## Ministry for Regional Development of the Czech Republic

# Czech Republic Portraits of Regions



#### Czech Republic - Portraits of Regions

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#### Foreword

The elaboration of this publication was initiated by the Ministry for Regional Development of the Czech Republic. The publication introduces both Czech and foreign readers to topical trends of the socio-economic development of the regions in the Czech Republic. Apart from general information about physical geography, population and economy of the Czech Republic it also gives a detailed characterization of all its fourteen regions. We believe that the reader will find plenty of valuable information in this book.



## INTRODUCTION

The Czech Republic (Czech lands) is a landlocked country located in central Europe, consisting of the historic provinces of Bohemia, Moravia and a part of Silesia. With a total area of 78,866 sq km and population of 10.2 million it ranks among middle or smaller sized European countries. In the west it borders on Germany (811 km), in the south on Austria (466 km), in the east on Slovakia (252 km), and in the north on Poland (762 km).

The Czech Republic is one of the youngest countries in Europe. It was established only on January 1, 1993 as a consequence of a break-up of Czechoslovakia, the common state of the Czechs and Slovaks, into two independent states. The roots of Czech statehood, however, go much deeper into history. The Czech principality was established as early as in the 9<sup>th</sup> century. During the 10<sup>th</sup> and 11<sup>th</sup> centuries the principality was consolidated, incorporating Moravia and some other neighbouring territories. The gradual rise in political, economic and cultural importance of the medieval Czech state resulted in its declaration as a kingdom in 1212 and reached its peak during the reign of Charles IV (1346-1378).

In the 15<sup>th</sup> century the Czech lands were considerably weakened by religious wars between the Catholics and the Hussites, members of a reformational Christian movement following the teaching of the theologian and reformer Jan Hus (1369-1415). In 1526 the Hapsburgs ascended to the Czech throne and the state was incorporated into a larger territory – the Austrian monarchy. During the bloody Thirty Years' War (1618-1648) the Czech territory was devastated and the population was re-catholised by force. Religious tolerance and the abandonment of counter-productive feudal economy were brought by economic reforms of Josef II in 1781. From the end of the 18<sup>th</sup> century, the Czech lands developed rapidly and gradually became the economic base of the Austrian monarchy. The economic rise of the Czech lands was accompanied by formation of the modern Czech nation, which was at the same time connected with the Czech culture and language revival and later with an effort to gain political independence.

After the defeat of Austria-Hungary in World War I the Czech lands became independent on October 28, 1918 and formed an essential part of the newly established Czechoslovakia, whose territory comprised Slovakia and a part of the present-day Ukraine as well. The first Czechoslovak president Tomáš Garrigue Masaryk (1850-1937) established a firm democratic foundation for the country. However, the expansionism of Hitler's regime in neighbouring Germany proved fatal to the new Czechoslovak democracy. In 1938 Czechoslovakia was stripped of its border territories with a German majority, and in March 1939 the remaining Czech territory was occupied by the *Wehrmacht* and the so-called Protectorate of Bohemia and Moravia was created.

The Czechoslovak state was renewed in 1945. In February 1948 the communists seized power, the country was transformed into a totalitarian state and became a part of the Soviet bloc. Changes to the political system were brought about by the peaceful "Velvet" revolution on November 17, 1989. After the collapse of the communist regime the lengthy process of economic, political and moral renewal of the Czech society, externally represented by the president Václav Havel, was started. Changes touched all spheres of life and meant not only economic transformation but also transformation of political institutions and practically all aspects of life.

During the first stage of development after 1989 relations between the Czechs and Slovaks within the common state and the question of return to the traditionally "pro-western" orientation of the country were the main issues to be solved. Controversy and latent tension between Czech and Slovak political representatives lead to the break up of Czechoslovakia. The break-up itself took place peacefully thanks to the consensus of both parties and relations between both successor states are very good.

A major priority of the foreign policy of the newly created Czech Republic was its integration into Euro-Atlantic security structures and full participation in the European integration. The most important events since gaining independence were admission into NATO in March 1999 (together with Poland and Hungary) and the particularly successful negotiating process related to admission into the EU (May 1, 2004).

As far as internal changes within the Czech Republic itself are concerned, the accomplishment of the territorial reorganization of public administration could be ranked as an important event. The conception of the reform was fully in concord with the European conception of democracy and it was aimed at the accomplishment of greater effectiveness within the public administration. In January 1, 2001 fourteen new regions were established in the Czech Republic. These, as higher territorial self-administration units, represent not only self-government but are also a part of the state administration. At the end of 2002 district offices were dissolved (they acted on behalf of the state administration) and their function was transferred both to the new regions and municipalities with extended powers (a total of 205 municipalities). However, on the regional level districts represent NUTS 4 level and the new regions NUTS 3 level. Higher level, NUTS 2, is made up by areas or association of regions, of which 8 were established in the Czech Republic.

Table 1: Basic char	racteristic	s of regions in	the Czech Rep	public (as of	January 1, 2005)
Region	Area (sq km)	Number of inhabitants	Population density (inh. per sq km)	Number of municipalities	Administrative centre
Capital City of Prague	496	1,170,571	2,360.0	1	Praha
Středočeský	11,015	1,144,071	103.9	1,146	Praha
Jihočeský	10,057	625,712	62.2	623	České Budějovice
Plzeňský	7,562	549,618	72.7	501	Plzeň
Karlovarský	3,315	304,588	91.9	132	Karlovy Vary
Ústecký	5,335	822,133	154.1	354	Ústí nad Labem
Liberecký	3,163	427,563	135.2	215	Liberec
Královéhradecký	4,758	547,296	115.0	448	Hradec Králové
Pardubický	4,519	505,285	111.8	452	Pardubice
Vysočina	6,790	510,114	75.1	704	Jihlava
Jihomoravský	7,196	1,130,240	157.1	672	Brno
Olomoucký	5,268	639,423	121.4	397	Olomouc
Zlínský	3,964	590,706	149.0	304	Zlín
Moravskoslezský	5,428	1,253,257	230.9	299	Ostrava
Czech Republic	78,866	10,220,577	129.6	6,248	Praha
Source: Regionální portréty, ČSÚ 2005.					

Fig. 1: Administrative division of the Czech Republic Area (NUTS 2) Liberacky Severovýchod Region (NUTS 3) gbem Ústecký Administrative Centre Severozapad Královéhradecký Hlavni město Praha Karlovarský Středočeský Pardubicky ZSKO Střední Čechy Moravskos/ezskj Plantsky Střední Morava **Jihovýchod** · 281 Vysiočína Brno Zilinský Jihomoravský 100 km

## **ENVIRONMENT**

The Czech Republic comprises of three historic provinces – Bohemia, Moravia and the Czech part of Silesia. The concentric shape of Bohemia is delimited by the Czech Basin and its mountain rim forms almost an ideal hydrographical unit of the Elbe River drainage basin. The Moravian territory possesses transitive and passable character in Moravian vales, whose axes are formed by important European rivers – in the central and southern part the Morava River, in the northern part the Odra River. East Moravia is covered by the Western Carpathians, which in comparison to the Czech Highland is a younger geological unit.

#### GEOLOGICAL COMPOSITION AND DEVELOPMENT

Intense geological processes in the past are reflected in varied landforms on a relatively small territory. There were massive orogeneses; during the Cretaceous Era part of the territory was flooded by the sea, volcanism was active as late as the beginning of the Quaternary Period and the continental glacier transported erratic boulders from Scandinavia.

The Czech Republic straddles to two large geological units with markedly different development: Bohemia, and the greater part of Moravia and Silesia are a part of the Czech Massive, while the eastern part of Moravia and Silesia lie on the Outer Carpathians.

The Czech Massive is a relic of a vast mountain range elevated during the Hercynian orogenesis in the Paleozoicum (devon-carbon) 380-300 millions years ago. Orogenesis was accompanied by rock metamorphosis and red-hot magma erupted out of the Earth's depths, which solidified not very deep below the surface – this consolidated the Czech Massive by vast plutons into one unit. At that time Central Europe was situated in the tropics and depressions among mountain ranges started to overgrow with lush vegetation. Accumulation of plant remnants which were later covered by younger sedimentary layers gave birth to hard coal deposits.

At the beginning of the Mezosoic Period the northern and eastern parts of the Czech Massive were flooded by a shallow sea. Vast sea transgression appeared in the Cretaceous Period and the sea gradually flooded the whole northern part of the Czech Massive; Cretaceous sediments were deposited in the basins of southern Bohemia. The transgression lasted for 10 million years. The Czech Cretaceous Basin was formed, which is the largest preserved sedimentary basin in the Czech Republic (it presently covers an area of almost 15,000 sq km, although the original area was even larger). The basin was filled first by freshwater and later by sea sediments. The thickness of deposited layers exceeds 1 km in the central part. The Czech Cretaceous Basin today represents the most important area of ground water accumulation in the Czech Republic.

During the Tertiary Period the Czech Massive remained primarily dry land. While in the south and east huge Alpine orogenesis took place, the Czech Massive experienced tectonic activity resulting in domal uplift, formation of faults and rifts. In the tectonically most active area of Podkrušnohoří the Ohře Rift was formed; declines along faults in southern Bohemia renewed accumulation of sediments in lake basins. Fault tectonics influenced not only the formation of depressions but particularly uplift of border mountain ranges and revival of volcanic activity. The latter began in the Cretaceous Era, culminating during the Tertiary Period, and faded away in the Quaternary Period. It was mainly centred in the Ohře Rift (České

středohoří, Doupovské Mts.), along the Elbe fault line (Říp, Bezděz, Ralsko, Kunětická hora) and in Nízký Jeseník Mts. (in the surroundings of Bruntál). As a result of tectonic movements the characteristics of hydrographical system were changed; the contemporary characters were established in the middle of the Tertiary Period. By the end of the Miocene the sea ebbed from the Carpathians forefront and the territory of the Czech Republic became dry land.

While during the older Tertiary Period the territory of the Czech Republic lay in the subtropical belt, during the younger Tertiary the climate gradually got colder. During the Quaternary Period, the youngest geological era, the climate oscillated – in the Pleistocene glacials and warmer interglacials altered. When northern Europe was glaciated, Bohemia and Moravia were in the cryogenic zone with a thick layer of permafrost. The northern rim of the Czech Massive was modelled by the continental glacier and the Krkonoše, Šumava and Hrubý Jeseník Mts. by mountain glaciers.

The Carpathian system is much younger than the Czech Massive. It was formed during the Alpine orogenesis taking place from the Upper Cretaceous Era to the younger Tertiary Period. It touches the Czech territory only at its outer part, which is formed by fold thrusts of the Mezosoic and Tertiary rocks. This so called flysch belt is made from altering layers of sandstone, claystone and pudding stone pushed on the eastern rim of the Czech Massive from south and south-east during the younger Tertiary Period 25-15 millions years ago. In front of the fold thrusts a depression was formed, filled mainly with sea and freshwater sediments and also inside the Carpathian belt a large sedimentary area came into existence (the Vienna Basin). About 15 million years ago the Moravian area was uplifted and the sea gradually retreated from the central and southern parts. Sea sedimentation carried on for a shorter period in the Ostrava and Opava regions in a small bay extending from Poland. By the end of the Miocene the sea retreated from these areas as well. The north of the Outer Carpathian depression was modelled by the Pleistocene glacier, in non-glaciated areas wind blew fine debris out of fluvial sediments and large covers of loess and sands were formed. In southern Moravia they reach a thickness of up to 35 m.



Tors created by frost weathering on the Žárový vrch. (Photo: Irena Smolová)

#### MINERAL RESOURCES AND THEIR EXTRACTION

The Czech Republic is not a significant producer of raw materials. Mining makes up 1.4% of the country's GDP and in 2004 this branch employed around 50 thousand workers. Raw materials in the Czech Republic are owned by the state and these consist of reserved materials (the so-called "reserve deposits"). Out of more than 1,500 registered localities of reserve deposits most of them (one fifth) consist of building stone deposits and more than one seventh by gravel-sand and sand deposits. Presently 1,005 allotments have been assigned, out of which 603 are active (they take up the area of 801 sq km).

**Ore extraction** has a long tradition in the Czech lands. During the Middle Ages Bohemia was the centre of European gold and silver mining. Ore extraction gave birth to a number of the Czech and Moravian towns (Kutná Hora, Příbram, Jáchymov, Kašperské Hory, Zlaté Hory). The Czech territory experienced the latest ore mining boom during socialist industrialization after 1948, when ore was extensively extracted, despite economic losses. After 1989 the ore extraction was gradually slumped and presently only uranium ore is being extracted.

In the past, apart from gold and silver, the extraction of iron, copper and uranium ore was important as well. *Iron ore* extraction formed the basis of prosperity of many ironworks and the Czech steel industry. The deposits were, however, noted for their low yield and were relatively soon exhausted. The extraction was important in the Barrandien area, Příbram region, Krušné Mts. and Šumava Mts. Zlaté Hory mining district in the Jeseníky Mts. foothills was an important area for cooper ore extraction in the past.

From 1945 until the middle of the 1990s, uranium mining was a major part of the Czech economy, and the Czech Republic (before 1993 Czechoslovakia) ranked among the world's foremost producers of concentrated uranium. By 2004 almost 110 thousand tons of uranium had been extracted in the Czech Republic. During the 1960s the annual production reached 3 thousand tons, presently the only active mine is in Dolní Rožínka (the Vysočina Region) producing less than 150 tons per year and even this mine should close in the near future.

Fuel production is important for the Czech economy. In addition to uranium, the Czech Republic has deposits of brown and hard coal, and limited deposits of natural gas and oil of the highest quality. The most important as for the amount is the brown and hard coal, which reached its peak during the 1980s. After 1989 a reduction programme was accepted and the extensive extraction has considerably decreased. Moreover, territorial and volume limits have been set.

The Czech Republic ranks among the ten largest world producers of brown coal and accounts for roughly 5% of world production. The largest Czech brown coal basins are connected with a tectonic rift below the Krušné Mts. (the Podkrušnohorský Rift). Brown coal has played an important role in the Czech economy. During the latter half of the 20<sup>th</sup> century brown coal mining experienced dynamic development, when bulk output was introduced. The highest mining volume was reached in 1986 (93 million tons). Then the rate of extraction considerably declined, in 1993 63.3 million tons were extracted, in 2004 only 44.5 million tons.

The Czech territory has relatively large deposits of *hard coal*. Mining for hard coal is active only in the Ostravsko-karvinský mining district, which is a part of the Upper Silesian Basin, one of the richest in hard coal in Central Europe. Approximately 85% of these deposits lie in Poland, the rest in the Czech Republic. In the past it was extracted in the Kladensko-rakovnický, Rosicko-oslavanský (near Brno) or Žacléřsko-svatoňovický (near Trutnov) mining districts. The largest volume of production in the Czech Republic was reached in 1980 (28.2 million tons), presently it is 13.3 million tons.

*Oil extraction* in southern Moravia goes back to the beginning of the 20<sup>th</sup> century. The deposits are connected with the Vienna Basin. Although Czech oil produciton is insignificant, compared to the con-



Significant influence of limestone extraction in the landscape. (Photo: Irena Smolová)

sumption of oil, it has been increasing considerably over recent years. Presently about 300,000 tons of the top quality oil without sulphur impurity is extracted in the Czech territory. Annual extraction of natural gas approaches  $250,000 \, \text{m}^3$ .

The production of most **other materials** increased after 1993. The extraction of kaolin, building stone and gravel-sand increased more significantly. In other cases it was kept on the previous level or increased slightly. The extraction of building materials causes serious environmental disturbances. Apart from the extraction of gravel-sand, the most controversial is the extraction of limestone, for approximately one third of this extraction takes place in protected areas (protected landscape areas or national parks).

Table 2: Development of selected raw materials extraction (1993-2004)					
Raw material	aw material		Total amount of extraction		
		1993	2004	(%)	
Ores – not uncluding uranium	(thousand tons)	131	0	0.0	
<ul><li>uranium ore</li></ul>	(tons)	437	134	30.7	
Hard coal	(thousand tons)	18,300	13,302	72.7	
Brown coal and lignite	(thousand tons)	63,340	44,498	70.2	
Oil	(thousand tons)	111	305	274.8	
Natural gas	(thousand m <sup>3</sup> )	244	244	100.0	
Kaolin	(thousand tons)	2,236	3,408	152.4	
Building stone	(thousand m <sup>3</sup> )	9,609	13,256	138.0	
Gravel-sands and sands	(thousand tons)	12,305	16,289	132.4	
Brick clay	(thousand m³)	10,071	10,396	103.2	
Limestone	(thousand tons)	1,779	2,012	113.1	
Clay and bentonite	(thousand tons)	690	714	103.4	
Source: database of the Czech Mining Office and the Mining Union					

#### LANDFORMS

A basic landform classification of the Czech Republic, as well as geological classification, consists of two basic units: the Czech Highland formed by the rocks of the Czech Massive, and the Carpathians with younger landforms mainly in flysch layers. The Czech Highland consists of western and central parts of the Czech territory with a central system of highlands and uplands and a ring of border mountain ranges (Krkonoše Mts, Šumava Mts, Jizerské Mts., Orlické Mts., Jeseníky Mts, Lužické Mts., and other). It is separated from the Carpathian mountain range by a depression along the Znojmo-Ostrava line. The Western Panonian Basin and Central European Lowland reach Czech territory only by their rims in the Dolnomoravský Vale and Opava surroundings respectively.

The highest peak of the Czech Republic, Sněžka (1602 m a.s.l.) in the Krkonoše Mts., is at the same time the highest peak of the Hercynian mountains in Europe. A total of 391 peaks in the Czech Republic exceed the altitude of 1000 m above sea level, out of which 180 are in the Šumava Mts., 56 in the Hrubý Jeseník Mts. and 54 in the Krkonoše Mts.

The lowest point of the Czech territory is usually considered to be the Elbe River at the point where it leaves the Czech Republic towards Germany at Hřensko (115 m a.s.l.). However, taking into account human activity, the lowest point of the Czech Republic is the bottom of a giant open-pit coal mine "ČSA" at Most (30 m a.s.l.). This coal pit recesses 160-200 m below the surrounding surface (230 m a.s.l.).

#### Karst

Distinctive landforms developed in territories formed by dissoluable rocks (e.g. limestone and lime dolomites), which are subject to the process of karsting. Typical forms are created on the surface and below ground. The largest and most important karst areas, the Moravian Karst and the Czech Karst, are formed from the Devonian and Silurian limestone, small karst areas can be found in crystalline limestone; in the Carpathian area and small islands in the Lusatia and Brno region Jurassic limestone is typical. The most important cave systems were formed during the Tertiary Period and are marked by abundant dripstone ornamentation.

From Brno northbound to Sloup and Holštějn there is a 3-5 km wide and 25 km long belt of over-whelmingly Devonian limestone, where the largest karst in the Czech Republic are to be found, the Moravian Karst, developed. It comprises the Amatérská Cave system, the longest karst cave system in the Czech Republic (almost 35 km of subsurface space), and huge Macocha Abyss (138 m deep). The second largest karst area in the Czech Republic, the Czech Karst, is graced by the well-known Koněpruské Caves.

Bozkovské Dolomite Caves in Podkrkonoší, the longest cave system in dolomites in the Czech Republic, reach the length of 1,040 m and are characterised by subsurface lakes. Zbrašovské Aragonite Caves form a unique hydrothermal cave system of European importance modelled in limestone by the simultaneous action of precipitation and warm mineral springs coming from great depths. Unique ornamentation of these caves is formed by aragonite, geyser stalagmites and orbicular flowstone coating resembling doughnuts. These are the warmest caves in the Czech Republic with a constant temperature of 14°C.

In the Czech territory there are 13 cave systems open to the public. Sloupsko-šošůvské Caves in the Moravian Karst are the longest, while the Na Špičáku Cave has the longest written historical record and is so far the only cave that is barrier-free. The caves are also used for speleotherapy.

Near the town of Hranice the deepest abyss in the Czech Republic, Hranická Abyss with a current depth of 273.5 m (of which 204.5 m are under karst lake surface), can be found. According to experts it may even be the deepest abyss in Europe. It is of hydrothermal origin and is almost entirely filled with mineralised acidulous water with a temperature of 14-16.5°C.

The Czech Republic is also rich in pseudokarst phenomena, mainly in layers of cuboidal sandstone of rock cities, where ficture, debris and fissure caves and abysses prevail. Pseudokarst was created also in the sandstones of the flysch belt of the Western Carpathians and in the vulcanites of the České středohoří. The longest cave system in non-karst rocks is Teplická Cave in Adršpašsko-teplické Rock City, which is also one of the longest in the Central Europe (1,065 m).

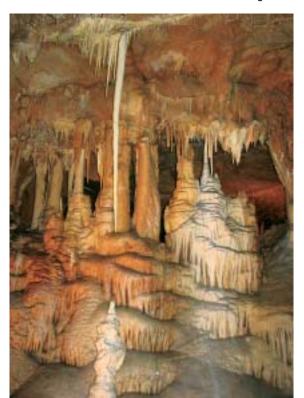
#### **Rock cities**

Typical rock cities developed in the sandstone of the Czech Cretaceous Basin. Since the end of sedimentation they have been subject to mechanical weathering and fluvial and eolian action. They are marked with a great variety of forms and microforms. The height of rock towers is usually between 10-80 m, occasionally more. They represent distinct landscape dominants.

The largest rock city in central Europe, Adršpašsko-teplické Rocks, is protected as a national natural reserve of 1,772 ha. After the retreat of the Cretaceous sea, the originally solid sandstone table was dissected through tectonic activity and erosion into unique rock cities. The Adršpašské Rocks are typical of a set of 270 isolated towers and pillars, while the Teplické Rocks are characterised by compact, less dissected rock faces and deep gullies.

Kokořínsko is typical of lid rocks – hard ferritic or pudding stone rock ledges covering irregular cones of less resistant sandstone. The large area of rock cities north of Máchovo jezero and Břehyně Ponds is referred to as the Polomené Mts. In 1955 the oldest protected landscape area in the former Czechoslovakia, the Czech Paradise, was established in order to protect rock cities in the Jičínská Upland. One of its parts, the Prachovské Rocks – a rock city of 190 ha – ranks among the oldest tourism destinations in Bohemia. The sandstone Suché Rocks are on the left bank of the Jizera River.

Since 1972 the rock cities in the Děčínská Highland have been part of Labské pískovce Protected



Landscape Area, whose core became the České Švýcarsko National Park in 2000. A wide variety of forms in Cretaceous sandstones includes gullies, up to 150 m high rock faces, towers, pillars, overhangs, ledges, rock arches and windows. Pravčická brána, the largest rock arch in Europe, is 16 m high and 26.5 m wide.

Dripstone decorations in the Javoříčské jeskyně karst caves, central Moravia.

(Photo: Irena Smolová)

#### **CLIMATE**

The Czech Republic lies in the temperate belt and experiences four seasons. Prevailing westerly winds bring the air masses from the Atlantic. Average monthly air temperatures show a simple course with a minimum in January and maximum in July.

Average monthly air temperature differences depend on location, most importantly altitude. Among the warmest areas are southern Moravia, the central Polabí area and Prague with average annual temperatures around 9°C. Annual averages lower than 6°C can be found only in the mountainous altitudes, and even the highest stations give annual average temperatures above the freezing point (Sněžka 0.2°C). Extremely low air temperatures are brought by arctic air masses from the north and the east. The temperature record of –42.2°C was registered on February 11, 1929 in Litvínovice near České Budějovice. The warmest temperatures are connected with warm air masses from the south. The historical record for the highest temperature of +40.2°C was recorded at Praha-Uhříněves on July 27, 1983.

Long-term annual mean rainfall on the Czech territory is 686 mm. Among the driest areas are the Žatec and Kladno regions, where yearly rainfalls do not exceed 450 mm. Low rainfalls around 500 mm are typical of southern Moravia. On the contrary, the highest rainfall is in the Jizerské Mts. (yearly rainfalls over 1,700 mm), Šumava Mts., Krkonoše Mts., Hrubý Jeseník Mts., and Moravskoslezské Beskydy Mts. (over 1,500 mm).

The greatest percentage of yearly rainfall occurs during the summer season (up to 40%) and the spring season (25%). Summer rainfall often has a torrential character. Historically the greatest Central European rainfall record of 345.1 mm within a 24-hour period was registered on July 29, 1897 in Nová Louka in the Jizerské Mts. A similar extreme was recorded on August 12, 2002 in Cínovec in the Krušné Mts., where 312 mm of precipitation occurred within 24 hours.

The first days with snow cover occur in mountains during October, in the lowlands by the end of November or by the beginning of December. The duration of snow cover ranges from 40 days a year in the lowlands to more than 150 days in the mountains. Studniční hora in the Krkonoše Mts. has snow patches till the end of August. Duration of sunshine in the Czech territory varies between 1,300 to 1,800 hours per year.

The oldest Czech meteorological station, Prague-Klementinum, has been recording air temperature since 1775. This continuous data set, unique in Europe, is often used by foreign specialists when studying climatic changes. Since 1962 the Solar and Ozone Observatory of the Czech Hydrometeorological Institute in Hradec Králové has been carrying out daily measurements of the total amount of ozone in the atmosphere, to describe the current state of the ozone layer above Central Europe. It is one of the longest European data sets of its kind, assessed for its quality as an international standard.

#### **WATERS**

The Czech Republic is an important European water source region. Its rivers flow towards three seas – the Baltic, the North and the Black Sea. The main European hydrological divide runs through the country. Almost two thirds of the area of the Czech Republic is a part of the Elbe watershed (63%), more than one fourth belongs to the Danube watershed (28%) and almost one tenth to the Odra watershed (9%). The longest Czech watercourse is the Vltava River, but the Elbe is considered to be historically the main waterway of Bohemia. The Morava and the Odra are the most important rivers of Moravia and Silesia.

Presently the total length of the river system in the Czech Republic is approximately 76,000 km. The structure and character of the river system reflect its natural development, but during the last several

	Table 3: The longe	est rivers in the C	zech Republic
River	Length	Watershed	Flows into
	(km)	area (sq km)	
Vltava	430	28,090	Labe
Labe (Elbe)	370	51,392	North Sea
Dyje	306	13,419	Morava
Ohře	300	5,614	Labe
Morava	271	24,110	Dunaj
Berounka (-Mže) 1)	246	10,690	Vltava
Sázava	225	4,349	Vltava
Jihlava	185	3,117	Dyje
Svratka	174	7,119	Dyje
Jizera	164	2,193	Labe
Otava (-Vydra) 2)	113	3,788	Vltava
Odra	112	7,217	Baltic Sea

Notes: 1) Berounka together with its longest headwater tributary, the Mže River

2) Otava together with its longest headwater tributary, the Vydra River

Source:

Vlček, V. (ed.): Vodní toky a nádrže. Zeměpisný lexikon ČSR. Academia, Praha, 1984, 315 s.

centuries human influence has been increasing: with damming, construction of ponds or canals, stream regulation, stream straightening, irrigation and since the latter half of the 20<sup>th</sup> century also with the construction of large dams. During the last two hundred years the length of the river system has decreased by 4,500 km. In some places small streams have totally disappeared, and dams regulate the flow of most large rivers. Due to the important function of waterways for the countryside, notable financial resources are being invested into the natural regime of water streams revitalization.

Czech rivers and streams are almost totally dependent on precipitation, maximum natural flow rates are recorded during the spring thaw, and a second maximum during summer intensive precipitation. The timing of the spring thaw depends on altitude, coming to the lowlands in February and March, and to the mountains during May and June. During the last decade the Czech Republic was repeatedly stricken with catastrophic floods. In July 1997 sixty people lost their lives and material damage reached CZK 63 billion. A year later flash floods struck the Orlické Mts. and their foothills and in August 2002 the largest historic flood on the Vltava River struck most of Bohemia. It claimed nineteen lives and material damage reached CZK 75 billion.

Valuable areas of water resources are defined by a system of special protection. In the Czech territory 18 protected areas of natural water accumulation have been declared, of these 12 areas covering a total of 8,267 sq km are designated for the protection of surface water, and six with a total area of 9,900 sq km for ground water. Protected areas for waterways and their drainage basins for accumulating drinking water from surface water sources cover an area of approximately 2,700 sq km. Another approximately 6,200 sq km have been declared protected territory for drinking water extraction.

Since 1963 the quality of surface water has been monitored by a state network, extended later to include ground water monitoring. Presently the system is made of 284 quality control profiles for surface water, 140 springs and 328 wells. During the last decade water quality in waterways significantly improved mainly due to the construction of waste-treatment plants, the reduction or elimination of production in some fields of industry, and the reduction of fertilizer usage in agriculture.

Inland water transport has never been of great importance in the Czech Republic. Presently the length of navigable waterways is 303 km and includes the Elbe River below the Vltava River inflow, the middle part of the Elbe River, the lower Vltava River to the Slapy Dam and 1 km at the mouth of the Berounka

River. Historically the Vltava River was the main transport route of Bohemia. Goods (timber, salt, stone) were transported on boats and rafts mainly to Prague. This transport route came to a definite end with the construction of dams forming the so-called "Vltava Cascade". The Elbe River was used for the transport of brown coal from Podkrušnohoří to the Opatovice power station. Originally, the middle Elbe was to be connected to the Dunaj-Odra Canal, but this plan was never realised.

#### Lakes

The lakes of the Czech Republic are small and not very numerous when compared to those in the neighbouring states. Thus they are largely protected as outstanding natural formations. The largest natural lake in the Czech Republic, Černé Lake in the Šumava Mts., covers 18.5 ha and has a maximum depth of almost 40 m. Another category of lakes in the Czech Republic are man-made lakes. These are mostly the products of the mining industry. The largest of these are still to be created as a part of the planned revitalization of the regions affected by brown coal mining in the Podkrušnohoří area.

#### **Ponds**

Since the Middle Ages, the Czech Republic has traditionally been an important European fish farming area. A very dense network of ponds contributes to the landscape character of many regions. The Czech ponds rank among the oldest in Europe, records of their creation date back as far as the 12<sup>th</sup> century. A fish farming boom started under Charles IV, the estimated area covered by ponds during his rule (the 14<sup>th</sup> century) was 78 thousand hectares. A golden age of the Czech fish farming came in the 16<sup>th</sup> century particularly in southern Bohemia and Polabí. In the Pardubice region along the Opatovický Canal 230 ponds were constructed. In the Třeboň Basin, in southern Bohemia, the Zlatá stoka Canal was constructed to feed a large system of ponds, and on the Lužnice River the largest Czech pond Rožmberk (489 ha) was established. At the end of the 16<sup>th</sup> century the total area of ponds in the Czech territory reached 180,000 hectares. However, economic forces led to a decrease in the number of ponds over the subsequent years. Draining the fish ponds freed land for agriculture. At the same time, domestic fish production faced competition from imported sea fish, and the costs of dredging ponds and maintaining dikes increased. By 1820 the total area covered by ponds decreased by more than a half and a hundred years later (1920) to 41,000 hectares. Presently, a number of ponds are protected as technical monuments or as internationally important wetlands and bird reserves.



View of the Pálavské vrchy over the Nové Mlýny dam. (Photo: Irena Smolová)

#### **Dams**

The beginnings of dam construction in the Czech lands go back to the end of the 18<sup>th</sup> century, when the development of manufacturing increased the demand for water. In the vicinity of factories earthen dams up to 30 m high were constructed and reservoirs resembling large ponds were formed. Some of these still exist to the present (e.g. Pilská in the Příbram region). Dams in the modern sense built with contemporary methods for the purpose of water management have been built only since the end of the 19<sup>th</sup> century. They usually satisfied water supply needs and had a regulative and flood preventing function. The impulse for dam construction was felt after recurrent floods at the end of the 19<sup>th</sup> century. Floods following extremely heavy precipitation in the Jizerské Mts. in 1897 resulted in heavy losses in both material damage and lives. This was the reason why seven dams were constructed on the upper reaches of the rivers in the Jizerské Mts. Before the establishment of independent Czechoslovakia in 1918, nineteen dams with a total capacity of 38.1 million m³ were constructed in the Czech lands. These were usually small dams at the upper reaches of rivers regulating the outflow from their drainage basins. By 1945 another sixteen dams were constructed.

Increasing demand for water consumption in agricultural irrigation and electricity production connected with socialist industrialization led to an intensive increase in dam construction. Between 1945 and 1990 eighty dams with the total capacity of 2,893 million m³ were constructed. During the first phase, water management was the primary intensive in order to secure sufficient drinking water. In the 1950s and 1960s the largest dams of the Vltava Cascade were constructed: Lipno, Orlík, Kamýk, Slapy.

During recent years dam construction has declined. After 1990 only four were finished; the construction of all these, however, had begun in the 1980s, and to date no new construction of a dam has been started. Currently the possibility of constructing the Nové Heřminovy Dam on the Opava River is being discussed; this dam would protect the Krnov region from floods.

Table 4: The largest dams in the Czech Republic (according to area)						
Dam	River	Surface area (ha)	Total capacity (mil. m <sup>3</sup> )	Height of dam (m)	Put into operation	
		(πα)	(11111. 111 )	dam (m)	орогалоп	
Lipno I	Vltava	4,870	306.0	25.0	1958	
Orlík	Vltava	2,732	716.6	99.5	1963	
Švihov	Želivka	1,670	264.0	62.0	1975	
Nové Mlýny – dolní	Dyje	1,668	87.8	9.8	1989	
Slapy	Vltava	1,392	269.3	70.0	1955	
Nechranice	Ohře	1,338	272.4	48.0	1968	
Nové Mlýny – střední	Dyje	1,033	34.0	6.7	1980	
Rozkoš	Úpa, Metuje	1,001	76.2	26.0	1970	
Slezská Harta	Moravice	923	226.6	65.0	1997	
Vranov	Dyje	763	132.7	47.0	1934	
Jesenice	Ondrava	760	52.8	21.0	1961	

Source: Vlček, V. (ed.): Vodní toky a nádrže. Zeměpisný lexikon ČSR. Academia, Praha, 1984, 315 s.

#### SOIL.

Soil is a natural part of the national wealth of every country. Over the centuries, the Czech lands have developed both highly fertile and considerably less suitable farmland. Agricultural land accounts fore more than a 50% of the total area of the Czech Republic.

In the driest and warmest areas chernozem developed. This is a type of relic soil originating in the early phase of the postglacial period under the original steppe and forest-steppe stands. It has a huge dark humus horizon and is the most fertile soil used for growing the most demanding crops (maize, wheat or sugar beat). It is typical of southern Moravia and a part of Polabí. These areas suffer from occasional desiccation and need to be irrigated.

Cambisols are typical of the lower upland level. They evolved under the original oak-hornbeam forests. They are valuable agricultural soil and compared to chernozems less prone to desiccation. They do well with demanding cereals (wheat, barley) or sugar beet.

In the middle altitudes (250-500 m above sea level) sod-podzols occur. They are of lower agricultural quality and to increase their fertility they require amelioration.

The most frequent soil of the Czech Republic is luvisol. Apart from lowlands, luvisols can be found in all types of mountainous terrain. Originally, they were covered with beech, oak and horn beam forests.

In the moist and cold climate of higher altitudes with annual precipitation exceeding 800 mm podzols are common. These are formed under coniferous forests, particularly spruce ones. They have low natural fertility and are used as pastures and mountain meadows. Most areas characterized by such soils are currently covered by coniferous forests.

Intensive use of soils for agricultural production and large-area deforestation disturbs natural soil cover by exposing the soil surface to erosion (destructive fluvial and wind action). Erosion leads to the loss of the most fertile layer of soil, and soil replacement takes hundreds of years.

Table 5: Potential fluvial soil erosion hazard in the territory of the Czech Republic (as of January 1, 2004)				
Level of fluvial	Agricultural	land area		
erosion hazard	(ha)	(%)		
Without hazard	180,655	4.2		
Soils predisposed	1,192,676	27.9		
Soils slightly endangered	1,106,743	25.9		
Soils endangered	771,599	18.0		
Soils highly endangered	429,891	10.1		
The most endangered soils	595,250	13.9		
Total	4,276,814	100.0		
Source: Výzkumný ústav meliorací a ochrany půdy, Praha 2004.				

#### **BIOTA**

When prehistoric peoples arrived, most of the Czech territory was covered by forests. Floodplain forests and oak groves grew in the lowlands, while in the highlands mixed oak forests prevailed, and the highlands and mountains were covered by beech forests with some firs. People started to deforest the landscape converting more and more land for agricultural production and cutting down forests for timber, fuel, and charcoal. At the end of the Middle Ages the rate of deforestation of the Czech landscape and increasing demand for timber reached such an extent that reforestation efforts started by the middle of the 16th century. Original forests rich in species were being replaced by monocultures of quickly growing spruce, which comprise until today more than half (53.9%) of the forested area in the Czech Republic. From the 13th to the 15th century when people began to colonise the mountainous border regions deforestation spread to hillside areas. As a result, erosion accelerated and the retention ability of landscape was reduced. Episodes of intensive precipitation and spring thaw caused recurrent devastating floods in the valleys. Already in the 19th century some forest owners realised the importance of forests for the landscape and started to protect valuable parts of forest stands. Thus, the oldest protected areas in the Czech forests include original forests left to natural development, e. g. Žofínský Virgin Forest or Hojná Voda. Special protection was granted to individual historically important trees.

During the last few decades the biological diversity of forest stands has been developing favourably. The proportion of deciduous forests has been increasing. While in 1950 the deciduous forests share was only 12.5%, presently it reaches 22.5%. This positive trend was brought about by attempts to approach the natural composition of forest complexes. The increase in proportion of deciduous forests, particularly oak and beech, is accompanied by a decrease in proportion of coniferous forests made up of spruce, fir, pine. The only conifer with increasing share is larch.

Forests cover approximately one third of the Czech territory. However, there are considerable regional differences. The lowest level of forestation can be found in fertile areas at lower altitudes, where they were cut down to provide space for intensive agricultural activities. The lowest share of forests can be seen around Břeclav (16.3%), Přerov (18.8%) and Prostějov (19.3%). On the contrary the highest share is around Jeseník (59.2%), Vsetín (53.8%) and Šumperk (48.2%).

The ownership structure of forested land has changed considerably as well. As late as in 1990 more than 95% of forests were owned by the state, the remaining part by agricultural cooperatives and private owners. Gradual restitutions lead to the decrease in the share of state ownership to 61.5%. Presently private owners manage 23% of forest area, municipal and regional authorities almost 15%. Church property is still subject of debate (it includes around 6% of the total forest area in the Czech Republic).

Table 6: Species composition of forests in 1950 and 2004				
Species	Share in %			
	1950	2004		
Spruce	60.0	53.9		
Fir	2.9	0.9		
Pine	21.2	17.5		
Larch	1.5	3.8		
Other conifers	0.2	0.2		
Oak	3.6	6.6		
Beech	4.5	6.3		
Birch	2.1	3.0		
Other deciduous	4.0	7.8		
Source: Zpráva o stavu lesa a lesního hospodářství ČR.				

Source: Zpráva o stavu lesa a lesního hospodářství CR Ministerstvo zemědělství ČR, Praha 2004.

#### ENVIRONMENTAL AND LANDSCAPE PROTECTION

Twenty-five protected landscape areas (PLA) and four national parks (NP) were declared in the Czech Republic up to the present day.

National park is a worldwide category of internationally or nationally important and unique areas with preserved natural or little affected ecosystems. All activities in national parks should be directd towards the preservation and improvement of the natural environment and contribute to scientific and educational functions. The four national parks of the Czech Republic take up 1.5% (1,195 sq km) of the state territory. The area of national parks is divided into three zones and public access to these zones is restricted. National parks have an independent administrative body, the National Park Administration, which coordinates and manages all major activities effecting the natural environment in these areas.

Protected landscape areas (8,683 sq km) are characterised as vast regions with harmonically shaped landscape, distinct landforms, a significant amount of natural forest ecosystems and permanent grassland, with ample representation of woods, or with historic monuments. Economic exploitation of these areas is permitted in accordance with their protected status to the extent that it contributes to and improves their natural state and assures the preservation of optimal ecological conditions. Recreational use is permissible if it does no harm to natural values.

#### **UNESCO** biosphere reserves

Biosphere reserves are declared by UNESCO within the programme Man and the Biosphere. The Czech Republic presently has six biosphere reserves: Bílé Karpaty, Krkonoše, Křivoklátsko, Pálava, Šumava, and Třeboňsko.



A mountain meadow below the top of Lysá hora in the Beskydy PLA. (Photo: Martin Jurek)

Table 7: National parks in the Czech Republic (as of September 1, 2005)				
National Park	Area (sq km)	Year of declaration	Characterization	
České Švýcarsko	79	2000	Rock cities with the largest rock arch in the Czech Republic	
Krkonošský	363	1963	The highest Hercynian mountain range in Europe, glacial and periglacial landforms, peat bogs, waterfalls, endemic species	
Podyjí	63	1991	Deep Dyje River canyon with numerous meanders, cryogenic landforms, vegetation and climatic inversion	
Šumava	690	1991	Vast forest complexes, peat bogs and wetlands, glacial lakes, cryogenic landforms	
Source: Seznam zvláště chráněných území ČR, Agentura ochrany přírody a krajiny, Praha 2005.				

Table 8: Protected landscape areas in the Czech Republic (as of September 1, 2005)				
PLA	Area	Year of	Characterization	
	(sq km)	declaration		
Beskydy	1,160	1973	The highest part of the Czech Carpathian range	
Bílé Karpaty	715	1980	Carpathian meadows, harmonic cultural landscape	
Blaník	40	1981	Preserved cultural landscape	
Blanský les	212	1989	Forested mountain massive on the left bank of the Vltava River	
Broumovsko	410	1991	Sandstone rock cities (largest in central Europe)	
České středohoří	1,070	1976	Neo-volcanic stubs, canyon Porta Bohemica	
Český kras	132	1972	Karst area (Koněpruské Caves)	
Český les	473	2005	Natural forest complexes, peat bogs	
Český ráj 1)	180	1955	Sandstone rock cities, neo-volcanic stubs	
Jeseníky	745	1969	Periglacial landforms, peat bogs	
Jizerské hory	350	1967	Peat bogs, beech forests, elevated etchplain	
Kokořínsko	270	1976	Sandstone rock city (rock lids)	
Křivoklátsko	630	1978	Preserved original species composition of forest	
Labské pískovce 2)	245	1972	Sandstone rock cities	
Litovelské Pomoraví	96	1990	Floodplain forests, Morava River meanders, wetland biotopes	
Lužické hory	350	1976	Mountain range on Lugicum fault, Naděje Ice Cave	
Moravský kras	92	1956	The largest karst area in the Czech Republic	
Orlické hory	200	1969	Vast forest complexes, peat bogs	
Pálava	86	1976	Jurassic klippe, karst landforms	
Poodří	82	1991	Floodplain forests, Odra River bends, ponds	
Slavkovský les	640	1974	Neo-vulcanites, forest complexes	
Šumava 3)	940	1963	Glacial relics, peat bogs	
Třeboňsko	700	1979	Ponds, wetlands	
Žďárské vrchy	715	1970	Numerous weathering landforms, cryogenic landforms	
Železné hory	380	1991	Wedge block, limestone islands	

Notes: 1) enlarged in 2002;

Source:

Seznam zvláště chráněných území ČR, Agentura ochrany přírody a krajiny, Praha 2005.

 <sup>2)</sup> part of this area became the České Švýcarsko National Park declared in 2000;
 3) enlarged in 1991, Šumava National Park declared on part of PLA

#### Natura 2000

Natura 2000 is a system of protected areas with endangered plant and animal species and with valuable biotopes. The purpose of the system is to preserve biodiversity, to protect valuable plant and animal species and to ensure permanent care of the most valuable natural localities in the European Union. The Czech Republic committed itself to the goals of Natura 2000 when it entered the EU. During the first phase, bird reserves were declared. The total extent of protected areas in the Czech Republic thus rose from 15% to 18.5%. Forty one bird reserves were declared by the date of admission of the Czech Republic to the EU. Individual areas are distinctive as for their acreage and number of bird species. The largest is Šumava (968.4 sq km); Křivoklátsko, Doupovské hory, Labské pískovce, Krkonoše, Králický Sněžník, Jeseníky, Libavá, Beskydy and Třeboňsko cover an area of more than 300 sq km. On the other extreme the smallest (under 5 sq km) bird reserves are DehtáY in southern Bohemia and Bohdane Pond in the Pardubice region.

#### Peat bogs and wetland societies

Peat bogs in the Czech Republic cover 27,000 hectares and contain more than 420 million tons of dry matter. Their present area is much smaller in comparison with the original natural state, large portions were converted into agricultural land, built up or inundated by ponds. Smaller peat bogs of a total area of up to tens of hectares prevail. Among the largest in the Czech Republic are Třeboňská and Borkovická Moors in the Třeboňsko region, Mrtvý luh, Rokytecká and Rybárenská Marsh in the Šumava Mts., Boží Dar Peat Bog in the Krušné Mts., Dářko Peat Bog in Ždárské vrchy and Rejvíz Peat Bog in the Jeseníky Mts. Marshes are frequent in Polabí, Máchovo jezero surroundings, Hornomoravský and Dolnomoravský vales.

In the Czech Republic, peat bogs represent a Quaternary relic. These vulnerable biotopes have a great importance in the landscape as a regulator of outflow and storage of ground water. Peat bogs, marshes and wetlands are protected by law and most of them are small protected areas. Ten localities in the Czech Republic are on the list of the Ramsar Convention on Wetland Protection.

Table 9: Internationally important wetlands in the Czech Republic					
Locality	Area	Altitude			
	(ha)	(m asl)			
Krkonošská Peat Bogs	230	1,300-1,440			
Šumavská Peat Bogs	6,371	730-1,200			
Třeboňská Peat Bogs	1,100	470-490			
Třeboňské Ponds	10,165	420-450			
Novozámecký and Břehyňský Ponds 1)	923	250-272			
Lednice Ponds	650	170-175			
Litovelské Pomoraví	5,122	220-250			
Poodří	1,500	214-282			
Lower Dyje Wetlands	11,500	152-180			
Liběchovka and Pšovka 2) Wetlands	350	175-290			

Notes: 1) Doksy surroundings in the Česká Lípa region;

2) Kokořínsko region

Source: Ministerstvo životního prostředí, Praha, 2005.

### **PEOPLE**

The Czech Republic is presently ranked among countries where the birth rate is lower than the death rate. According to the data of the Czech Statistical Office (ČSÚ) the population decreased from the beginning of 1993 till the end of 2004 from 10.326 million (51.45% women) to 10.221 million (51.23% women). Social, economic and political living conditions in a totalitarian system led, not only in the Czech Republic but in other transforming countries of central and east Europe as well, to the formation of demographic behaviour patterns significantly different from the prevailing demographic behaviour of democratic countries with advanced market economies. The Czech Republic was lagging behind in terms of decreasing its mortality intensity improvement, and maintained a high marriage rate, as well as a low average age for first marriages and a corresponding young average age of mothers specifically at first childbirths and a high induced abortion rate. Less notable variance from the European average is to be found in the divorce rate, in this field the Czech Republic traditionally ranks among the countries with the highest rate; the birth rate did not differ much from the European average.

The former pattern of demographic behaviour of the population was encouraged by significant state paternalism, significant social benefits in diverse fields and existence of sometimes even unbearable social certainties. The above mentioned situation did not provide sufficient space for personal decision making and sense of responsibility. Young people would extensively uniformly contract marriage at an early age, only about 5% of women remained single and the pattern of a two-child family was favoured. The transition to a market economy and all its social consequences, but also its new opportunities of self-realisation, led to changes in demographic behaviour. Individuals as well as families have faced a highly competitive environment simultaneously with life style changes, higher incomes, and an improved social status, all of which were inaccessible for a majority of people in the previous era. Due to the current curbing of social benefits aimed at families with children, the scope of social security narrowed and unemployment appeared as a new reality, negatively affecting couples considering marriage and potential parents. These new conditions for individuals and families were weighed within a free and sensible decision-making process concerning family life and the position of children in the family. This new situation was similar to the period of demographic behaviour changes, which took place during the 1970s and 1980s in democratic European countries. However, changes of demographic behaviour took place very quickly in the Czech Republic.

At present many more young people study at universities or higher professional schools. The amount of free time made available during their studies allows them to travel and gain experience particularly after graduation and prior to starting their first job. Young people face greater demands on the labour market, domestic but specifically international experience is valued and significant work flexibility is expected. Furthermore the endeavour to achieve a higher position, better income and the concurrent risk of not finding or losing one's job have become important conditions in the decision-making process, whether, when and how to start a family, when to have children and how many. Opportunities for obtaining financially affordable housing also play an important role. The Czech Republic has not found, or rather has not yet approved an appropriate conception of housing policy in the market economy. A drastic decline in housing construction took place in the 1990s. The construction of easy affordable co-operative flats has been virtually abandoned. Only in the past few years, following the indisputable effect of long-term housing savings and opportunities for getting low-interest loans for the construction, purchase or reconstruction of houses, has the situation been improving. However, it will take many more years until the effect of all these measures will be obvious. Negative consequences are certainly brought about by postponing rent deregulation, by flat shortage originating from the conversion of existing flats to com-

Renaissance-baroque square in the centre of České Budějovice, southern Bohemia. (Photo: Irena Smolová)



mercial use, by uncertain range and structure of social housing etc. For some young people their present, respectively future family housing situation remains a serious issue in their decision-making in terms of child planning. Demographic behaviour is significantly influenced by the situation on the labour market. A particularly adverse situation can be found in regions with a high unemployment rate. Efforts to improve this situation have not brought about significant results so far. Therefore, decreasing fertility is also contributed to by the unemployment of young people and financial difficulties in obtaining housing.

#### NATURAL POPULATION CHANGE

In 1993 the number of live births exceeded the level of 120 thousand in the Czech Republic. One year later the number of live births decreased to 106.5 thousand; and 1995 was the first year since the beginning of demographic monitoring to witness less than one hundred thousand births in the Czech Republic (96.1 thousand). The number of live births was decreasing in the first half of the 1990s despite the extremely advantageous age structure of potential mothers. Markedly populous years, the generation of 1973-77, were reaching the age of the then maximum fertility rate (21-23 years of age; today the highest fertility rate is at the age of 26-28). For this reason the fertility rate changed dramatically in the Czech Republic. The period of 1996-2001 was characterized by stability of basic birth indexes without any profound changes. The number of births very narrowly exceeded the level of 90 thousand children; in 1999 it even decreased below this level. The total fertility rate was permanently below the level of 1.20 and the Czech Republic thus ranked among the countries with the lowest fertility rate in the world. In 2002 the number of live births increased to 92.8 thousand and in 2003 to 93.7 thousand. During 2004, a total of 97.7 thousand live babies were born in the Czech Republic, the highest number since 1995. The increase in births was reflected in the increase of fertility to 1.23 children. The average age of mothers at the birth of their first child reached 26.3 (in 1993 it was 22.6). Live births outside marriage increased considerably (in 1993 it was 15.3 thousand, i.e. 12.7% of all babies born; in 2004 it was 29.8 thousand, i.e. 30.6% of all babies born). Data available on live births signaled than in 2005 their number was going to exceed 100,000 babies and the crude birth rate was going to be more than 10% after a long time. Fertility rate would approach 1.30 children by the end of the year.

The high abortion rate was one of the characteristics of the reproduction behaviour of the population in the Czech Republic before 1989. This situation was made possible by the relative affordability of abor-

tions, which was made possible by liberal legislation, the low level of reliable contraception use, and even by considerable tolerance of the general public towards termination of the unwanted pregnancies by abortion. The highest abortion rate was achieved in 1988, afterwards the number of abortions started to decrease. This trend is characteristic of the whole monitored period, i.e. from 1993 to 2004. The greatest decrease in all abortion rates, caused mainly by the rapid reduction of induced abortions, was experienced in 1993 and 1994. With its level of induced abortions the Czech Republic already ranks among the developed European countries. In 2004 the number of terminations in the Czech Republic reached 41.3 thousand (in 1993 it was 85.5 thousand), out of which 27.6 thousand were induced abortions. The significant decrease in induced abortions during the last fifteen years was reflected in the decrease of their proportion in all terminations. "Only" one fifth of pregnancies were terminated in 2004 while in 1993 it was more than one third and at the turn of 1980s and 1990s it was even above 40%.

Since the beginning of 1990s, after thirty years of stagnation, the death rate given by the **number of deaths** has witnessed considerable changes. Aspects of mortality began improving quickly: life expectancy at birth was extended, the infant mortality rate decreased. Annual numbers of deaths decreased despite the fact that the population was getting older, and the resulting increase in the number of older people who are thus subjected to an increased risk of death. As a consequence of the improved physical condition of the inhabitants of the Czech Republic, life expectancy at birth increased for men by 3.3 years to 72.5, for women by 2.6 years to 79.0 between 1993 and 2004. The more significant increase in the case of men is not surprising, for their mortality rate was extremely high in the Czech Republic in the past. The category of women has witnessed significant decrease in the intensity of the total death rate after 1998. The crude death rate in the Czech Republic has been under 11% since 1996 (minimum 10.5% in 2004). In absolute figures the lowest number of deaths was recorded in 2004 (107.2 thousand) and the highest on the contrary in 1993 (118.2 thousand).

From the point of view of the death rate development according to the causes of death, the category of the circulatory system diseases underwent the most significant changes after 1992. These were enabled mainly by the improvement of health care, which lay in the rapid spread of modern medical devices and pharmaceuticals. Even improvement in people's life style played its role. The mortality rate

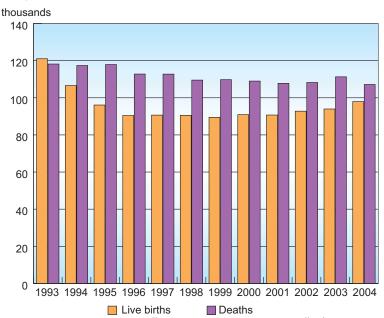


Fig. 2: Live births and deaths in the Czech Republic (1993-2004)

Source: Vývoj obyvatelstva České republiky v roce 2004. ČSÚ, Praha 2005.

caused by heart and vascular diseases decreased in both sexes very significantly and contributed to the greatest extent to the total increase in life expectancy. Within this group of death causes the most favourable development has been experienced in the case of the acute myocarditis (reduction by half, especially among men) and vascular brain diseases (among both men and women).

Despite a significant improvement in the death rate the Czech Republic still lags behind developed western European countries. Czech women and men have a life expectancy by 4-6 years lower than inhabitants in countries with the lowest mortality rate (Iceland, Switzerland, Sweden, Spain and Italy); with men the difference remains even more distinct. Within new EU members the situation is favourable for the Czech Republic; only Slovenia has a lower death rate.

Positive development in infant mortality brings evidence of high quality pre-natal and neo-natal care and diagnosis in the Czech Republic. The decrease in the infant mortality rate (number of deaths up to one year of age per 1,000 live births) from 8.5% in 1993 to 3.7% in 2004 was influenced mainly by the decrease in the mortality rate in the first days of life. The infant mortality rate in the Czech Republic is one of the lowest in Europe.

The results of analysis of the level and structure of mortality of the inhabitants of the Czech Republic seem in most aspects to be a very promising contribution to future development. The process of changes started in the mid 1980s and significantly accelerated due to the political and the social development during the 1990s, which brought about many positive results. Over the last few years the Czech Republic exceeded other post-communist countries in the trend in the death rate with concurrent life expectancy increase in all age groups, as some other post-communist countries experienced even deterioration in their death rates. At the same time, life expectancy in the Czech Republic started to get closer to developed countries, but this process of adjustment will probably take a long time. Keeping the mortality level decreasing however requires other impulses such as new financial and ideological investments not only into health care but also into prevention, senior care, traffic safety, work safety and other forms of health protection and last but not least to education and life style.

Improving death rates in the Czech Republic are however not sufficient to substitute the decrease in births, so a **natural decrease in population** has continued since 1994 in the Czech Republic. The greatest decrease was recorded in 1996 when it reached 22.3 thousand people, and also in 1995, 1997 and 1999 the Czech Republic lost more than 20 thousand people per year through the natural decrease. A considerable decrease in the loss of inhabitants was experienced in 2004 (only 9.5 thousand) and existing development of birth and death rates in the Czech Republic showed that in 2005 the loss was going to be lower.

#### **AGE STRUCTURE**

In demographically developed countries, i.e. in the countries which finished the shift to the low natality and mortality levels within the process of demographic revolution and to which the Czech Republic belongs, structural changes of population have much greater importance than the development of its mere absolute figures. Population structure shifts according to age, sex and family status are becoming a more significant factor conditioning their overall economic and social development. As a consequence of long-term low fertility rate and increasing medium life span the process of demographic ageing is typical of these countries and it will gradually deepen. This process is characteristic of the shift in relative representation of main age groups in the population. The numbers and proportions of children are decreasing and gradually there will be both an absolute and a relative decrease in the productive age population, the only absolutely increasing population group being the people in older age groups. The relation between the productive and non-productive part of the population will deteriorate. **Population ageing** becomes the most topical demographic process in the developed countries. Its consequences touch upon all the spheres of social and economic development; they will be most seen in the functioning of contemporary systems of social and health care, for those were established under very different demographic conditions.

the end of 1992 ar	Table 10: Population structure according to the main age groups in the Czech Republic at the end of 1992 and 2004 (thousands and %)			
Age group 1992 2004				
thousands	%	thousands	%	
2,065	20.0	1,527	15.0	
6,933	67.1	7,259	71.0	
1,328	12.9	1,435	14.0	
10,326	100.0	10,221	100.0	
	thousands 2,065 6,933 1,328 10,326	1992 thousands % 2,065 20.0 6,933 67.1 1,328 12.9	thousands     %     thousands       2,065     20.0     1,527       6,933     67.1     7,259       1,328     12.9     1,435       10,326     100.0     10,221	

At the end of 1992 children aged 0-14 years made up one fifth of the Czech population. Decrease in birth rate caused the ratio of pre-productive population to drop to 15.0% at the end of 2004. According to the last official population prediction (ČSÚ 2003, medium estimate) the proportion of this population group would drop to only 12.6% in 2030, and to 12.4% in 2050. The opposite trend can be seen in the post-productive age population group (65+). Though the proportion of seniors in the population of the Czech Republic did not increase significantly during the examined period (from 12.9% at the end of 1992 to 14.0% at the end of 2004), in the coming years it will be much more dynamic, by 2030 their proportion should reach 22.8% (31.3% in 2050). The ageing of the Czech population during 1992-2004 is explained also by the average age index. Over the twelve years it has increased from 34.9 to 38.2 years of age in the case of men and from 38.3 to 41.3 in the case of women. The population ageing results in the need for a greater number of social care institutions, first of all retirement homes and boarding houses for seniors. The number of spaces in the social care institutions increased during 1993-2003 from 57.3 thousand to 77.3 thousand; however this is not enough for the future. In many larger municipalities it will be necessary to construct new social care institutions for seniors.

age men women 

Fig. 3: Age structure of population in the Czech Republic (as of December 31, 2004)

thousands Source: Věkové složení obyvatelstva ČR v roce 2004. ČSÚ, Praha 2005.

#### **MIGRATION**

The importance of **migration** in the population development of the Czech Republic during 1990s as opposed to the past has considerably increased. Changes in political orientation in 1989 influenced the foreign migration both qualitatively and quantitatively. The opening of the borders enabled free movement of people across the borders and formerly illegal emigration became legal. Despite this fact in 1991 the Czech Republic changed from an emigration country to an immigration one. There has been an exponential rise in the number of immigrants compared to the times of the totalitarian regime. Decrease in registered numbers of emigrants, particularly since 1994, shows the imperfection in the registration of emigrants. The migration balance remains overestimated in the long term, total quantity of foreign migration could be considered underestimated and that is why the image of officially registered foreign migration character development is indisputably distorted. Since 1993 the internal migration between the Czech and Slovak Republic changed to the cross-border migration as a consequence of the break-up of Czechoslovakia. In the overall population statistics the official migration balance mitigated the natural decrease in population. It is possible to derive from existing data, despite the imperfection of data on emigrants, that the total increase of inhabitants due to foreign migration was apparent in the 1990s.

During the 1990s the disproportion between the real situation in the foreign migration character and the official figures gradually widened. The attractiveness of the Czech Republic for migrants gradually increased. There was a rise in temporary economic immigrants who were not included in the official statistics of the foreign migration at that time. The Czech Republic changed for certain groups of emigrants from a transit country to a target one; especially at the beginning this was caused rather by the more strict immigration policy of the European Union than by the needs and opportunities of the Czech economy. There was even a rise in the number of political asylum applicants and the country suffered also from illegal immigration. As a consequence of the increasing number of legal and illegal immigrants and more strict European Union legislation, changes in the migration legislation were carried out in the Czech Republic aimed at a more strict and reliable regulation of the foreign migration. These bring Czech legislation into accord with the goals agreed to and laws of European Union states.

Since 2001 the methodology of foreign migration monitoring changed, which caused the loss of compatibility between data on the number of emigrants and immigrants with the preceding years. Since that year the figures on foreign migration have included, in addition to persons changing their place of per-

Table 11: Foreign migration in the Czech Republic in 1993-2004					
Year	Immigrants	Emigrants	Migration balance		
1993	12,900	7,424	5,476		
1994	10,207	265	9,942		
1995	10,540	541	9,999		
1996	10,857	728	10,129		
1997	12,880	805	12,075		
1998	10,729	1,241	9,488		
1999	9,910	1,136	8,774		
2000	7,802	1,263	6,539		
2001*)	12,918	21,469	-8,551		
2002*)	44,679	32,389	12,290		
2003*)	60,015	34,226	25,789		
2004*)	53,453	34,818	18,635		

Note:  $^{\star}$ ) since 2001 a different statistical method has been in use Source:

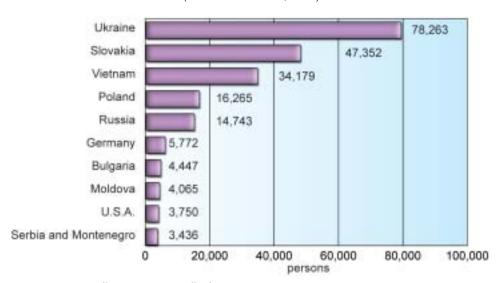
Vývoj obyvatelstva České republiky v roce 2004. ČSÚ, Praha 2005.

manent residence, also foreigners who lived in the Czech Republic and whose visas were issued for more than 90 days; if these visas expired and they left the country, they are registered as emigrants. The numbers for registered immigrants reflect reality more closely thanks to this adjustment, but in the case of the Czech citizen emigration the imperfect registration still remains. Since 2001 migration statistics included also persons that were granted asylum; their numbers were, however, very low. In 1993-2004 only 1,404 petitions for asylum were granted in the Czech Republic.

According to figures of the Ministry of the Interior, more than 254.3 thousand foreigners with residence permits lived in the Czech Republic at the end of 2004, out of which 154.8 thousand were holders of visas of more than 90 days. The number of foreigners with this kind of stay has become more significant in the last few years. A significant feature, which characterizes the Czech Republic in the foreign migration area, is that after the initial wave of returning emigrants, there was a rise in the attractiveness of the Czech Republic particularly for the citizens of Eastern European countries and Vietnam. Their incentive for coming is almost indisputably an economic one. The main countries that contributed to the population increase via foreign migration recently have been the Ukraine (in 2004 positive migration balance 11.4 thousand people) and Vietnam (3.7 thousand). The Czech Republic has a positive migration balance, though considerably lower than countries such as Russia, Poland, Germany, Moldova etc.

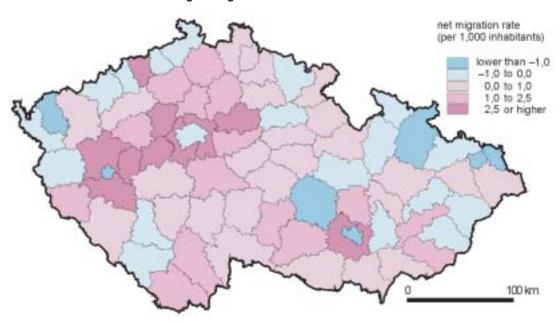
As a result of economic and social transformations, a rapid decrease in large-scale housing construction and a still undeveloped housing market, the level of **domestic migration** and its regional structure changed radically during the 1990s. The decrease in migration mobility, already noticeable in the 70s and the 80s, continued with the decrease in the amount of migration over long distances and internal migration within the "enclosure" of smaller territorial units (core-periphery). Migration attraction of smaller settlements (of up to 5,000 inhabitants) increased, on the contrary large and gradually even small towns experienced population loss. Deconcentration tendencies connected with the process of suburbanization become evident in large cities (mainly the hinterlands of Prague, Brno and Plzeň). The population tends to move outside the territory of these cities to the surrounding municipalities or to municipalities having good access to the centre. Temporary forms of population migration (daily commutation from the large periphery and periodical commutation connected with temporary living in rented flats or hostels in the cities) are becoming important again.

Fig. 4: Ten most frequent citizenships of foreigners with permanent residence permits and temporary stays over 90 days in the Czech Republic (as of December 31, 2004)



Source: Cizinci v České republice. ČSÚ, Praha 2005.

Fig. 5: Migration balance in 1993-2004



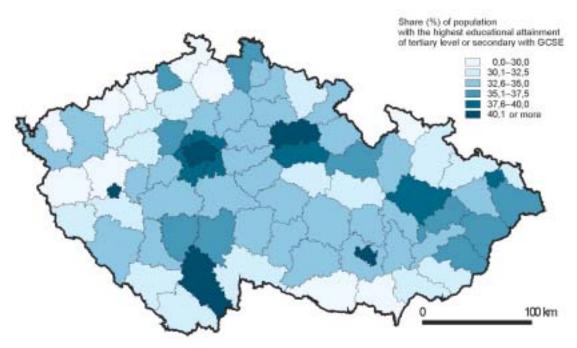
Source: Pohyb obyvatelstva v České republice. ČSÚ, Praha 1994, 1995, ..., 2005.

#### **EDUCATION STRUCTURE**

Over the past ten year, in addition to the change in the age structure of the population, the level of education, expressed in the highest educational attainment, has also changed considerably. There were also changes in the network of basic, secondary and tertiary schools. Decreasing numbers of children born in the 1980s as opposed to the preceding years led to the reduction in the oversized school network (the highest figures for the number of educational institutions were reached in the middle of the 1990s). As a result, some underused basic and secondary schools were closed or joined together. Within the framework of the secondary education the situation was somewhat more difficult, since together with the reduction in number of institutions (mainly the secondary vocational schools with technical specialization) they saw an increase in the interests in the study at grammar schools and secondary schools. The interest in practical education was replaced by the young generation's interest in general education with a greater prospective for the future studies at tertiary schools. As a relatively apt form of link between secondary and tertiary education the so called higher professional schools came into existence. There was a gradual increase in the proportion of church and private schools within the total number of secondary education institutions. However, the highest increase was experienced by institutions of tertiary education. In 1993 twenty-three public universities were active in the Czech Republic with 127.1 thousand students. In 2004 there were 61 universities: 275.0 thousand people studied at 25 public universities, and 19.1 thousand at 36 private universities.

Hand in hand with the greater supply and increased choice of fields of studies in secondary and tertiary education, but also thanks to the establishment of many private secondary and tertiary schools, there was also a substantial rise in the education rate of the population of the Czech Republic. This index was followed in detail (for small localities) only within the population census, i.e. once in ten years, and the comparison can be made between the censuses in 1991 and 2001. The rise in the education rate in the last intercensal period was more prominent in the secondary education: in 1991 the share of the population older than 15 years with GCSE reached 22.9%, but ten years later it was already 28.4%. The portion of population with tertiary education increased from 7.2% to 8.9%. In 2001 the number of people

Fig. 6: Population with tertiary and secondary education with GCSE (as of March 1, 2001)



Source: Sčítání lidu, domů a bytů 2001. ČSÚ, Praha 2003.

older than 15 years with tertiary or secondary education with GCSE reached 37.3% (in 1991 it was 30.1%). According to selective research on the labour force at the end of 2004 the share of these persons increased to 41.4%. However, there were significant regional differences. The highest education rate of the population was reached in Prague (54.5% with tertiary or secondary with GCSE education) and in Brno (51.6%). On the contrary, there were territories where this share was under 30% (Fig. 6). The lowest share of population with tertiary or secondary education with GCSE was in border regions, particularly in the territories with a higher proportion of Roma population.

#### ETHNIC AND RELIGIOUS COMPOSITION

The Czech Republic belongs to European countries with ethnically homogenous population, the overwhelming majority being Czech nationals (94.2% of inhabitants, including individuals declaring a regional Moravian or Sileasian nationality, in 2001). The last census in 2001 recorded 193.2 thousand ethnic Slovaks, 52.0 thousand Poles, 39.1 thousand Germans and only 11.7 thousand Roma people; however, experts estimate that currently more than 250 thousand Roma people live in the Czech Republic.

The 2001 census also examined population structure according to religion. Almost one third of the inhabitants of the Czech Republic were religious people (3.3 million, i.e. 32.2%). On the other hand more than 6 million people were without denomination, these made up three fifths of the population (59.0%). The remaining part (8.8%) did not answer the question on religion (in 1991 this number was 16.2%). During 1991-2001 the number of religious people declined by more than 1.2 million and the number of people without denomination increased by more than 1.9 million. Among religious people 83.4% were Roman Catholics, 3.6% belonged to Czech Evangelic Brethern, 3.0% to the Czechoslovak Hussites and the remaining 10.0% to other churches.



Velká synagoga (Great synagogue) in Plzeň, the second largest in Europe. (Photo: Irena Smolová)



Velehrad near Uherské Hradiště is one of the most frequented Christian pilgrimage sites in the Czech Republic. (Photo: Dušan Gavenda)

## **ECONOMY**

In the Czech Republic the 1990s are connected with the transition from the centrally planned economy to the market one. The integrated synopsis of the **economic reform** was finished and approved in September 1990, i.e. already in the period of the federal state of the Czechs and Slovaks. The whole conception of the reformation strategy called for a complex approach, which included a succession of wide spectrum of measures focused on price deregulation, foreign trade liberalization, introduction of internal inner convertibility of the currency, and privatisation. The cornerstone of the economic reform was the price deregulation. For the first time after several decades the Czech firms had the opportunity to set the prices of their products by themselves. Most prices were deregulated since the beginning of 1991 and price regulation was preserved at that time only in monopolized branches. A decision concerning the internal convertibility of the Czech crown (CZK) was a very important step in the reform, which was very significant for the foreign trade liberalization. Before the internal convertibility of the crown was introduced a considerable devaluation had been carried out, which should have preserved the fixed exchange rate of the crown. By this conscious undervaluation of the crown made the reorientation of the country's foreign trade (with the break up of COMECON) "from the East to the West" was easier for the wide range of products.

The territorial reorientation of the export had an immense effect on the structure of goods. Each industrial branch faced decline (the greatest decline was registered at the traditional export of machines and equipment). In 1991 import and export with planned economies dropped, compared to the previous year, to the half. This decline was only partly compensated by the increase of trade with countries with market economies. A number of firms, however, re-oriented their export very successfully. The reason for their export successes was firstly an advantageous exchange rate and lower labour costs in the Czech Republic than in developed countries. After basic macroeconomic stability had been achieved one of the main issues of the reform programme was represented by the private sector development, which was based on an extensive programme of privatisation of state firms and support of the medium and smallscale enterprises. The Czechoslovak privatisation process was based on the combination of restitution of assets and property to the previous owners and their heirs, of sale of the assets and property to the domestic and foreign investors, and of the "handing out" state assets and property to the population via investment coupons. The process of privatisation (except for restitutions) was divided into two parts: a "small-scale" privatisation, i.e. privatisation of small-scale enterprises mainly belonging to the service sector, and a "large-scale" privatisation concerning former state firms (particularly industrial, to a far lesser extent construction, trade, and agricultural firms).

From the point of view of the quality of the owners the means of direct sales of the smaller firms and plants was unproblematic. This method faced difficulties when applied to large firms since new owners paid off their share purchase debts from the income of a firm, and sometimes they even put it into the accounts of the privatised firm. Moreover, not having their own resources they abandoned further development and the much expected boom of these firms did not occur. The law regulation large-scale privatisation approved a spectrum of privatisation methods, including direct sale, public tenders, sale via capital markets, or free transfer of property to the towns and villages. Privatisation via investment coupons became the most important form of the privatisation of industrial enterprises. It was organized in two waves (the first was finished in January 1993 and the second one in December 1994). A total of 785 industrial enterprises offered shares of their assets in the Czech Republic. In the first privatisation wave there were mainly firms in industrial branches that were characterised by the competitive markets (such as the manufacture of machinery and the production of metal or food products as well as textiles

or building materials), while the second wave put more stress on the privatisation of the monopolized industrial branches (energetics, metallurgy or chemical production).

Having finished the coupon privatisation by the end of 1994 the Czech Republic reached in comparison with other post-communist countries the highest proportion of the private ownership. Quick privatisation was quick only in the sense that state was replaced in the owner role by new private owners, who were the millions of "coupon" shareholders and newly founded investment privatisation funds, that had nor abilities nor ambitions to manage and restructure firms. The most coupon shareholders sold their shares and the control blocks of shares were gained mainly by investment funds, which (although most of them were controlled by respected institutions, mainly existing banks) did not manage their property rights effectively. No one in the economy did enforce authentic restructuring of the firms in practice. Funds were focused on financial transactions (sometimes not favourable to their shareholders), they were content only with a vague firm strategy and did not ask for the dividend proceeds from their investments. A large group of investment funds sold the shares of industrial firms later and in a not small number of cases abused imperfect laws for the "tunnelling" of firms. A part of privatisation funds even left the capital market, whilst fund shareholders were often harmed in this process. These facts were the greatest weaknesses of the "Czech way" of privatisation.

Today, in hindsight, we can claim, that foreign strategic investors were not sufficiently involved in the privatisation of the Czech economy, especially when we consider that at the beginning there was no private sector participation in the creation of domestic product in the Czech Republic. This is evident in comparison with Hungary that had both a high initial proportion of "real" owners and relatively high level of investments of foreign investors in their firms.

The Czech economy was afflicted by the economic recession starting in the second half of 1997 and lasting till the end of 1999. It resulted from accumulated and insufficiently solved problems. The means of privatisation, insufficient corporate capital resources and low managerial skills led to slow restructuring, particularly of large crucial industrial companies. The situation was worsened by frequent legislative changes and insufficient law enforcement (passivity during bankruptcy and support to the unprofitable companies). An important role was played also by slow privatization of large commercial banks and by weakened world markets, particularly in the EU. Economic development in the Czech Republic shows that strict macroeconomic policy does not lead to required results unless it is supported by structural reforms, privatisation and modernisation in the business sector and in banking, which would lead to higher efficiency of productive resource utilization and to higher economic productivity.



The town of Ústí nad Labem in northern Bohemia grew predominantly thanks to industrial production development. (Photo: Daniel Neuwirth)

#### **FOREIGN DIRECT INVESTMENTS**

The assessment of the privatisation process in individual countries is often derived from the quality of development of several of its largest privatised firms, which consequently can drive the growth of the whole economy. The fact that important industrial and export firms were not privatised directly into hands of the foreign investors already in the first half of the 1990s can be considered a mistake. The frequently quoted example of Škoda Mladá Boleslav (privatised into the hands of the German firm Volkswagen) was not sufficiently followed by other firms important for the entire economy. During the first half of the 1990s in the sector of large companies, with export potential, only the international consortium IOL (companies Shell, and Conoco) invested in Česká rafinérská, Procter&Gamble in Rakona Rakovník, and Philip Morris in Tabák Kutná Hora.

From the beginning of the 1990s till the end of 1997 **foreign direct investments** in the Czech Republic reached USD 9.2 billion (annual sum of USD 2 billion was exceeded in 1995 only), which was less than in Poland (USD 14.6 billion) and Hungary (USD 15.9 billion). At that time the position of the Czech government towards granting concessions to the foreign investors was rather negative. It was not until 1998 that a rather extensive system of the investment incentives not only for foreign investors but also for domestic ones was approved. The system consists of an income tax relief, grants to municipalities for building technical infrastructure, job creation grants, training and retraining grants. The investments incentives bear an important regional dimension, for their amount depends on the situation on the regional labour markets.

In 1998 the Czech Republic experienced a sharp increase in the foreign direct investments (FDI) inflow thanks to the incentive system. During last years FDI hovered aroung USD 5 billion. The year 2002 was the exception, and according to the preliminary data 2005 as well, when FDI exceeded USD 8 billion. On the other hand in 2003 they reached only USD 2.1 billion, the balance was influenced by the purchase of Eurotel shares from the foreign investor and the sale of foreign shares in Český Telecom to the portfolio investors from the U.S.A. and the U.K. An amount of investment per capita in the Czech Republic is the highest among all transition economies of Central Europe. Most economists consider foreign direct investments to be one of the most effective methods of development especially for regional economies, and the amount of their inflow is one of the basic economic indicators of the

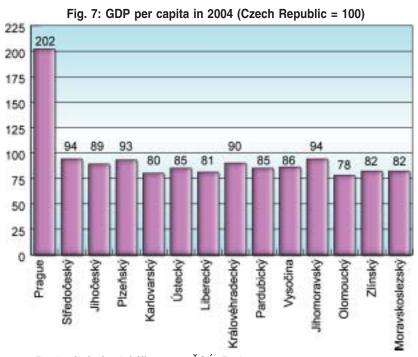


New investments flow mainly into deliberately founded industrial zones.
For instance, a large plant of car factory TCPA was built in Ovčáry near Kolín. (Photo: Toyota Peugeot Citroen Automobile Czech, s. r. o.)

national economies. The positive assessment of the Czech Republic is not unambiguous however, for there is a dominant position of Prague in the regional distribution of the foreign direct investments. Almost half of investments coming to the Czech Republic were in companies seated in the capital city. From the point of view of the amount of investments the Středočeský Region is important, on the opposite extreme only a small amount of investments are directed towards the Moravian regions. The conception of the development of the Czech economy includes investment incentives even in the future years. However, they will be focused, unlike during preceding years, on the technologies with higher added value.

## GROSS DOMESTIC PRODUCT

The Czech economy experienced considerable structural change as a whole during 1993-2004. The proportion of agriculture and industry in the GDP decreased in favour of the service sector. A similar process was experienced at the regional level, but with a different intensity. One of the basic summary indexes of the economic level of a given region is the level of **gross domestic product per capita**. According to the data of ČSÚ the GDP in the Czech Republic in 2004 reached 71% of the European Union (EU25) level per capita converted by the purchasing power parity. Comparing the economic capacity of particular regions, it is obvious that the capital city of Prague is economically the most effective. Today, almost one fourth of the Czech Republic's gross domestic product is created there. With 143% of the EU average of the GDP per capita Prague represents a unique region in the transition economies. In the period after 1992 the regional differences in the economic capacity of particular regions were deepening. Compared with other regions, the Středočeský Region shows the highest rate of growth. In the last few years the Olomoucký Region has the lowest GDP per capita (see Fig. 7). As for development in the Czech Republic after 1992 it usually grew, with the exception of recession in 1997-99. In 2004 the Czech economy grew by 4.7%.



Source: Regionální národní účty 2004. ČSÚ, Praha 2005.

Table 12: Average number of employees in basic sectors of the national economy in 1993 and 2004							
Sector	19	93	2	004			
	absolute number % absolute number % (thousands)						
Agriculture, forestry, fishery	375.0	7.7	202.3	4.3			
Industry and construction	2,093.0 43.9 1,844.6 39						
Services	ervices 2,405.5 49.4 2,659.7 56.5						
Total 4,873.5 100.0 4,706.6 100.0							
Source: Labour market in the	Source: Labour market in the Czech Republic in 1993-2004. ČSÚ, Praha 2005.						

#### THE STRUCTURE OF EMPLOYMENT

The structure of employment by **basic sectors of the national economy** has changed considerably. In 1989 a total of 652 thousand persons worked in the primary sector in the Czech Republic (12.5%), out of which 596 thousand employees belonged to the agriculture itself. The most important employer was the secondary sector, where more than 2.5 million people were employed (2.1 million in industry), while in the less developed tertiary sector not more than 2.1 million people were employed. As early as in 1992 more employees worked in the tertiary than in the secondary sector and two years later more people worked in the tertiary sector than in the other two sectors combined, this means that lay-off of the redundant employees from the primary and secondary sector in favour of the tertiary sector was very quick at the beginning of the 1990s. The process of employee number reduction in the production sphere and their increase in the services continued in the following years, but much more slowly. According to the results of selective research on the labour force the proportion of employees in the tertiary sector increased to 56.5%. In comparison to the EU it is still a very low relative value, for in the developed market economies the proportion of the tertiary sector in the total employment structure reaches almost two thirds. In the capital city of Prague 79.0% of the population was employed in the services in 2004, on the other hand in the Liberec region it was only 44.7%. Also in three other regions (Zlínský, Pardubický and Vysočina) the tertiary sector does not employ more than half of the labour force.

### LABOUR MARKET

At the beginning of the transformation from a centralized to a free-market economy **unemployment** was an unknown phenomenon. In December 1990 the unemployment rate was 0.7% and a year later it had already reached 4.1%. In 1992-96 the registered unemployment rate was between 3-4% and was very low, then. In this period of factual absence of the economic restructuring the very low unemployment rate was achieved, partly by the absorption capacity of growing tertiary sector. The turning point came with the period of recession in 1997, when the registered unemployment rate started to rise. By the end of 1999 it exceeded 9%. The general unemployment rate (according to selective research) reached 8.3% in 2004. Registered unemployment rate (applicants registered at labour offices) is slightly higher. By the end of the third quarter of 2005 more than 500 thousand job applicants were registered, out of which 475 thousand were ready to start working within a fortnight. The registered unemployment rate thus reached 8.8%. In the Czech Republic there are distinct regional differences in the situation on the labour market. The highest unemployment rate is in a long-term in the structurally afflicted regions, i.e. in the Ústecký and Moravskoslezský regions. Apart from Prague low unemployment rates are to be found in the Jihočeský, Plzeňský and Středočeský regions.

Risk groups on the job market as in other EU countries comprise especially women with small children, people with low qualification, handicapped people, people over 50 years of age, new graduates

and young people without experience. Groups where different handicaps cumulate (e. g. young unqualified people) face the greatest threat. The main risk factor on the labour market on the labour market is a low level of education. For instance, the percentage of people with only a basic education in the total unemployed population reached 24.6% in 2004 and the unemployment rate within this group reached 26.1% (among people with tertiary education it was 2.3%). The proportion of unemployed women has always been higher than 50%. The index reached the highest level in 1998, when 56.5% out of the total number of the unemployed were women; at present the index is only 52.8%. The number of the handicapped unemployed has risen from 20 thousand in 1993 to 74.7 thousand at the end of 2004 (the unemployment rate exceeds 40%). The problem is the shortage of suitable job positions for this group of people.

The key problems in the labour market are the growth in long-term unemployment, the growth of unemployment among young people and the shortage of vacancies. At the end of 1997 the proportion of the long-term unemployed (more than 12 months) compared to the total number of the unemployed did not reach even one fifth. By the end of 2004 the proportion increased to 40.6% (219.7 thousand people). The growth in the proportion of the long-term unemployed conforms to the growth in the average length of the period of unemployment (from 9 months in 1997 to more than 18 months at the end of 2004). The specific rate of unemployment of the young people to 24 years of age reaches 20.4% at present. The Czech Republic is characterized by a relatively small offer of vacancies. In the period after 1992 the number of vacancies did not ever reach the level of 100 thousand by the end of a year. The maximum was recorded by the end of 1995 (88 thousand), by the end of 2004 there were only 51.2 thousand vacancies. Agricultural workers rank among professions requiring qualified workers with the least vacancies in 2004 (less than 1.5 thousand).

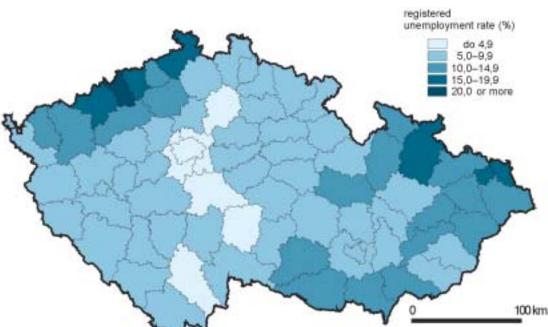


Fig. 8: Registered unemployment rate in the Czech Republic (as of September 30, 2005)

Sources: Monthly unemployment reports of September 30, 2005. Ministry of Labour and Social Affairs of the Czech Republic, 2005.

### **AGRICULTURE**

Agriculture ranked among the most heavily supported sections of the economy within the centrally planned socialist system; as a result it was characterized by low economic effectiveness and disproportionate size on the national scale. The transition to market economy meant considerable pressure on agricultural enterprises to adapt to the new economic conditions and to the market opportunities in terms of dimension, structure and efficiency. At the end of 1989 there was virtually no private sector in the Czech agricultrure, two thirds of agricultural land was cultivated by co-operative farms (1,024 farms) and one third by state organizations, mainly by state farms (there were 174 of these). The average size of agricultural land of a co-operative farm was 2,563 hectares, for a state farm the average was 6,259 hectares. By the end of 1990, a total of 3,205 natural persons had established agricultural enterprises in the Czech Republic, they however cultivated less than 1% of agricultural land. The transformation process in agriculture underwent a series of legislative measures passed in 1991-93, which led to its gradual privatisation. Among the main aims of agricultural policy ranked the renewal of land and other agricultural property rights via restitution, privatisation and transformation, restructuring and relocation of agricultural production adapted to the market conditions. Long-term aims were particularly oriented towards the conception of sustainable agriculture under the conditions of gradual liberalization of the world agricultural market.

The period of transformation of agriculture in the Czech Republic is marked by considerable changes in its enterprise structure. This can be seen in the increased proportion in the number of individual farmers and other individual agricultural entrepreneurs, in the agricultural land area cultivated by all agricultural enterprises as well as in the dynamic development of trading companies. At the same time the changes can be seen in the continuing decline in the importance of cooperatives, which presently cultivate about one fourth of the total agricultural land. At the end of 2004 there were 678 cooperatives, 2,319 trading companies, 32,231 natural persons and 180 other subjects active in Czech agriculture.

The total area of the agricultural land resources of the Czech Republic is 4,269 thousand hectares (54.1% of the total area of the country). Its largest part is classified as arable land, even though its area has been decreasing recently. On the other hand the area of permanent grasslands is increasing. This change could be marked as positive in the regions, which have less favourable conditions for intensive land use. On the basis of the complex soil survey and according to the criteria of the Council of the EU the bulk of the agricultural land (more than 60%) was classified as less favourable areas (LFA) and as



Wheat is the most widespread cereal harvested in the Czech Republic. (Photo: Dušan Gavenda)

Czech beer, acknowledged as one of the best in the world, requires quality hops and barley malt. (Photo: Dušan Gavenda)



areas with ecological restrictions. The common aim for these areas is to ensure such a development of multifunctional agriculture that would put in harmony productive and non-productive functions of agriculture, forestry and water management with respect to the character of natural and socio-economic conditions. It should further contribute to the restoration of the balance between the volume of production and market capacity, to the ecological, cultural and architectonical preservation of the rural land.

The total agricultural production is gradually decreasing in financial terms. In 2004 the value of gross agricultural production was by 7.4% lower than in 1993. Livestock production slightly predominates over the crop production, but the proportion of crop production has slightly increased during the last ten years. The structure of crop production has changed. The production of cereals, potatoes and particularly of sugar beet has decreased; the production of oil-bearing crops (particularly of rape) has increased. As for livestock production, the numbers of farm animals (especially of cattle) have decreased. This has resulted in decreased production of meat and milk.

Some characteristics of Czech agriculture gradually draw near to the EU average. For instance the share of primary sector employees (agriculture, forestry and fishery) can be mentioned. The state-wide value (4.3%) is greatly exceeded particularly in the Vysočina Region (10.4%). The present conception of agrarian policy of the Czech Republic came into effect in 1998 and was divided into two stages. The first stage (revitalization) was finished by the end of 2001 and was aimed particularly at the recovery and stabilization of the agricultural sector in the Czech Republic and at its institutional preparation for the country's EU accession. The conception of the second stage (adaptation) is heading for the quickest adaptation of the agrarian sector of the Czech Republic to the Common Agricultural Policy of the EU in all of its areas (structural, regional, environmental, and rural).

An inseparable part of the Czech agricultural policy is organic farming. A total of 836 farms were organic at the end of 2004, cultivating 263.3 thousand hectares (6.2% of the agricultural land). It is a forward-looking mode of farming, which is creating a new market for organic farming products, as well as new job opportunities. Organic farming contributes to the development and maintenance of rural land-scape and to the conservation of all parts of the natural environment.

#### **INDUSTRY**

Czech **industry** lost more than 700,000 workers, i.e. one third of the total, from 1989 to 2004. The decrease was noticeable in the first stage of the economic transition of the Czech Republic. During 1989-93 the number of industrial workers decreased by almost 450 thousand, from 2,113.3 to 1,664.4 thousand. Then the pace of employee release was slower. In 1999 the number of industrial workers decreased for the first time below the level of 1.5 million (1,468.7 thousand). The creation of new jobs in industrial firms usually spurred by foreign investors on the so-called "green fields" waned after 1999, and has, for all practical purposes, stopped. The Czech Statistical Office stated that Czech industry employed 1477.8 thousand workers in 2003.

When compared to 1989 not only the organizational structure of the Czech industry but also the size structure of industrial firms has considerably changed. In the centrally planned economy most industrial firms were centrally managed by the ministries responsible for them. The centrally managed industry employed 1.75 million workers, more than 350 thousand were employed in cooperatives and communal industrial workshops. Mining companies (e. g. Ostravsko-karvinský Mining District employed 75 thousand workers) and within manufacturing industry engineering and metallurgical industries employed the largest numbers of workers.

At the end of 1989 eight engineering companies with more than 10 thousand workers existed in the Czech Republic. The largest one was the concern Škoda Plzeň, with 41.5 thousand workers, out of which 33.4 thousand were employed in Plzeň itself. In terms of the number of employees, it was followed by ČKD Prague (28.9 thousand) and car factories AZNP (presently Škoda Auto) Mladá Boleslav (17.7 thousand), Tatra Kopřivnice and LIAZ Liberec. More than 10 thousand workers was employed at the end of 1989 also in two companies in Brno – Zetor (tractor production) and Zbrojovka (arm production) – and in Transporta in Chrudim. The Czech engineering industry employed more than 600 thousand workers at the end of 1989.



One of the most important industrial branches is car production. (Photo: Toyota Peugeot Citroen Automobile Czech, s. r. o.)

In terms of the number of workers the second most important branch of manufacturing industry was the textile production (155.4 thousand workers), however no company employed more than 10 thousand workers. In the ten largest companies the number ranged between 4-8 thousand. Larger companies of that period were active in metallurgy (145 thousand workers). In VŽKG Ostrava 37.6 thousand people were employed, in NHKG Ostrava 23.6 thousand, in Poldi Kladno 19.0 thousand and in Železárny Třinec 18.5 thousand. In 1989 another three industrial companies with more than 10 thousand employees existed in other branches (SVIT Zlín with 20.1 thousand workers, Tesla Rožnov with 12.3 thousand workers and Chemické závody in Litvínov with 11.4 thousand workers).

Employee reductions in many industrial enterprises, and the closing of some of the larger companies resulted in the decrease of manufacturing companies with more than 10 thousand employees. While at the end of 1989 there were fifteen such companies, in 2004 only two – Škoda Auto employing 24.1 thousand workers (by 6.4 thousand more than in 1989) and Mittal Steel Ostrava (successor of NHKG) with 11 thousand workers. More than 5 thousand workers were employed in the chemical group Unipetrol (7.2 thousand), Třinecké železárny (5.6 thousand) and the largest clothing company Oděvní podnik Prostějov (almost 6 thousand). Among the ten largest employers in 2004 there were a producer of jewellery, Preciosa Jablonec nad Nisou; two car component producers, Bosch Diesel Jihlava and Autopal Nový Jičín; and representatives of chemical industry, Aliachem Pardubice and Barum Continental Otrokovice (which as the tenth largest employer in manufacturing had 4 thousand workers).

Out of the above mentioned companies only in two was foreign capital not active in a more important way, which confirms the increase of the amount of the foreign direct investments into industry. While at the beginning of the transition process the investments were directed towards the building material industry and foodstuffs and the tobacco industry, during the last years the investments have flown mainly into the automotive and electrical industries.

(in thousands workers)						
Industrial branch	Workers (	(thousands)	Index			
	1993	2003	2003/1993 *10			
Raw material extraction	105.5	49.8	47.2			
Manufacturing	1,471.1	1,362.7	92.6			
Out of which:						
Manufacture of food products	152.2	143.2	94.1			
Manufacture of textile, clothing						
and leather products	211.7	124.5	58.8			
Woodworking industry	76.5	75.1	98.2			
Manufacture of paper and printing products	52.5	64.4	122.7			
Manufacture of chemical products	107.3	117.6	109.6			
Manufacture of glass and building materials	88.1	82.8	94.0			
Manufacture of metallurgical products	102.2	61.9	60.6			
Manufacture of metal works	154.3	163.7	106.1			
Manufacture of engineering products	313.1	261.3	83.5			
Manufacture of electrical engineering products	124.4	185.1	148.8			
Other	88.8	83.1	93.1			
Electricity, gas and water production						
and distribution	87.8	65.3	74.4			
Industry in total	1,664.4	1,477.8	88.8			

The most important investor into the car and car components production in the Czech Republic and into electrical engineering are firms located in Germany. Among the largest industrial producers there is Škoda Auto owned by Volkswagen Group, Siemens Group CZ and Bosch Group CZ. Škoda Auto is not only the largest industrial enterprise according to the number of employees but also according to sales and export. In 2004 its sales reached EUR 5 billion and the company accounted for by almost 10% of Czech exports. Siemens Group is made up of 24 companies employing a total of 12.2 thousand workers and its sales exceeded EUR 1.6 billion. Seven companies with around 10 thousand workers are active in the manufacturing. The Bosch Group sales approach EUR 1 billion, in the Czech Republic the group employs 8.2 thousand workers in three towns (Jihlava, České Budějovice and Česká Lípa). In addition to Škoda Auto and Siemens Group CZ, the companies Unipetrol, Mittal Steel Ostrava and Třinecké železárny have higher sales than Bosch.

In 1993-2004 the representation of workers in individual industrial branches considerably changed. Data for 2004 were not available at the time of writing, thus the 2003 data were used for assessing structural changes in industry. After 1992 the number of employees decreased in the metallurgical industry and in the textile, clothing and leather industry. The highest decline was recorded in the leather industry. In 1993 about 32.3 million pairs of shoes were produced in the Czech Republic (73.2 million in 1989), but only 1.2 million pairs in 2003. The sharpest increase in number of workers was recorded in electrical engineering.

#### **SERVICES**

Considerable changes in the number of employees were recorded in individual branches of the service sector. Most branches experienced an increase in the number of employees. Transport, communications, and education were the exceptions. The field with the largest number of employees remained in wholesale and retail trade with almost 750 thousand workers.

Table 14: Employment structure according to service branches in 1993 and 2003 (in thousands workers)						
Service branch	Workers (thousands) Index					
	1993	2003	2003/1993 *100			
Wholesale and retail trade	608.7	735.0	120.7			
Restaurants and accommodation	111.7	184.4	165.1			
Transport and communications	384.7	360.8	93.8			
Commerce and insurance	64.6	94.2	145.8			
Services for companies 1)	303.3	447.2	147.4			
Public administration and defence	132.7	196.4	148.0			
Education	323.9	299.8	92.6			
Health and social care	263.3	285.9	108.6			
Other services	158.7	167.0	105.2			
Services in total <sup>2)</sup>	2,351.6	2,770.7	117.8			

#### Poznámky:

- 1) Services in real estate, rents, services for companies research and development
- 2) Data on number of employees in services are different from data quoted in Table 12 because of different methodology

Source: Time series of basic indexes of labour statistics 1948-2003. ČSÚ, Praha 2004.

## THE RETAIL SECTOR

In the Czech Republic the process of nationalization after 1948 also affected the retail sector, though not as quickly as the large industrial enterprises. During "socialism" the retail sector was divided into the state and cooperative sector. The cooperatives were active mainly in rural areas. Their sales network was made up at the end of 1989 of almost 17 thousand shops, i.e. two fifths of all shops in the Czech Republic.

In the 1990s and 2000s a dynamic change in the retail sector took place. The change in the retail sector was characterised by disintegration of the state trading companies, particularly as a result of abrupt changes of ownership, newly established trade entities, the involvement of foreign investors, large increase in floor space, increase in the number of employees, modernisation of sales networks and improvement of service and by gradual improvement of the technical quality of large shops.

In the whole process of transformation of the Czech **retail sector** we can see two basic stages. During the first one, marked by the atomization of retail business networks (the first half of 1990s), new retail units experienced dynamic growth; the network of larger shops (self-service shops, department stores) was reconstructed. In addition to domestic firms, foreign companies already took part in this process (Julius Meinl, Ahold, Delvita). In fact, large investment activity on the part of foreign firms in the domestic trade network is obvious since the second half of the 1990s. Among the most active companies rank the German companies Globus, Metro, Tengelmann, Rewe and Schwarz. In addition, every important European trade chain has its representation in the Czech Republic. No company with purely Czech capital independent from foreign businesses is to be found among the ten largest trade companies. The largest domestic retail chain is the traditional association of consumer cooperatives Jednota – COOP.

Foreign companies run all types of trade in the Czech Republic. After the first stage of the development of supermarkets the turn of the century was marked by the spread of networks of discount shops and hypermarkets. Measured by the degree of area penetration by hypermarkets (18 units per 1 million inhabitants) the Czech Republic occupies one of the first positions in Europe. In the last years large regional trade and entertainment centres have been developing very dynamically combining numerous functions. Today, the trade environment in the Czech Republic is strongly international and the degree of its concentration is increasing. The retail sale turnover of the foreign firms is increasing too, while domestic firms have faced decline, or stagnation for a long time. Expressed in terms of their share in retail sales of food stuffs, foreign chains account for over 50% of the Czech market.

According to the number of employees the largest retail company is Ahold Czech Republic, which is the only to employ more than 10 thousand workers in the Czech Republic. A bit smaller Globus and Tesco Stores CZ employ more than 5 thousand workers. According to the sales the largest retail trader in the Czech Republic in 2004 was Makro C&C CZ with more than EUR 1.2 billion. The level of EUR 1 billion was exceeded also by Ahold Czech Republic (supermarkets Albert and hypermarkets Hypernova) and Schwarz (Lidl discount stores and Kaufland hypermarkets).

## **TOURISM**

The importance of tourism for the economy of the Czech Republic has been increasing. Foreign tourism revenues reached EUR 3.6 billion in 2004, made up 3.9% of the GDP and participated by 6.3% in the total export of the Czech Republic. According to the World Travel and Tourism Council (WTTC), in 2004 tourism employed 124.1 thousand persons (direct employment; 2.6% of all employed people

in the Czech Republic), while the total employment (including indirect) covered 611.4 thousand labour positions, i.e. every eighth person was employed in tourism or related branches.

The number of foreign visitors in the Czech Republic has been about 100 million each year since 1992 (the maximum of 109.4 million was reached in 1996). Out of 96 million visitors in 2004 the overwhelming majority arrived by road means of transport (88.7 million, i.e. 92.5%), 4.2 million by air, and 3.1 million by train.

The Czech Statistical Office registered 7,640 accommodation establishments with 433.2 thousand beds in the Czech Republic by the end of 2004. The total number of beds has been slightly decreasing in the last years, on the other hand the number of quality beds in hotels and pensions has been increasing (229.7 thousand). In all collective accommodation establishments (including camps, cottage camps, hostels) 12.2 million persons were accommodated in 2004, out of which foreigners formed one half (6.1 million). An average of 37.0% of the bed capacity of accommodation establishments was utilised by tourists (maximum utilisation of 53.5% was recorded in Prague, minimum of 21.2% in the Ústecký Region).

In comparison with 2003 the number of accommodated foreigners has increased by one million. The foreigners concentrate particularly in Prague (3.5 million foreigners, i.e. 57.3% of all accommodated foreigners in the Czech Republic). The Karlovarský Region (387 thousand foreigners), Jihomoravský Region (346 thousand) and Jihočeský Region (318 thousand) are among other attractive destinations in the Czech Republic. According to the country of origin the highest share of the accommodated foreign visitors was made by the Germans (1,569 thousand persons in 2004), followed by the British (651 thousand), Italians (391 thousand), Americans (293 thousand) and Dutch (274 thousand). Thanks to low cost air lines the highest increase was recorded with the British (in 2000 it was only 237 thousand).

Domestic tourism has been developing dynamically as well. According to the data of CzechTourism agency the Czechs carried out 5.6 million five-and-more-day trips in the Czech Republic in 2004. In comparison with 2003 the expenditures increased by 12% for domestic trips (by 4% only for foreign trips). The most favourite destination was the Jihočeský Region (almost 780 thousand trips), followed by the Královéhradecký Region (680 thousand trips) and the Liberecký Region (580 thousand trips). Active tourism (mountain hiking and biking) has become a trend during the past years. The Czech Republic has been experiencing qualitative changes in tourism. Tourists seek new forms of tourism and thus wider range of services connected not only with recreation but also with sports activities, education etc. is offered.

## **INFRASTRUCTURE**

From the point of view of density, the **transport infrastructure** of the Czech Republic is comparable to that of other EU countries; however, it lags behind considerably in qualitative parameters. The technical state of transport infrastructure is in disrepair and its integration into European transport routes is limited. In the Czech Republic there is more than 55 thousand kilometres of roads and motorways, out of which 2,601 km conform to the standards of E-type European road networks. In the Czech Republic 546 km of motorways and 336 km of expressways were completed by the end of 2004. Only one third of the planned network of motorways is currently complete. Although regional road network is sufficiently dense, a majority of its roads do not fulfil the technical standards with low-quality surfaces and numerous traffic-safety deficiencies. Although the density of roads and motorways is 0.737 km/sq km (in EU countries it is 0.389 km/sq km), the density of motorways is only 0.006 km/sq km (EU 0.015 km/sq km). As for comparison of the regions the worst equipped are the Zlínský, Královéhradecký and Pardubický regions. As of the end of 2004 these regions had no motorway or expressway. In the Czech Republic there is, in comparison with other EU countries, a low density of separated cycling routes. This adverse

development is influenced by the high degree of car ownership, which is comparable to the EU countries. Main attention after 1992 has been paid to the construction of motorways, expressways and bypasses.

The railway network consists of 9,612 km of railways, out of which double tracks make up 1,866 km. The Czech Republic has an exceptionally dense railway network (0.120 km/sq km, EU 0.047 km/sq km), but it lags behind in the level of electrification and in the number of double tracks. Also the technical level of railway infrastructure in the Czech Railways is not sufficient, in terms of speed, railway crossing safety, and the safety equipment for stations, tracks etc. The worst situation is in the Karlovarský and Liberecký regions which are completely without good railway service, and in Jihočeský and Zlínský regions without sufficient connection with Prague. In recent years primary attention has been paid to the modernization of the *railway corridor 1* (Děčín-Praha-Česká Třebová-Brno-Břeclav) and *railway corridor 2* (Bohumín-Přerov-Břeclav). These high-speed tracks (160 km per hour) have been integrated into European networks according to international treaties. The modernization of the railway corridors 1 and 2 will be finished soon.

The number of passengers transported stagnated in the second half of the 1990s, there was however a considerable change in the type of transport used. There was a significant shift from public to individual transport. A similar shift was recorded even in the area of transport capacity, where the total index increased slightly, however, the capacity of road and railway transport were decreasing in favour of individual car transport of persons. In the 1990s a considerable portion of cargo transport was shifted from the railways to roads, together with a slight decrease in the total transport of goods, but together with an increase in the total amount of transported materials by one half. The traffic load on roads and local communications increased very significantly with all the associated negative impacts on the environment.

The total length of water routes in the Czech Republic is 664 km, out of which 303 km of the Elbe-Vltava water route serve for international long-distance water transport. Water transport in the Czech Republic makes up a rather small proportion of overall transport, which is partly due to the fact that the only connection of the water route network of the Czech Republic to the rest of Europe is through the Elbe River, whose navigation parameters are problematic.

Air transport in the Czech Republic is currently experiencing very rapid growth. In the Czech Republic there are 87 civil airports, out of which 9 are international. The bulk of air traffic, however, goes through Praha-Ruzyně airport, which accounts for 94% of total air transport of persons and over 84% of cargo air transport. Other major international airports are in Brno, Ostrava and Karlovy Vary. Their capacity is not currently fully utilised. In 1993 a total of 1.358 million persons were passed through the Czech Republic's airports, in 2004 this number was 10.125 million persons.

After 1992 the Czech Republic experienced an improvement in **technical infrastructure**. Almost 90% of the population uses water from the public water supply networks. However, regional differences exist; in the Středočeský Region only 72.3% of the population uses public supply of water. As much as 68.4% of the population lives in houses connected to the sewerage system. While in Prague it is 99.3%, in the Středočeský Region the percentage drops to only half of the population. Almost two thirds of households (64.1%) are connected to natural gas. The situation is more favourable in Moravia than in Bohemia. The highest number of homes with a gas fixture is in the Jihomoravský Region (82.2%), in the Jihočeský Region it is only 35.7%.





# Portraits of Regions

## Hlavní město Praha (Capital City of Prague)



Area: 496 sq km

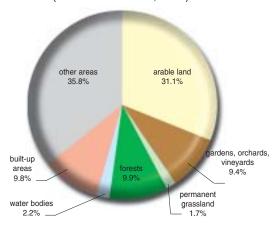
**Population:** 1,170,571 (as of January 1, 2005)

out of which

54,880 foreigners with temporary residence 21,884 foreigners with permanent residence

Population density: 2,360 persons/sq km Number of administrative districts: 22 Number of city districts: 57

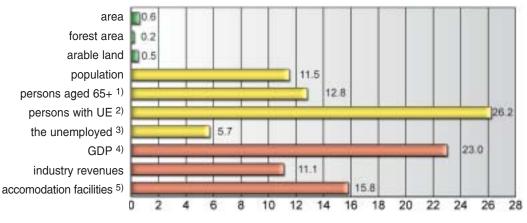
## Land Use (as of December 31, 2004)



Source: Statistická ročenka půdního fondu ČR. ČÚZK, Praha 2005.



#### Share of the capital city of Prague in selected country statistical figures



share in the figure for the Czech Republic as a whole (%)

#### Notes:

- 1) 65+ persons aged 65 or more
- 2) UE university level of education
- 3) the unemployed number of economically active persons without employment
- 4) GDP gross domestic product
- 5) accomodation facilities number of beds in touristic accomodation facilities

Data sources: ČSÚ (Czech Statistical Office) and ČÚZK (Czech Office for Surveying, Mapping and Cadastre).

#### NATURAL ENVIRONMENT

Prague is situated in the central part of the Czech Highland largely in the Poberounská geomorphologic unit, only the smaller north-eastern part lies in the Czech Tableland geomorphologic unit. The present characteristic relief of the city is formed by erosive and accumulative activity of the Vltava River along with the varried levels of resistance of the underlying rock. Prague is distinctive of the contrast between flat terrain of the highest parts and deeply cut valleys of the Vltava River and its tributaries. As a result of the tectonic uplift of the Czech Massive the Vltava River started to cut deep into the bedrock during the Quaternary Period, and in the last Ice age it reached a level 10-12 m below the present river bed. River terraces such as Dejvická, Letenská, Kralupská, Pankrácká or Lysolajská bear evidence to the alterations of the erosion and accumulation periods.

The highest point of the area lies south-west off Zličín (399 m a.s.l.), the lowest point is the Vltava River in Suchdol (177 m a.s.l.).



Vltava River and the Charles Bridge below the Prague Castle. (Photo: Dušan Gavenda)

#### POPULATION AND SETTLEMENT PATTERNS

Prague is a statutory city; for purposes of state administration it has been divided since 2001 into 22 administrative districts and for purposes of self-government it is divided to 57 autonomous city districts with elected authorities. These city districts are not homogeneous. There are city districts with the distinct character of a city centre, districts with a predominantly residential character dating back to the 1920s and 1930s, districts with an industrial character, districts with housing estates, districts with a sub-urban character (many of which were created when the surrounding municipalities were incorporated into Prague). They differ in the degree of urbanisation, population density, quality of infrastructure, and in social economic living conditions. There are considerable differences in the number of inhabitants in individual districts. While the number of inhabitants in three city districts exceeds 100 thousand, 21 do not reach even 2 thousand and out of the 21 districts five have less than 500 inhabitants.

At the end of 2004 the average age of the Prague's population reached 41.7 years, which was the highest number in the Czech Republic. The age index exceeded 100 in Prague (the only region in the Czech Republic), which means that the proportion of persons in pre-productive age (12.5%) was lower than the number of persons in post-productive age (15.7%). The adverse age structure of the population in Prague is reflected in the long term in the negative natural change since the 1980s. The greatest decrease of the natural change was recorded in 1995 (5.7 thousand). As late as in 1992 the migration balance reduced the natural population decrease and thus Prague's population increased. In the years 1993-2001 the population in the capital city decreased. The negative migration balance in the period 1998-2001 resulted from the migration of the population to suburban municipalities. After a sharp decline in housing construction in the 1990s, housing construction was revived and it was subsequently reflected in the increase of immigrants. In 2004 the number of finished flats per 10 thousand inhabitants reached 50.8, which was the second highest value in the Czech Republic (the Středočeský Region ranking first). There was a net increase in immigration to Prague; therefore Prague was marked with an increase in population since 2002. During 2004 its population increased by 5 thousand inhabitants. This positive migration balance was influenced significantly by foreign immigration. Compared to other regions, Prague showed certain unique characteristics. Compared to the national average Prague was more heterogeneous in terms of the educational structure of the population. The percentage of persons aged 14+ with tertiary education was 22.1%, the share of persons aged 14+ with GCSE reached two fifths.



Old Town Square with a monument to Jan Hus. (Photo: Irena Smolová)

Population change						
Period	absolute	numbers	in ‰ pe	er year		
	natural migration change balance		natural change	migration balance		
1993-1996	-19,495	7,158	-4.0	1.5		
1997–2000	-18,326	-5,501	-3.8	-1.2		
2001–2004	-12,321 12,416		-2.6	2.6		
1993-2004	-50,142	14,073	-3.5	1.0		

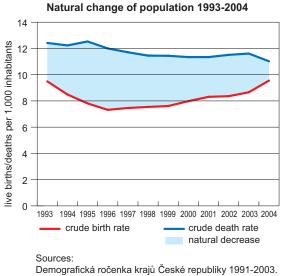
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Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.

Age structure of population					
Age group	Unit	19	993	20	04
Age group	Offic	CZ Region		CZ	Region
0–14	%	19.4 16.8		14.9	12.5
15–64	%	67.6 67.4		71.0	71.8
65+	%	13.0 15.7		14.0	15.7
mean age	years	36.8 39.3		39.8	41.7
old/young ratio	_	66.8	93.6	94.0	125.8

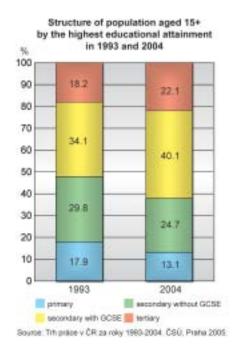
#### Sources:

Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.



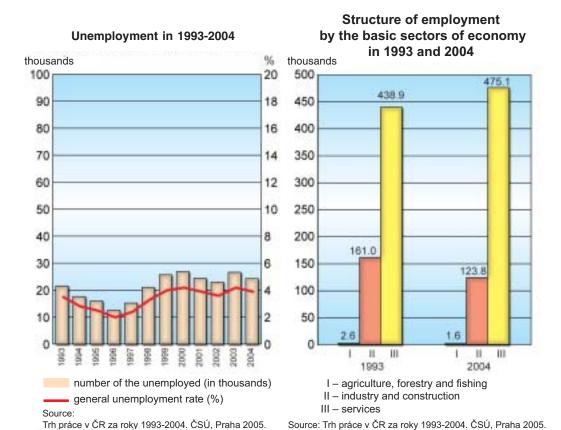
ČSÚ, Praha 2004.

Vývoj obyvatelstva ČR v roce 2004. ČSÚ, Praha 2005.



#### **ECONOMY**

Prague takes a unique position in the Czech economy. The GDP per capita is double the national average and reaches 143% of the EU25. Prague is considered to have a degree of investment stability; it also has low unemployment, a labour force with an above average level of qualification, a large number of commuters (more than 160 thousand) and high wage level (by one fourth higher than the national average). Prague has a specific economic structure. The share of GDP made up by manufacturing has fallen below 10%. The only company with more than 1,000 employees is the rubber-making company of Mitas. The increased importance of the service sector is characteristic of the economic development of Prague. Commercial services account the highest proportion in the tertiary sector in terms of value added (almost 25%), followed by trade (16.7%), and transport and communications (13.0%). The largest employers in Prague are institutions involved in transport and communication. More than 13 thousand persons are employed by the Dopravní podnik hlavního města Prahy (Praque transit authority). Retail and services are developing very dynamically. Construction of large shopping malls on the outskirts of the city and of new shopping arcades in the centre has increased the amount of sales space as well as the quality of retail services. The number of guests accommodated in hotels and hostels in 2004 approached 4 million; 89.8% of these were foreigners. Prague accounts for more than half of all the overnight stays of foreign visitors to the Czech Republic.



. ,	atest number of employees in Prague y, as of December 31, 2003)	
Employer	Branch	Emp.
Dopravní podnik hl. m. Prahy	City and sub-urban transport	13.0
České dráhy	Railway transport	7.7
Univerzita Karlova	Education	7.3
Česká pošta	State post	7.0
Fakultní nemocnice v Motole	Health care	5.3
Česká spořitelna	Finance and insurance	5.1
Všeobecná fakultní nemocnice v Praze	Health care	4.9
Český Telecom	Telecommunication	4.5
České aerolinie	Air transport	4.5
Československá obchodní banka	Finance and insurance	4.1
Note: Emp. – number of employees in thousands	S	
Source: CRR MU in Brno database, 2005.		

## **TOURIST ATTRACTIONS**

The majority of visitors of Prague are interested in its historical core, which is in terms of area and number of conserved monuments the largest town monument reserve in the Czech Republic. In 1992 it was added to the UNESCO's World Heritage List. Staroměstské náměstí (the Old Town Square) is dominated by the Town Hall built in 1338 as the seat of the Old Town administration. The oldest gothic part of the complex - including the tower, oriel chapel and rich decoration – originated in the latter half of the 14th century. The other dominant feature of the Old Town Hall is the astronomical clock from the beginning of the 15<sup>th</sup> century, on which the twelve apostles appear each hour between 9 and 21 o'clock. The calendar on the lower part of the clock includes the allegorical depiction of the twelve months of the year painted by Josef Mánes (1865). The city skyline is crowned by the *Pražský hrad* (Prague Castle). From the end of the 9th century it served as the seat of the Přemysl dynasty which ruled Bohemia. The castle experienced an unprecedented boom during the latter half of the 14th century during the reign of Charles IV, who, after having been crowned Emperor, made it the seat of the Holy Roman Empire. The royal palace was rebuilt in grand style, the fortifications were strengthened, and the construction of St Vitus Cathedral in the French style started within the grounds of the castle. The construction of the castle complex reached its peak during the reign of the Emperor Rudolf II, who made Prague his residence in 1583 and started to transform the city into a dignified and monumental centre of the Empire, which attracted diplomats, artists and scholars. He founded the northern wing of the castle palace with today's Španělský sál (Spanish Hall) in order to house rich artistic and scientific collections. When independent Czechoslovakia was founded in 1918, the Prague castle became the seat of the president. Necessary adjustments were made at that time by the Slovene architect Josip Plečnik. Prague Castle is an outstanding cultural and historic monument. It houses the crown jewels, the remains of the Czech kings, valuable religious relics, artistic treasures and historic documents. Important events have taken place there, the Prague Castle embodies the historic tradition of the Czech state and links the Czech present to the past.

The oldest bridge across the Vltava River is the *Karluv most* (Charles Bridge). originally called Prague or Stone Bridge, only in 1870 was it renamed as a tribute to its founder Charles IV. Originally both banks had been connected in the same place by a stone Romanesque bridge erected in 1158-71, which was named Judita's after the wife of the king Vladislav I. However, it was badly damaged in 1272 and 1342 by floods, and had to be replaced by the new gothic bridge in the latter half of the 14th century. Gradually from 1683 to 1714 the railings of the bridge were decorated by thirty statues of the saints by outstanding baroque artists.



Equestrian statue of St Wenceslas (svatý Václav), patron saint of the Czech land, in front of the National Museum building in the Wenceslas Square. (Photo: Dušan Gavenda)

# Středočeský Region



Area: 11,015 sq km

**Population:** 1,144,071 (as of January 1, 2005)

out of which

20,927 foreigners with temporary residence 10,161 foreigners with permanent residence

Population density: 103.9 persons/sq km

Number of municipalities: 1,146

(including 74 towns)

Administrative centre:

Prague (outside the territory of the region)

Other large towns:

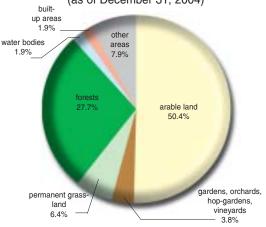
Kladno (69.4 thousand inhabitants, as of January 1, 2005) Mladá Boleslav (43.0 thousand) Příbram (35.1 thousand)

Kolín (29.5 thousand)

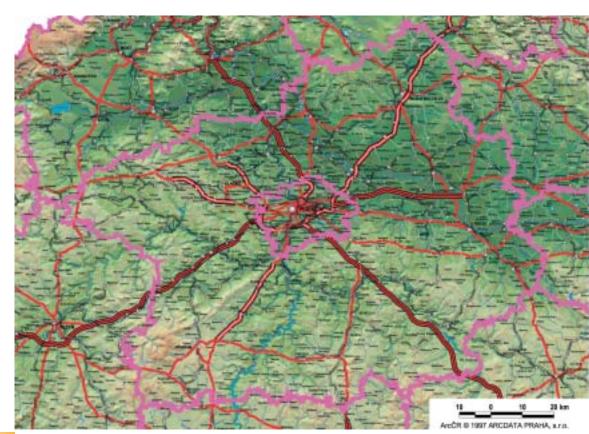
Kutná Hora (21.1 thousand)

#### Land Use

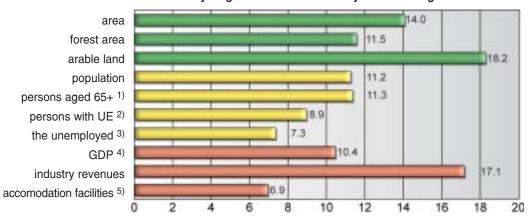
(as of December 31, 2004)



Source: Statistická ročenka půdního fondu ČR. ČÚZK, Praha 2005.



#### Share of the Středočeský Region in selected country statistical figures



share in the figure for the Czech Republic as a whole (%)

#### Notes:

- 1) 65+ persons aged 65 or more
- 2) UE university level of education
- 3) the unemployed number of economically active persons without employment
- 4) GDP gross domestic product
- 5) accomodation facilities number of beds in touristic accomodation facilities

Data sources: ČSÚ (Czech Statistical Office) and ČÚZK (Czech Office for Surveying, Mapping and Cadastre).

## NATURAL ENVIRONMENT

The terrain of the Středočeský (Central Bohemia) Region is not very mountainous: plains prevail in the north and in the south and southwest there are highlands culminating with Tok peak with an altitude of 864 m a.s.l. The Elbe River with numerous meanders and oxbows flows through the fertile central part of the region. The river leaves Central Bohemia near Mělník (at 153 m a.s.l). The axis of the western part of the region is made up by the Vltava River, the largest tributary of the Elbe River. The Vltava River is dammed several times (the Orlík, Kamýk, Slapy, Štěchovice, Vrané dams) and its average flow rate is 150 m³/sec (near Mělník, at the confluence with the Elbe River). Unique landforms are represented by the rock cities in the north and the Czech Karst in the southwest. Low precipitations and rich soils on loess covers and fluvial sediments are typical of the whole territory of the region. Important hard coal deposits were mined till 2002 in the Kladno region, iron and uranium were extracted in the Příbram region. Presently gravel sand deposits and clays in the Polabí are exploited.

The most valuable natural areas in Central Bohemia are designated as protected landscape areas. The *Kokořínsko PLA* with typical rock lids and deep canyons stretches to the northern part of the region. On the beds of the canyons internationally important wetlands are preserved. The *Křivoklátsko PLA* stretches to the western part of the region; it is one of the six biosphere reserves of the Czech Republic. Vast complexes of the original Hercynian mixed forests and undisturbed landscape are preserved there. In the *Czech Karst PLA* the Koněprusy Caves are open to the public; as are the attractive abandoned limestone quarries. The smallest *Blaník PLA* is Blaník peak of which legend tells is the restiny place of the knights of Blaník, who will ride forth to protect the Czech lands in their time of greatest need. A part of the *Czech Paradise PLA* with its characteristic rock cities reaches the eastern part of the region.

### POPULATION AND SETTLEMENT PATTERNS

The location of the region influences significantly its social and economic character, for it forms a large hinterland of Prague. It is an important source of labour for the capital city. The specific character of the region was reflected in the 1990s in a different demographic development, for since 1997 it has experienced a population increase due to migration. In 2004 the migration balance was 9.6 thousand and together with relatively low natural population decrease (–1.3 thousand) the population in 2004 increased by 8.3 thousand (7.3%; followed by Prague with 4.3% and the Ustecký Region with 1.5%). This migration influences the intensity of housing development, which has been the most intense in the Czech Republic. In 2004, 6.1 thousand flats were finished and the construction of almost 8 thousand was started.

Immigration favourably influences the age structure of the population. In 1993 the Středočeský Region was marked by the highest proportion of the persons of post-productive age after Prague (13.8%), in 2004 the situation was considerably better (with 14.1% it ranked the eighth within regions). The lower representation of persons with higher education than the national average is due to the fact that the natural centre of the region, Prague, is an independent region. Inspite of this, the proportion of persons with GCSE or tertiary education is higher than in the Ústecký or Karlovarský regions.

In the region there are 1,146 municipalities with an average area of 9.6 sq km and the average population of 987. Seventy four municipalities have the status of a town. The largest town is Kladno with almost 70 thousand inhabitants. Another four towns have more than 20 thousand and thirteen towns more than 10 thousand inhabitants. The region is characterized by the high proportion of municipalities with the number of inhabitants below 500. There are 704 such municipalities, i.e. 61.4%, with 15% of the population of the whole region.



Town Hall is one of the last preserved historic buildings in Kladno. (Photo: archive)

Population change						
Period	absolute numbers		Period absolute		in ‰ pe	er year
	natural change			migration balance		
1993-1996	-12,862	7,956	-2.9	1.8		
1997–2000	-13,102	22,906	-3.0	5.2		
2001–2004	-8,160	30,640	-1.8	6.8		
1993-2004	-34,124	61,502	-2.5	4.5		

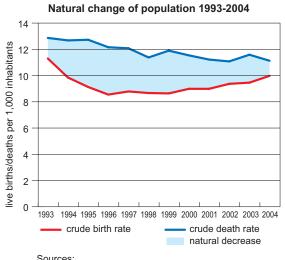
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Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.

Age structure of population					
Age group	Unit	19	993	20	04
Age group	Offic	CZ Region		CZ	Region
0–14	%	19.4 18.8		14.9	15.1
15–64	%	67.6 67.4		71.0	70.8
65+	%	13.0 13.8		14.0	14.1
mean age	years	36.8 37.5		39.8	39.8
old/young ratio	_	66.8	73.3	94.0	93.6

#### Sources:

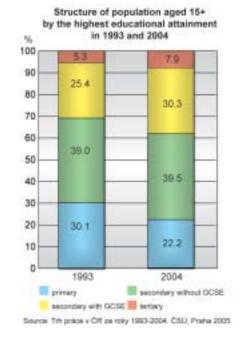
Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.



#### Sources:

Demografická ročenka krajů České republiky 1991-2003. ČSÚ, Praha 2004.

Vývoj obyvatelstva ČR v roce 2004. ČSÚ, Praha 2005.

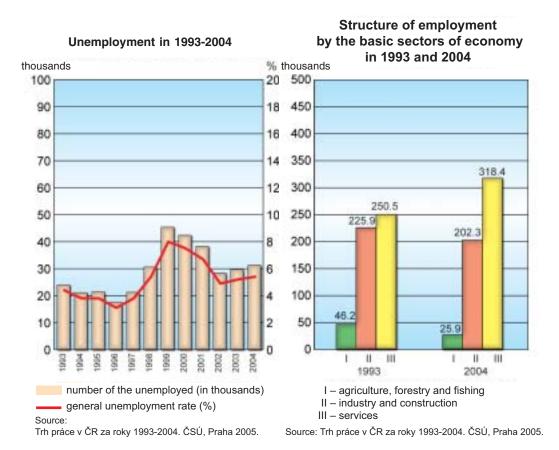


### **ECONOMY**

Diversified economy and the central location of Prague result in the high potential for job creation and in a low unemployment rate. The analysis of the structure of the gross added value shows different economic orientation from Prague. The two regions act complementarily. Manufacturing is the most important economic branch; it accounts for more than one third of the region's added value. Transport, storage, post and telecommunications is the second most important branch with 12.6%, followed by trade (12.4%). The agriculture accounts for 4.2% of GDP, which exceeds by almost one per cent the mean value for the Czech Republic as a whole (3.3%).

The industry of the region is dominated by the car company Škoda Auto in Mladá Boleslav, which has numerous subcontractors. In 2005 car production was started in Kolín in the company Toyota Peugeot Citroën Automobile Czech, Ltd. There are other important machine tool producers in the region - the largest airplane producer Aero Vodochody, or producer of ammunition Sellier&Bellot in Vlašim. The metallurgy and leather-making industry were considerably reduced

after 1993. Extraction and processing of raw materials declined as well. Polabí is the most significant agricultural district in the region due to its excellent natural conditions. The region stands out mostly for its crop production (wheat, barley, sugar beat, in the town hinterlands fruits, vegetables and flowers). The quantity of the livestock production is not very important in comparison to other regions.



. ,	er of employees in the Středočeský Regionas of December 31, 2003)	n
Employer	Branch	Emp.
Škoda Auto, Mladá Boleslav	Car production	18.9
České dráhy	Railway transport	8.1
Česká pošta	State post	4.0
Aero Vodochody, Odolena Voda	Airplane production	2.2
Ahold Czech Republic	Trade	1.9
Sklárny Kavalier, Sázava	Production of glass and glass products	1.8
Finanční ředitelství	Public administration	1.5
Sellier&Bellot, Vlašim	Production of armaments and ammunition	1.4
Spolana, Neratovice	Production of basic chemical materials	1.2
VDO Česká republika, Brandýs nad Labem	Production of accessories for the car industry	1.2
Note: Emp. – number of employees in thousands		
Source: CRR MU in Brno database, 2005.		

## **TOURIST ATTRACTIONS**

Central Bohemia offers a number of places for recreation, mainly in the valleys of the Berounka, Sázava and Vltava Rivers. The closest surroundings of Prague are used for weekend recreation. Many historic sites are situated in Central Bohemia: *Kutná Hora* historic core (St. Barbora Cathedral, Vlašský dvůr, Hrádek with silver mines, charnel house) which has been on the UNESCO's World Heritage List since 1995. In addition to Kutná Hora, town monument reserve is to be found in the nearby town of *Kolín*. The most visited site of the region is *Karlštejn*, a castle erected by the Czech king Charles IV in 1348-57 to house the coronation jewels, important documents and relics. The castle chapel of the Holy Cross is decorated by gothic panel paintings of world significance by Mister Theodorik. *Křivoklát*, another castle, ranks among the oldest and most important castles of the Czech princes and kings. Its origins go back to the 12<sup>th</sup> century: during the reign of Přemysl Otakar II it was rebuilt as a large royal castle, finished by Vladislav Jagellonský. Frequently visited castles include Točník, Český Šternberk, Kost or Kokořín, or the chateaux in Konopiště, Žleby, Kačina, Nelahozeves, Mělník and Lány (used as the summer seat of the president). As for natural attractions, the region's protected landscape areas are among the top attractions.



The Karlštejn Castle. (Photo: Vítězslav Válka)

## Jihočeský Region



Area: 10,057 sq km

**Population:** 625,712 (as of January 1, 2005)

out of which

5,973 foreigners with temporary residence 3,979 foreigners with permanent residence

Population density: 62.2 persons/sq km

Number of municipalities: 623

(including 45 towns)

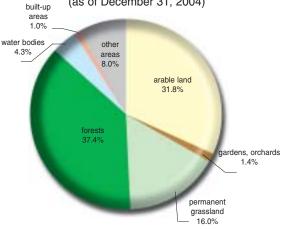
Administrative centre: České Budějovice (94.6 thousand inhabitants, as of January 1,

2005)

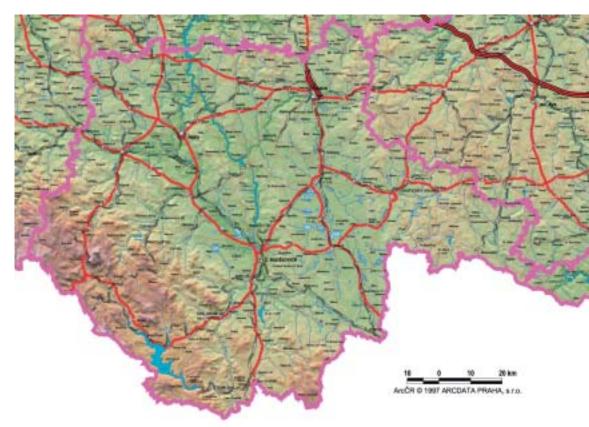
#### Other large towns:

Tábor (36.0 thousand)
Písek (29.8 thousand)
Strakonice (23.3 thousand)
Jindřichův Hradec (22.7 thousand)

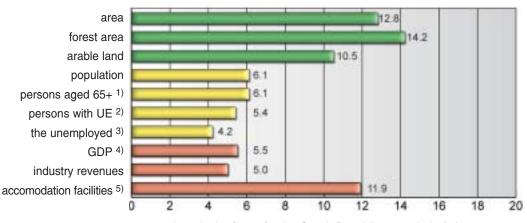
## Land Use (as of December 31, 2004)



Source: Statistická ročenka půdního fondu ČR. ČÚZK, Praha 2005.



#### Share of the Jihočeský Region in selected country statistical figures



share in the figure for the Czech Republic as a whole (%)

#### Notes:

- 1) 65+ persons aged 65 or more
- 2) UE university level of education
- 3) the unemployed number of economically active persons without employment
- 4) GDP gross domestic product
- 5) accomodation facilities number of beds in touristic accomodation facilities

Data sources: ČSÚ (Czech Statistical Office) and ČÚZK (Czech Office for Surveying, Mapping and Cadastre).

## NATURAL ENVIRONMENT

Most of the territory of the Jihočeský (South Bohemia) Region lies on the old igneous rocks covered with younger sediments. The tectonically lowered central part is divided by the Lišov Sill into two sedimentary basins – the Českobudějovická Basin in the west with the Vltava River, Třeboňská Basin in the east with the Lužnice River. The largest pond area in the Czech Republic was founded there. The origin of the first ponds date back to the reign of Charles IV; however, fish farming blossomed in the 16<sup>th</sup> century on the Rožmberk estate. Most ponds of the Třeboň region are fed by a unique water management masterpiece: the Zlatá stoka canal. Presently more than 7,000 ponds covering a total area of over 31 thousand hectares are located in South Bohemia, the three largest being Rožmberk on the Lužnice River, Horusický near Veselí nad Lužnicí and Bezdrev near Hluboká nad Vltavou. During the latter half of the 20<sup>th</sup> century new large water works were constructed: the Lipno Dam (4,870 ha, the largest in the Czech Republic), the Orlík Dam with the largest capacity in the Czech Republic or the Římov Dam supplying a significant part of the region with drinking water. Due to the construction of the Temelín nuclear power station the Hněvkovice Dam was constructed on the Vltava River. The combined surface area of these ponds and reservoirs make up 4% of the total area of the region.

Vast forests, particularly in the Šumava Mts. and Novohradské Mts. are an important natural resource of the region. Mineral resources of the region include sand and gravel sand deposits, brick clay and other building materials. Deposits of peat are important as well.

Little disturbed natural environment is protected by law in a number of specially designated areas. Two UNESCO biosphere reserves (Šumava and Třeboňsko) are located in the region. The Šumava and Třeboň moor lands are protected as internationally important wetlands. In 1991 the Šumava National Park was declared in the south-western part of the region with the area of 690 sq km; its buffer zone is the Šumava PLA (940 sq km). Among the most valuable localities of the national park are Šumava cirque lakes, canyons of the Křemelná, Vydra and Otava Rivers,

Modrava and Kvilda moor lands, Chalupská moor, Vltava mead, Knížecí Pláně, Stožec or Trojmezná. In the Šumava Mts. foothills the *Blanský les PLA* was declared in 1989 with an area of 212 sq km. The *Třeboňsko PLA* is an acknowledged example of the harmonic relations between nature and human activities. The Lužnice River with preserved natural meanders forms a natural axis of the territory with vast wetlands, peat bogs and sand dunes.

#### POPULATION AND SETTLEMENT PATTERNS

South Bohemia is the least densely populated region in the Czech Republic. Scarcely populated territories have preserved a unique character with a number of cultural and natural monuments. Out of the total number of 623 municipalities 447 (71.2%) have less than 500 inhabitants and almost 91 thousand persons live in these municipalities. More people are concentrated in the administrative centre of the region – České Budějovice (94.6 thousand). The towns of Tábor, Písek, Strakonice and Jindřichův Hradec represent other large population centres. More than 10 thousand people live also in Český Krumlov and Prachatice.

As late as in 1993 South Bohemia experienced natural population increase, i.e. the number of births exceeded the number of deaths. Since 1994, however, the region has been experiencing natural decrease; in 1995 and 1996 this even exceeded the level of one thousand persons. On the other hand the region gained population during 1993-2004 via migration. In 1995-1996 and 1999-2001, however, the migration balance did not reach the level of natural decrease and the region as the whole was losing its population. Since 1993 the total population has slightly increased. The average age increased from 36.4 in 1993 to 39.5 in 2004, which was slightly less than the national average (39.8 years). South Bohemia was one of the regions where the proportion of the population with GCSE and with the tertiary education exceeded 40% (other than South Bohemia the only other regions to exceed this level were Prague, the Plzeňský Region and the Jihomoravský Region).

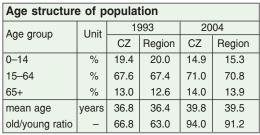


Přemysl Otakar II Square in České Budějovice is one of the largest in Central Europe, with the size of 133 x 133 m. (Photo: Irena Smolová)

Population change						
Period	absolute numbers		Period absolute		in ‰ pe	er year
	natural change			migration balance		
1993-1996	-1,545	2,981	-0.6	1.2		
1997–2000	-3,435	-3,435 2,776		1.1		
2001–2004	-2,598	3,017	-1.0	1.2		
1993-2004	-7,578	8,774	-1.0	1.2		

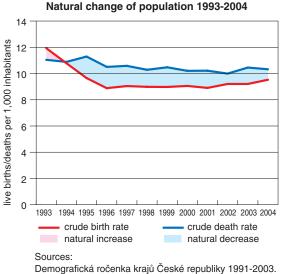
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Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.



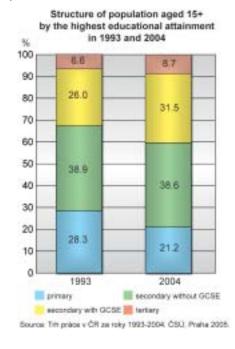
#### Sources:

Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.



Demografická ročenka krajů České republiky 1991-2003 ČSÚ. Praha 2004.

Vývoj obyvatelstva ČR v roce 2004. ČSÚ, Praha 2005.

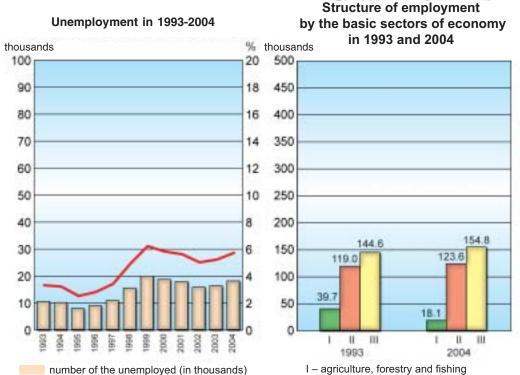


## **ECONOMY**

The employment in the primary sector is the second largest in the Czech Republic. This is a result not only of higher employment in agriculture, but also in the forestry and a significant number of persons traditionally working in the fish farming industry. The structure of crop area does not differ much in South Bohemia from that in the Czech Republic as a whole; however the percentage of the arable land is only 64.6% (in the Czech Republic it is 71.6%). On the other hand South Bohemia is marked with a higher level of livestock production (beef cattle, pigs). Forestry and fish farming occupy an important position in the region. The region was ranked first in the Czech Republic in the volume of timber (one sixth of the total volume of timber in the Czech Republic). One half of fish production comes from South Bohemia. In comparison to the national average the proportion of the primary sector in the creation of total gross added value made in the region is more than twofold (6.2%). However, the crucial economic sector with the proportion of more than 25% is manufacturing.

Before 1989 South Bohemia was not characterized by a larger concentration of metallurgy and heavy industry; therefore the impact of restructuring was not felt as severely as in other regions of the Czech Republic. Thus the situation on the labour market is relatively favourable. Tourism and related services have developed successfully. The number of guests in the collective hotels and hostels exceeded one million in 2004 and the region ranked second in the Czech Republic after

Prague. The construction of the Temelín nuclear power station (in operation since 2002) was the largest industrial investment in the region. Its opening ended the need to import electricity from other regions, mainly from ecologically afflicted northern Bohemia. Foreign direct investments were directed mainly into the car industry. The largest producers of car components and accessories in the region are two new companies, Robert Bosch and Dura Automotive CZ, and one traditional company, ČZ Strakonice. Eleven industrial enterprises and one construction firm (Hochfief VSB, once Vojenské stavby) with more than 1 thousand employees are active in the region.



I - agriculture, forestry and fishing

II - industry and construction

III - services

Source: Trh práce v ČR za roky 1993-2004. ČSÚ, Praha 2005. Source: Trh práce v ČR za roky 1993-2004. ČSÚ, Praha 2005.

Employers with the greatest number of employees in the Jihočeský Region

(civil sector only, as of December 31, 2003)					
	Employer	Branch	Emp.		
	České dráhy	Railway transport	4.6		
	Česká pošta	State post	3.0		
	Nemocnice České Budějovice	Health care	2.7		
	Robert Bosch, České Budějovice	Production of accessories			
		for the car industry	1.9		
	Madeta, České Budějovice	Production of dairy products	1.5		
	ČZ Strakonice	Production of accessories			
	•	for the car industry	1.5		
	Jihočeská univerzita, České Budějovice	Education	1.3		
	Dura Automotive CZ, Blatná	Production of accessories			
		for the car industry	1.2		
	Jitex Písek	Production of knitted products	1.2		
	Hochtief VSB	Construction	1.2		
	Note: Emp. – number of employees in thousands				
	Source: CRR MU in Brno database, 2005.				

general unemployment rate (%)

#### TOURIST ATTRACTIONS

Natural environment with a high percentage of forest, bodies of water and a number of cultural monuments (almost six thousand buildings) attract people from all over Czech Republic and from abroad. During the summer season the Lipno and Orlík dams, the south Bohemian ponds and the Šumava Mts. are the main attractions, in winter the top attractions are mainly the Šumava ski resorts of Churáňov and Zadov.

The folk architecture of the "country baroque" is implicitly connected with the South Bohemia. The peculiar architectonic style originated at the turn of the 18<sup>th</sup> and 19<sup>th</sup> centuries by translation of the baroque features from the town houses to the rural folk architecture. In 1995 typical settlements of Klečany, Komárov, Mažice, Vlastiboř, Zálší and Záluží were declared monument reserves. The second typical area is the Hlubocká blata moors between Hluboká nad Vltavou, Bosňany and Netolice. The best known village is *Holašovice* which was listed in 1998 as a UNESCO heritage site.

The historic centres of **České Budějovice**, **Český Krumlov** (a UNESCO heritage site since 1992), **Jindřichův Hradec**, **Prachatice**, **Tábor**, **Třeboň** and **Slavonice** are town monument reserves. Slavonice is seeking to be added to the UNESCO's World Heritage List as an example of a renaissance town. Balneology is an important part of tourism of the region; spas make use of rich resources of peat to treat the motor disorders. The towns of **Bechyně** and **Třeboň** possess a status of spa towns. In addition to that there are a number of historic monuments in the region, such as chateaux in Hluboká nad Vltavou, Český Krumlov, Blatná, Červená Lhota, or the medieval castles Zvíkov, Nové Hrady or Orlík.

The town of Český Krumlov. Photo: Irena Smolová)



Holašovice – an example of rustic baroque. (Photo: Irena Smolová)

## Plzeňský Region



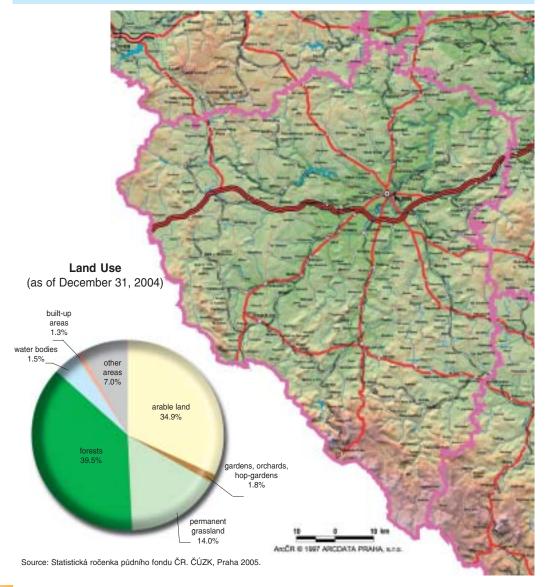
**Area:** 7,562 sq km **Population:** 549,618

(as of January 1, 2005) out of which 7,624 foreigners with temporary residence 4,882 foreigners with permanent residence **Population density:** 72.7 persons/sq km

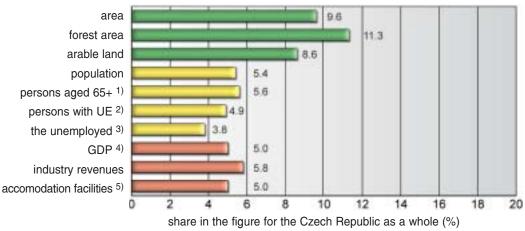
Number of municipalities: 501

(including 46 towns)

Administrative centre: Plzeň (162.6 thousand inhabitants, as of January 1, 2005)
 Other large towns: Klatovy (22.9 thousand), Rokycany (13.8 thousand), Tachov (12.5 thousand), Sušice (11.5 thousand), Domažlice (10.8 thousand)



#### Share of the Plzeňský Region in selected country statistical figures



#### Notes:

- 1) 65+ persons aged 65 or more
- 2) UE university level of education
- 3) the unemployed number of economically active persons without employment
- 4) GDP gross domestic product
- 5) accomodation facilities number of beds in touristic accomodation facilities

Data sources: ČSÚ (Czech Statistical Office) and ČÚZK (Czech Office for Surveying, Mapping and Cadastre).

#### NATURAL ENVIRONMENT

The Plzeňský Region has a hilly character. The central part is occupied by the Plzeňská Basin surrounded by the hilly terrain of the Plzeňská Upland and Brdy. The Plzeňská Upland is characterized by heights formed by resistant rocks (the lydites), which protrude in the form of isolated tors. The axis of the Plzeňská Basin is formed by the Berounka River; in its valley there are numerous terraces. The southern and south-western rim of the region consists of the Český les and Šumava Mts. The Šumava Mts. reaches into the region partly with the Železnorudské Mts. and the Šumavské Plains, which represent vast remnants of the Tertiary peneplain in the altitude of 900-1100 m a.s.l. with numerous peat bogs. Above the peneplain the highest peaks of the region rise (Velká Mokrůvka 1370 m a.s.l., Poledník with the glacial corrie of Plešné Lake).

Most of the region falls into the Berounka River drainage basin; the river emerges at the confluence of the Mže and Radbuza Rivers. The Mže River starts in Germany and two dams were erected on it: Lučina near tachov and Hracholusky near Plzeň. The Plzeňská Basin has a centripetal drainage pattern and is an important confluence area, which makes it prone to floods (e.g. that in 2002). Nýrsko Dam built on the Úhlava River in the Šumava PLA server as an important source of drinking water. In addition to glacial lakes, the region offers the other unique geological formation, Mladotické Lake, formed in the 19th century as a result of a landslide which created a natural dam on the Mladotický Brook. The region has large potential reserves of raw materials (deposits of clay, kaolin and building stone).

The **Šumava NP** and **Šumava PLA** extend into the region. They protect vast forest complexes, peat bogs, and periglacial and glacial landforms. In the **Český les PLA** in the southwest, declared in 2005, original mixed forests and undisturbed landscape of the Czech-German border are protected. The highest peak is Čerchov (1042 m a.s.l.). A small part of the **Slavkovský les PLA** extends into the region as well.

## POPULATION AND SETTLEMENT PATTERNS

The Plzeňský region is the second least populated in the Czech Republic. Population distribution is considerably uneven; almost 30% of inhabitants live in Plzeň, but compared to other regions the Plzeňský Region has no large towns (only in Klatovy and Plzeň does the population exceed 20 thousand). In 2004 there were 341 municipalities with less than 500 inhabitants, i.e. 68.1% of the total number of municipalities, with 12.5% of the population of the region. Since 1993 the population of the region has been decreasing due to a high natural decrease, which is not sufficiently compensated by the migration balance (with the exception of the year 2003). The highest population decrease was recorded in Plzeň: 173 thousand inhabitants in 1991 and around 10 thousand less people at present.

The aging of the population after 1993, typical of the whole republic, has affected the Plzeňský Region very intensely. In 2004 the average age exceeded 40 years (40.2; the second after Prague), in 2005 the index of age reached 100, i.e. the number of inhabitants in the post-productive age exceeded the number of inhabitants aged 0-14. Recently the level of education has increased considerably (the proportion of population with GCSE and the tertiary education increased in 1993-2004 from 31% to 40.8%; the highest value after Prague and the Jihomoravský Region). This favourable development goes hand in hand with the development of education in Plzeň, where the Západočeská University was founded.



Gothic church of St Bartholomew in the centre of Plzeň with the highest church tower in the Czech Republic. (Photo: Irena Smolová)

Population change				
Period	absolute	numbers	in ‰ per year	
	natural	migration	natural	migration
	change	balance	change	balance
1993–1996	-4,656	2,291	-2.1	1.0
1997–2000	-5,766	2,575	-2.6	1.2
2001–2004	-4,428	3,242	-2.0	1.5
1993-2004	-14,850	8,108	-2.2	1.2

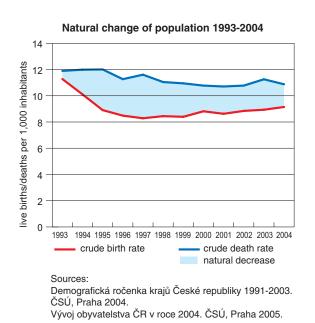
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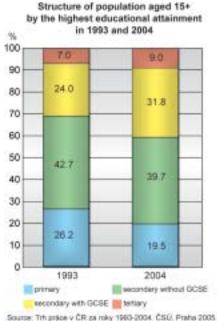
Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.

Age structure of population					
Age group	Unit	1993		2004	
Age group	Onit	CZ	Region	CZ	Region
0–14	%	19.4	18.8	14.9	14.6
15–64	%	67.6	67.9	71.0	70.8
65+	%	13.0	13.3	14.0	14.6
mean age	years	36.8	37.3	39.8	40.2
old/young ratio	_	66.8	70.5	94.0	99.9

#### Sources:

Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.

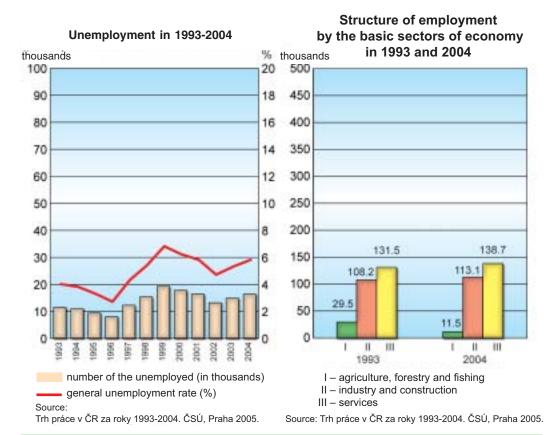




### **ECONOMY**

In the past the region posessed great natural potential. Rich deposits of iron ore and hard coal formed the basis of the development of Plzeň's industry. Presently, only the extraction of construction materials is of notable importance, in particular the mining of kaolin for the production of ceramic tiles in Horní Bříza and Chlumčany (the company Lasselsberger). For 150 years the economy of the region was almost entirely interlinked with the existence of the greatest machinery company in the Czech Republic – Škoda Plzeň. At the end of 1989 it employed more than 33 thousand workers. Unsuccessful privatization led to enormous debts and a slump in production. Škoda Holding company became a successor of Škoda Plzeň in 2000, financially and administratively managing numerous subsidiaries. The management of the holding decided to restructure the production through a reduction of productive branches and enhancement of their competitiveness. Beer production has been traditionally associated with Plzeň. The largest Czech producer and exporter – Plzeňský Prazdroj (presently a part of SAB Miller) is located in the city.

The Plzeňský region is attractive for foreign investors due to its location, qualified labour force, and developed research base in technical fields. The majority of foreign direct investments flow into electro-technical industry (Panasonic AVC Networks Czech producing televisions, Yazaki Wiring Technologies Czech and Alcoa Fujikura Czech producing electrical wiring for the car industry).



Employers with the greatest number of employees in the Plzeňský Region (civil sector only, as of December 31, 2003)					
Employer	Branch	Emp.			
České dráhy	Railway transport	5.0			
Fakultní nemocnice, Plzeň	Health care	3.7			
Česká pošta	State post	2.6			
Lasselsberger, Plzeň	Production of building materials				
	and ceramic products	2.3			
Panasonic AVC Networks Czech, Plzeň	Production of TV sets	1.7			
Yazaki Wiring Technologies Czech, Plzeň	Production of accessories				
AL 5 "I O I O!Y"	for the car industry	1.6			
Alcoa Fujikura Czech, Stříbro	Production of accessories	1.0			
74 made Yashi Assainta Mas Y	for the car industry	1.6			
Západočeská univerzita, Plzeň	Education	1.6			
Dioss Nýřany	Production of batteries, air conditioners, and metal goods	1.6			
Plzeňské městské dopravní podniky, Plzeň		1.0			
	Oity transport	1.2			
Notes: Emp. – number of employees in thousands Škoda Holding employee 6.3 thousand persons in the company and its 18 subsidiaries in the region.					
Source: CRR MU in Brno database, 2005.					

Foreign investments positively influence the creation of new labour positions. There were only 4.8 applicants per vacancy at the end of 2004 (the second lowest after Prague). Manufacturing accounts for one third of the regional GDP. As for transport and communications, commercial services, and trade, each account for one tenth of the regional GDP.

The quantity of regional GDP accounted for by the primary sector in the region has fallen below 5%, nevertheless this percentage is higher only in the Vysočina, Jihočeský and Olomoucký regions. Forestry is important in the region. Rape has a more significant position in the crop area structure than in other regions. Favourable natural conditions (high percentage of permanent grassland) are reflected in the above-average intensity of beef cattle breeding.

### **TOURIST ATTRACTIONS**

The Plzeňský region has uneven potential for the development of the tourist industry. The city of Plzeň offers many cultural monuments, including its historic underground, which with its 20 km of tunnels if one of the largest in Central Europe. Among the sites of natural interest in Plzeň there are the Bolevecké Ponds, which form a unique landscape and are considered an outstanding technical achievement dating back from the 15<sup>th</sup> century.

In the territory of the region there are three town monument reserves. *Plzeň* was declared one in 1989. Its most important landmark is the St. Bartholomew Cathedral. The *Horšovský Týn* town monument reserve on the left bank of the Radbuza River protects a castle rebuilt in the middle of the 14th century by the Prague archbishop Arnošt z Pardubic. During the Renaissance the town developed as well. Its square and streets are graced with renaissance or baroque houses. The *Domažlice* town monument reserve protects the original historic core of the royal city. The castle with its tower, the Lower gate with the early gothic portal, and the church rank among the oldest monuments of the town. In August the folklore festival *Chodské slavnosti* takes place here. The baroque chateau in Manětín and the monastery in Plasy are other cultural monuments of the region. The ruins of the gothic castles of Rabí and Rabštejn nad Střelou, the water castle of Švihov and the monastery in Kladruby are attractive for tourists as well. The Šumava Mts. provide excellent conditions for both summer and winter recreation. *Konstantinovy Lázně* aimed at the prevention and treatment of cardiovascular diseases, motor disorders, metabolism and respiratory organs, has the spa status.



Glacial lake Laka in the Šumava Mts. (Photo: Pavel Mentlík)

# Karlovarský Region



Area: 3,315 sq km

Population: 304,588 (as of January 1, 2005)

out of which

5,897 foreigners with temporary residence 8,828 foreigners with permanent residence

Population density: 91.9 persons/sq km

Number of municipalities: 132

(including 28 towns)

**Administrative centre:** Karlovy Vary (51.5 thousand inhabitants, as of January 1, 2005)

Other large towns:

Cheb (33.5 thousand)

Sokolov (24.7 thousand)

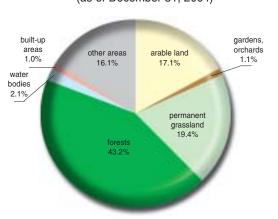
Ostrov (17.2 thousand)

Chodov (14.4 thousand)

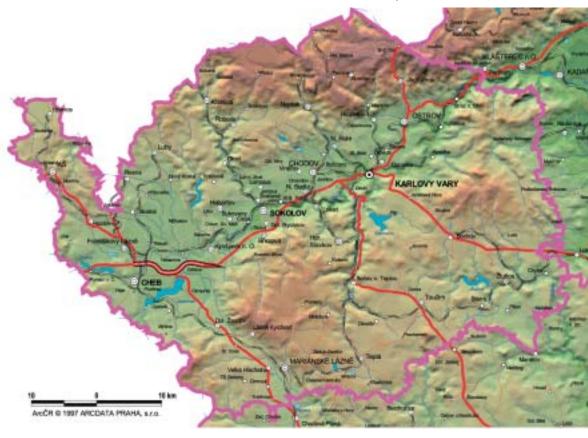
Mariánské Lázně (14.1 thousand)

Aš (12.8 thousand)

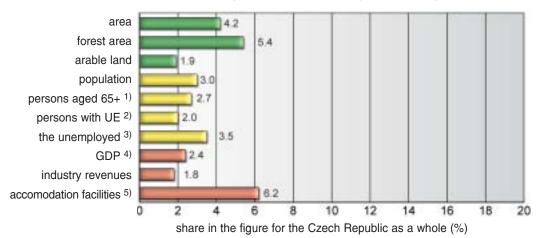
## Land Use (as of December 31, 2004)



Source: Statistická ročenka půdního fondu ČR. ČÚZK, Praha 2005.



#### Share of the Karlovarský Region in selected country statistical figures



#### Notes:

- 1) 65+ persons aged 65 or more
- 2) UE university level of education
- 3) the unemployed number of economically active persons without employment
- 4) GDP gross domestic product
- 5) accomodation facilities number of beds in touristic accomodation facilities

Data sources: ČSÚ (Czech Statistical Office) and ČÚZK (Czech Office for Surveying, Mapping and Cadastre).

### NATURAL ENVIRONMENT

The Karlovarský Region occupies the westernmost part of the Czech Republic. The Ohře River forms the axis of the region flowing from the southwest to the northeast through the wide depression of the Podkrušnohorský Rift. The present appearance of the landscape was significantly influenced by the Tertiary neo-tectonic movements, when the central part declined along the Krušnohorský and Litoměřický faults. The rift divides the Krušné Mts. and Smrčiny in the north and the northwest from the Slavkovský les in the south. In the eastern part the depressions of the Chebská and Sokolovská Basins are divided by the volcanic complex of the Doupovské Mts. The Krušné Mts. reach the region at their highest south-western part with Klínovec (1244 m a.s.l.). They are typical of peneplain with peat bogs and peaks protruding over the level of peneplain, e. g. Božídarský Špičák (1115 m a.s.l.) whose basaltic top ranks among the largest occurrences of basalt in Central Europe. The southern part consists of the Karlovarská Highland.

The region is noted for its numerous mineral springs with the world-famous triangle of the towns of Karlovy Vary, Mariánské Lázně and Františkovy Lázně. However, vast areas have been damaged by brown coal extraction. The *Slavkovský les PLA*, declared in 1974, protects the natural hinterland of the spas.

## POPULATION AND SETTLEMENT PATTERNS

Like other regions, the Karlovarský Region spared of population decrease (in 1995-96 and 1998-2001). Since 2002 the population has increased again. The region has a favourable age structure, which was considerably influenced by the population change after World War II (the German nationals were transferred to Germany and they were substituted by internal migrants). The population is the least nationally homogenous in the Czech Republic – the last census recorded 4.6% Slovaks and 2.7% Germans. The proportion of population aged 0-14 is 15.6%, while the portion of the population in the post-productive age is only 12.6%, therefore the age index is very low (the second lowest after the Ústecký Region). The average age was 38.8 years in 2004.

The Karlovarský Region has the smallest number of municipalities in the Czech Republic, their average area is by far the largest (25.1 sq km, which is the double of the national average). Out of 132 municipalities only 59 have less than 500 inhabitants; 5.3% of the population lives in these municipalities. More than four fifths of the population lives in towns, i.e. the highest of the Czech regions (apart from Prague). The high degree of urbanization is a result of a specific settlement structure – a higher concentration of relatively small towns.



Špalíček, a block of eleven medieval buildings on the town square in Cheb. (Photo: Michael Manger)

Population change						
Period	absolute	numbers	in ‰ per year			
	natural	migration	natural	migration		
	change	balance	change	balance		
1993–1996	835	12	0.7	0.0		
1997–2000	-332	-102	-0.3	-0.1		
2001–2004	-434	589	-0.4	0.5		
1993–2004	69	499	0.0	0.1		

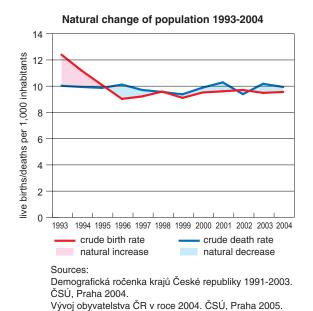
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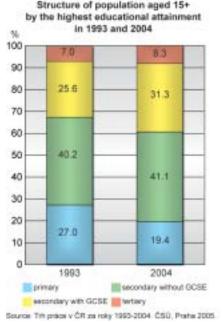
Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.

Age structure of population					
Age group	Unit	1993		2004	
Age group	Offic	CZ	Region	CZ	Region
0–14	%	19.4	20.1	14.9	15.6
15–64	%	67.6	69.5	71.0	71.8
65+	%	13,0	10.4	14.0	12.6
mean age	years	36.8	35.4	39.8	38.8
old/young ratio	_	66.8	51.9	94.0	80.7

#### Sources:

Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.

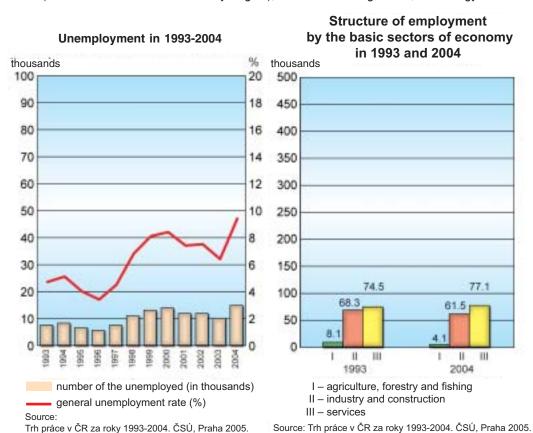




## **ECONOMY**

The Karlovarský Region has a specific character which differs significantly from every other region. Apart from the smaller area and population (the smallest in the Czech Republic), it is marked by a high degree of forestation, the lowest percentage of arable land, and various natural resources such as natural and healing springs, brown coal deposits, kaolin and ceramic clay deposits and deposits of metal ores (currently unexploited). All this significantly affects the character of the region. After abandoning mining of non-ferrous ores, the region's economy focused on manufacturing (textile and cloth, chemicals, ceramics etc.) and the brown coal and kaolin mining. The spas have played an important role in the region for centuries. The spa capacity makes up more than 40% of spa accommodation facilities in the Czech Republic. The spas account for the longest period of stay of foreign visitors – 7.6 days (Prague comes second with 4.1 days). Accommodation and food services make up 4.0% of the gross added value of the region, which is unprecedented in other regions.

The share of agriculture and forestry in the regional GDP is only 2.4%. Agricultural land makes up only 37.6% of the region, which is the lowest in the Czech Republic; arable land makes up only 45.6% of the agricultural land (in the Czech Republic it is 71.6%). Permanent grassland accounts for more than one half of the agricultural land, but still the beef cattle farming does not match the national average. In 2004 GDP per capita reached four fifths of the national average. Industry was the most important in the creation of the GDP. Mining and raw material processing accounted for 6.5% (second after the Moravskoslezský Region), the manufacturing 25.3%, and energy and water



Employers with the greatest number of employees in the Karlovarský Region (civil sector only, as of December 31, 2003) Employer Branch Emp. Sokolovská uhelná, Sokolov Brown coal extraction 5.4 České dráhy 2.4 Railway transport Witte Neidek Production of accessories for the car industry 1.4 Karlovarský porcelán, Karlovy Vary Production of porcelain 1.0 Česká pošta State post 1.0 Nemocnice, Karlovy Vary Health care 0.9 Lázně Františkovy Lázně Health care 0.9 Léčebné lázně Mariánské Lázně Health care 0.7 Léčebné lázně Jáchymov Health care 0.7 Nemocnice Sokolov Health care 0.7 Note: Emp. - number of employees in thousands

Source: CRR MU in Brno database, 2005.

production and distribution 4.1%. The biggest employer in the region is Sokolovská uhelná (brown coal extraction company). Karlovarský porcelain, the biggest Czech producer of utility porcelain, Witte Nejdek, a producer of car components and accessories, and the chemical company of RSM Chemacryl in Sokolov, the biggest producer of acrylic acid in Central Europe, rank among bigger employers in industry. The birthplace of production of musical instruments in the Czech Republic is the town of Kraslice, where string instruments started to be produced as early as the beginning of the 17th century.

### **TOURIST ATTRACTIONS**

The Karlovarský Region is second to Prague in the number of visitors in the Czech Republic. The spas are the main attraction. The largest spa is *Karlovy Vary*, the youngest *Mariánské Lázně*. The spa *Františkovy Lázně* is situated north of the town of Cheb. *Lázně Kynžvart* is associated with the figure of the Austrian chancellor Metternich. The originally mining town of *Jáchymov*, founded in the first half of the 16<sup>th</sup> century near rich silver deposits, has spa status as well. Pierre and Marie Curie isolated the uranium from the ore there. Motor disorders are treated in Jáchymov today with the help of mineral and radioactive springs.

Three town monument reserves are located in the region: Františkovy Lázně, Cheb and Loket. Františkovy Lázně represents an architectonically pure spa centre. It was founded in 1793 and the character of a spa town of the turn of the 19th and 20th centuries has been preserved. The historic core of *Cheb* experienced large-scale renovation and reconstruction during the 1950s and 1960s. One of the most valuable buildings is the Cheb Castle, including a two-floor Romanesque-gothic chapel, which is the only one of its kind in Europe. Cheb's town symbol is the Špalíček, a block of historic half-timbered houses dating back to the 13th century. The town of *Loket* was wetablished around the year 1240 during the reign of Wenceslas I. The royal castle of Loket with its Romanesque rotunda stands on a dramatic bend of the Ohře River. The castle was renovated during the reign of Wenceslas IV.

A fountain fed by the Vřídlo thermal spring, the hottest (73°C) in the spa of Karlovy Vary. (Photo: Stephen Eric Wood / DHD Multimedia Galery)

# Ústecký Region



Area: 5,335 sq km

**Population:** 822,133 (as of January 1, 2005)

out of which

8,931 foreigners with temporary residence 10,772 foreigners with permanent residence

Population density: 154.2 persons/sq km Number of municipalities: 354 (including 46 towns)

Administrative centre: Ústí nad Labem

(93.9 thousand inhabitants, as of January 1, 2005)

#### Other large towns:

Most (67.8 thousand)

Děčín (51.8 thousand)

Teplice (51.2 thousand)

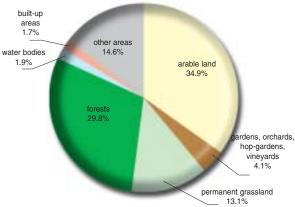
Chomutov (50.2 thousand)

Litvínov (27.0 thousand)

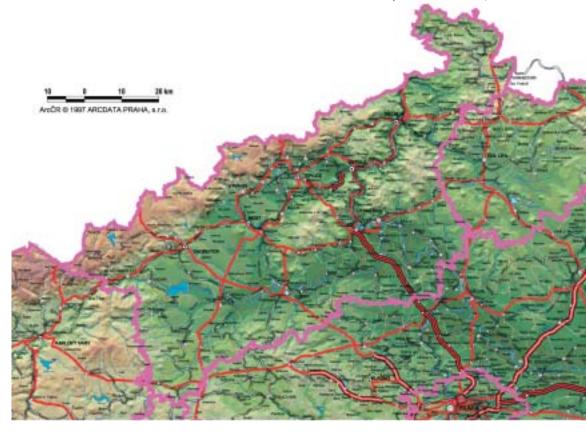
Litoměřice (24.4 thousand)

Jirkov (21.2 thousand)

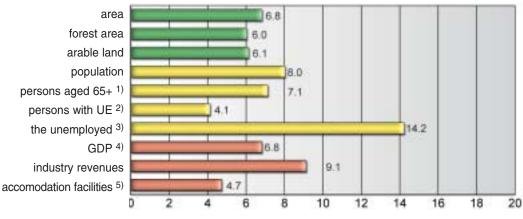
## Land Use (as of December 31, 2004)



Source: Statistická ročenka půdního fondu ČR. ČÚZK, Praha 2005.



#### Share of the Ústecký Region in selected country statistical figures



share in the figure for the Czech Republic as a whole (%)

#### Notes:

- 1) 65+ persons aged 65 or more
- 2) UE university level of education
- 3) the unemployed number of economically active persons without employment
- 4) GDP gross domestic product
- 5) accomodation facilities number of beds in touristic accomodation facilities

Data sources: ČSÚ (Czech Statistical Office) and ČÚZK (Czech Office for Surveying, Mapping and Cadastre).

## NATURAL ENVIRONMENT

The landscape of the region is quite varied. Along the border with Germany the region is isolated by the belt of the Krušné Mts., the Labské Sandstones, and the Lužické Mts. The Krušné Mts. were in the past an important mining area. Rivers and sterams descending the slopes of the mountains provide a source of water for the population and industry of the Podkrušnohoří region. The southern part of the region consists of vast plains of the Czech Cretaceous Tableland with isolated examples of neo-volcanic hills (Říp 459 m a.s.l. or Házmburk 418 m a.s.l.). From time immemorial Mt. Říp has been one of the ultimate symbols for the Czech nation. On its top there is the Romanesque rotunda of St. George. The České středhohoří with the highest peak of the region, Milešovka (837 m a.s.l.), was created by volcanic activity during the Tertiary Period. Today, it is a distinct feature of the landscape. The largest river of the region is the Elbe, which enters the region in a deep canyon called Porta Bohemica (The Gate of Bohemia). The Elbe River takes in the Ohře and Bílina Rivers from the left, and the Ploučnice and Kamenice Rivers from the right. The largest body of water is the Nechranická Dam on the Ohře River, built in the 1960s.

The north-eastern part of the region has large protected areas. In the České Švýcarsko National Park unique landforms of the sandstone rock cities are protected. The Labské pískovce PLA plays a protective role for the national park. In the Lužické Mts. PLA and České středohoří PLA landscapes with typical neo-volcanic knobs are protected. The Kokořínsko PLA with typical landforms of rocks cities and the so-called rock lids stretches to the region at its northern part. The Střední Poohří PLA is currently being prepared to be added to the list of Czech PLAs.

#### POPULATION AND SETTLEMENT PATTERNS

The population of the Ústecký Region decreased by 4.2 thousand inhabitants, i.e. by 0.5%, during the last intercensal period (1991-2001). The decrease was, however, by one half lower than in the 1980s. The main cause of the population decrease at that time was the relatively high level of emigration from the region to other regions, while in the 1990s the main cause of the population decrease was a steep decline in the birth rate. Since 1993 the population has been increasing. The region predominates in the number of live births. Since 2002 the crude fertility rate has exceeded the level of 10%. Age and education structure of the population is very similar to the Karlovarský Region (predominance of the persons aged 0-14 over the persons in the post-productive age, and the low proportion of persons with higher education). In the Ústecký Region, the proportion of persons in post-productive age is the lowest in the Czech Republic (12.4% at the end of 2004) and the average age of the population was 38.8 years, which was one year less than the national average. In the inter-regional comparison the Ustecký Region was in the last position in 2004 as for the percentage of the population with tertiary education (only 5.1% persons older than 14 years) and it occupied a similar position in the proportion of persons with GCSE (28.1%). In the long run the region is marked also by high divorce and abortion rates. Some unfavourable demographic characteristics of the region are related with the higher proportion of the Romany population.

The population is significantly concentrated in the Podkrušnohorská Basin. The population density in the Louny and Litmoměřice regions is considerably lower. The population is concentrated in 354 municipalities, out of which the 46 have town status and account for 79.3% of the population of the region. The settlement structure is dominated by relatively large towns; five of them have more than 50 thousand inhabitants (a similar situation is to be found only in the Moravskoslezský Region). Only 6.2% of population lives in municipalities with less than 500 inhabitants (190 municipalities). The industrial development during the 20th century and particularly brown coal extraction contributed to the depopulation (in some case even abandonment) of small villages and to the concentration of the population into towns.

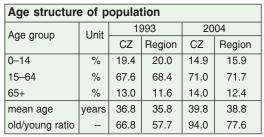


Modern suspension Marian Bridge over the Elbe River in Ústí nad Labem. (Photo: Daniel Neuwirth)

Population change							
Period	absolute	numbers	in ‰ per year				
	natural change	migration balance	natural change	migration balance			
1993-1996	-1,534	1,894	-0.5	0.6			
1997–2000	-4,230	5,709	-1.3	1.7			
2001–2004	-3,291	5,044	-1.0	1.5			
1993–2004	-9,055	12,647	-0.9	1.3			

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Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.



#### Sources:

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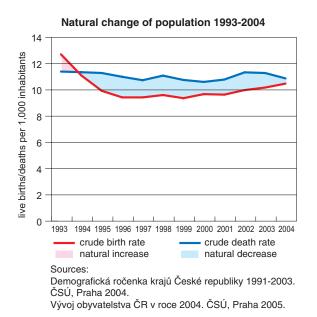
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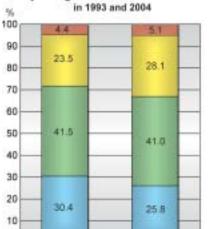
secondary with GCSE [ lerkary

Source: Tith prace v CR za roky 1983-2004, CSC, Praha 2005.

primary

Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.





2004

mecondary without GCSE

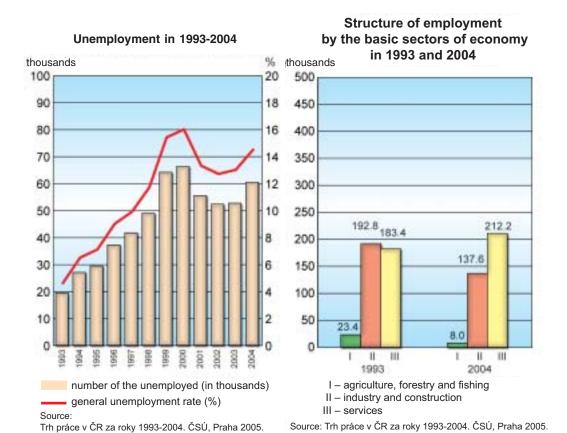
Structure of population aged 15\* by the highest educational attainment

**ECONOMY** 

The Ústecký Region ranks among the most industrialized regions not only in the Czech Republic but also in Central Europe. The detrimental impact on the environment, particularly in the latter half of the 20<sup>th</sup> century, was a consequence of more than 200 years of industrialization (concentration of chemical factories and coal mining). The impact has been considerably less in recent years. The economic development was also influenced by historic-social factors – expulsion of the Czech population before World War II and the transfer of the German nationals after WWII together with the immigration of the inland population. The region is relatively rich in natural potential: apart from the large deposits of brown coal, deposits of glass and foundry sands and building stone can be found here.

The regional GDP per capita in 2004 increased to 84.5% of the national average and reached 60% of the EU level. The manufacturing industry is crucial for the creation of regional GDP (28.5%). Compared to other regions, the proportion of extraction and raw material processing is more than fourfold (4.8%) and the proportion of the energetics more than double (8.9%). Two brown coal mining companies rank among the biggest employers in the region (Mostecká uhel-

ná and Severočeské doly). Only three companies employing more than one thousand workers are active in the region presently: chemical companies Chemopetrol and the Spolek pro chemickou a hutní výrobu in Ústí nad Labem, and the largest producer of flat glass in the Czech Republic Glaverbel Czech in Teplice. The Ústecký region is structurally afflicted and the unemployment rate is high. The proportion of agriculture in the creation of GDP is only 1.9%, which is



#### Employers with the greatest number of employees in the Ústecký Region (civil sector only, as of December 31, 2003) Employer Branch Emp. Railway transport České dráhy 9.5 Mostecká uhelná společnost, Most Brown coal extraction 4.6 Severočeské doly, Chomutov Brown coal extraction 3.9 Česká pošta State post 2.9 Chemopetrol, Litvínov Production of basic chemicals 2.7 ČEZ Electricity production 2.1 Masarykova nemocnice, Ústí nad Labem Health care 2.1 Finanční ředitelství Public administration 1.7 Nemocnice s poliklinikou. Most Health care 1.5 Severočeské vodovody a kanalizace, Adjustment and distribution of drinking 1.3 and service water Teplice Note: Emp. – number of employees in thousands Source: CRR MU in Brno database, 2005.

lower than the national average. Livestock production rate in theústecký Region is the lowest of all regions in the country. Crop production is more important. The region dominates in hop cultivation (58.3% of the total area of hop-fields in the Czech Republic), fruit, vegetable and wine cultivation are important as well (the area of local vinyeards cannot compete with that of South Moravia, though).

## **TOURIST ATTRACTIONS**

The Ústecký Region has many historic monuments: e.g. the rotunda on Říp, gothic church in Most, baroque chateau in Duchcov, monasteries in Osek and Doksany, and chateaux in Ploskovice and Libochovice. The historic cores of Litoměřice, Úštěk, Roudnice nad Labem and Terezín were declared town monument reserves. The *Terezín* citadel was founded by the Emperor Josef II in 1780. The core of fortification is formed by the Great stronghold and the total area of the fortification is 398 ha. In Marie Terezie's honour it was renamed Theresienstadt. In February 1942 Terezín became a Nazi concentration camp and eventually a main deportation point from which Czech Jews were transported to extermination camps, mainly to Auschwitz. The town was renewed after WWII.

At the confluence of the Elbe and Ohře Rivers the town of *Litoměřice* is situated. It was once one of the most important settlements in Bohemia. Its square belongs among the largest in the Czech Republic (1.8 ha). Every year a horticultural exhibition *Zahrada Čech* (The Garden of Bohemia) takes place here. Settlement in the area of *Úštěk* dates back to the 10<sup>th</sup> to 13<sup>th</sup> centuries. Old trade routes passed through the place, connecting Litoměřice with Lusitania. The town core has been preserved around the Church of St Peter and Paul.

The natural beauties of the **České Švýcarsko National Park** with the Pravčická brána rock arch, other rock cities (Tiské stěny, Děčínské stěny) and the Porta Bohemica river gorge are the main attractions of the region. A horse-racing establishment in Most, a motor-racing circuit and a golf course are available. The Krušné Mts. and Lužické Mts. have good conditions for skiing.



Tiské stěny rock walls. (Photo: Daniel Neuwirth)

# Liberecký Region



Area: 3,163 sq km

**Population:** 427,563 (as of January 1, 2005)

out of which

5,634 foreigners with temporary residence 5,032 foreigners with permanent residence

Population density: 135.2 persons/sq km

Number of municipalities: 215

(including 36 towns)

Administrative centre: Liberec (97.4 thousand

inhabitants, as of January 1, 2005)

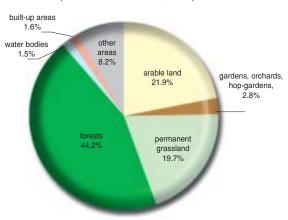
Other large towns:

Jablonec nad Nisou (44.6 thousand)

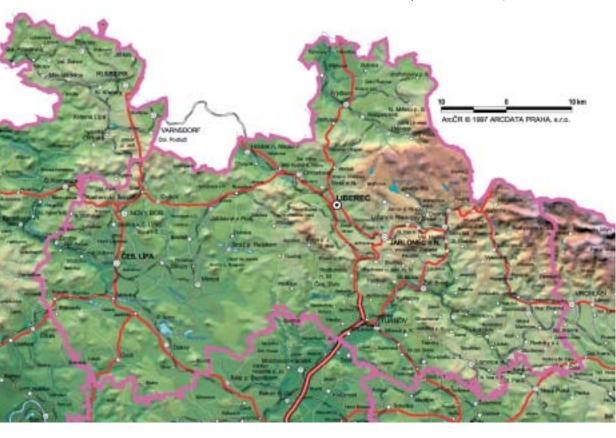
Česká Lípa (38.8 thousand) Turnov (14.4 thousand) Nový Bor (12.2 thousand)

#### Land Use

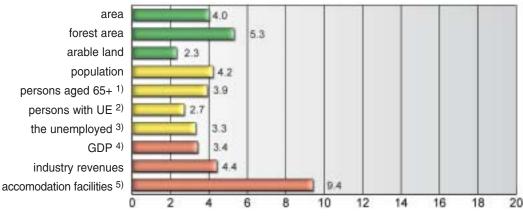
(as of December 31, 2004)



Source: Statistická ročenka půdního fondu ČR. ČÚZK, Praha 2005.



#### Share of the Liberecký Region in selected country statistical figures



share in the figure for the Czech Republic as a whole (%)

#### Notes:

- 1) 65+ persons aged 65 or more
- 2) UE university level of education
- 3) the unemployed number of economically active persons without employment
- 4) GDP gross domestic product
- 5) accomodation facilities number of beds in touristic accomodation facilities

Data sources: ČSÚ (Czech Statistical Office) and ČÚZK (Czech Office for Surveying, Mapping and Cadastre).

### NATURAL ENVIRONMENT

In the north the Liberecký Region is mountainous, whereas the territory in the Ploučnice River drainage basin is less dissected. The highest peak of the region is Kotel in the Krkonoše Mts. (1435 m a.s.l.) near Rokytnice nad Jizerou in the Semily region, the lowest point is the Smědá River at the point it leaves Czech territory (208 m a.s.l.). The most famous peak of the region is Ještěd (1012 m a.s.l.), other notable peaks include Smrk (1124 m a.s.l.) and Jizera (1122 m a.s.l.). The region is divided by the main European watershed, parting waters that run to the North Sea and the Baltic Sea. The Jizera, Smědá, Lužická Nisa Rivers start in the Jizerské Mts., the Ploučnice River on the slopes of Ještěd. There are numerous mineral springs in the region (e.g. Lázně Libverda). Abundant sources of surface water in the mountainous areas and of ground water, particularly in the Severočeská cretaceous sheet, make the Liberecký Region perspective drinking and service water reservoir of national importance. The protected areas of natural accumulation of water in the Jizerské Mts., Krkonoše Mts and Severočeská cretaceous basin make up almost 60% of the area of the region.

The natural potencial of the Liberecký Region includes quality glass and foundry sands. Decorating and building stone has been quarried in the region for a long time (e.g. the Liberec granite, Železnobrodské roofing slates, quality basalts and quartzites). Uranium ore extraction in Stráž pod Ralskem near Česká Lípa brought about significant economic, social and environmental changes in the past thirty years. In 1990 the deep mining of uranium ore was abandoned, and in 1993 the chemical extraction of uranium was decided to be terminated as well (the cleanup of the site is supposed to take several decades).

The region is characterized by a large degree of ecosystem diversity and high concentration of protected areas. There are five protected landscape areas in the region and the *Krkonošský* 



Tors in the Jizerské Mts. (Photo: Irena Smolová)

**National Park**, the oldest in the Czech Republic, stretches to the eastern part of the region. In the **České středohoří PLA** neo-volcanic landforms are protected; the **Jizerské Mts. PLA** is an example of preserved mixed forests and varied cryogenic landforms. The **Lužické Mts. PLA** is a borderline mountain range; rock cities are protected within the **Czech Paradise PLA** and **Kokořínsko PLA**.

## POPULATION AND SETTLEMENT PATTERNS

Apart from Prague, the Liberecký Region is the smallest region and in terms of population is the second smallest (after the Karlovarský Region). The population has not significantly changed between 1993 and 2004 (the total increase was 154 persons). The natural population decrease (since 1994) was substituted by active migration balance. The natural decrease was the smallest (only 37 persons) in 2004 and the crude natural increase rate reached -0.1% in the same year. In 2004 the crude fertility rate exceeded 10 % for the first time since 1994. The level of infant mortality has been lower than the national average. The average age of the population in 2004 was 39.2 years, which was less than the national average. The age structure differs on the local level. While in the Česká Lípa region the population is among the youngest in the Czech Republic, in the Semily and Turnov region it is one of the oldest.

The population density is average for the country. Almost 78% of inhabitants lived in towns at the end of 2004 (in the Czech Republic as a whole it was 70.2%). The highest population concentration is in the Liberec-Jablonec agglomeration. There are 215 municipalities with less than 500 inhabitants in the region, i.e. 46.3%, and only 6.2% of population lives in such communitites.

Population change							
Period	absolute	numbers in ‰ per year					
	natural change	migration balance	natural change	migration balance			
1993-1996	-367	2,090	-0.2	1.2			
1997–2000	-1,941	1,934	-1.1	1.1			
2001–2004	-1,135	451	-0.7	0.3			
1993-2004	-3,443	4,475	-0.7	0.9			

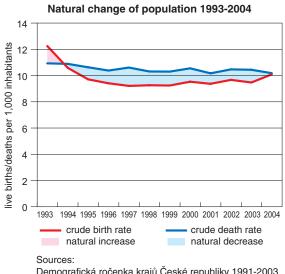
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Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.

Age structure of population					
Age group	Unit	1993		20	04
Age group	Offic	CZ	Region	CZ	Region
0–14	%	19.4	20.0	14.9	15.7
15–64	%	67.6	67.7	71.0	71.4
65+	%	13.0	12.3	14.0	13.0
mean age	years	36.8	36.1	39.8	39.2
old/young ratio	_	66.8	61.6	94.0	82.7

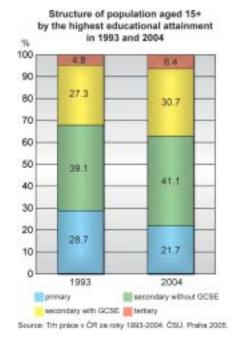
#### Sources:

Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.



Demografická ročenka krajů České republiky 1991-2003. ČSÚ, Praha 2004.

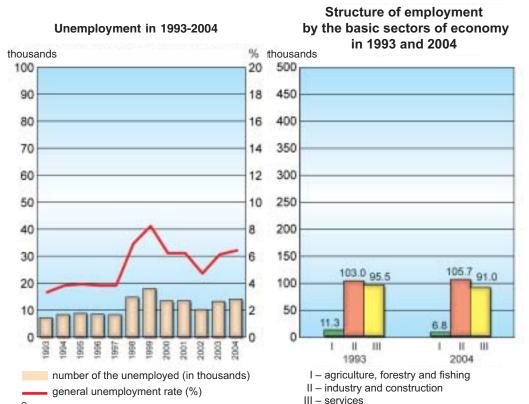
Vývoj obyvatelstva ČR v roce 2004. ČSÚ, Praha 2005.



## **ECONOMY**

As early as in the latter half of the 19<sup>th</sup> century the region ranked among the most industrialized regions of the Austrio-Hungarian Empire. The industrial character of the region has been preserved, but the structure changed. The importance of mining and raw material processing has declined. Until recently radioactive material deposits in the Česká Lípa region were considered as the main natural resource of the region, today the extraction and processing of decorating and building stone are more important. Chemical extraction of uranium ended in 1993; nowadays only recultivation of landscape which was changed by mining takes place. Manufacturing is the most important: it makes up 38.4% of the regional GDP, which is the greatest value in the Czech Republic. The importance is documented in the table of "Top 10" employers in the region. Among the largest companies there are glass and jewelry producers, mainly Preciosa Jablonec and the newly formed Jablonex Group, created by merging of five glass companies in 2005. The foreign direct investments, however, flow mainly into the car industry (production of components). Traditional textile industry has become less important over the last few years and the number of workers decreased after 1989 from 19.2 thousand to less than one third of that level.

The size of the primary sector has already decreased to 2%, even if forestry considerably contributes to the gross added value of the region. The Liberecký Region is the first in terms of the forest percentage in the total area (44.2%). The region is important for tourism, particularly in the winter season.



Source:

Trh práce v ČR za roky 1993-2004. ČSÚ, Praha 2005.

Source: Trh práce v ČR za roky 1993-2004. ČSÚ, Praha 2005.

#### Employers with the greatest number of employees in the Liberecký Region (civil sector only, as of December 31, 2003)

Employer	Branch	Emp.
Preciosa, Jablonec nad Nisou	Production of jewellery	4.0
České dráhy	Railway transport	2.6
Delphi Packard Electric ČR, Česká Lípa	Production of electrical equipments	
	for cars	2.6
Krajská nemocnice, Liberec	Health care	1.9
Crystalex, Nový Bor	Production of glass	1.7
Česká pošta	State post	1.5
Johnson Controls	Production of accessories	
automobilové součástky, Česká Lípa	for the car industry	1.5
Diamo, Stráž pod Ralskem	Extraction and processing of uranium of	ore 1.4
Železnobrodské sklo, Železný Brod 1)	Production and processing of glass	1.2
Ornela, Zásada 1)	Production of glass	1.2
Note: 1) in October 2005 the companies Železnob	rodské sklo, Ornela, Bižuterie Česká Mincovna	a, Jablo-
nex, and Bohemian Jewelry merged into Jablonex	Group, Jablonec nad Nisou (3.5 thousand em	ployees)

Emp. - number of employees in thousands

Source: CRR MU in Brno database, 2005.

### **TOURIST ATTRACTIONS**

The Liberecký Region is a frequently visited recreational area. Mountain resorts of the Krkonoše Mts. (Harrachov, Rokytnice nad Jizerou or Vysoké nad Jizerou) and Jizerské Mts. (Bedřichov, Josefův Důl, Desná, Hejnice or Bílý Potok) are among the top attractions. In Liberec the world cup in ski jump takes place.

**Bozkovské Dolomite Caves** are open to the public. In the summer season Doksy, Máchovo Lake and the Czech Paradise are among important tourist sites.

Castles and chateaux, such as Bezděz, Zákupy, Lemberk, Frýdlant, Sychrov, Hrubý Rohozec, Valdštejn, and a number of religious monuments are historic landmarks and thus are frequently visited. Two spas are located in the region: *Lázně Libverda* and *Lázně Kundratice*, where motor disorders, heart diseases, circulatory problems, and rheumatism are treated.



Harrachov ski resort in the Krkonoše Mts. (Photo: Irena Smolová)

## Královéhradecký Region



Area: 4,758 sq km

**Population:** 547,296 (as of January 1, 2005)

out of which

5,513 foreigners with temporary residence 4,336 foreigners with permanent residence

Population density: 115.0 persons/sq km Number of municipalities: 448 (including

43 towns)

Administrative centre: Hradec Králové

(94.7 thousand inhabitants, as of January 1, 2005)

#### Other large towns:

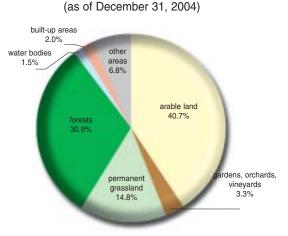
Trutnov (31.2 thousand)

Náchod (21.2 thousand)

Jičín (16.2 thousand)

Dvůr Králové nad Labem (16.2 thousand)

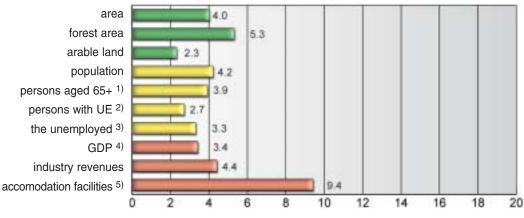
## Land Use



Source: Statistická ročenka půdního fondu ČR. ČÚZK, Praha 2005.



#### Share of the Královéhradecký Region in selected country statistical figures



share in the figure for the Czech Republic as a whole (%)

#### Notes:

- 1) 65+ persons aged 65 or more
- 2) UE university level of education
- 3) the unemployed number of economically active persons without employment
- 4) GDP gross domestic product
- 5) accomodation facilities number of beds in touristic accomodation facilities

Data sources: ČSÚ (Czech Statistical Office) and ČÚZK (Czech Office for Surveying, Mapping and Cadastre).

## NATURAL ENVIRONMENT

The landscape of the region is typified of great altitudinal differences. It rises from the lowlands in the south to the north. Two mountain ranges, the Krkonoše Mts. and the Orlické Mts. are in the north and north east, both with many attractions for summer and winter holidays. The Krkonoše Mts. include the highest peak in the Czech Republic, Sněžka (1602 m a.s.l.), and a number of other peaks exceed the altitude of 1000 m a.s.l. Žacléř and Broumov regions are also rather mountainous with old volcanic ranges (Vraní Mts. and Javoří Mts.). The mountains change into low hills in the south. The southern and central parts of the region are filled with the Cretaceous sediments with typical rock cities. The largest is the Adršpašsko-teplické Rock City; the Czech Paradise is also frequently visited.

The Elbe River (Labe in Czech) rising in the Krkonoše Mts. forms the axis of the region. Its important tributaries are the Úpa, Metuje, Orlice and Cidlina Rivers. In order to regulate the outflow two dams were erected on the Elbe River: the Labská Dam in Špindlerův Mlýn and the Les Království Dam near Dvůr Králové nad Labem. The Rozkoš Dam secures water for irrigation. It is one of the largest in the Czech Republic (1,001 ha). The region has important reserves of ground water. The eastern part of the *Krkonošský National Park*, the oldest national park in the Czech Republic, stretches into the region. Unique glacial landforms (corries, troughs), peat bogs, waterfalls or endemic species are protected in the area. In 1955 the *Czech Paradise PLA* was declared to protect the rock cities. The area has been recently enlarged. In 1991 the *Broumovsko PLA* was declared; it is an example of harmonic cultural landscape with rock cities and baroque religion structures. *The Orlické Mts. PLA* protects virgin mixed forests, peat bogs, and deeply cut valleys.

## POPULATION AND SETTLEMENT PATTERNS

Apart from border areas the region is relatively uniformly and densely populated. A characteristic feature of the settlement is a number of middle sized and smaller settlements. There are 285 small municipalities with 12.5% of the population. 68% of the population of the region lives in towns. Nine towns have more than 10 thousand inhabitants, but only three of them exceed 20 thousand inhabitants.

The Královéhradecký Region is one of the regions where the population has decreased since 1994. The highest measured decrease was recorded in 2001, when the region lost 1,563 inhabitants. The decrease is a result of the negative natural change since 1994 and in 2000 and 2002 by a negative migration balance as well. The above mentioned population change results in the ageing of the population. In 1993 the average age of the population in the Královéhradecký Region reached 37.1 years. Over a period of only 11 years it increased to 40.1 years and the value was the third highest after Prague and the Plzeňský Region. The level of the age index approaches 100 (equal proportions of persons in pre-productive and post-productive age). Thanks to a high proportion of persons older than 65 years (14.7%; the second highest value in the Czech Republic after Prague) the age index of the population reached 97.5 at the end of 2004. The life expectancy is above-average compared to the Czech Republic (men – 73.1 years, the second highest in the Czech Republic; women – 78.8 years the sixth highest). Average level of educational of the population is higher. The proportion of persons with GCSE and tertiary education was 32.8% in 1993 and 39.6% in 2004. Higher proportions of these persons were recorded in 2004 only in Prague, Jihomoravský, Plzeňský, and Jihočeský regions.



Town square in Nové Město nad Metují. (Photo: Irena Smolová)

Population change							
Period	absolute	numbers in ‰ per year					
	natural change	migration balance	natural change	migration balance			
1993-1996	-2,082	1,410	-0.9	0.6			
1997–2000	-3,724	1,122	-1.7	0.5			
2001–2004	-3,096	-500	-1.4	-0.2			
1993-2004	-8,902	2,032	-1.3	0.3			

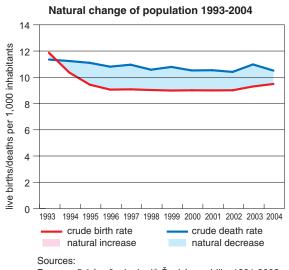
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Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.

Age structure of population					
Age group	Unit	1993 20		20	04
Age group	Offic	CZ	Region	CZ	Region
0–14	%	19.4	19.2	14.9	15.1
15–64	%	67.6	67.2	71.0	70.1
65+	%	13.0	13.6	14.0	14.7
mean age	years	36.8	37.1	39.8	40.1
old/young ratio	_	66.8	70.7	94.0	97.5

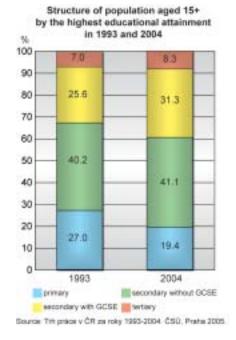
#### Sources:

Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.



Demografická ročenka krajů České republiky 1991-2003. ČSÚ, Praha 2004.

Vývoj obyvatelstva ČR v roce 2004. ČSÚ, Praha 2005.

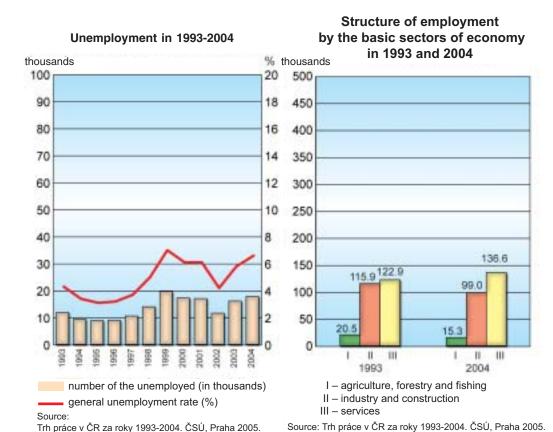


#### **ECONOMY**

The share of agriculture and forestry in the regional GDP is decreasing as in other regions and presently is at the level of about 5%. Livestock production is a little more important. In the level of pig farming the Královéhradecký region ranks fourth and in the beef cattle farming the region ranks fifth in the Czech Republic. In 2005 there were 39.1 cows per 100 ha of agricultural land (in the Czech Republic as a whole it was 32.8 cows) and 108.3 pigs per 100 ha of agricultural land (in the Czech Republic it was 94.2 pigs). The proportion of cereals in the crop area was 55%, which was by 5% less than the national average. The Královéhradecký Region is an important producer of sugar beet (almost 15% of the total production). The region has large areas of orchards, which take up 1.3% of agricultural land (the second highest proportion after Jihomoravský Region).

Manufacturing accounts for most of the gross added value (30.9%). The number of employees in this branch decreased in 2004 to 74.6 thousand (almost 30% of all employed), nevertheless it is still the largest employer in the region. The top ten employers in the region include České dráhy (Czech Railways), the largest employer, the teaching hospital, the state post, and seven compa-

nies from the manufacturing industry. In the private sector two subsidiaries of Škoda Auto in the Královéhradecký Region (Vrchlabí, Kvasiny) employ more people than any other employer and the rubber making company of Rubena Hradec Králové, established in 1999 through the merger of the two independent companies of Rubena Náchod and Gumokov Hradec Králové, employs almost the same number as Škoda Auto. Traditional textile companies are still important employers, even



# Employers with the greatest number of employees in the Královéhradecký Region (civil sector only, as of December 31, 2003) Employer Branch Emp.

(0.1.1. 00010. 0.1.1); a		
Employer	Branch	Emp.
České dráhy	Railway transport	4.3
Fakultní nemocnice, Hradec Králové	Health care	3.9
Škoda Auto, závody Kvasiny a Vrchlabí	Production of cars	2.3
Rubena, Hradec Králové	Production of rubber products	2.2
Česká pošta	State post	2.0
Veba, Broumov	Weaving of cotton fabric	1.5
Tiba, Dvůr Králové nad Labem	Weaving of cotton fabric	1.4
Juta, Dvůr Králové nad Labem	Weaving of jute fabric	1.4
Continental Teves Czech Republic,	Production of accessories	
Jičín	for the car industry	1.1
Mileta, Hořice	Weaving of cotton fabric	1.0
Note: Emp. – number of employees in thousands		
Source: CRR MU in Brno database, 2005.		

if they do not employ as many workers as at the end of the 1980s. More than one thousand employees work in Tiba and Juta (both companies in Dvůr Králové nad Labem), Veba in Broumov and Mileta in Hořice. The Královéhradecký Region is marked by the lowest inflow of foreign direct investments per capita. This fact is reflected in the relatively less extensive construction of "green field" plants. The largest investment project in the region was the Continental Teves Czech Republic in Jičín, a company producing brake systems for cars.

In 2004, 54.5% of all employed persons of the region worked in the tertiary sector. Most of them were employed in trade, which was the second most important branch after the manufacturing industry with regard to the creation of the GDP (10.6%).

#### TOURIST ATTRACTIONS

The region ranks among the richest in the Czech Republic as for the number and importance of the natural and cultural landmarks. The most valuable natural areas are the Krkonošský National Park and the protected lanscape areas, mentioned above. The region has numerous cultural sites as well. Many chateaux are open to the public. Among the most frequented is the chateau in Ratibořice with the nearby national natural reserve of Babiččino údolí, other chateaux in the region include Hrádek u Nechanic, Chlumec nad Cidlinou, Náchod, Nové Město nad Metují, Opočno or Častolovice. The medieval castles of Kost or Potštejn are accessible as well. Historic cores of a number of towns were declared town monument reserves: *Hradec Králové*, *Nové Město nad Metují*, *Jičín* and *Josefov*. The latter is a baroque fortification at the confluence of the Elbe and Metuje Rivers erected in 1780-89 as a defense against the Prussian army. Another most frequented site is the chateau in *Kuks* with outstanding baroque statues by M. B. Braun. *Velichovky*, *Janské Lázně* in the Krkonoše Mts. and *Lázně Bělohrad* have the status of spa towns.



The Kost Castle near Sobotka in the romantic landscape of the Czech Paradise. (Photo: Irena Smolová)

# Pardubický Region



Area: 4,519 sq km

**Population:** 505,285 (as of January 1, 2005)

out of which

3,411 foreigners with temporary residence 2,443 foreigners with permanent residence

Population density: 111.8 person/sq km Number of municipalities: 452 (including

32 towns)

Administrative centre: Pardubice

(88.2 thousand inhabitants, as of January 1,

2005)

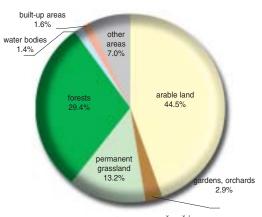
Other large towns:

Chrudim (23.5 thousand) Svitavy (17.3 thousand)

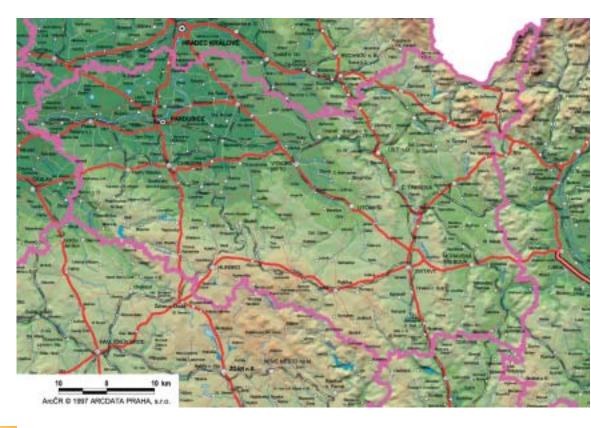
Česká Třebová (16.7 thousand)

Ústí nad Orlicí (15.0 thousand)

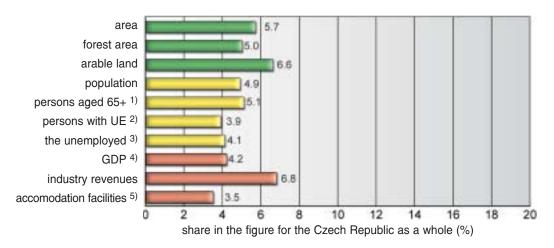
## Land Use (as of December 31, 2004)



Source: Statistická ročenka půdního fondu ČR. ČÚZK, Praha 2005.



#### Share of the Pardubický Region in selected country statistical figures



#### Notes:

- 1) 65+ persons aged 65 or more
- 2) UE university level of education
- 3) the unemployed number of economically active persons without employment
- 4) GDP gross domestic product
- 5) accomodation facilities number of beds in touristic accomodation facilities

Data sources: ČSÚ (Czech Statistical Office) and ČÚZK (Czech Office for Surveying, Mapping and Cadastre).

## NATURAL ENVIRONMENT

The landscape of the region consists of both fertile lowlands and dissected terrain of the borderline mountain ranges. The Elbe River with its tributaries forms the axis of the region. They are typical of wide alluvial plains and low terraces. The Kunětická Hill, a basaltic knob near Pardubice, dominates the region. Towards the rim the Bohemian sheet rises and forms cuestas. The rock walls have been dissected by fluvial action into bizarre landforms. The Žďárské Hills, formed by resistant granite rocks, and the Železné Mts. stretch into the southern part of the region. The highest elevations are in the eastern part of the region: Orlické Mts. and Králický Sněžník with the highest peak of the region. Its upper part is protected by unique karst phenomena in the marble, preserved mixed and beech forests and a number of rock landforms. The massive forms an important water source and on Klepý Hill three main European watersheds meet. The Pardubický Region is an important area of surface and ground water accumulation. Several dams were constructed on the upper reaches of the rivers. The Pardubický Region is also an important fish farming area. Gravel sands and limestone are extracted in the region. In the *Orlické Mts. PLA*, *Železné Mts. PLA*, and *Žďárské Hills PLA* preserved natural landscapes are protected.



Medieval walls preserved in the historical core of Polička. (Photo: Martin Jurek)

## POPULATION AND SETTLEMENT PATTERNS

The population of the Pardubický Region increased in 1993 for the last time. Since then it has seen a decrease every year – the same situation is in the Královéhradecký Region. The greatest decrease was recorded in 2001 (1,085 persons, out of which the natural decrease made up 587 and emigration 488). In 2001 the fewest children were born (4,481, i.e. 8.8‰), since that year the birth rate has increased. The average age is 39.6 years and it can be assumed that at the end of 2005 the population over 65 years of age will predominate over the population aged 0-14 in the region. Compared to the national average the life expectancy in the Pardubický Region is higher (the fourth highest figure for men). The adverse demographic situation is starting to improve at present. The educational structure approaches the national average. Education index (i.e. the proportion of population with GCSE and tertiary education per 100 inhabitants older than 24) was lower in 2004 than the national average.

The population density of the Pardubický Region is lower than the national average due to the less populated mountain and highland areas in the east. Pardubice considerably dominates the settlement structure with its almost 90 thousand inhabitants. There are other eight towns with more than 10 thousand inhabitants. In all towns (32) of the region 61.2% of the population lives (in the Czech Republic it is 70.2%). A relatively high proportion of the population (13.8%) lives in municipalities with less than 500 inhabitants (289) – it is exceeded only in the Vysočina, Středočeský and Jihočeský regions.

Population change						
Period absolute numbers		in ‰ per year				
	natural change	migration balance	natural change	migration balance		
1993-1996	-1,681	1,191	-0.8	0.6		
1997–2000	-2,243	1,002	-1.1	0.5		
2001–2004	-2,260	-716	-1.1	-0.4		
1993–2004	-6,184	1,477	-1.0	0.2		

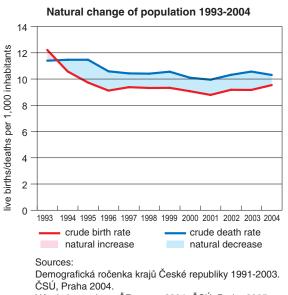
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Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.

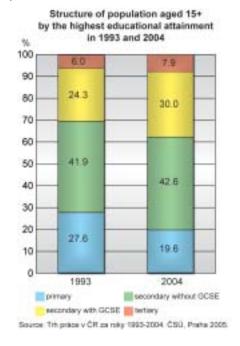
Age structure	Age structure of population				
Age group	Unit	1993		2004	
Age group	Oilit	CZ	Region	CZ	Region
0–14	%	19.4	20.0	14.9	15.6
15–64	%	67.6	67.1	71.0	70.0
65+	%	13.0	12.9	14.0	14.4
mean age	years	36.8	36.5	39.8	39.6
old/young ratio	-	66.8	64.5	94.0	92.8

#### Sources:

Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.



Vývoj obyvatelstva ČR v roce 2004. ČSÚ, Praha 2005.

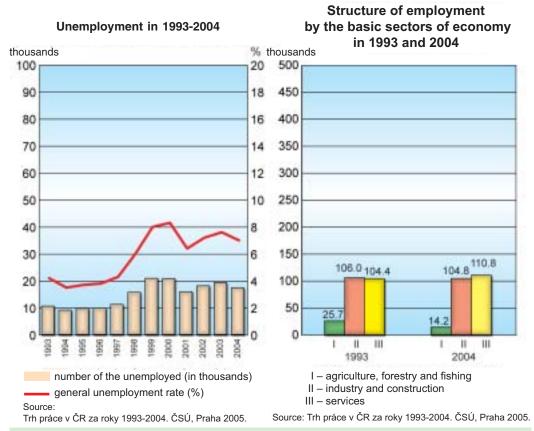


#### **ECONOMY**

A relatively important proportion of the primary sector in the creation of the regional GDP comes from intensive agriculture (due to the favourable climatic and soil conditions in the Polabí region). Crop production dominates agricultural production. However, the share of agricultural land devoted to the production of cereals is the lowest in the Czech Republic. On the other hand the shares of oil plants, legumes and sugar beet are above the national average. The region predominates in the crop area of curative herbs (46.3% of the national crop area) and of flax (21.3%). With greater altitude the proportion of livestock production increases (beef cattle farming is the most important).

As for other branches the highest share in the regional GDP is made up by manufacturing (33.3%), trade (11.8%), and transport and communications (10.6%). Apart from machinery manufacturing in the past centered on electrical engineering and chemistry. On the list of the ten largest employers there were three companies with foreign capital in 2003, which did not construct new plants in the so-called "green fields" during the first phase, but made use of the existing buildings of Tesla (AVX in Lanškroun - producer of tantalum and ceramic condensers and connectors, Kiekert-CS in Pardubice with its production plant in Přelouč – producer of central lock car systems,

and Foxconn CZ in Pardubice – producer of computers). A subsidiary of the Taiwan company of Foxconn presently employs more than 3,500 persons in Pardubice. The inflow of foreign investments has also been noted in the machinery as well (in companies such as Rieter CZ in Ústí nad Orlicí, producer of textile machinery, and Karosa in Vysoké Mýto). Synthesia, formerly the largest employer in the region, became a part of the chemical holding of Aliachem, together with Fatra Napajedla and Technoplast Chropyně. České dráhy (Czech Railways) is the largest employer in the region. Pardubice is one of the most important transport hubs in the Czech Republic.



## Employers with the greatest number of employees in the Pardubický Region (civil sector only, as of December 31, 2003)

Employer České dráhy Aliachem, Pardubice Česká pošta AVX Czech Republic, Lanškroun Foxconn CZ, Pardubice Karosa, Vysoké Mýto Nemocnice Pardubice Rieter CZ, Ústí nad Orlicí	Branch Railway transport Production of basic chemicals State post Production of electrical components Production of computers Production of buses Health care Production of textile machinery	Emp. 5.7 2.9 2.5 2.5 2.1 1.7 1.7
Rieter CZ, Ustí nad Orlicí OEZ, Letohrad  Kiekert-CS, Pardubice	Production of textile machinery Production of electrical switching equipment Production of accessories	1.4 1.2
Note: Emp. – number of employees in thousands	for the car industry	1.1
Source: CRR MU in Brno database, 2005.		

### **TOURIST ATTRACTIONS**

The tourist attractions of the Pardubický Region include the Orlické Mts. and their foothills and the area of Králický Sněžník. During the summer season the Sečská Dam and its surroundings are popular recreation areas. Agrotourism has been developing in the region primarily drawing on the region's horse-breeding tradition. In the castle in Slatiňany there is a museum devoted to horses and the National stud farm is situated in Kladruby nad Labem. The region offers many historic monuments. The Historic cores of *Litomyšl*, *Moravská Třebová* and *Pardubice* were declared town monument reserves. The castle in Litomyšl has been a UNESCO heritage site since 1999. The folk architecture is protected near Hlinsko in the open air museum of Vysočina in Veselý Kopec. Tourists also frequently visit the late gothic castle of Kunětická hora, the castle of Svojanov or the African museum in Holice dedicated to a local native, the explorer Emil Holub. Near Pardubice there is the spa town of *Lázně Bohdaneč* where motor disorders are treated.

In Pardubice the Great Steeplechase takes place every year. The first race was run in November 1874; in 2005 it was run for the 115<sup>th</sup> time. A long tradition of motor-racing has been continued by the race called *O Zlatou přilbu České republiky (For the Golden Helmet of the Czech Republic)*.



The Orlické Mts. offer opportunities for both summer and winter recreation. (Photo: Martin Jurek)

# Vysočina Region



Area: 6,790 sq km

**Population:** 510,114 (as of January 1, 2005)

out of which

4,074 foreigners with temporary residence 1,807 foreigners with permanent residence

Population density: 75.1 persons/sq km Number of municipalities: 704 (including

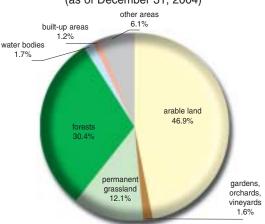
33 towns)

**Administrative centre:** Jihlava (49.9 thousand inhabitants, as of January 1, 2005)

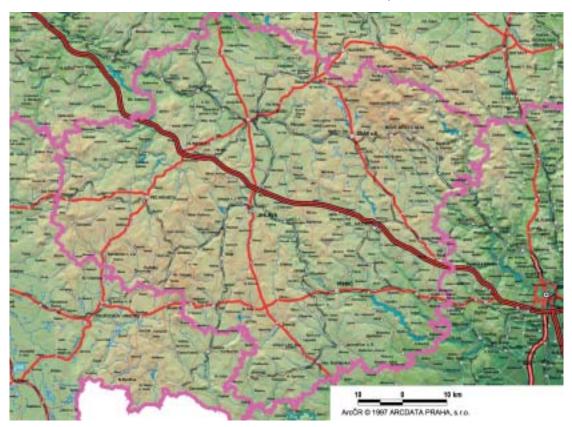
#### Other large towns:

Třebíč (38.7 thousand) Havlíčkův Brod (24.3 thousand) Žďár nad Sázavou (24.0 thousand)

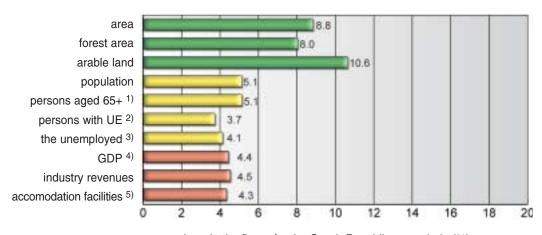
## Land Use (as of December 31, 2004)



Source: Statistická ročenka půdního fondu ČR. ČÚZK, Praha 2005.



#### Share of the Vysočina Region in selected country statistical figures



share in the figure for the Czech Republic as a whole (%)

#### Notes:

- 1) 65+ persons aged 65 or more
- 2) UE university level of education
- 3) the unemployed number of economically active persons without employment
- 4) GDP gross domestic product
- 5) accomodation facilities number of beds in touristic accomodation facilities

Data sources: ČSÚ (Czech Statistical Office) and ČÚZK (Czech Office for Surveying, Mapping and Cadastre).

### NATURAL ENVIRONMENT

The Vysočina region is situated in the central part of the Czech Republic on the historic border between Bohemia and Moravia. Most of the region consists of the Českomoravská Highland, which is characterized by mildly undulating terrain with numerous depressions (troughs and basins). The highest part is the Hornosvratecká Highland in the northwest with the highest peak of Devět skal (836.3 m a.s.l.) and the Javořická Highland in the southwest with Javořice (836.5 m a.s.l.). Important Bohemian and Moravian rivers rise in the region, and the main European watershed runs between the Doubrava, Sázava and Želivka Rivers on one side and the Svratka, Oslava, Jihlava and Moravská Dyje Rivers on the other. Several dams were erected on the rivers; some of them are of national importance: the Švihov Dam and the Vír Dam supply Prague and Brno respectively with drinking water. The Dalešice Dam on the Jihlava River is the tallest dam in the Czech Republic. The region has also many ponds, the largest being Velké Dářko. The Vysočina region ranks among the coldest parts of the Czech Republic with annual mean temperature of 5-7°C. The peat bogs are an important landscape component, e.g. in Padrtiny near Velké Dářko.

Two protected landscape areas are situated in the region. The **Žďárské Hills PLA** was declared in 1970 where the harmonic cultural landscape with the significant representation of the natural ecosystems is protected. The **Železné Mts. PLA** was declared in 1991 and comprises a rock block dissected by rivers (the Chrudimka and Doubrava Rivers).

### POPULATION AND SETTLEMENT PATTERNS

The settlement pattern of the region is very scattered due to the natural environment. It is characterized by a high number of small settlements. The settlements are integrated into 704 municipalities; the average area of a municipality is only 9.6 sq km, and the average population is only 725 inhabitants. Both figures are the lowest in the Czech Republic. Almost 80% of municipalities have less than 500 inhabitants and one fifth of the region's population lives there. The level of urbanization is relatively low since only 60% of the population lives in towns. There is no town with more than 50 thousand inhabitants; the population of Jihlava fell below this level in 2004. Apart from Jihlava, three other towns with populations of between 20-50 thousand (Třebíč, Havlíčkův Brod, Žďár nad Sázavou) and four towns with 10-20 thousand inhabitants (Pelhřimov, Velké Meziříčí, Humpolec and Nové Město na Moravě). On the other hand in the Vysočina Region there are five towns where the number of inhabitants does not reach 2 thousand (the smallest is Habry with 1,300 inhabitants).

The Vysočina Region ranks among the regions which have seen an annual decrease in population in recent years. This is caused not only by the negative natural balance but also by negative migration balance (the year 2003 was an exception when 505 persons immigrated to the region). The life expectancy in the Vysočina Region is relatively high (for men 72.9 years – the third highest value, for women 79.0 years – the second highest value). The age structure of the population is favourable. The percentage of the population aged 0-14 (15.8%) is considerably higher than the percentage of the population in the post-productive age (14.3%). The education structure is worse: the percentage of the persons with GCSE and tertiary education is lower.



The pilgrimage church of St. John of Nepomuk in Zelená hora near Žďár nad Sázavou. (Photo: archive)

Population change							
Period	absolute numbers		in ‰ per year				
	natural change	migration balance	natural change	migration balance			
1993-1996	221	536	0.1	0.3			
1997–2000	-2,224	292	-1.1	0.1			
2001–2004	-1,915	-178	-0.9	-0.1			
1993–2004	-3,918	650	-0.6	0.1			

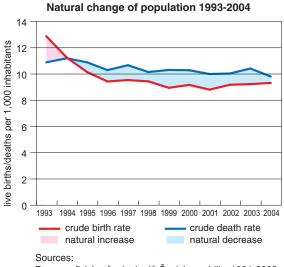
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Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.

Age structure of population					
Age group	Unit	1993		2004	
Age group	Offic	CZ	Region	CZ	Region
0–14	%	19.4	20.7	14.9	15.8
15–64	%	67.6	66.5	71.0	70.0
65+	%	13.0	12.7	14.0	14.3
mean age	years	36.8	36.1	39.8	39.3
old/young ratio	_	66.8	61.3	94.0	90.3

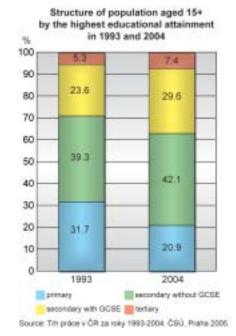
#### Sources:

Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.



Demografická ročenka krajů České republiky 1991-2003. ČSÚ, Praha 2004.

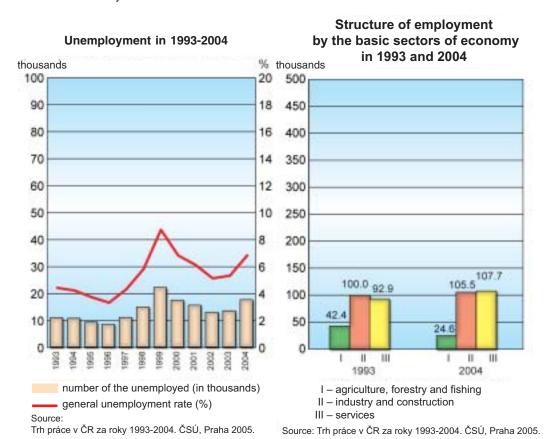
Vývoj obyvatelstva ČR v roce 2004. ČSÚ, Praha 2005.



## **ECONOMY**

The region's economic development was influenced by natural conditions in the past. Medieval colonisation and 19th century industrialisation occurred later and with less intensity than in the low-land areas. The Vysočina Region has always been among the poorer areas of the country; at the same time, however, it was saved from environmental pollution and from the creation of large areas devastated by industry. Nowadays the region ranks among dynamically developing regions. Industry accounts for almost 41% of the regional GDP. The importance of extraction and processing of raw materials is not great, with the exception of the extraction of the building stone and uranium ore. The extraction of the uranium ore is, however, planned to end in the nearest future. The percentage of regional GDP accounted for by manufacturing has been increasing (34.0%), particularly thanks to the economic successes of the largest company in the region, Bosch Diesel in Jihlava. Foreign direct investments are concentrated into the towns along the motorway D1 connecting Prague with Brno. Apart from Jihlava these are Humpolec and Velké Meziříčí. One of the most important energy sources of the Czech Republic – Dukovany nuclear power station – is situated southeast of Třebíč.

Agriculture is a traditional source of livelihood in the Vysočina Region. Agriculture and forestry account for 9.6% of the regional GDP, which is an unusual value compared with other regions. High employment in the primary sector (25 thousand, i.e. 10.4%) reflects this fact. The region leads in the production of potatoes (34% of the Czech production) and in the livestock production (pig farming). Meat processing plants are associated with the livestock production, the largest is Kostelecké uzeniny.



Employers with the greatest number of employees in the Vysočina Region (civil sector only, as of December 31, 2003)							
Employer Bosch Diesel, Jihlava	Branch Production of accessories	Emp.					
ŽĎAS, Žďár nad Sázavou České dráhy Motorpal, Jihlava	for the car industry Production of iron and steel Railway transport Production of accessories for the car industry	4.5 3.0 2.7					
Sklo Bohemia, Světlá nad Sázavou Česká pošta ČEZ, Praha Kostelecké uzeniny, Kostelec Nemocnice Jihlava Pleas, Havlíčkův Brod Note: Emp. – number of employees in thousands	Production of crystal glass State post Electricity production Production of meat products Health care Production of underwear	1.6 1.5 1.5 1.3 1.3					
Source: CRR MU in Brno database, 2005.							

# **TOURIST ATTRACTIONS**

Out of a number of monuments in the Vysočina Region, three of them are on the UNESCO's World Heritage List. The town monument reserve of *Telč* (since 1992) consists of the historic core of the town with late gothic fortification and gates. The square is surrounded by a unique set of gothic and renaissance arcaded houses and renaissance, baroque and classical gables. The renaissance chateau dating from the 16<sup>th</sup> century dominates the town. The baroque pilgrimage church of St. John of Nepomuk on the *Zelená hora* near Žďár nad Sázavou was inscribed on the list in 1994. The town of *Třebíč*, another UNESCO heritage site since 2003, is known for its St. Procopius' Basilica and the well-preserved Jewish ghetto and Jewish cemetery.

The historic cores of two other towns are protected as town monument reserves – *Jihlava* and *Pelhřimov*. The centre of Jihlava is surrounded by the remnants of gothic city walls. Its underground has 25 km of tunnels.

The Vysočina Region is attractive all year round. It has good conditions for both summer and winter recreation; it also has many valuable cultural and historic monuments. Nové Město na Moravě often hosts the world cup in nordic skiing.



Telč. (Photo: Irena Smolová)

# Jihomoravský Region



Area: 7,196 sq km

Population: 1,130,240 (as of January 1, 2005)

out of which

15,566 foreigners with temporary residence 8,335 foreigners with permanent residence

Population density: 157.1 persons/sq km Number of municipalities: 672 (including

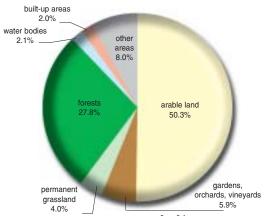
47 towns)

**Administrative centre:** Brno (367.7 thousand inhabitants, as of January 1, 2005)

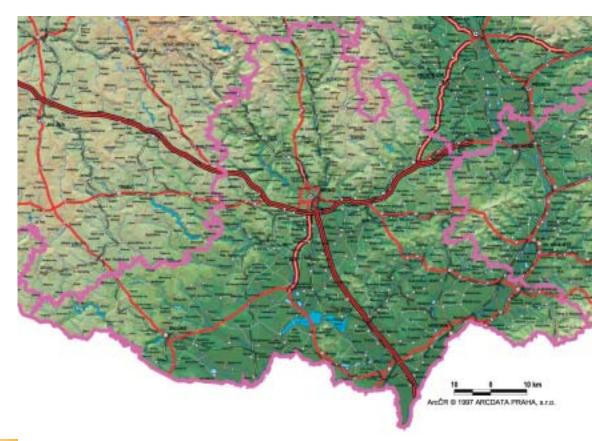
# Other large towns:

Znojmo (35.2 thousand) Hodonín (26.3 thousand) Břeclav (25.7 thousand) Vyškov (22.3 thousand) Blansko (20.3 thousand)

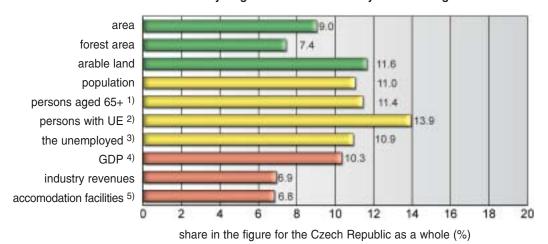
# Land Use (as of December 31, 2004)



Source: Statistická ročenka půdního fondu ČR. ČÚZK, Praha 2005.



## Share of the Jihomoravský Region in selected country statistical figures



#### Notes:

- 1) 65+ persons aged 65 or more
- 2) UE university level of education
- 3) the unemployed number of economically active persons without employment
- 4) GDP gross domestic product
- 5) accomodation facilities number of beds in touristic accomodation facilities

Data sources: ČSÚ (Czech Statistical Office) and ČÚZK (Czech Office for Surveying, Mapping and Cadastre).

# NATURAL ENVIRONMENT

The character of the landscape is determined by its location on the dividing line between two basic geological systems: the Czech Massive and the Carpathians. The border between the two units is formed by a wide belt of the Outer Carpathian depression comprising the Dyjsko-svratecký and Dolnomoravský vales and Vyškovská Gate. The northern outlet of the Vienna Basin with rich petroleum and natural gas deposits stretches to the south-eastern part of the region.

The vales rank among the most fertile areas in the Czech Republic thanks to favourable climatic conditions and quality soils. Grapes and other thermophile plants are grown there. The border areas are marked by dissected hilly terrain. A unique landscape is protected in the *Bílé Karpaty PLA*, which is also a UNESCO biosphere reserve together with the *Pálava PLA*, where karst landforms of the Pavlovské Hills are protected.

The north-western part of the region is cmposed of the rocks of the Czech Massive and with its higher altitude has a colder climate. This marks the edge of the Českomoravská and Drahanská Highlands. The Moravian Karst is a part of the Drahanská Highland. It is one of the most important karst areas in Central Europe. The *Moravian Karst PLA* was established as early as in 1956 and contains the longest cave system in the Czech Republic (the Amatérská Cave with a total length of almost 35 km). The landscape of the Českomoravská Highland is characterized by mildly undulating terrain with a mosaic of fields, forests and pastures dissected by the deep, prevailingly forested valleys of the Svratka, Oslava, Jihlava, Rokytná, Jeviškovka, Dyje Rivers and their tributaries. A part of the Dyje River valley is protected as the *Podyjí National Park* for its outstanding landscape and bilogical richness.

The whole region lies in the Morava River basin. Most of its territory is drained by its most important right bank tributary: the Dyje River. The lowest point in the terrain lies at the confluence of the Dyje and Morava Rivers. A number of the river's valleys have been transformed by the construc-

tion of a system of dams – the Nové Mlýny Dams and the Vranovská Dam on the Dyje River and the Brněnská Dam on the Svratka River.

# POPULATION AND SETTLEMENT PATTERNS

In 1994 the number of deaths for the first time exceeded the number of births in the Jihočeský (South Moravia) Region, but due to the high active migration balance (2,010 persons) the region has not yet experienced a decrease in the number of inhabitants. The first decrease was experienced in 1995 and South Moravia continued to lose its population until 2002. The highest decreases were recorded in 2001 and 2002, when the region was losing population even through emigration. In the following two years and during the first half of 2005 the population increased. The average age of the population has increased from 37 years in 1993 to 40 in 2004; its position within the Czech Republic did not change (a higher average age was recorded in Prague and in the Plzeňský and Královéhradecký regions). On the other hand the population of South Moravia stands out for its educational structure. The proportion of persons older than 14 years with GCSE and tertiary education reached 42.4% in 2004 (only Prague experienced a higher value). Not only the educational structure but also the age structure of the region is strongly influenced by the population structure of the city of Brno.

Almost one third of the population of the region lives in Brno, the second largest city of the Czech Republic. Combined together the 47 towns of the region account for 62.8% of the population of the region, which is one of the lowest values in the Czech Republic. Only 7.4% of the population lives in small municipalities of less than 500 inhabitants (322 municipalities). The region has a varied settlement structure. The South Moravian vales are typified by large rural settlements, often with several thousands inhabitants, situated at quite a distance from one another. In the Hodonín region there are even six municipalities with more than 3 thousand inhabitants without the status of the town. The dissected Českomoravská Highland is characterized by a number of small settlements not farther than 2-3 km from one another. The Drahanská Highland is characterized by middle sized settlements, founded later probably due to higher altitude of the area. Since the middle of the 1990s the process of suburbanisation has become a distinct phenomenon. It affects mainly the Brno hinterland; the population for various reasons leaves the city and settles in neighbouring villages.



Brno. (Photo: David Procházka)

Population change						
Period	absolute	numbers	in ‰ per year			
	natural change	migration balance	natural change	migration balance		
1993-1996	-6,094	5,428	-1.3	1.2		
1997–2000	-9,815	5,439	-2.1	1.2		
2001–2004	-6,966	2,135	-1.5	0.5		
1993-2004	-22,875	13,002	-1.7	1.0		

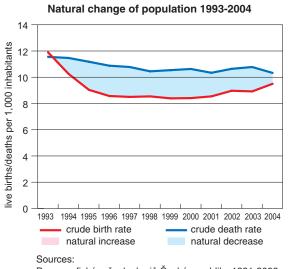
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Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.

Age structure of population					
Age group	Unit	19	1993		04
Age group	Offic	CZ Region		CZ	Region
0–14	%	19.4	19.5	14.9	14.7
15–64	%	67.6	66.8	71.0	70.7
65+	%	13.0	13.6	14.0	14.6
mean age	years	36.8	37.0	39.8	40.0
old/young ratio	_	66.8	69.8	94.0	99.1

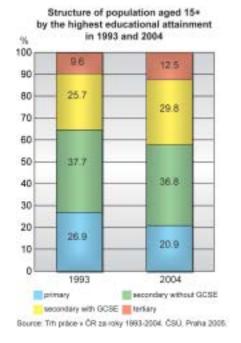
#### Sources:

Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.



Demografická ročenka krajů České republiky 1991-2003. ČSÚ, Praha 2004.

Vývoj obyvatelstva ČR v roce 2004. ČSÚ, Praha 2005.

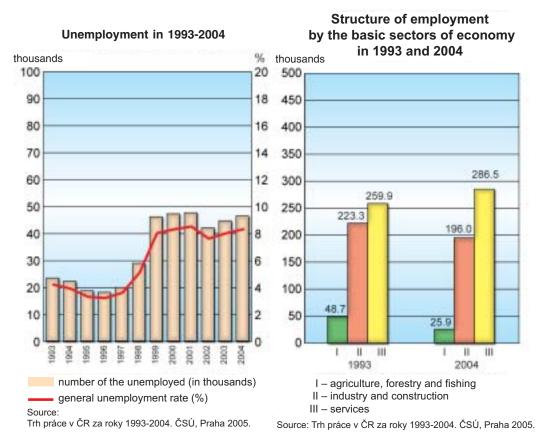


# **ECONOMY**

The economic structure of South Moravia changed considerably during the years 1993-2004. The decrease in workers in the production sector started after 1989. In agriculture the number of employees decreased from 44.9 thousand in 1993 to 22.8 thousand in 2004 (the proportion in the total employmed population is 4.5%, together with forestry and fishing it makes up 5.1%). The manufacturing industry experienced a decrease in the number of employees as well: from 164.4 thousand to 132.1 thousand (25,9%). On the other hand the number of employees in most branches of the tertiary sector increased. The highest absolute increase was recorded in trade and the highest relative increase in the banking and insurance sector. The proportions of individual branches in the creation of the gross added value changed as well. Agriculture and forestry accounts for 3.9% of the regional GDP (in the Czech Republic it is 3.3%), manufacturing for 23.6% (25.9% respectively). The structure of the gross added value of South Moravia differs from the structure of the Czech Republic primarily in the building industry and commercial services. In the former (the building industry) the proportion is 8% and it is the second highest figure in the Czech Republic after the Liberecký Region, in the latter (commercial services) the proportion is 15.7% and it is the second highest figure after Prague. In 2004 the per capita GDP in South Moravia reached 93.9% of the

level of the Czech Republic and 67% of the level of the EU25. In the Czech Republic only Prague shows higher figures but these are practically incomparable with other regions (201.8% and 143.0%).

Agriculture has become less important for the economy of the region but still its position within the agriculture of the Czech Republic is often exceptional. The percentage of arable land reaches 83.6% (the highest in the Czech Republic). The proportion of the crop area devoted to cereals is



Employers with the greatest number of employees in the Jihomoravský Region (civil sector only, as of December 31, 2003)				
Employer	Branch	Emp.		
České dráhy	Railway transport	7.7		
Fakultní nemocnice Brno	Health care	4.7		
Česká pošta	State post	4.5		
Masarykova univerzita, Brno	Education	3.1		
Statutární město Brno	Public administration	3.0		
Dopravní podnik města Brna, Brno	City transport	3.0		
Fakultní nemocnice u sv. Anny, Brně	Health care	2.6		
Vysoké učení technické, Brno	Education	2.4		
Tyco Electronics Czech, Kuřim	Production of electrical equipment			
	for cars	1.9		
Finanční ředitelství	Public administration	1.8		
Note: Emp. – number of employees in thousands				
Source: CRR MU in Brno database, 2005.				

66.9%, which is the second highest figure after the Ústecký Region. However, the area of the Ústecký Region is far smaller, therefore the yields of cereals in tons are double in South Moravia. 91.6% of vineyards and 25.2% of orchards in the Czech Republic are concentrated in the region. The region is first in the level of pig breeding. On the other hand, the importance of industry of the region has decreased considerably even within the Czech Republic. Afflicted was mainly machinery in Brno. While in Zetor (known for its production of tractors) and in Zbrojovka (production of armaments) more than 10 thousand workers were employed in 1989, at the end of 2004 there was no factory in Brno with more than one thousand employees. The largest industrial employer was the electronics company of Tyco Electronics Czech. About 1.5 thousand workers are employed in two manufacturing companies: the rubber making company of Gumotex in Břeclav and furniture making company of Tusculum in Rousínov. Companies active in the tertiary sector are by far the largest employers in the region. The unemployment rate in South Moravia is higher than the national average.

# **TOURIST ATTRACTIONS**

The region includes the *Podyjí National Park* and the unique Moravian Karst with the famous Macocha Abyss and four accessible cave systems. Out of a number of attractive places two UNESCO heritage sites – the *Lednicko-valtický area* and *Villa Tugendhat* in Brno – take exceptional positions. Twenty historically important localities and buildings have the status of national cultural monuments. The centres of *Brno*, *Znojmo* and *Mikulov* are town monument reserves and other 11 were declared town monument zones. Rural architecture is valuable and attractive as well. The memorial battlefield zone near Slavkov (Austerlitz) enjoys a large numbers of foreign visitors.

Visitors from the Czech Republic and abroad are also attracted by important cultural, social, sports and trade events traditionally held in the region – the Brno international fairs, folklore festivals, athletics competitions, car races and others. *The fair ground in Brno* is the largest in the Czech Republic.

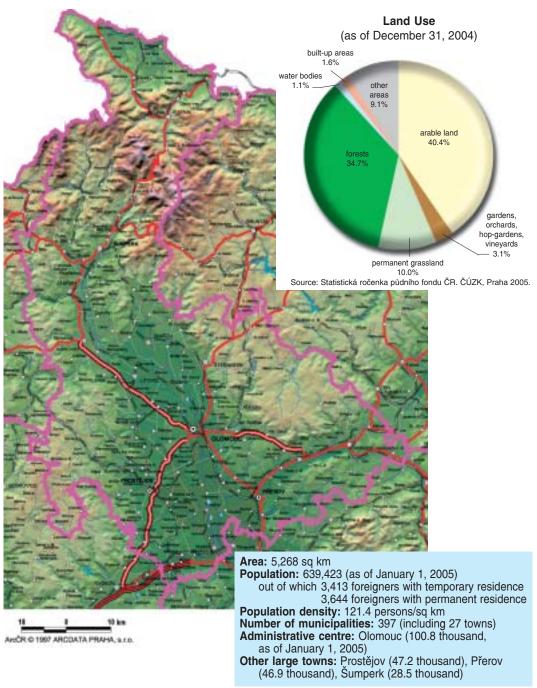
**Hodonín** has the status of a spa town, only recently **Lednice** and **Pasohlávky** in the Břeclav region have acquired the status as well. Seasonal recreational boat transport is offered on the Vranovská and Brněnská reservoirs and on the renewed Baťa's Canal.



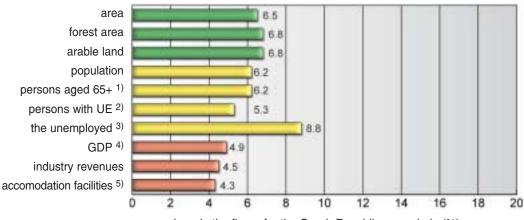
Lednice-Valtice landscape area. (Photo: Irena Smolová)

# Olomoucký Region





## Share of the Olomoucký Region in selected country statistical figures



share in the figure for the Czech Republic as a whole (%)

#### Notes:

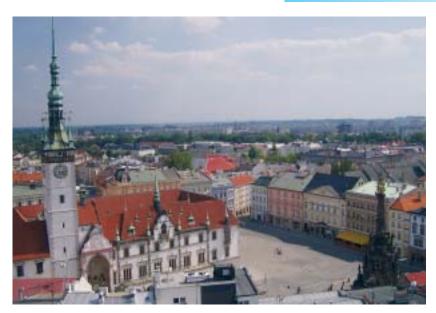
- 1) 65+ persons aged 65 or more
- 2) UE university level of education
- 3) the unemployed number of economically active persons without employment
- 4) GDP gross domestic product
- 5) accomodation facilities number of beds in touristic accomodation facilities

Data sources: ČSÚ (Czech Statistical Office) and ČÚZK (Czech Office for Surveying, Mapping and Cadastre).

# NATURAL ENVIRONMENT

The terrain of the northern part of the region is mountainous with the Jeseníky Mts. and its highest peak of Praděd (1491 m a.s.l.). The southern part consists of the lowlands of Haná. The Morava River forms the axis of the central and southern parts of the region. The Olomoucký Region lies on the divide between the Czech Highland and the Western Carpathians and has varied environmental features. A larger part of the region belongs to the older Czech Highland with a typical block structure. The landscape was considerably transformed by continental and alpine glaciers during the early Quaternary Era. The central and south-eastern part of the region belongs to the Outer Carpathian depression.

A considerable altitudinal span is reflected in the character of the vegetation: from the alluvial forests of the Morava River floodplain to the sub-alpine vegetation above the timberline in the Hrubý Jeseník Mts. The karst areas with five cave systems open to the public are unique in the region. The longest cave system in the region is the Javoříčské Caves near Olomouc with rich dripstone decoration. The hydrothermal Zbrašovské Aragonite Caves are the warmest in the Czech Republic. The deepest abyss in the Czech Republic is situated in the region – the Hranická Abyss has been measured as being 274.5 m deep, but it is probably much deeper. The most valuable segments of the landscape are protected by law. The remains of the alluvial forests along the central reaches of the Morava River have been protected since 1991 as the *Litovelské Pomoraví PLA*. The mountain ecosystems with vast peat bogs have been protected since 1969 as the *Jeseníky PLA*. Cryogenic landforms (such as tors or felsenmeers) are remarkable in the mountain range.



Horní náměstí (Upper Square) in Olomouc with the Holy Trinity Column and the gothic Town Hall, complemented with a peculiar astronomical clock. (Photo: Dušan Gavenda)

# POPULATION AND SETTLEMENT PATTERNS

The Olomoucký Region ranks among regions with a relatively high population decrease. The population decreased by 15 thousand between the years of 1993 and 2004. The yearly decreases often exceeded the level of one thousand persons thanks to unfavourable natural change and negligible immigration. The age structure is slightly better than in the Czech Republic as a whole, thanks to a higher proportion of the age category of 0-14 years. The average age at the end of 2004 was 39.6 years (in the Czech Republic it was 39.8 years). The proportion of persons with tertiary education and with GCSE does not reach the national average.

The average population density of 121 persons per 1 sq km approaches the national average. However, within the region there are distinct local differences. The Jeseník region has the lowest population density (less than 60 persons/sq km). On the other hand, fertile vales have an above-average population density. Despite the fact that there are ten towns with more than 10 thousand inhabitants, including the administrative centre of Olomouc with 100 thousand inhabitants, the level of urbanisation is not high. Only some 58% of the population lives in towns (in the Czech Republic as a whole it is 70.2%). Small municipalities with less than 500 inhabitants (180 municipalities) make up less than one half of all municipalities and 51.2 thousand persons lives there (8.1% of the population).

# **ECONOMY**

During the last five years the regional GDP per capita has been the lowest in the Czech Republic. In 2004 it was 78% of the national average and only 55% of the EU25 average. The structure of gross added value in the region differs from the structure of the Czech Republic mainly by the above-average proportion of the manufacturing industry, transport and communications, and health and social services. Thanks to the very fertile south and central parts of the region (Haná) the share of the primary sector is above-average. Fertile soils are used intensively for growing crops; the crop production dominates the agriculture of the region. Traditional sugar beet cultivation is important (one fourth of the production of the Czech Republic). Yields per hectare of

Population change					
Period	absolute numbers			er year	
	natural change	migration balance	natural change	migration balance	
1993-1996	-1,933	1,693	-0.7	0.7	
1997–2000	-4,554	608	-1.8	0.2	
2001–2004	-3,133	-1,440	-1.2	-0.6	
1993-2004	-9,620	861	-1.2	0.1	

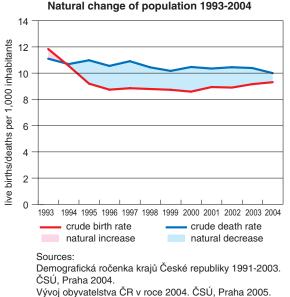
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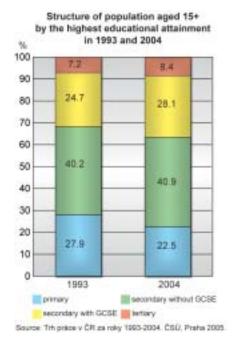
Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.

Age structure of population					
Age group	Unit	19	1993		04
Age group	Offic	CZ Region		CZ	Region
0–14	%	19.4	20.0	14.9	15.1
15–64	%	67.6	67.3	71.0	70.9
65+	%	13.0	13.0 12.7		14.0
mean age	years	36.8	36.3	39.8	39.6
old/young ratio	_	66.8	63.8	94.0	92.9

#### Sources:

Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.

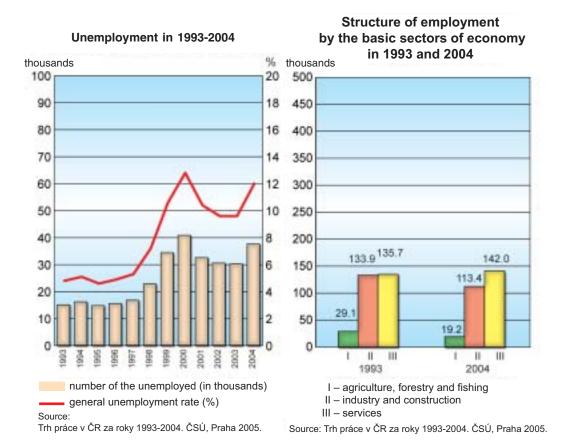




barley, wheat and rape are significantly above the national average as well. In the central part of the region (around Tršice) one of the hop growing areas is situated (one tenth of hop garden acreage of the Czech Republic). Manufacturing of food products is interlinked with agriculture. Limestone and gravel sands are mined in the region.

The largest employer in the region is, as in other regions, České dráhy (Czech Railways). Other large employers include the teaching hospital and the second oldest university in the Czech Republic, Palacký University, both situated in Olomouc, Olomouc, Přerov, Mohelnice and Prostějov are the industrial centres of the region. The largest industrial employer in the region, Oděvní podnik in Prostějov, is one of the most important European producers of men's and women's ready-made clothes. Traditional companies of UNEX in Uničov producing mining machinery, MORA in Hlubočky producing domestic appliance (cookers, boilers), and new "green-field" investments rank among the largest companies. An example of such a "green-field" investment is LG.Phillips Displays CR, Ltd. in Hranice, a company producing TV displays, the largest investment in the region which started its production in 2001. Siemens, investing in Mohelnice, is another large employer in the region. The amount of foreign direct investments

reached some USD 2,000 per capita by the end of 2003, which was one of the lowest rates in the Czech Republic. This fact may have an influence on the low average wages in the region (lower wages are found only in the Karlovarský Region).



Employers with the greatest number of employees in the Olomoucký Region (civil sector only, as of December 31, 2003)

(civil sector only, as	s of December 31, 2003)	
Employer	Branch	Emp.
České dráhy	Railway transport	6.6
Oděvní podnik, Prostějov	Production of clothes	3.7
Fakultní nemocnice Olomouc	Health care	3.3
Česká pošta	State post	2.4
Univerzita Palackého, Olomouc	Education	2.3
Siemens Elektromotory, Mohelnice	Production of electromotors,	
	generators and transformers	1.9
UNEX, Uničov	Production of mining	
	and building machines	1.5
Meopta Přerov	Production of optical	
	and photographic appliances	1.4
LG.Philips Displays, Hranice	Production of electron tubes	
	and electrical components	1.3
Mora Moravia, Hlubočky-Mariánské Údolí	Production of domestic appliances	1.2
Note: Emp. – number of employees in thousands		
Source: CRR MIL in Brno database, 2005		

# **TOURIST ATTRACTIONS**

Five cave systems are open to the public: Javoříčské Caves, Mladečské Caves, Zbrašovské Aragonite Caves, Na Pomezí Caves, and Na Špičáku Caves. The castles of Bouzov, Helfštýn and the chateaux in Šternberk, Úsov, Tovačov, Velké Losiny, Jánský vrch and Náměšť na Hané are among the most frequented sites. Well-known pilgrimage sites are situated in the region, such as the Basilica of Our Lady's Visitation on Svatý Kopeček near Olomouc. Many folk traditions have been preserved in the region, brought closer to the public during several festivals, e.g. in Náměšť na Hané, Prostějov or Kojetín. Several ski resorts are frequently visited in the Jeseníky Mts., such as the Červenohorské sedlo, Petříkov, Ostružná or Ramzová.

Two town monument reserves are to be found in the region: *Olomouc* and *Lipník nad Bečvou*. The former is the second largest in the Czech Republic. The streets following the medieval plan are lined with baroque palaces and houses. The Holy Trinity column has been a UNESCO monument since 2001. It is 35 m high and was erected in between the years of 1716-54, and is one of the last such columns built in the baroque style. The city walls were replaced by the green belt surrounding a large part of the historic core.

In **Teplice nad Bečvou** cardiovascular diseases are treated, **Velké Losiny** is known for its hot sulphur springs, **Bludov** and **Slatinice** have the status of spa towns. **Jeseník** has the status of a climatic spa with the longest tradition of hydrotherapy in the world.



Pilgrimage basilica of Our Lady's Visitation on the Svatý Kopeček hill. (Photo: Dušan Gavenda)

# Zlínský Region



Area: 3,964 sq km

**Population:** 590,706 (as of January 1, 2005)

out of which

3,429 foreigners with temporary residence 2,943 foreigners with permanent residence

Population density: 149.0 person/sq km Number of municipalities: 304 (including

30 towns)

Administrative centre: Zlín (78.6 thousand inhabitants, as of January 1, 2005)

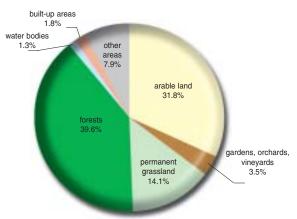
## Other large towns:

Kroměříž (29.0 thousand) Vsetín (28.4 thousand)

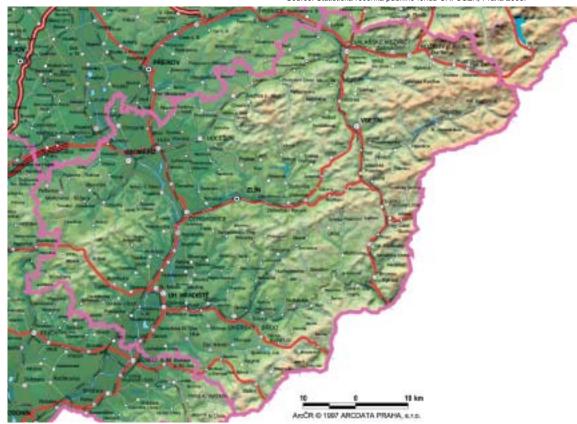
Valašské Meziříčí (27.4 thousand) Uherské Hradiště (26.3 thousand)

# Land Use

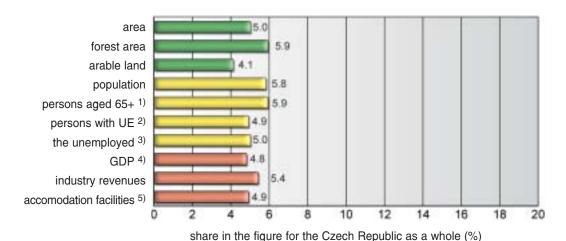
(as of December 31, 2004)



Source: Statistická ročenka půdního fondu ČR. ČÚZK, Praha 2005.



### Share of the Zlínský Region in selected country statistical figures



#### Notes:

- 1) 65+ persons aged 65 or more
- 2) UE university level of education
- 3) the unemployed number of economically active persons without employment
- 4) GDP gross domestic product
- 5) accomodation facilities number of beds in touristic accomodation facilities

Data sources: ČSÚ (Czech Statistical Office) and ČÚZK (Czech Office for Surveying, Mapping and Cadastre).

# NATURAL ENVIRONMENT

The terrain of the Zlínský Region has a dissected character. It is mainly made up of uplands and highlands. In the west of the region the fertile lowland Haná is situated. The Moravskoslezské Beskydy Mts. stretch to the north part of the region. The mountain ranges in the eastern part form the border with Slovakia – the Javorníky Mts. (with Velký Javorník, 1071 m a.s.l. as thehighest peak) and the Bílé Karpaty Mts. (Velká Javořina, 970 m a.s.l.). The western part is transected by the Morava River with partly preserved natural meanders, oxbows and alluvial forests. The river flows through the wide depression of the Dolnomoravský Vale, which is the most fertile and warmest part of the region. The mountainous parts of the region are plagued by landslides, mainly in the flysch structures in the Vsetín and Zlín regions.

Almost one third of the region is made up of protected areas. Two landscape protected areas stretch into the region. The *Beskydy PLA* was declared in 1973 and is the largest PLA in the Czech Republic (1,160 sq km, the highest peak is Lysá hora, 1323 m a.s.l.). It protects vast virgin forest complexes, pseudokarst phenomena or rock formations. The *Bílé Karpaty PLA* is also a UNESCO reserve. It is characterized by the Carpathian meadows and the harmonic cultural landscape of the Czech-Slovak border.

# POPULATION AND SETTLEMENT PATTERNS

Since 1994, the population in the Zlínský Region has been decreasing. It is caused both by a natural decrease and since 2001 by a negative migration balance, therefore yearly population decreases have been rather high in recent years. In 2003 and 2004 the total population decrease was greater than one thousand persons. However, during the first half of 2005 the population decrease was only 222 persons, which means that the negative trend of a deep decrease in the number of inhabitants was stopped. The age structure of the Zlínský Region is similar to other regions in the Czech Republic. In 2004 the average age was 39.6 years (in the Czech Republic as a whole it was 39.8 years). The life expectancy of women reached 79.0 years (the average value of the years of 2001 and 2002). Higher life expectancy in the Czech Republic was recorded only the Jihomoravský Region (by 0.2 year more). The life expectancy of men was the same as the national value (72.1 years). The educational structure of the Zlínský Region is more favourable as well. Even if the proportion of persons with tertiary education does not reach the republic average (the Zlínský Region 8.5%, the Czech Republic 9.9%), higher proportions are recorded only in Prague and the Jihomoravský, Plzeňský and Jihočeský regions. The Zlínský Region is characterized by a high proportion of religious people (55.2%). The average for the whole Czech Republic is 32.1% and thus the Zlínský Region is the only region where the proportion of religious people exceeds half of the total population. In the Uherské Hradiště region, the number even reaches almost two thirds. This fact is reflected positively in some population characteristics (low divorce and abortion rates).

The Zlínský Region, together with the Vysočina Region, rank among regions with most stable population, i.e. with a high proportion of natives. The population density is above average as well. The population is concentrated in the fertile Moravian vales. The settlement structure is dominated by the Zlín agglomeration with more than 100 thousand inhabitants. Otherwise the population is concentrated mainly in middle sized and larger settlements. Only 5.5% of population lives in small municipalities with less than 500 inhabitants (the third lowest proportion after the Moravskoslezský and Karlovarský regions). The proportion of urban population in the region is only 61.2%, which is only a little more than in the "least urban regions" (the Olomoucký and Vysočina regions). Nine towns with more than 10 thousand inhabitants are situated in the region.

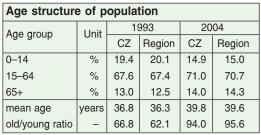


The modern town of Zlín owes its development to the entrepreneurial activities of Tomáš Baťa. (Photo: Irena Smolová)

Population change						
Period	absolute	numbers	in ‰ per year			
	natural change	migration balance	natural change	migration balance		
1993-1996	-1,799	2,416	-0.7	1.0		
1997–2000	-4,126	1,813	-1.7	0.8		
2001–2004	-3,464	-853	-1.5	-0.4		
1993-2004	-9,389	3,376	-1.3	0.5		

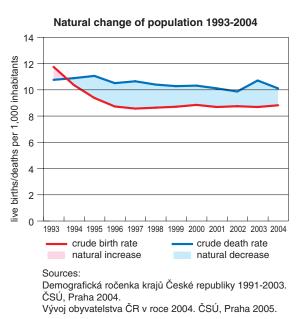
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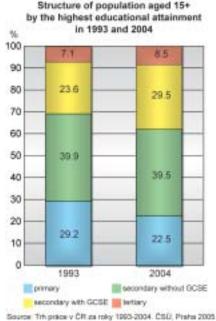
Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.



#### Sources:

Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.

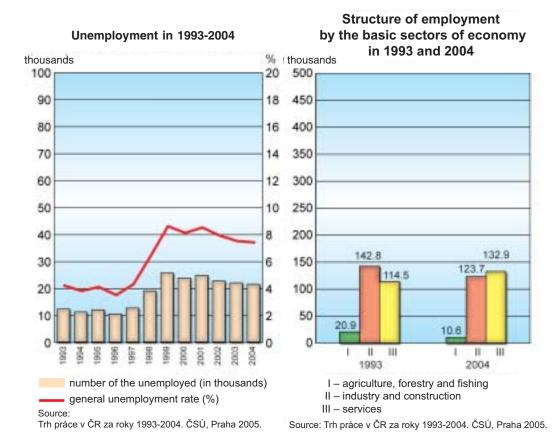




# **ECONOMY**

In the recent past the Zlínský Region was rightly considered an economically strong region with substantial concentration of large industrial companies, many of which were founded by Tomáš Baťa (production of shoes, tyres, machine tools and airplanes). Products associated with such companies were traditionally produced in Zlín and its hinterland. During the 1990s the economically stable position of Zlín and of the whole of eastern Moravia started to change as a consequence of a slump in production in a number of formerly prosperous industrial branches (production of shoes experienced the most severe decline). Dynamic development of the region is impeded by its peripheral location within the Czech Republic. The break up of Czechoslovakia had negative impacts on the economic success of some industrial companies of the region, as many such companies traded with Slovakia before the break up of the federation. Manufacturing, however, still plays the most important role in the regional GDP (38.5%, which is the second highest value in the Czech Republic after the Liberecký Region). Other branches of economy make up less than 10% od GDP, with the exception of trade (11.9%) and commerce services (11.7%).

The proportion of agriculture and forestry in the gross added value is 3.9%, which is more than the national average. Agricultural land takes up 49.4% of the area of the Zlínský Region (in the Czech Republic it is 54.1%). The intensity of livestock and crop production is relatively lower. In



Employers with the greatest number of employees in the Zlínský Region (civil sector only, as of December 31, 2003)				
Employer	Branch	Emp.		
Barum Continental, Otrokovice České dráhy	Production of rubber casings and tubes Railway transport	3.9 2.9		
Baťova nemocnice Zlín Aliachem <sup>1)</sup> , plants in Napajedla	Health care	2.0		
and Chropyně	Production of basic chemicals	1.8		
Česká zbrojovka, Uherský Brod	Production and repair of armaments			
	and ammunition	1.8		
ON Semiconductor Czech Republic,	Production of electronics			
Rožnov pod Radhoštěm	and electrical components	1.7		
TON, Bystřice pod Hostýnem	Production of furniture	1.7		
TCT, Vidče	Production of electrons			
	and electrical components	1.3		
MITAS <sup>2)</sup> , plants in Zlín and Otrokovice Delphi Czech Republic <sup>3)</sup> , plants in	Production of rubber casings and tubes Production of electrical equipment	1.2		
Slušovice and Vizovice	for cars	1.2		
Notes: 1) seat in Pardubice 2) seat in Pardubice	rague 3) seat in Bakov nad Jizerou			
Emp. – number of employees in thousands				
Source: CRR MU in Brno database, 2005.				

2004 only 8 thousand persons were employed in agriculture. The largest employer was the industrial sector with 99.2 thousand workers. This fact was reflected in the top 10 regional employers – eight such employers belonged to the manufacturing industry.

The existing industrial potential of the region is based on the formerly key machine tool companies. Manufacturing, chemical industry, rubber making and food processing are of considerable importance. They still rank among the leading suppliers of consumer goods on the Czech market. The largest employer is the producer of tyres Barum Continental in Otrokovice.

# **TOURIST ATTRACTIONS**

The region has very different conditions for tourist development. *Kroměříž*, a UNESCO heritage site since 1998 and a town monument reserve, was the property of the bishops of Olomouc, who built their summer residence there. Thanks to the number of monuments it is also sometimes referred to as the Athens of Haná.

The largest spa in Moravia and the fifth largest in the Czech Republic – *Luhačovice* – is situated in the region. Fifteen springs are used for the treatment of various diseases. The buildings by Dušan Jurkovič give the town a distinct character. In addition to Luhačovice, *Ostrožská Nová Ves* with sulphur springs used for the treatment of motor disorders has the status of a spa town.

One of the most frequented sites of the region is the open air folk museum in *Rožnov pod Radhoštěm*, and recently the *Baťa Canal*, constructed between Otrokovice and Rohatec in 1936-38, has become a popular destination. It is used for recreational boating.

The most frequented castles and chateaux are Buchlov, Buchlovice, Valašské Meziříčí, Vsetín or Uherský Ostroh. The history of the pilgrimage site of *Velehrad* is connected with the arrival of the Slavic priests Constantine and Methodius to Moravia. Folk festivals take place regularly in the region – Haná feast in Chropyně or the procession of king in Vlčnov.



Statues of preachers Constantine and Methodius on the top of Radhošť, a pilgrimage mountain in the Beskydy Mts. (Photo: Jan Kašpárek)

# Moravskoslezský Region



Area: 5,428 sq km

Population: 1,253,257 (as of January 1, 2005)

out of which

7,942 foreigners with temporary residence 10,385 foreigners with permanent residence

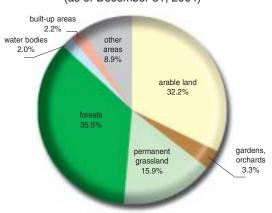
Population density: 230.9 persons/sq km Number of municipalities: 299 (including

39 towns)

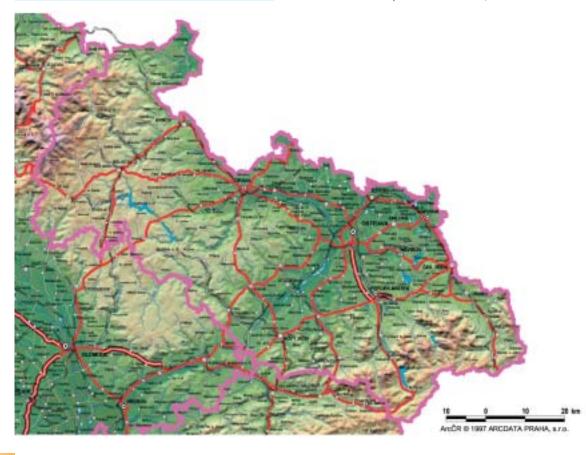
Administrative centre: Ostrava (311.4 thousand inhabitants, as of January 1, 2005)

Other large towns: Havířov (84.8 thousand), Karviná (63.4 thousand), Frýdek-Místek (59.9 thousand), Opava (59.8 thousand), Třinec (38.2 thousand), Orlová (34.0 thousand), Nový Jičín (26.3 thousand), Český Těšín (26.1 thousand), Krnov (25.4 thousand), Kopřivnice (23.4 thousand), Bohumín (23.1 thousand)

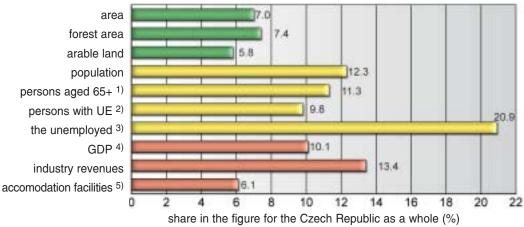
# Land Use (as of December 31, 2004)



Source: Statistická ročenka půdního fondu ČR. ČÚZK, Praha 2005.



## Share of the Moravskoslezský Region in selected country statistical figures



#### Notes:

- 1) 65+ persons aged 65 or more
- 2) UE university level of education
- 3) the unemployed number of economically active persons without employment
- 4) GDP gross domestic product
- 5) accomodation facilities number of beds in touristic accomodation facilities

Data sources: ČSÚ (Czech Statistical Office) and ČÚZK (Czech Office for Surveying, Mapping and Cadastre).

# NATURAL ENVIRONMENT

The western part of the region is formed by the Hrubý Jeseník Mts. with the highest peak of Praděd (1491 m a.s.l.). In 1969 the *Jeseníky PLA* was declared. The upper parts of the mountain region are formed by peneplain with numerous peat bogs and cryogenic landforms (tors, cryoplanation terraces). To the east the Hrubý Jeseník Mts. pass into the lower Nízký Jeseník Mts., where the water courses cut deeply. Landform types are enriched by several volcanic cones, which were active as early as in the older Quaternary. The largest of them, the stratovolcano of Velký Rudný (780 m a.s.l.) looms over the Slezská Harta Dam.

The central part of the region is characteristic of the densely populated lowlands of the Moravian Gate, the Ostrava Basin and the Opava Lowland. Towards the east the terrain is again mountainous and on its eastern border with Slovakia the Moravskoslezské Beskydy Mts. are situated with Lysá hora (1323 m a.s.l.) with numerous pseudokarst phenomena and vast virgin forest complexes. The protected mountain range is known as the *Beskydy PLA*, with its 1,160 sq km being the largest PLA in the Czech Republic. The Beskydy are also an important reservoir of drinking and service water for the Ostrava agglomeration. The north-eastern border is formed by the Slezské Beskydy Mts. with Velká Čantoryje (995 m a.s.l.).

The Odra River, the axis of the Moravskoslezský Region, starts in the Nízký Jeseník Mts. and flows through the Moravian Gate towards the Ostrava Basin, where several important tributaries from the Jeseníky and Beskydy Mts. run into it. In the Nízký Jeseník Mts and in part of the Moravian Gate the Odra River has preserved its natural character with meandering parts and remains of the alluvial forests and wetlands, which have been protected since 1991 as the *Poodří PLA*. In the Ostrava Basin the Odra River is affected by the sewage water. In the Odra River drainage basin several dams were constructed in order to supply factories with water (the Kružberk, Slezská Harta, Olešná, Žermanice, Těrlicko dams). The natural potential of the region is enhanced by deposits of hard coal, natural gas, limestones, marble and gravel sands.

# POPULATION AND SETTLEMENT PATTERNS

The Moravskoslezský (Moravian-Silesian) Region ranks among regions with decreasing population. From 1993 to 2004 the number of inhabitants decreased by almost 36 thousand (by 2%), which was the second highest decrease in the Czech Republic after Prague. Permanent population decrease was caused not only by natural decrease but also by the prevalence of emigration over immigration. The highest decrease by natural change occurred in 2003 (1,830 persons) and the highest decrease by emigration in 2001 (2,086 persons). The negative migration balance was one of the reasons for the lower intensity of housing construction in the region. The number of finished flats per 10 thousand inhabitants in 2004 reached 15.9 (fewer flats were finished only in the Ústecký Region). The decrease in infant mortality is viewed positively, but its level is still above the national average. The Moravskoslezský Region was marked in the past by a higher proportion of children and youth. During recent years the age structure of the region has started to resemble the structure of the Czech Republic. The average age of the population in the region in 2004 reached 39.1 years, which was only by 0.7 year less than the national average. In 1993 the Moravskoslezský Region ranked second (after the Ústecký Region) in the lowest proportion of persons with GCSE or tertiary education. This proportion was 28.7%. In 2004 this figure increased to 36.1% and thus the Moravskoslezský Region's position was taken over by the Karlovarský Region (34.9%).

The population in the region is distributed very unequally. The Jeseníky and Beskydy mountain ranges are very scarcely populated; on the other hand, the Ostrava Basin is densely populated. The settlement structure is marked by a minimum representation of small municipalities with less than 500 inhabitants, where around 2% of the population lives. Almost two thirds (62%) of the population live in towns with more than 20 thousand inhabitants; every fourth inhabitant lives in the regional capital of Ostrava. The settlement structure is dominated by relatively large towns, 5 of



them have more than 50 thousand inhabitants (comparable to the Ústecký Region). Sixteen towns have more than 10 thousand inhabitants. The average area of municipalities (18.1 sq km) is very large in the Czech Republic – with regard to the national average the value is higher by almost a half.

The New Town Hall in Ostrava. (Photo: Dušan Gavenda)

Population change						
Period	absolute	numbers	in ‰ per year			
	natural change	migration balance	natural change	migration balance		
1993-1996	886	-1,510	0.2	-0.3		
1997–2000	-5,649	-3,697	-1.1	-0.7		
2001–2004	-6,412	-5,684	-1.3	-1.1		
1993-2004	-11,175	-10,891	-0.7	-0.7		

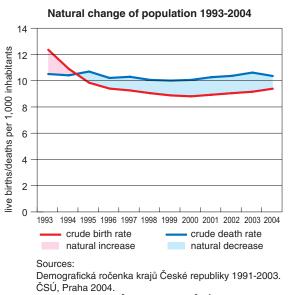
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Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.

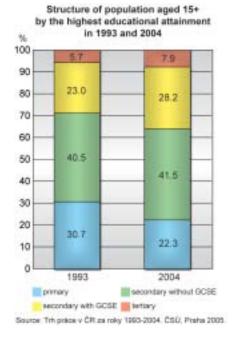
Age structure of population							
Age group	Unit	1993		2004			
		CZ	Region	CZ	Region		
0–14	%	19.4	20.5	14.9	15.5		
15–64	%	67.6	68.3	71.0	71.6		
65+	%	13.0	11.2	14.0	12.9		
mean age	years	36.8	35.6	39.8	39.1		
old/young ratio	_	66.8	54.8	94.0	83.5		

#### Sources:

Demografická ročenka krajů ČR 1991-2003. Praha, ČSÚ 2004. Vývoj obyvatelstva ČR v roce 2004. Praha, ČSÚ 2005.



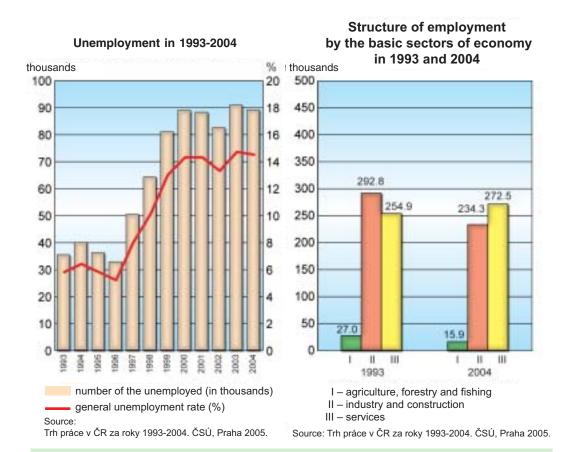
Vývoj obyvatelstva ČR v roce 2004. ČSÚ, Praha 2005.



# **ECONOMY**

Manufacturing accounts for the largest proportion in the GDP of the Moravskoslezský Region (31.6%). In the structure of the GDP the remaining basic industrial branches are significantly represented: both the processing of raw materials and the production and distribution of electricity. The proportion of agriculture is very low (2.1%), the lowest in the Czech Republic after Prague and the Liberecký Region. The Ostrava Basin with deposits of top quality hard coal, metallurgy and heavy machinery is the industrial centre of the region. The largest employer of the region is the mining company of OKD, which nowadays employs far fewer workers than at the end of the 1980s. The region, as the republic metallurgy centre, accounts for 100% of the production of raw iron, 92% of the production of steel and 98% of the production of coke. The largest metallurgical company in the Czech Republic is Mittal Steel Ostrava (formely ISPAT Nová huť), other companies with metallurgical tradition are Třinecké železárny and ŽDB Bohumín. Despite a slump in the mining industry, more than one third of the economically active population works in mining and metallurgy. Energetics and the chemical industry take an important position in the region. Important chemical companies are located in Ostrava, Bohumín, Paskov and Odry. Metallurgy is largely linked with machinery. Autopal Nový Jičín, a producer of car lighting systems, cooling appliances and air-conditioning components ranks among region's largee companies in terms of the number of employees, output, export and production.

The structure of the branches of economy in the Moravskoslezský Region is a source of severe problems, especially a high unemployment rate, which is the second highest in the Czech Republic. Particularly long-term unemployment is a problem as well as unfortunate ratio between the number of unemployed and the number of vacancies. Presently the region is not linked to the motorway system, which is another handicap of the region.



#### (civil sector only, as of December 31, 2003) **Employer** Branch Emp. OKD, Ostrava Hard coal extraction 17.5 11.2 ISPAT Nová huť, Ostrava 1) Production of iron and steel České dráhy Railway transport 8.7 Třinecké železárny, Třinec Production of iron and steel 5.8 Česká pošta State post 5.1 Autopal, Nový Jičín Production of accessories for the car industry 4.1 Českomoravské doly, Kladno Hard coal extraction and production of hard coal briquettes 3.5 Fakultní nemocnice s poliklinikou, Ostrava Health care 3.4 Statutární město Ostrava Public administration 3.0 Vítkovice Strojírenství, Ostrava 2) Heavy machinery 3.0 Notes: 1) presently Mittal Steel Ostrava 2) presently Vítkovice Heavy Machinery, Ostrava Emp. - number of employees in thousands

Employers with the greatest number of employees in the Středočeský Region

Source: CRR MU in Brno database, 2005.

# **TOURIST ATTRACTIONS**

During summer and winter seasons tourists visit mountain resorts in the *Jeseníky* and *Beskydy* Mts. with many ski routes and ski runs. Karlova Studánka and Vrbno pod Pradědem in the Jeseníky and Čeladná, Bílá or Morávka in the Beskydy are the most important mountain resorts.

Several cultural monuments are attractive destinations as well. Three town monument reserves are situated in the region: *Příbor*, *Nový Jičín* and *Štramberk*. In Štramberk, in addition to the castle and the town's folk architecture, one of the well known archaeological and paleontological localities of the Czech Republic is to be found in the Šipka Cave. The chateaux in *Hradec nad Moravicí*, *Raduň*, *Kravaře* or *Fulnek*, and the *Hukvaldy*, *Starý Jičín* and *Sovinec* castles are frequently visited. The region has excellent conditions for industrial tourism with the car museum in Kopřivnice, the railway carriage museum in Studénka, the mining museum in Ostrava and the Michal mine. *Karlova Studánka* in the Bílá Opava River valley below Praděd has the status of a climatic spa. *Darkov* and *Klimkovice* also have the status of spa towns.



Square in the town of Příbor, birth place of Sigmund Freud. (Photo: Martin Jurek)

# LITERATURE

- BIČÍK, I. a kol.: Druhé bydlení v Česku. Univerzita Karlova, Praha 2001, 167 s.
- CULEK, M. a kol.: Biogeografické členění České republiky. Agentura ochrany přírody a krajiny ČR, Praha 2005, 590 s.
- CZUDEK, T.: Reliéf Moravy a Slezska v kvartéru. SURSUM, Tišnov 1997, 213 s.
- CZUDEK, T.: Vývoj reliéfu krajiny České republiky v kvartéru. Moravské zemské muzeum, Brno 2005, 238 s.
- DEMEK, J.: Geomorfologie českých zemí. Nakladatelství ČSAV, Praha 1965, 335 s.
- DEMEK, J. (ed.): Zeměpisný lexikon ČSSR. Hory a nížiny. Academia, Praha 1987, 584 s.
- DEMEK, J., NOVÁK, V. a kol.: Vlastivěda moravská. Neživá příroda. Muzejní a vlastivědná společnost v Brně, Brno 1992, 242 s.
- DVOŘÁK A., NOUZA, R.: Ekonomika přírodních zdrojů a surovinová politika. Vysoká škola ekonomická a Oeconomica, Praha 2002, 164 s.
- HAMPL, M. a kol.: Geografická organizace společnosti a transformační procesy v České republice. PřF UK, Praha 1996, 341 s.
- HAMPL, M. a kol.: Regionální vývoj: specifika české transformace, evropská integrace a obecná teorie. PřF UK, Praha 2001, 428 s.
- HÄUFLER, V.: Ekonomická geografie Československa, Academia, Praha 1984, 639 s.
- CHLUPÁČ, I. a kol.: Geologická minulost České republiky. Academia, Praha 2002, 436 s.
- CHYTRÝ, M., KUČERA, T., KOČÍ, M. (ed.): Katalog biotopů České republiky. Agentura ochrany přírody a krajiny ČR, Praha 2003, 304 s.
- JANČÁK, V., GÖTZ, A.: Územní diferenciace českého zemědělství a její vývoj, PřF UK, Praha 1997, 81 s.
- JANSKÝ, B., ŠOBR, M. a kol.: Jezera České republiky. Univerzita Karlova, Praha 2003, 216 s.
- KOMÁREK, V. a kol.: Prognóza a program. Academia, Praha 1990, 319 s.
- KUžVART, M. (ed.): Ložiska nerudních surovin ČR II. Univerzita Karlova, Praha, 1992, 631 s.
- MACKOVČIN, P., SEDLÁČEK, P. (ed.): Chráněná území ČR. Svazek I XIV, Praha: Agentura ochrany přírody a krajiny, 2002–2005.
- MACHONIN, P., TUČEK, M. a kol.: Česká společnost v transformaci. Sociologické nakladatelství, Praha 1996, 364 s.
- MAKARIUS R. (ed.): Hornická ročenka 2003. Český báňský úřad, vydavatelství Montanex, Ostrava 2004, 294 s.
- MAKARIUS R. (ed.): Hornická ročenka 2004. Český báňský úřad, vydavatelství Montanex, Ostrava 2005, 300 s.
- MOLDAN, B. a kol.: Životní prostředí České republiky: Vývoj a stav do konce roku 1989. Academia, Praha 1990, 281 s.
- NEČAS, C.: Romové v České republice včera a dnes. Univerzita Palackého v Olomouci, Olomouc 2002, 129 s.
- PAVLÍK, Z. a kol.: Populační vývoj České republiky 1990–2002. DemoArt, Praha 2002, 98 s.
- QUITT, E.: Klimatické oblasti ČSSR. Studia Geographica 16: 1-79, GgÚ ČSAV, Brno 1971, 73 s.
- REICHMANN, F. (ed.): Horninové prostředí ČR jeho stav a ochrana. Český geologický ústav, Praha 2000, 189 s.
- ŘEHÁK, S.: Aktuální problémy ČR 6. díl Doprava. Schola forum, Ostrava 1997, 25 s.
- SPĚVÁČEK, V. a kol.: Transformace české ekonomiky: politické, ekonomické a sociální aspekty. Linde, Praha 2002, 525 s.

SRHOLEC, M.: Přímé zahraniční investice v České republice. Linde, Praha 2004, 171 s.

STARÝ, J., KAVINA P. (ed.): Surovinové zdroje České republiky. Ministerstvo životního prostředí, Česká geologická služba-Geofond, Praha 2004, 204 s.

SZCZYRBA, Z.: Maloobchod v České republice po roce 1989 – vývoj a trendy se zaměřením na geografickou organizaci. Univerzita Palackého v Olomouci. Olomouc 2005, 145 s.

ŠIŠKOVÁ, T. (ed.): Menšiny a migranti v České republice. Portál, Praha 2001, 188 s.

ŠVEJNAR, J. a kol.: Česká republika a ekonomická transformace ve střední a východní Evropě. Academia, Praha 1997, 359 s.

TOMÁŠEK, M.: Půdy České republiky. Česká geologická služba, Praha 2003, 67 s.

TOUŠEK, V., VANČURA, M.: Aktuální problémy ČR: Díl 1, Průmysl. Scholaforum, Ostrava 1996, 25 s.

VEČERNÍK, J. (ed.): Zpráva o vývoji české společnosti 1989–1998. Academia, Praha 1998, 364 s.

VITURKA, M. a kol.: Regionální vyhodnocení kvality podnikatelského prostředí v České republice. ESF MU, Brno 2003, 141 s.

VLČEK, V. (ed.): Zeměpisný lexikon ČSSR. Vodní toky a nádrže. Academia, Praha 1984, 315 s.

# **SOURCES**

Analýza stavu maloobchodní sítě na území ČR. ČSÚ, Praha 2000.

Cestovní ruch 2000-2005, ČSÚ, Praha 2005,

Cizinci v České republice 2004. ČSÚ, Praha 2005.

Časové řady základních ukazatelů statistiky práce 1948–2003. ČSÚ, Praha 2004.

Česká republika v číslech 2005. ČSÚ, Praha 2005.

Databáze CRR MU v Brně, 2005.

Databáze Českého báňského úřadu a Těžební unie, 2005.

Definitivní údaje o sklizni zemědělských plodin za rok 2004. ČSÚ, Praha 2005.

Demografická příručka 2004. ČSÚ, Praha 2005.

Demografická ročenka krajů České republiky 1991–2003. ČSÚ, Praha 2005.

Hrubá zemědělská produkce za rok 2004. ČSÚ, Praha 2005.

Informace o životním prostředí v ČR (1999–2004). ČSÚ, Praha 2005.

Kapacita hromadných ubytovacích zařízení cestovního ruchu k 31. 12. 2004. ČSÚ, Praha 2005.

Kraje České republiky 2003. ČSÚ, Praha 2004.

Měsíční výkazy zaměstnanosti k 31. 9. 2005. MPSV ČR, Praha 2005.

Náboženské vyznání obyvatelstva. ČSÚ, Praha 2003.

Národnostní složení obyvatelstva. ČSÚ, Praha 2003.

Okresy České republiky za rok 2004. ČSÚ, Praha 2005.

Počet obyvatel v obcích České republiky k 1. 1. 2005. ČSÚ, Praha 2005.

Pohyb obyvatelstva v ČR za rok 2004. ČSÚ, Praha 2005.

Projekce obyvatelstva ČR do roku 2050. ČSÚ, Praha 2003.

Regionální národní účty 2004. ČSÚ, Praha 2005.

Regionální portréty. ČSÚ, Praha 2005.

Seznam zvláště chráněných území ČR. Agentura ochrany přírody a krajiny ČR, Praha 2005.

Souhrnná zpráva 2004, Ministerstvo zemědělství ČR, Praha 2005.

Soupis ploch osevů k 31. 5. 2005. ČSÚ, Praha 2005.

Sčítání lidu, domů a bytů k 1. 3. 2001, dojížďka a vyjížďka. ČSÚ, Olomouc 2004.

Statistická ročenka České republiky 2004. ČSÚ a Scientia Praha 2004.

Statistická ročenka půdního fondu České republiky. Český úřad zeměměřičský a katastrální, Praha 2005.

Statistický lexikon obcí České republiky 2005. ČSÚ a Ministerstvo vnitra ČR, Ottovo nakladatelství, Praha 2005.

Trh práce v ČR za roky 1993-2004. ČSÚ Praha 2005.

Věkové složení obyvatelstva ČR v roce 2004. ČSÚ, Praha 2005.

Vývoj obyvatelstva ČR v roce 2004. ČSÚ, Praha 2005.

Zaměstnanost a nezaměstnanost v České republice podle výsledků výběrového šetření pracovních sil za 4. čtvrtletí 2004. ČSÚ, Praha 2005.

Zemědělství 2004. Ministerstvo zemědělství ČR, Praha 2005.

Zpráva o stavu lesa a lesního hospodářství ČR. Ministerstvo zemědělství ČR, Praha 2004.

### **AUTHORS OF PHOTOGRAPHS**

Cover: Jan Kašpárek (alluvial forest in Poodří)

Vítězslav Válka (Prague astronomical clock)

Werner Braun (Telč)

Imprint: Dušan Gavenda (Petřín outlook tower)

pp. 48-49: Dušand Gavenda (autumn on Velký Kosíř, town square in Nový Jičín)