urbanism. Thus, concentration of people in cities with more than 10 thousand inhabitants became a typical feature of settlement system development in the socialist era. Note that prefabricated housing estates were the main location for migration.

The situation shifted once again after 1989. In this time period, barriers of suburbanization were removed. Properties, including housing units, were transferred to private ownership. Price and quality of housing became highly differentiated because of newly implemented market mechanisms (e.g. price deregulation). Moreover, financial tools to support housing construction or purchase (e.g. mortgage market) were introduced.

Altogether, suburbanization has become the most striking process in internal structure of Czech cities after 1989. The intensity of this process is naturally spatially differentiated and it follows the Czech settlement hierarchy. Thus, suburbanization processes are of the highest intensity in Prague and its surrounding. Generally, Prague has much wider development opportunities compared with other Czech cities. It is noteworthy that a number of Prague's brownfields were redeveloped by market forces. This is not a typical process in other Czech cities where some public interventions are necessary. Besides suburbanization, also deurbanization and reurbanization processes may be identified in the Czech Republic. See the following case study of Prague for a complex understanding of this issue.

Case study – urbanization processes in Prague

Prague city centre is the place where the most dynamic changes after 1989 may be observed. The process of commercionalization is the most visible one. This process is connected with new commercial activities located in the city centre, such as administrative activities, retailing, or tourism. Note that these activities tend to replace residential function of city centre. Simultaneously, physical upgrading of buildings may be observed in the Prague city









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centre. On the other side, some new problems arise. These include social conflict between oldstayers on one hand and new owners of housing buildings on use of these buildings, increasing transport intensity, lack of parking lots, or protection of cultural heritage.

Prague's inner cities are the areas where social disparities tend to increase. Thus, the quality of regenerated attractive neighbourhoods is increased. However, other neighbourhoods are declining. These problems of Czech inner cities are reflected e.g. in integrated development programs focused on revitalization of socially problem urban areas.

The further destiny of Prague's housing estates is not obvious. Will housing estates become new ghettoes overcrowded by poor inhabitants or neighbourhoods of middle-income classes? Some middle way seems to be the most likely answer. We may expect that attractive housing estates will retain inhabitants of higher socioeconomic status. Other housing estates may become a nightmare of many Czech cities. Note that several development programmes are focused on regeneration of Czech housing estates.

Besides commercionalization of the city centre, suburbanization is the second most visible process which changes Prague's internal structure. There are a number of typical problems of suburbanization, such as decline of inner cities, increasing demands on technical and transport infrastructure, increasing transport intensity, conflicts between newcomers and oldstayers, or soil depletion.

Source: OUŘEDNÍČEK, M. Sociální geografie pražského městského regionu. Praha: Univerzita Karlova v Praze, 2006.

2.3 Actual problems of rural settlement in the Czech Republic

The first question of our interest is definition of the term rural settlement. There is a number of definitions in this regard. However, we restrict our interest only in some of them.

The OEDC approach, followed also by the European Union, is based on the population density variable. There is a benchmark value of less than 150 inhabitants per km² to speak about rural settlement. On the contrary, the traditional Czech approach chooses number of









inhabitants as the decisive criterion. The critical value is set at 2 thousand inhabitants. Note that the OECD definition is extended in defining the term rural region as follows:

- Rural region is the region where at least 50 percent of inhabitants live in rural municipalities.
- Urban region is the region where less than 15 percent of inhabitants live in rural municipalities.
- Other regions are labelled as transitive regions.

If we apply either the OECD approach or the Czech approach the results are the same. There are approximately 90 percent of rural municipalities in the Czech Republic. Their total area is approximately 75 % of the whole territory of the Czech Republic. However, only 30 percent of inhabitants live in rural municipalities. On the regional level, there are 20 rural "okresy" and one rural "kraj" in the Czech Republic.²

Thus, we understand the term rural settlement now. In fact, there are differences in rural settlement. Thus, development problems of rural municipalities are various. Easy said, we may distinguish three types of rural municipalities:

- We already wrote about rural settlement in suburban zones of large cities. Replacement of rural characteristics by urban features is typical for this type of rural municipalities. Thus, traditional agricultural function is becoming less and less important. Furthermore, there are good relations between city and its hinterland – e.g. transport, technical infrastructure, or new economic activities.
- Rural municipalities in traditional agricultural areas, such as the Labe, Ohře, Morava valleys, are characteristic by still important position of agricultural production. Generally, this type of rural municipalities includes municipalities with more inhabitants, with welldeveloped technical infrastructure and transport connection to hierarchically higher cities. The traditional way of life is maintained with a strong role of churches and traditions.

² ÚSTAV ZEMĚDĚLSKÉ EKONOMIKY. *Zpráva o stavu zemědělství ČR za rok 2008*. Praha: Ústav zemědělské ekonomiky, 2009.









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- Peripheral rural settlement includes a typically problem areas characteristic by bad transport accessibility, disinterest of investors, lack of job opportunities, and emigration of young and well-educated people. Moreover, there are specific problems of some areas, including the Sudety area affected by loss of German inhabitants after WW2 (e.g. loss of long-term relations, cultural habits and others).

The existence of many development problems of rural municipalities evokes the question how to cope with these problems. Cooperation of municipalities is one way for solution. Such cooperation may be of different forms. These include, among others voluntary municipality groups, local action groups or euroregions. Thus, our fourth question is formulated as follows: "What are the differences between the three types of cooperation?"

Question 4:	











3. Demography and Regional Development of the Czech Republic

It is necessary to think about development of Czech regions in the context of current demographic trends. Let us turn our attention to two partial aspects of this context:

- evolution of changes in the number of inhabitants and in structural characteristics of population in the Czech Republic,
- socioeconomic impacts of demographic processes in the Czech Republic.

3.1 Population of the Czech Republic

There were a number of changes in the number of inhabitants in the Czech Republic historically. These changes reacted at several partial factors. Theoretically, we may embed theses changes in the context of the first and second demographic transition concepts:

- The period between the years 1869 and 1930 was characteristic by relatively high figures of natural increase. This trend was connected with high birth rates and decreasing mortality. On the contrary, the Czech territory loose inhabitants from migration in this time period. Altogether, a substantial increase in the number of inhabitants was recorded in the period 1869-1930.
- The period between the years 1930 and 1950 was characteristic by a huge drop in the number of inhabitants living in the Czech territory. There is a logical explanation by increase in mortality as a consequence of the WW2. However, the most important explaining factor was post-war deportation of Germans from the Sudety area. Thus, e.g. the Tachov County in the Plzeňský Region loose 50 percent of its population after WW2.

Let us look a bit closer at the post-war period now. Note that to follow demographic trends census data are traditionally used. Population census is organized once in ten years and provides extensive information on various demographic issues. Our first question is formulated as follows: "What are the changes in the number of inhabitants in particular decades after the WW2? How would you explain these changes?"









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Question 1:	

The preceding text already mentioned that the Czech Republic was emigration state in the long-term perspective. However, there is a substantial change in the last twenty years or so. Now, the Czech territory gains inhabitants from migration. Let us look a bit closer at the migration history of the Czech Republic. Associate Professor Drbohlav will be our guide for this time³.

³ DRBOHLAV, D. a kol. The Czech Republic: on its way from emigration to immigration country. *IDEA Working Papers*, 2009, no. 11, 124 s









The Czech Republic was an immigration country until the 19th century. The main migration flows were connected with German colonization in the 13th century. The advent of industrialization and urbanization led to traditional societal changes – increase in the number of inhabitants because of the demographic transition, and decrease in the number of agricultural jobs. Then, population pressure led to new life strategies based on emigration. Thus, the Czech territory lost population from emigration – 1.5 million people in the period 1850-1914. The main migration flows were directed to:

- Vienna as the centre of the Habsburg Monarchy and the main destination of Czech emigrants,
- Western European industrial regions (e.g. Germany, North France),
- North America in the form of colonization.

There were two specific target destination of Czech emigration – Vojvodina and Volyně. It is noteworthy that there is a large Czech minority in these two destinations also nowadays.

The emigration intensity decreased after the WW1. Economic prosperity of the Czech territory was one piece in the explanation mosaic. In addition, immigration flows, in the form of return migration, may have been noticed as well. However, the migration heyday of the Czech territory came after the WW2, when approximately 2.8 million Germans were deported from the Sudety area. Note that return of 250 thousand Czechs and Slovaks could not have compensated these population losses.

Socialism is characteristic by creation of a specific migration policy. Visas were necessary to leave the country. Thus, illegal migration was the most frequent type of migration of these days. Especially two years – 1948 and 1968 – are important in this regard. It is estimated that 500 thousand people left Czech territory during the socialist era. Moreover, there were some specific migration flows into the Czech territory, among others:

- Greek migration in North Moravia during Greek civil war,
- migration of Slovaks and Slovak Roma for employment in the form of internal migration in this time,









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- migration as a part of development cooperation (e.g. Mongolia, Angola, Cuba and others) a cooperation on the labour market (Poland, Vietnam and others).

Altogether, the Czech territory lost population during the socialist era. Moreover, the intensity of migration flows was rather low.

Another shift in migration tendencies may be observed after 1989. There are several reasons behind this development:

- fall of the Iron Curtain,
- division of Czechoslovakia,
- improving socioeconomic position of the Czech Republic,
- accession to the European Union in 2004.

Consequently, the Czech Republic is immigration country now and there are tendencies of its increasing importance. There are about 500 thousand legal migrants in the Czech Republic now. However, the real figure is much higher because of illegal migration. Although the official figures on illegal migrants are about 10 thousand people caught on the borders, the more precise estimates are much higher – around 300 thousand people.

Let us summarize the most important features of Czech population now:

- low natural increase,
- immigration state, ethnic homogeneity, specific area of migrant concentration,
- selective nature of internal migration,
- population ageing,
- decreasing importance of religion.

Thus, we know the typical features of Czech population now. Let us turn our attention at the discussion on socioeconomic impacts of demographic trends.









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3.2 Socioeconomic impacts of demographic processes in the Czech Republic

There are a number of socioeconomic impacts related to characteristics of Czech population. The second question of this chapter is for your thinking: "What are the socioeconomic impacts related to demographic trends and characteristics of current Czech population?"

Question 2:









4. Primary Sector and Regional Development of the Czech Republic

We dealt with the themes population and settlement/regional structure considering development aspects of the Czech Republic in the preceding chapters. Let us turn our attention at economic dimension of regional development, in particular in the traditional division on primary, secondary and tertiary sectors. The first area of our interest is the primary sector, focusing on two partial themes:

- evaluation of the state-of-the-art and development trends of Czech agriculture,
- introduction of main development problems of Czech agriculture, emphasizing the relations to the EU Common Agricultural Policy.

4.1 State-of-the-art and development trend of Czech agriculture

Agriculture has experienced a substantial decrease of its economic importance after 1989. This assertion is evident from the drop of agriculture share on employment from 12 percent in 1990 to 3.5 % in 2008⁴. But what are the causes of these changes? We may summarize them as follows:

- Socialist agriculture was oriented on self-sufficiency on one hand and on export of products to agriculturally less developed areas of the former Eastern bloc. Thus, socialist agriculture was based on intensive production, using chemicals and heavy machinery. Consequently, a number of negative environmental and other impacts could have been noticed. Note that socialist agricultural economic subjects had a high share of non-agricultural employment activities as well. However, just these activities were finished after 1989, during the restructuralization processes.
- There has been a rather radical change of subsidy system after 1989. Thus, the so called compensated subsidies in agriculturally less favoured areas were stopped. Note that this

⁴ ÚSTAV ZEMĚDĚLSKÉ EKONOMIKY. *Zpráva o stavu zemědělství ČR za rok 2008*. Praha: Ústav zemědělské ekonomiky, 2009.









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type of agricultural production, economically enabled by subsidies, increased erosion threads in the affected areas substantially. On the contrary, a new subsidy strategy has been followed after 1989. Measures for conversion of agricultural soil to grasslands and forests in less favoured areas are subsided now.

- After 1989, new economic conditions were created gradually. Traditional sale markets were in collapse. Competitive environment led to cost reduction, include lay-outs or investments in modernization processes. Consequently, agricultural enterprises were forced to adapt to changing conditions. However, a number of them were not able to cope with new conditions and they stopped their enterprise activities.
- Farmers have a rather low share on added-value of consumption sales. This is caused by their rather disadvantageous position in negotiations with transnational corporations in retailing.

Despite the abovementioned facts, it could be not claimed that Czech agriculture completely lost its importance. Thus, our first question for you is formulated as follows: "What is the importance of Czech agriculture now? In other words, what are the functions of Czech agriculture?"

Question 1	•		



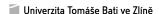






Naturally, there are several regional specifics of Czech agriculture. Some "kraje" are affected more, some "kraje" less, by decline of agricultural production. Moreover, spatial dimension is contained in two partial concepts closely related to agriculture as well. The first concept is the so called agricultural production areas. They include:

- Maize, wheat, barley, tobacco, tomatoes, sunflowers, and wine-yards are typical crops of the maize agricultural production area. This area is characteristic by altitude less than 250 metres, by average year temperature over 9 °C, by precipitation around 500 mm. The most fertile chernozems are a typical soil type for the area. The maize agricultural production area is located only in the "Dolnomoravský" and "Dyjskosvratecký úval" and it covers 6.7 % of the Czech territory.
- Sugar-beet, wheat, barley, and maize are typical crops of the sugar-beet agricultural production area. This area is characteristic by altitude less than 350 metres, by average year temperature between 8 and 9 °C, by precipitation up to 650 mm. Fertile brown soils are typical soil types for the area. The sugar-beet agricultural production area is located in traditional agricultural areas of the Czech Republic, in the Vltava, Labe, Ohře and Morava lowlands and it covers 24.3 % of the Czech territory.
- Grains, technical crops, and colza are typical crops of the grain agricultural production area. This area is characteristic by altitude less than 600 metres, by average year temperature between 5 and 8 °C, by precipitation up to 700 mm. Not so fertile brown soils are a typical soil type for the area. The grain agricultural production area is located in highlands and it covers 40.5 % of the Czech territory.
- Potatoes, rye, oat, legumes, or linen are typical crops of the potato agricultural production area. This area is characteristic by altitude less than 700 metres, by average year temperature between 5 and 8 °C, by precipitation up to 900 mm. Not fertile soils are a typical soil type for the area. The grain agricultural production area is located in highlands and it covers 18.5 % of the Czech territory.
- Potatoes and linen are typical crops of the fodder agricultural production area. This area is characteristic by altitude more than 700 metres, by average year temperature between 5 and 6 °C, by precipitation more than 700 mm. Not fertile soils are a typical soil type for











the area. The grain agricultural production area is located in mountainous regions and it covers 10.0 % of the Czech territory.

The so called "bonita soil-ecological units" are the second spatial concept relevant for agricultural production. The concept expresses natural value of particular plots.

4.2 Development problems of Czech agriculture

There are a number of partial problems related to Czech agriculture. A lot of them are closely related to Common Agricultural Policy of the European Union. Thus, what are the problems of this kind?

EU policies may be perceived as cornerstones of Czech agricultural policy because its subsidy system is based just on these policies. In the programming period 2004-2006, there were two financial instruments of Czech agricultural policy – the Operational Programme Rural Development and Multifunctional Agriculture as a part of EU Cohesion Policy, and the Horizontal Plan of Rural Development as a part of EU Common Agricultural Policy. While the first instrument was applied considering regional disparities, the second instrument covered the whole Czech territory. The Operational Programme Rural Development and Multifunctional Agriculture was focused especially on the following themes:

- investments in agricultural properties,
- diversification of agricultural and related activities,
- interventions to improve countryside,
- the LEADER programme.

The Horizontal Plan of Rural Development supported, among others:

- direct payments in less favoured areas for permanent grassland,
- conversion of arable soil to grassland and forests,
- ecological agriculture.









In the programming period 2007-2013 the both financial instruments were integrated into one document – the Programme of Rural Development of the Czech Republic with the total financial allocation of 3.6 billion EUR for the whole period. Note that the programme is financed from the European Agricultural Fund for Rural Development. There is a thematic accord between the two documents from the programming period 2004-2006 and the Programme of Rural Development of the Czech Republic in the programming 2007-2013. Nevertheless, the theme rural development is strengthened. Note that a special operational programme for fishery was created.

Besides the Programme of Rural Development of the Czech Republic, Czech farmers gain direct payments per hectare of agricultural land from the European Agricultural and Guarantee Fund. Note that there is a traditional development question on a disadvantageous position of newly accessed countries. In 2007, their direct payments were only 40 % of subsidies allocated for farmers from the old EU countries. Since this time, there has been a convergence of these disproportions. State Agricultural Intervention Fund is the source of direct payments for Czech farmers.

Finally, the importance of EU agricultural policy for Czech agriculture may be documented on the Czech sugar case. In this regard, the EU strived to offset overproduction on EU sugar market through cuts on sugar production in 2006. On this basis, financial support for restructuralization was offered for the decision to sell national quotas of sugar production. In the Czech Republic, the transnational corporation *Eastern Sugar* reflected this opportunity and closed its factories in the Hana region – in the cities of Kojetin and Nemcice. Altogether, the Czech Republic lost a quarter of its quotas on sugar production with negative impacts in the whole production chain.

Other problems of Czech agriculture may be summarized as follows:

- Position of farmers in the agro-industrial complex

There are two directions of pressure on farmers considering their position in the agroindustrial complex. First, farmers are confronted with increasing prices of inputs. Second, farmers are confronted with pressure from retailers to lower purchase prices. It is noteworthy









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that only ten retailing firms is the main place of shopping for almost 80 percent of customers in the Czech Republic.

- Diversification of agricultural and non-agricultural activities

It is highly desirable to diversify economic activities in agricultural development. Then, farmers are not fully dependant on agricultural production as the only source of income.

- Marketing

There is a traditionally high pressure on quality of food production in the European Union and Czech Republic as a development path. Thus, labels of quality are quite extensively used.

- Question of ownership rights

There is a rather large ownership fragmentation in the Czech Republic. This fact may be perceived as a serious barrier for agricultural development.

- Financing

Generally, there is lack of finances in agriculture in the Czech Republic. Historical debts play part in this regard.

- High share of arable land and erosion threads

During the socialist era, agricultural production was realized also in less favoured areas. Thus, a rather high share of arable land is threatened by erosion now.

- Low wages in agriculture
- Relatively high share of farmers in a higher age

We know the development problems of Czech agriculture now. Let us formulate our second, logical, question for you: "What are the instruments to solve the problems of Czech agriculture?"









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Question 2:	











5. Secondary Sector and Regional Development of the Czech Republic

In this chapter, let us turn our attention at the secondary sector theme. Just this sector has a huge impact for Czech economy now. Especially the following aspects of the theme will be of our interest:

- evaluation of the state-of-the-art and development trends of Czech industry,
- review of development problems of Czech mining,
- introduction of selected instruments to support industrial development of the Czech Republic on both, endogenous and exogenous basis.

5.1 State-of-the-art and development trend of Czech manufacturing

The Czech Republic is historically a country with a rich industrial tradition. Industrial development influences development of many Czech cities. There are a lot of examples of this kind. Let us mention at least rapid increase in the number of inhabitants of the Ostrava City after 1829, when the so called Rudolf's mine, a predecessor of the Vitkovice factory, was established. Similarly, the development of the Bata's factory in the first half of the 20th century was the key of Zlín development.

The socialist era is characteristic by a process known as socialist industrialization. The main features of this process were among others:

- emphasis on heavy industry development with preference of regions in North Moravia and North Bohemia.
- centrally directed large enterprises focused on economies of scale,
- orientation on the markets of the countries belonging to the Council of Mutual Economic Cooperation former socialist countries,
- technological obsolescence of production.









After 1989, societal conditions for industrial development were changed substantially in the Czech Republic. Czech manufacturing companies were forced to adapt on new market conditions. The following measures were closely related to the adaptation processes:

- price liberalization market based price setting,
- liberalization of foreign trade removal of free trade barriers, full convertibility of Czech crown,
- privatization.

New conditions after 1989 posed also the question on competitiveness of existing industrial factories. A number of industrial factories were not able to cope with new conditions and they stopped their production. Other economic subjects decided to follow necessary restructuralization processes in connection with the following strategies:

- search for a new competitive product on Western markets,
- search for a new foreign strategic partner,
- closing of inefficient production and layouts,
- modernization and reduction of energy demands.

Thus, the companies which were able to find a new competitive product or a strong foreign strategic partner were more likely to successfully restructure their activities. A number of successful case studies of this kind may be given. These include e.g. access of the German company Continental into the Barum Company in Otrokovice, or of German car producer Volkswagen into the Czech Skoda Company. Simultaneously, there is another dimension of the industrialization process after 1989. This is the dimension of foreign investors. In this regard, the Czech Republic is an attractive destination given by its cheap and qualified labour force, advantageous location, existing system of investment incentives, and the EU membership. Because of this evolution, manufacturing maintained its important position in the Czech economic structure. This is a difference of the Czech economic structure compared with the most development countries. Simultaneously, manufacturing firms are key Czech exporters.











Case study – car production in the Czech Republic

Car production belongs to the traditional industries of the Czech Republic. Three periods of its development may be distinguished historically:

1. Period of dynamic development until WW2

The roots of Czech car production may be embedded at the end of the 19th century when the first car was produced in 1897 by the Tatra factory in Koprivnice. At the beginning of the 20th century, car production was initiated also in two other factories – Laurin and Klement in Mlada Boleslav and Praga in Prague. Competition of the three factories led to further dynamic development of the industry. It is noteworthy that the Praga factory was the most important car producer until 1930s. However, the sale of luxury cars Laurin and Klement in 1925 for the Pilsen factory Skoda altered the situation markedly. Subsequently, the development of a new car type changed the market shares of car producers and Skoda became the leading brand of Czech car production.

2. Period of stagnation during the centrally planned economy

The second period of the Czech car production development was primarily connected with nationalization of Czech car producers after 1945. Central planning became the leading management strategy in this period. Thus, the total volume and location of production were formulated centrally. Personal car production was concentrated in Mlada Boleslav (brand Skoda) and in Pribor (brand Tatra). Trucks were produced in Koprivnice (brand Tatra), Prague (brand Praga, and Avia subsequently) and Jablonec (brand Liaz). Altogether, car production experienced a period of stagnation, especially in technological development, during the socialist era.

3. Period of internationalization and redevelopment after 1989

The last period of Czech car production development is connected with transition to market conditions on one hand and with search for new development opportunities of the industry. Moreover, foreign investments have become a typical feature of Czech car production. In this regard, the Volkswagen Company joined the traditional Czech car producer AZNP at the beginning of the 1990s to stimulate dynamic development of the Skoda Auto Company.









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Moreover, foreign investments have not been related only to car production but it has included also its supplier industries. There are a number of examples of this kind. Let us mention only investment accession of the German Robert Bosch Company into the former Motor Ceske Budejovice or of the U.S. Visteon Company into the former Autopal Novy Jicin. However, the long-term problems of the Tatra Company in Koprivnice or the collapse of the Liaz Company in Jablonec nad Lisou in 2003 showed that foreign investments are not a panacea for restructuring of all Czech car producers.

Besides the foreign investments into the existing company, there is another trend related to car production development in the Czech Republic – foreign investments on greenfields. The French-Japan TPCA Company investment in Kolin in 2004 and the South Korean Hyundai Company investment in Nosovice in 2008 are the two most important investments of this kind. There are also a number of new plants founded by foreign supplier-companies. Altogether, car production may be understood as one of the leading industries in the Czech Republic now.

Source: adapted according to NOVOSÁK, J., DAMBORSKÝ, M. Internacionalizace automobilového průmyslu v České republice. *Regionální studia*, 2010, vol. 3, no. 1, s. 1-8.

The high share of manufacturing on economic structure of the Czech Republic was declared in the preceding text. The first question for you is therefore formulated as folloes: "Which manufacturing industries are the most important for the Czech economic structure now?"

Question 1:			









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The absolute figures of added value or number of inhabitants are not the only relevant
variables to follow industrial development of the Czech Republic. The long-term trends are of
high importance as well. In this regard, our focus should be directed at two processes -
deindustrialization on one hand and reindustrialization on the other. Note that the
deindustrialization process is connected with industrial decline and job loss. On the contrary,
the process of reindustrialization means industrial redevelopment. Let us demonstrate these

Case study – industrial change of the Ostrava City

two processes, using the Ostrava City as a case study.

Territorial and population development of the Ostrava City is strongly associated with industrialization. Heavy industry has become a symbol of the city development in the 19th and 20th centuries. However, the neglect of restructuralization processes of Ostrava's economic base during the socialist era has created conditions for emerging economic problems of the city after 1989. The Ostrava's industrial base was hit seriously. Thus, the deindustrialization process has become a typical feature for Ostrava's development after 1989. Job loss in manufacturing, unemployment and abandoned industrial sites – brownfields – symbolize this process. Consequently, search for measures how to cope with industrial decline and unemployment has gained a privileged position in development perspectives and strategies of the Ostrava City.









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However, to find such measures has revealed to be complicated by several factors, including the fact that the Ostrava region was outside the interest of new investors for a long time after 1989. Thus only later, industrial investments opened new development paths for the Ostrava City. Note that the investment of the South Korean car producer Hyundai in the Nosovice industrial zone in 2008 was of great importance in this regard. Simultaneously, several measures realized by public sector increased investment attractiveness of the Ostrava City. These included also the construction of new industrial zones on one hand and of science-technological park on the other.

Investments on the Ostrava territory, and especially in the Hrabova industrial zone, have showed that manufacturing has remained an important employer in the city. Compared to the socialist era, some important differences may be noticed. These include diversification and modernization of industrial base, including traditional branches like metallurgy or machinery. It is necessary to emphasize the activities of Ostrava's science-technological park to support more innovative production, such as ICT technology. Just this development path may be perceived as one of few development paths of developed countries in fierce global competition. However, only the future will show whether industrialization or reindustrialization processes will dominate.

Source: adapted according to BEDNÁŘ, P., WILAM, P., NOVOSÁK, J. Světlá budoucnost černého města. *Stavební fórum*, 2008.

5.2 Development problems of Czech mining

Mining is a specific industrial branch with a long tradition in the Czech Republic. Spatially, occurrence of raw material is the decisive location factor of mining. Subsequently, mining is closely connected with spatially determined regional structures. Thus, how can we characterize mining in the Czech Republic?

In the case of the Czech Republic, as the main raw material may be regarded:

- black and brown coal and uranium as the energetic raw material, with a lower importance of oil and gas,









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- kaolin and glass-sands.

On the contrary, the Czech Republic is not rich in other raw materials, such as iron ore and others. Altogether, the second question for you may be formulated "Where can we find the main areas of mining in the Czech Republic? What are the related development consequences?"

•	Question 2:









5.3 Measures to support Czech manufacturing

The preceding subchapters showed the importance of manufacturing for Czech economic base. Thus, a number of measures how to stimulate industrial development of the Czech Republic may be identified. Both, exogenous and endogenous measures are applied. Thus, for example, the system of investment incentives belongs to the exogenous measures. The concept of intelligent specialization belongs to the endogenous measures.

The system of investment incentives represent a set of special measures how to attract foreign investors into the Czech Republic. The recent law on investment incentives from the year 2012 emphasised the importance of selected manufacturing branches, of technological centres and of so called strategic services. It is quite naturally that investment incentives provide some extra-bonus for foreign investors. In the case of the Czech Republic, the following incentives are offered:

- tax reliefs,
- low-price properties,
- financial support for new jobs or requalification,
- financial support to investments in capital properties.

Simultaneously, investors are required to meed some conditions to be eligible for investment incentives. These requirements include minimum volume of investments, own capital, creation of new jobs, and project sustainability. Morover, there is also regional dimension of the system with the aim to support flows of investments in lagging regions preferentially.

The modern concept of intelligent specialization is based on other concept than the investment incentive system. The concept aims to stimulate internal sources for regional development. The initial idea claims, that regional sources are limited. Thus, it is necessary to concentrate them on a rather limited number of industries – specialization. Simultaneously, innovations are regarded as the engine of development. Therefore, intelligent specialization is based on innovations. Note that there are close relations between the intelligent specialization concept and the theoretical concepts of clusters and regional innovation systems. Altogether,









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the third question of our interests take us in the Zlín Region: "How can we apply the concept of intelligent specialization in the Zlinsky Region?"

Question 3:











6. Tertiary Sector and Regional Development of the Czech Republic

Tertiary sector is the third broad economic sector of each country. However, there is a very broad range of services. To deal with each of them is outside the scope of this studying text. Thus our interest is restricted in three partial themes:

- evaluation the state-of-the-art and development trends of services in the Czech Republic,
- evaluation of development trends and problems of retailing in the Czech Republic,
- evaluation of development trends and problems of tourism in the Czech Republic.

6.1 State-of-the-art and development trends of Czech services

Services have generally the highest share on total employment in developed countries from the three broadly defined economic sectors. The Czech Republic is no exception in this regard because approximately 60 percent of its economic active inhabitants work in services. It is noteworthy that crucial differences between socialist and post-socialist services may be observed. Thus the typical features of service sectors before the year 1989 were:

- underdeveloped service sector because of preferential allocation of investments on industrial development (e.g. retailing characteristic by area standards and standardized "Jednota" building),
- service systems based on the central place settlement principles with preferred location of services in centres of a higher geographical level.

Simultaneously, services played no so important role in regional differentiation as currently. After 1989, important changes in service sector may be identified, again closely related to the processes of price liberalization, privatization and others. Furthermore, it is possible to observe increasing impact of services generally, and increasing impact of services on regional differentiation more specifically. In this context, we may formulate the first question for you:

"Which service branches do you regard as progressive ones?"









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Question 1:	

It was already pointed at increasing role of services in spatial differentiation after 1989. In this regard, it is necessary to distinguish between production services on one hand and public services on the other. While the first type of services contributes to spatial differentiation through its territorial concentration, the second type is spatially distributed more evenly.

Moreover, changing location of service facilities towards city hinterland, the so called commercial suburbanisation, is the second typical spatial pattern related to services. Thus, new hypermarkets, logistic centres, warehouses, and other facilities are localized on urban fringe close to highways. Once again, the typical problems of suburbanization are connected with this issue — soil depletion, or increasing transport intensity. Altogether, the original









nature of service regions, typical by concentration of services in core area of central cities, has changed markedly. Such evolution, we may document on retailing.

6.2 Evaluation of development trends and problems of Czech retailing

Retailing is a service type which we may use to document main changes in the Czech tertiary sector. We are using the text of Associate Professor Szczyrba from the Palacky University in Olomouc now.⁵ Thus, what development trends can we identify in the case of Czech retailing?

The beginning of the 1990s is characteristic by transition of retailing on market conditions. The following processes are of relevance in this regard:

- privatization of public property (e.g. privatization of six department stores Prior to U.S K-Mart Company),
- returning of public property to owners before its nationalization during the socialist era,
- transformation of cooperative sale networks and creation of new ownership hierarchy.

On this basis, new economic subjects in retailing have emerged. Subsequently, two evolution phases may be distinguished.

1. Phase of atomization

The phase of atomization is dated back to the 1990s. A large number of small retailing subjects were founded in this time. These firms filled the free niches of underdeveloped retailing market in the Czech Republic. Thus, the number of retailing subjects in the Czech Republic doubled between the years 1989 and 1998. Note that Czech retailers dominated the market in this time period. Spatially, new retailers started their sale activities in underdeveloped parts of cities, primarily in housing estates.

2. Phase of internationalization

⁵ Viz SZCZYRBA, Z. Maloobchod v ČR po roce 1989: vývoj a trendy se zaměřením na geografickou organizaci. Olomouc: Univerzita Palackého v Olomouci, 2005.









The phase of internationalization may be observed since the mid 1990s in the Czech Republic. The phase is characteristic by gradual access of transnational corporations on Czech retail market, including various formats of sale units – form supermarkets (e.g. Albert or Billa), hypermarkets (e.g. Tesco or Hypernova), discounts (e.g. Plus or Penny Market), to hobby markets (e.g. Bauhaus or OBI). There are also other development trends in retailing when hypermarkets extend their offer to customers by cinemas and other activities. Thus, hypermarkets become places for leisure activities. Note that there is close relation between retailing and individual transport with all negative impacts on environment. Moreover, there is another development problem related to new hypermarket construction. This problem asks about the future of city centres.

Increasing competition is another trend of retail market in the Czech Republic. This fact slowdowns further expansion of retail units. Moreover, market consolidation is another feature caused by its saturation. Some retail transnational chains decided to escape Czech market. The French transnational corporation Carrefour is an example of this kind. Note that further development trends may be perceived in the following spheres:

- creation of a new spatial pattern with shopping malls in inner cities and outlet centres on the city fringe,
- strengthening multifunctional characters of hypermarkets, including leisure and sport activities,
- increasing gaps between successful and unsuccessful retailers...

Altogether, the second period is characteristic by return to spatial concentration of retailers in large shopping centres. Note that concentration and cooperation is a typical feature also for retail chains in rural areas (e.g. Coop or Hruska).

6.3 Evaluation of development trends and problems of Czech tourism

Tourism belongs to important service industries in the Czech Republic. However, its importance cannot be overestimate because its share on gross added value is less than









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3 percent. Opportunities for tourism development are influenced by spatial conditions. Thus, the second question of this chapter is focused on spatial aspects: "Which spatial associations would you give if considering tourism development in the Czech Republic?"

Question 2:

And what are the main development problems of Czech tourism? They may be briefly summarised as follows:

- influence of external factors and seasonality with impacts on the need to search for all the year tourism activities,



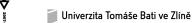






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- increasing number of tourists from new source countries with the need of adapting on this change,
- insufficient actors' cooperation on the basis of destination management and a relativally high dependence on public subsidies.











7. Transport and Regional Development of the Czech Republic

Transport is our last theme of concern in the sector discussion on regional development of the Czech Republic. The following themes will be introduced:

- development problems of road transport in the Czech Republic,
- development problems of railway transport in the Czech Republic,
- development problems of other transport modes in the Czech Republic.

7.1 Development problems of road transport in the Czech Republic

There are some characteristic features of road transport in the Czech Republic. Primarily, the Czech Republic has a very dense road network. In this regard, the density of Czech road network is two times higher than the EU15 average. On the other side, the high density is compensated by a low quality of road network, including a low share of highways and generally bad physical state.

Regionally, Central Bohemia a South Moravia has the highest length of highways. This fact increases investment attractiveness of these regions. Moreover, road network is advantageous also for Prague because most highways are directed to the Czech capital. On the contrary, some peripheral regions are characteristic by bad road connection because of lacking highway (e.g. South Bohemia).

What are the main problems of highway construction in the Czech Republic? The first problem is connected with a low degree of connectivity of highway network. Thus, the Czech Republic is characteristic by a high number of isolated and unfinished parts of highways. The second problem is related to a relatively high price of highway construction. This problem is, among others, caused by the Czech system of public procurements. Finally, highway construction is confronted also with a number of environmental conflicts. These include among others:









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- construction of the D3 highway through the tourist area along the Sazava River, with an alternative in modernization of the R3 and R4 highways,
- construction of the last part of the D8 highway through the natural protection area Ceske Stredohori conflict with the Labe River valley,
- construction of the R49 highway through the natural protection are Bile Karpaty, when the current plans are criticized to be not necessary because of low anticipated traffic capacity.

It is a typical task of spatial planning to prioritize missing parts of road network. In the Czech Republic, the problem of unfinished and not connected highway network was mentioned. Thus, our first question for you is formulated as follows: "Which missing parts of highways would you build first?"

Question 1:		









7.2 Development problems of railway transport in the Czech Republic

Railway transport of the Czech Republic has similar problems as the road transport. The typical feature of Czech railway network is its high density which was fourfold higher than the EU15 average at the turn of the 20th and 21st centuries. On the other hand, the quality of Czech railway network lags substantially. Only 30 percent of railways are electrified. Only 20 percent of railways are of two or more tracks. These are very low figures compared with EU15 average. Other drawbacks may be identified with respect to transport speed, or physical state of tracks.

Regionally, the longest railway network may be found in Central Bohemia and the Ústecký Region. In the case of Central Bohemia, the position of Prague as the central point of Czech railway network is of high relevance. In the case of the Ústecký Region, the length of railway network is influenced by its industrial history. Thus, railways were built-up for transport of coal and other mass substances. The main tracks of railway network in the Czech Republic, which belong to the TEN-T network, include:

- the 1st railway corridor Decin Prague Pardubice Ceska Trebova Brno Breclay,
- the 2nd railway corridor Ostrava Prerov Breclay,
- the 3rd railway corridor Cheb Plzen Prague Ostrava,
- the 4th railway corridor Decin Praha Ceske Budejovice.

The plans to build-up fast-speed track Prague – Brno – Ostrava are formulated for very remote future. Furthermore, the fast track from Prague to the Prague airport is planned to be built-up.

The future of railway transport in the Czech Republic may be anticipated in the following areas:

- The future of long-distance personal railway may be seen in fast and high-quality services. The question, often discussed in this regard, is the creation of competitive railway environment. Separation of Czech Railways as the transporter on one hand and









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railway transport track on the other was an important step in this way. Thus, conditions for private transporters were created.

- Regionally, the future of railway transport may be viewed in integrated transport systems. Railway is the key part of integrated transport systems. It is noteworthy that development of integrated transport systems is strongly influenced by the relationship between settlement system on one hand and railway network on the other. Prague, Brno, Ostrava and Olomouc are natural centres of regional railway networks. This fact enables building the integrated transport systems on the whole territory of the regions. On the contrary, the opportunities to develop integrated transport systems in the Zlinsky Region are limited because of low railway connectivity between the most important cities.
- The future of freight railway transport is perceived in the development of multimodal transport systems. Railway is understood as an integral part of these systems.

Case Study – Prague Integrated Transport

The origins of Prague Integrated Transport (PIT hereafter) are dated back at the beginnings of the 1990s. In this time, a first experimental system was introduced which connects the territory of Prague and several municipalities in its surrounding. Agreements between involved municipalities and counties were signed. In 1992, cooperation between the Prague municipality and Czech Railways was initiated. Thus, tickets from the Prague mass transport were valid also on selected tracks of Czech Railways. One year later, a new transport organisation of the Prague capital city, called Regional Organizer of Prague Integrated Transport (ROPIT hereafter), was established. The year 1995 is another important step in the PIT development. In this year, a sphere financial tariff was created. The further PIT development may be characterized as follows:

- increase in the number of railway stops, bus lines and other transporters in PIT,
- increase in the number of municipalities covered by the PIT system,
- involvement of new transporters in PIT,









- involvement of new features in PIT, such as Park & Ride system since 1998 or bike-buses and bike-trains since 2003,
- modernization of transport vehicles,
- increase in prices of tickets defined on the basis of spheres, travel time and change of the vehicle,
- implementation of electronic payment cards in 2008,
- implementation of interval time tables since the end of the 1990s.

There three main actors in the ROPIT system now:

- 1. involved municipalities and regions as the actors who demand transport services for their inhabitants and who finance these services,
- 2. ROPIT as the transport coordinator,
- 3. transporters.

The main function of ROPIT is to suggest transport solution for the PIT system. Thus, they coordinate timetable, and they remove duplicate lines based on municipal and regional requirements and opportunities of transporters. Subsequently, deals are signed. Simultaneously, ROPIT organizes financial flows in the PIT system, including the tariffs and distribution of revenues based on performance and characteristics of lines. Finally, ROPIT ensures unified information system of the PIT system and others.

Source: URBÁNKOVÁ, J., OUŘEDNÍČEK, M. Vliv suburbanizace na dopravu v pražském městském regionu. In *Sociální geografie pražského městského regionu*. Praha: Univerzita Karlova v Praze, 2006, s. 79-95.

There is a typical trend in model split related to Czech transport systems. Thus, the importance of road transport is strengthened in the long-term perspective caused by:

- transition to more flexible nature of economic activities where individual transport is preferred to more sustainable forms,



Ornestion 2







Univerzita Tomáše Bati ve Zlíně

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- psychological-social behaviour, influenced by perception of cars as a symbol of liberty,
 independence and western society,
- changing lifestyle connected also with the suburbanization process which is closely connected with cars,
- changing prices of more sustainable transport modes,
- externalities of individual transport not calculated in its costs..

Czech transport policy tries to react at this trend. Several measures are used in this regard (e.g. corridor modernization, building of integrated transport systems, multimodal transport, payment for road transport such as tolls, support to cycling and others).

7.3 Development problems of other transport modes in the Czech Republic

Besides the road and railway transport, there are also specific problems related ot other transport modes. Thus, the second question for you was formulated as follows: "What are the main development problems of air and ship transport in the Czech Republic?"

Question 2:	









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8. Competitiveness of the Czech Republic

The last two chapters of our studying text are understood as some form of summary. Two political documents of high importance for regional development of the Czech Republic are introduced. In particular, Strategy of International Competitiveness of the Czech Republic and Strategy of Sustainable Development of the Czech Republic are the documents of our interest. The theme of competitiveness is discussed in this chapter, the theme of sustainable development in the subsequent chapter.

8.1 Approaches to measurement of Czech competitiveness

There are a number of approaches how to measure the international competitiveness of the Czech Republic. We would like to stress two approaches:

- The first approach is the methodology based on the WEF studies. This methodology evaluates 144 countries using the scores for 12 areas of competitiveness. Both, aggregate figures and partial criteria are followed.
- The second approach is the methodology based on the IMD studies. This methodology evaluates 57 countries using the so called competitiveness index calculated by multi-criteria methods. The Czech Republic ranked 33rd place in the year 2012.

Thus, the first question of this chapter for you asks: "What is the position of the Czech Republic in the WEF evaluation?"

Question 1:			







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Besides the two abovementioned methods how to measure international competitiveness, let us notice also the evaluation known as *Innovation Union Scoreboard*. This evaluation is realized by the European Commission using various indicators related to the innovation theme. There are four groups of EU countries in this regard:

- weak innovators,
- moderate innovators,
- follow-up leaders,
- leading innovators.

The Czech Republic belongs to the group of moderate innovators. The main weaknesses of the Czech innovation environment may be summarized as follows:

- low share of inhabitants with tertiary education, with dynamic development in the last years,
- low degree of internationalization and scientific excellence,
- underfinanced science and research sector and lack of venture capital,
- lagging patent activities and commercionalization processes of science and research outputs..









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8.2 Strategy of international competiveness of the Czech Republic

The second part of the chapter deals with the case study of the document titled Strategy of International Competitiveness of the Czech Republic. The following text introduces the essence of particular pillars and measures given in this document.

Case study – Strategy of International Competitiveness of the Czech Republic

Strategy of International Competitiveness of the Czech Republic is an overarching document relevant for the competitiveness theme of the Czech Republic. The following text introduces the main development paths given in this document.

Pillar – Institutions

- Effective public administration agenda restructuralization, status of public employees
- Higher quality of regulation RIA, CIA assessment, e-legislation
- Improving law enforcement alternative measures for justice decisions

Pillar – Infrastructure

- Road transport highway construction, city road rings
- Railway transport increasing effectiveness of railway network, high-speed corridors, public logistic networks
- Air and water transport air infrastructure, railway track to Prague airport, improvement in water transport opportunities

Pillar - Education

- Quality and accessibility of preliminary education accord between family and working life, alternative forms of preliminary education
- Changing elementary and secondary education education standards
- Reform of tertiary education diversification of studying programmes, quality and excellence, financing of tertiary education
- Changing education content key competences, relations to labour market









Pillar - Labour market

- Accord between family and working life
- Labour market development inclusion of specific groups, active employment policy
- Increasing accessibility of rental housing
- Policies related to migration of qualified workers
- Implementation and development of life-long learning systems

Pillar – Financial markets

- Pilot Seed Fund – financial engineering

Pillar – Efficiency of goods and service markets and improving of enterprise environment

- Improving enterprise environment reduction of administrative burden
- Services for enterprise development counselling, investment incentive system
- Services for innovative enterprises commercionalization, internationalization, technology transfer, patent protection

Pillar - Innovations

Management of national innovation system – evaluation of innovation potential

Environment for excellent science and research – new evaluation of science and research, smart specialization, excellent infrastructure, foreign researchers

Cooperation between enterprises and research sector for knowledge transfer – financial schemes, partnership, centres for technology transfer public procurements

Foresight and technological areas of strategic importance for economic growth of the Czech Republic – recognition of trends and opportunities

Space activities of Czech firms

Source: Strategie mezinárodní konkurenceschopnosti České republiky











9. Sustainable Development of the Czech Republic

The last chapter of our studying text deals with several environmental issues. The theme is embedded in the sustainable development discussion. The following themes are discussed in more details:

- evaluation of the state-of-the-art and development trends of Czech environment,
- evaluation of tools for improvement of Czech environment,
- evaluation of sustainable development in the Czech Republic.

9.1 State-of-the-art and trends in the Czech Republic

The state-of-the-art of Czech environment at the beginning of the transformation period was substantially affected by socialist heritage. The main problems may be summarized as follows:

- Air quality was worsened by emissions from heavy industry and energy production. These economic activities were energetically and materially very intensive and technologically obsolescent. Furthermore, there were some regional specifics. Thus, North Bohemia was affected by sulphur oxides from local power plants. North Moravia suffered from high levels of solid particles in atmosphere. Consequently, emissions negatively influenced not only quality of life in urbanized areas but also quality of forests in surrounding.
- Also water quality was relatively worse in the socialist era. Thus, water consumption was
 wasteful and water cleaning facilities and system underdeveloped. Long water parts were
 categorized to the worst level. Low water quality negatively impacted also water
 ecosystems and countryside.
- Agricultural production increased the threads of soil erosion and contamination.
- Extensive nature of socialist economy was noticed also in mining through negative impacts on countryside and waste management.









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At the beginning of the 1990s Czech environment belonged to the worst ones in Europe. Consequently, a number of measures were approved to improve the undesirable state-of-theart. The measures include among others:

- new legislative norms,
- extensive investments in environment.

These steps, complemented by economic problems of a number of huge polluters, led to dynamic improvements of environmental quality in the Czech Republic. Thus, air and water pollution have been reduced substantially after 1989. However, most of the interventions led into the final phase of the pollutant production cycle, not into new technologies. Simultaneously, environmental investments dropped significantly at the end of the 1990s. Consequently, the Czech Republic still lagged behind the EU average in a number of environmental indicators.

So, what are the recent environmental problems of the Czech Republic? They include:

- existence of sites where imission limits of air pollutants are exceeded,
- the ability of the Czech Republic to meet the requirements of the Directive 91/271/EHS on cleaning of urban wastewater,
- higher energy consumption in industry and transport, and generally high energy demand of Czech economy, compared with the EU average,
- a high share of soil threatened by degradation and ongoing soil depletion,
- material dependence on non-renewable resources,
- the quality of environmentally important sites.

9.2 Instruments for environmental development of the Czech Republic

There are a number of environmental problems in the Czech Republic. Therefore, the question arises which instruments for solving of these problems are at disposal. In this subchapter, we focus on some of them, emphasizing their spatial impact.









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The first instrument of our interest is the system of protected areas and the system of NATURA 2000. The protected areas belong to the areas of the highest environmental value in the Czech Republic. The Law 114/1992 defines the Czech system of protected areas with the following categories:

- national park as a territorially large area with natural ecosystems of international importance,
- protected landscape area as a large area of an extraordinary natural importance,
- national natural reservation as not so large area of an extraordinary natural importance on international level,
- natural reservation as not so large area with ecosystems typical for the given area,
- national natural site as a natural site of a small area with ecological, scientific, and aesthetic importance on the international level,
- natural site as a natural feature of a small area with ecological, scientific, and aesthetic importance on the regional level.

The categories national park and protected landscape areas are labelled also as large protected areas. Our first question of this chapter for you asks: "What are the themes of protection in these areas?"

Question 1









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The Czech system of protected areas is complemented by the European system titled NATURA 2000. This system consists of localities of high environmental value established with the aim to protect threatened species, with a special emphasis on birds. Thus, there are close similarities between the Czech and EU system of protected areas. So what is the difference between them? Easy said, the species which are typical for the Czech Republic may be rare on the European level. On the contrary, the species which are typical for Europe may be rare in the Czech Republic. It is noteworthy that both, Czech and EU systems of protected areas regulate economic and other activities in these areas. A special attention is given to evaluation of investment projects. However, the goal of the NATURA 2000 system is not creating a conserved natural area. On the contrary, it requires environmentally sensitive economy in the area, in accord with the principles of sustainable development.

The second question for you is focused on another spatial instrument for environmental protection – territorial system of ecological stability: "Could you explain the rationale of this concept?"

Question 2:	

 $^{^6}$ Directive 79/409/EHS from the year 1979 and Directive 92/43/EHS from the year 1992











The third instrument of our interest is connected with two abbreviations – EIA and SEA. EIA means environmental impact assessment. The main goal of EIA is to evaluate the impact of legally determined investment projects (e.g. dams, water cleaning facilities, industrial production, deforestation and others) on particular elements of environment. Subsequently, the EIA document serves as a background in the decision making process. SEA is connected with evaluation of the impact of strategic documents on environment. The logical link is as follows. Strategic documents contain relevant investment project. The SEA assessment assures the match of these projects with environmental protection goals. Then, also EIA is expected to formulate positive recommendation for project realization.

9.3 Sustainable development of the Czech Republic

The last theme of our interest is the concept of sustainable development. Sustainable development tries to find a balance between the economic, social and ecological dimensions of territorial development. In the case of the Czech Republic, the fundamental framework is formulated in the document titled Strategic Framework of Sustainable Development of the Czech Republic. Five priority axes are formulated:

- society, people and health,
- economy and innovations,
- territorial development,
- landscape, ecosystems, and biodiversity,
- stable and secure society.

Let us point at the involvement of the three dimensions of sustainable development. We would like to emphasise the territorial dimension related to the territorial cohesion concept. Do you know the meaning of this concept?









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Case Study – Local Agenda 21 in the Zdechov municipality

The mountainous village Zdechov has 600 inhabitants and is located in the peripheral part of the Czech Republic, on the border between Czech and Slovak Republic. A rich cultural life has survived in the village so far. Note that local action groups and cultural commission of the municipality play the most important role in this regard. A number of tradition cultural actions are held in the municipality each year. Moreover, several new cultural projects have been initiated as well. It is noteworthy that some cultural actions are of regional importance. Cultural life in the village represents an important factor of social cohesion because also some sensitive groups, such as youths and new immigrants, participate in them. And just culture played the leading role in the decision of the Zdechov municipality to take part in Local Agenda 21.

Officially, the Zdechov municipality joined Local Agenda 21 in 2009, in the so called D-category. The decision was motivated by two factors. The first factor was the goal to embed the long-term realized cultural activities in an overarching concept of Local Agenda 21. Such a step was perceived to contribute to further development of cultural life in the village. Others said culture was the main theme of Local Agenda 21 in the Zdechov municipality. The second factor was rather pragmatic because it followed the project-oriented activities of the village. Local Agenda 21 was understood as a brand which could have increased the opportunities of the village in explanation of its project applications. Furthermore, participation of the village in Local Agenda 21 was expected to increase its chances in the competition on the Village of the Year in the Zlínský Region. It is noteworthy that the former participation of the Zdechov's mayor in the Vsetin City was beneficial because just the Vsetin City may be understood as a pioneer of Local Agenda 21 in the Czech Republic.

From the organisation viewpoint, the mayor of the municipality was the main coordinator of Local Agenda 21. He cooperated closely with the informal working group which involved representatives of the cultural commission, local action groups, school, enterprises and other subjects. Communication between the actors of Local Agenda 21 was realized on an informal basis in both directions. Simultaneously, various methods for citizen involvement were









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applied. The high participation of local citizens is noteworthy. Finally, point at various innovative methods used – e.g. pictures of "dream garden" drawn by school pupils.

Local Agenda 21 was not formalized in any strategic document of the Zdechov municipality. The main strategic document is annually actualized Programme of Municipality Development, first enacted in 1992. Culture and societal life had a strong position in the document. Moreover, it was anticipated that just Local Agenda 21 may have become the leading concept for preparation of a new strategic document. Note that development projects in the Zdechov municipality were traditionally financed from various sources, including EU subsidies. Finally, volunteers were used in organization of all actions.

From the practical point of view, Local Agenda 21 hinders at the problem of rather intangible benefits. This was also the case of the Zdechov municipality because the Local Agenda 21 implementation process was stopped three years later. It could be anticipated that potential benefits did not offset formal costs of the process.

Source: HÁJEK, O., NOVOSÁK, J., BEDNÁŘ, P. Local Agenda 21 and culture: lessons from the Czech Republic. Local Culture and Governance, 2011, vol. 3, no. 1-2, s. 83-94.











10. Model Situations

Model situations are the tasks which will be solved during our seminars. The model situations assume your home-preparation. However, the main workload will be held at school. Thus, the following text describes only the fundamental information on model situations. Some additional information will be given during our lectures. So what are the model situations?

Model Situation 1

The first model situation is based on a rather new tool which was developed in the EU Cohesion Policy framework. This is the so called European Grouping of Territorial Cooperation (EGTC hereafter) for solving the problems of cross-border areas. The model situation will be based on the proposal how to establish EGTC, using the relevant legislation. The road mad for the establishment of EGTC will be used as a typical tool for solutions.

Model Situation 2

The second model situation is based on the review of financial tools for housing development in the Czech Republic. The goal of the model situation is to suggest a typology of tools used for typical projects of housing development. The model situation will teach you systemic thinking in the thematic sphere of development projects. The logical links between themes, financial tools, eligible applicants and provider of finances will be introduced.

Model Situation 3

The third model situation is based on an increasing importance of international migration for the Czech Republic. First, we will define various categories of international migrants on the Czech territory. Subsequently, two questions will be discussed:

- 1. What is the rationale of migrants' transition between the categories?
- 2. How could be instruments of migration policy be formulated to meet relevant goals of the Czech Republic?









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Model Situation 4

The fourth model situation is based on the case study of the TPCA Company investments in the Kolin municipality. Your task will be to formulate a review of positives and negatives determined by the investment. The situation of negotiation between proponents and opponents of the investment will be simulated.

Model Situation 5

The fifth model situation is focused on the creation of development strategy of the tourism cluster. The opportunities to draw funds from external sources will be the overarching framework for this model situation. Thus, you will recognize, among others, the possible limits for cluster development in services.

Model Situation 6

The sixth model situation simulates the process of programming, others said, creation of EU operational or other programmes – strategic documents. The link to the transport theme is discussed. Based on quantitative analyses of inputs and impact, intervention logics will be proposed how to allocate financial means. Relations between various spatial units are introduced as well. Finally, opportunities for integrated thematic approach are given.

Model Situation 7 a 8

The essence of the seventh and eighth model situation is structured in the same way as the sixth model situation. However, the relations to the themes innovations and environment are discussed.









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How to finish the course?

Dear students,

If you completed your reading to this page I would like to congratulate and say thank you for your attention. There is only one task for you to complete the course. You are required to successfully complete written and oral exams of this course. I would like to wish you no accident in this regard. ©