



DERREG

Developing Europe's Rural Regions
in the Era of Globalization



CASE STUDY CONTEXTUAL REPORT 1



Jihomoravský kraj

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1. Introduction

1.1 Location and Geography

Jihomoravský kraj (South Moravia in English, also previously known as Brněnský kraj), occupies the south-eastern corner of the Czech Republic. It has international borders with Austria and Slovakia, and is closer to Bratislava and Vienna than to the Czech capital, Prague (figure 1). The region has historically formed part of a north-south transit corridor through central Europe and has strong connections not only to Austria and Slovakia, but also to Hungary and Poland. With an area of 7,196 km², the region encompasses fertile lowlands in the south and west, and partly-forested uplands and karst landscapes in the north and east (figure 2). The southern border is partly formed by the Morava and Dyje rivers.



Figure 1: Location of Jihomoravský kraj in the Czech Republic



Figure 2: Jihomoravský kraj showing landscape features and major towns

In 2007, the population of Jihomoravský kraj stood at 1,135,000 people, of whom 367,000 (32%) are permanently resident in Brno, the largest city and regional capital. The region is categorized by Eurostat as 'significantly rural' or 'intermediate rural', with a population density of 157 persons per km², or 110 persons per km² if Brno is excluded. As such, Jihomoravský kraj is the fourth most densely populated of our ten case study regions and is the second-highest quintile for population density for 'intermediate rural' regions in the European Union. Outside Brno, the largest towns are Znojmo (34,375 residents), Hodonín (25,897), Břeclav (24,319), Vyškov (21,901) and Blansko (20,920), which collectively comprise just over a tenth of the region's population, with a further 11.5% of the population living in towns with between 5,000 and 20,000 residents. As such, 45% of the regional population lives in settlements of fewer than 5,000 people.

Jihomoravský kraj has extensive transport connections with neighbouring regions, and achieves a relatively high score of 106,000 on ESPON's accessibility index. It is crossed by two transnational rail corridors, linking Berlin-Prague-Brno-Budapest-Istanbul and Vienna-Břeclav-Ostrava-Warsaw respectively, and whilst Brno Tuřany airport has daily flights to London, Moscow and Prague, with 506,000 passengers in 2008. Major highways connect Brno with Prague (D1/E50/E65), Ostrava (D1/E462) and Bratislava (D2/E65) (figure 3). There are however problems of congestion and poor maintenance on major routes, and transport connections between rural districts are more limited.

| NUTS 1 | NUTS 2 | NUTS 3 | LAU 1 | LAU 2 |
|----------------|----------------------------|--------------------------------------|---|--------------------|
| Czech Republic | Jihovýchod (South-East) | Jihomoravský kraj (South Moravia) | Blansko Břeclav Brno-mesto (city) Brno-venkov Hodonín Vyškov Znojmo | 672 municipalities |

Table 1: Hierarchy of administrative/statistical units for Jihomoravský

The political and economic development of Jihomoravský kraj has been shaped by the legacy of forty-years of Communist government and central economic planning. Since the fall of communism and the formation of the Czech Republic, the economy has been liberalised and democratic regional and local government introduced. The political complexion of Jihomoravský kraj is finely balanced between left-leaning and right-leaning parties. In the 2006 elections to the national Chamber of Deputies, the Social Democrats (ČSSD) won 33% of the vote in the region, closely followed by the centre-right Civic Democratic Party (ODS) with 31%, Communists (KSČM) with 14%, Christian Democrats (KDU-ČSL) with 11% and Greens (SZ) with 6%. The Social Democrats are the largest party in the Jihomoravský kraj regional assembly and have the governor, replacing a previously centre-right dominated assembly with the KDU-ČSL as the largest party in elections in October 2008. The Civic Democrats (ODS) are the largest party on Brno City Council (but without a majority), whilst many councillors in rural municipalities are independents.³

2. The Regional Economy

2.1 Economic History

The economy of Jihomoravský kraj was historically based on agriculture and trade. The region was known as the 'Czech granary' and is the centre of Czech viticulture, whilst its position on north-south and northwest-southeast transit routes supported trade and commerce, especially with neighbouring cities including Prague, Vienna, Bratislava and Krakow. The arrival of railways at a relatively early date in 1839 prompted industrialisation, including textiles and later machinery, mainly centred on Brno but also in some medium-sized towns. More rural districts remained predominantly agricultural in focus.

Socialist government in the post-war period imposed a centrally planned economy that transformed the region's economic base in several ways. The closure of the Austrian border curtailed trade and contributed to the marginalisation of border districts. Industry was prioritised and developed in all towns, based on a model of large specialist factory plants. Accordingly, many towns became dependent on a single industry for employment.

Liberal reforms since 1990 have dramatically restructured the regional economy, with extensive deindustrialisation, agricultural modernisation and the general diversification of the economy. The major beneficiary has been the service sector, which has grown considerably in significance (figure 5). During the last decade, the balance between industrial employment and the service sector has stabilised, but figures for the larger Jihovýchod NUTS2 region (including Jihomoravský kraj and neighbouring Vysočina kraj)

³ www.volby.cz

show a continuing trend of decreasing agricultural employment and a strengthening financial and business services sector (figure 6).⁴

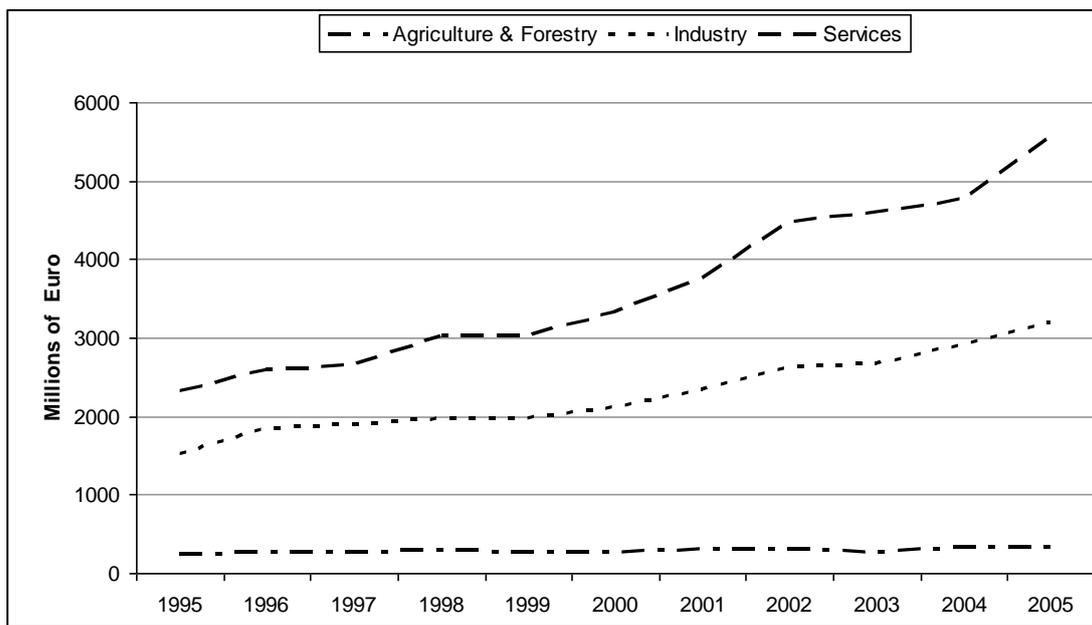


Figure 5: Gross Valued Added (GVA) by sector in Jihomoravský kraj, 1995 – 2005 (Source: Eurostat)

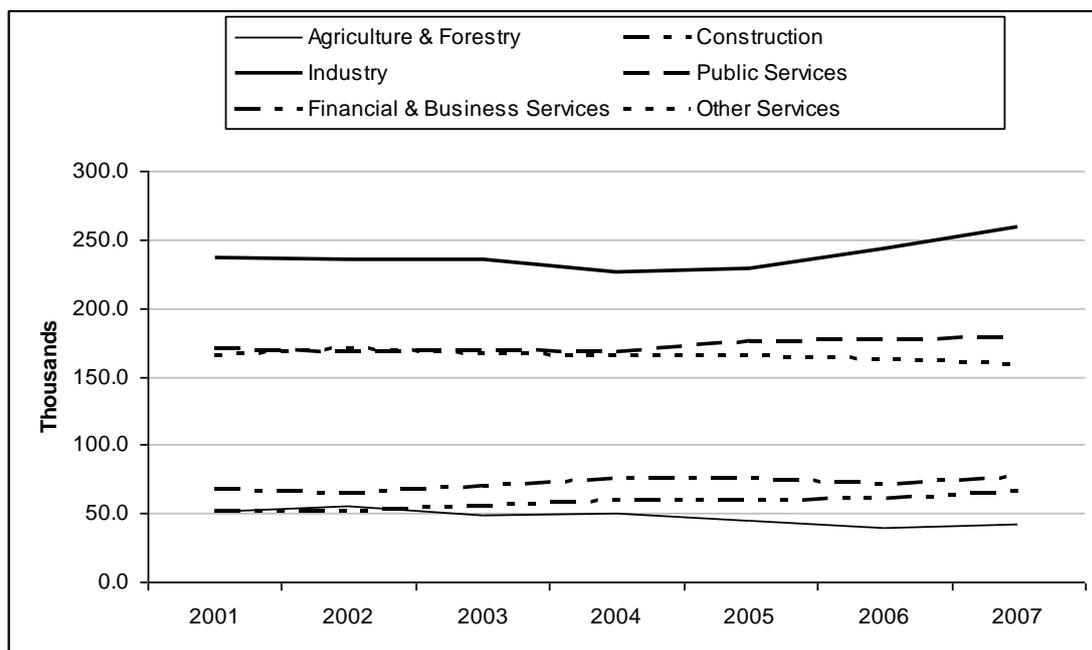


Figure 6: Employment by sector in Jihovýchod NUTS2 region, 2001 – 2007 (Source: Eurostat)

Strong economic growth has increased the GDP per capita in Jihomoravský kraj by a factor of 2.58 from €3,900 in 1995 to €10,100 in 2006 (Figure 7). However, the 2006 figure is only 42.9% of the EU average, and is the second lowest of the DERREG case study

⁴ Eurostat

regions.⁵ Yet, it compares favourably with most regions in the 'Accession States' of Central and Eastern Europe, and Jihomoravský kraj has the third highest regional GDP in the Czech Republic, contributing 10% of the national GDP in 2004.

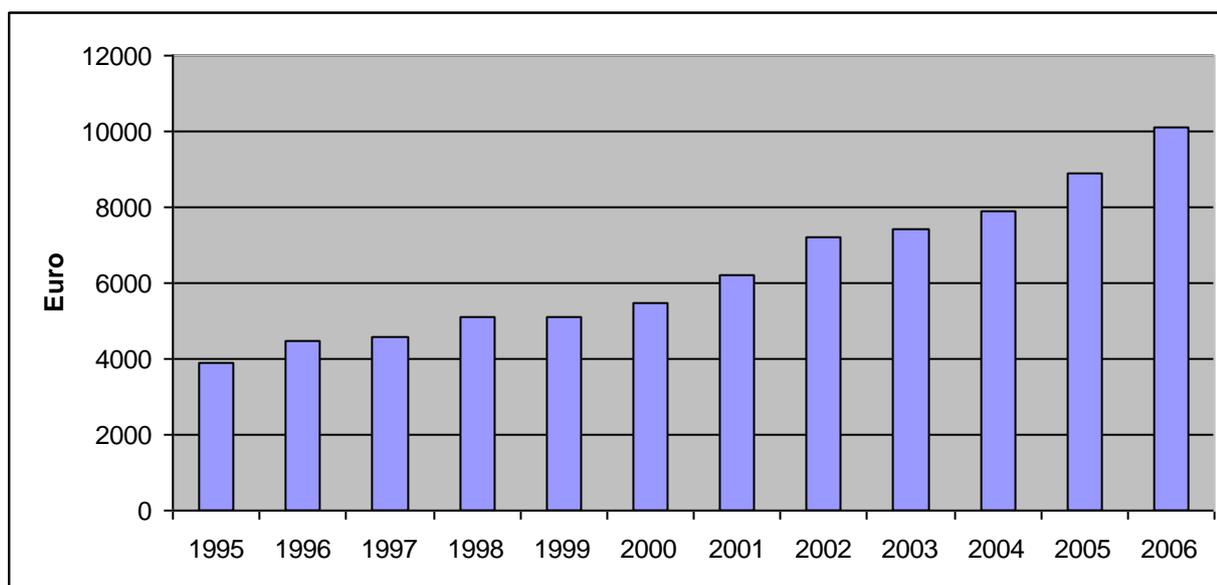


Figure 7: GDP per head in Jihomoravský kraj, 1995 – 2006

Source: Eurostat

2.2 Present Economic and Employment Structure

The service sector is the most important area of activity in the Jihomoravský economy, as measured by employment and contribution to GVA, but there is also a strong industrial sector. Services employed 53% of the working population 2007, compared with 38% working in industry and just 5% in agriculture and forestry. The dominance of the service sector is even more pronounced in terms of GVA, with the sector contributing 61% of regional GVA in 2005, compared with 35% from industry and 3.5% from agriculture.⁶ The level of industrial employment is the highest for any of the ten DERREG case studies, but is lower than for neighbouring 'intermediate rural' regions in the Czech Republic and Slovakia, reflecting the ongoing legacy of communist policies.⁷ Engineering industries are most significant, followed by a declining textile industry. Food processing, chemical and pharmaceuticals, glass making, ceramics and wood processing are also important.

Just over six in ten of the working age population in Jihomoravský kraj are economically active, more than in any of the other DERREG case study regions. Unemployment increased during the 1990s, but was fairly static at around 45,000 people (c. 8% of the economically active population) between 2003 and 2006, but fell sharply in 2007 to 30,600 (5.4%), according to Eurostat. Unemployment is consequently now lower than in six of the other DERREG case study regions, the exceptions being Alytus, Westerkwartier and the West of Ireland. Youth unemployment is also lower in than in most of the other case studies, at 10.9%. However, there are notable geographical variations in unemployment rates, with the lowest rates in Brno and surrounding communes and the highest rates in rural communes in the south-west of the region. Some villages in the Znojmo region had unemployment rates above 25% in October 2009. Levels of economic inactivity are also higher in rural communes than in towns.

⁵ Eurostat

⁶ Eurostat

⁷ EU Rural Development Report 2008

Brno is the largest centre of employment in the region and there is a distinct peri-urban commuting field around the city. Across Jihomoravský kraj, 42% of workers commute to work outside their town or village of residence, but this increases to 73.7% for residents of rural municipalities. The largest employers in the region include public services including hospitals, universities and schools, as well as Czech Railways, Czech Post and regional transport enterprises. These employers tend to be located in Brno or in towns. Nearly a quarter of the working population are employed in skilled manual or craft occupations, a similar proportion in technical occupations, and around a sixth each in professional and managerial occupations, clerical and non-manual occupations and semi- and un-skilled manual work (table 2).

| | Number | % |
|--|----------------|--------------|
| Senior officers and managers | 34,966 | 6.8% |
| Professionals | 55,494 | 10.8% |
| Professional and managerial occupations | | 17.6% |
| Technical and associate professionals | 116,697 | 22.7% |
| Clerks | 26,251 | 5.1% |
| Service and retail workers | 61,261 | 11.9% |
| Clerical and non-manual occupations | | 17.0% |
| Skilled agricultural and fishery workers | 10,497 | 2.0% |
| Craft and related trade workers | 108,528 | 21.1% |
| Skilled manual and craft occupations | | 23.1% |
| Plant and machine operators and assemblers | 51,526 | 10.0% |
| Elementary occupations | 35,480 | 6.9% |
| Semi- and un- skilled manual work | | 16.9% |
| Armed forces | 4,827 | 1.0% |
| Not described | 7,763 | 1.5% |

Table 2: Occupational structure of the Jihomoravský kraj labour market, 2001
(Source: Eurostat)

Private enterprise has flourished in Jihomoravský kraj since economic liberalisation, especially through the growth of self-employment and small and medium sized enterprises (SMEs). There were nearly 270,000 businesses registered in the region in 2007, a 22% increase on 2000. A significant majority of these are sole-trader enterprises with no employees, and there are at least a further 30,000 businesses with fewer than 25 employees. Only around 30 businesses employ more than 1,000 workers. There is some evidence however that the level of self-employment peaked in the early 2000s, and that there has been a modest growth in medium-sized enterprises employing between 20 and 500 workers, reflecting the strengthening of the business sector.⁸

In 2007, business start-ups in Jihomoravský kraj outstripped business closures by a ratio of more than two-to-one, with 11,031 new businesses established against 4,978 closing. Half of all new business registrations were for private entrepreneurs, with just under a quarter being for incorporated companies and partnerships. However, sole-traders also

⁸ Statistická ročenka JMK

accounted for more than two-thirds of business failures in 2007. The greatest sectors of business growth are in wholesale and retail trade, restaurants and hotels, real estate and letting, construction and industry (figure 8).

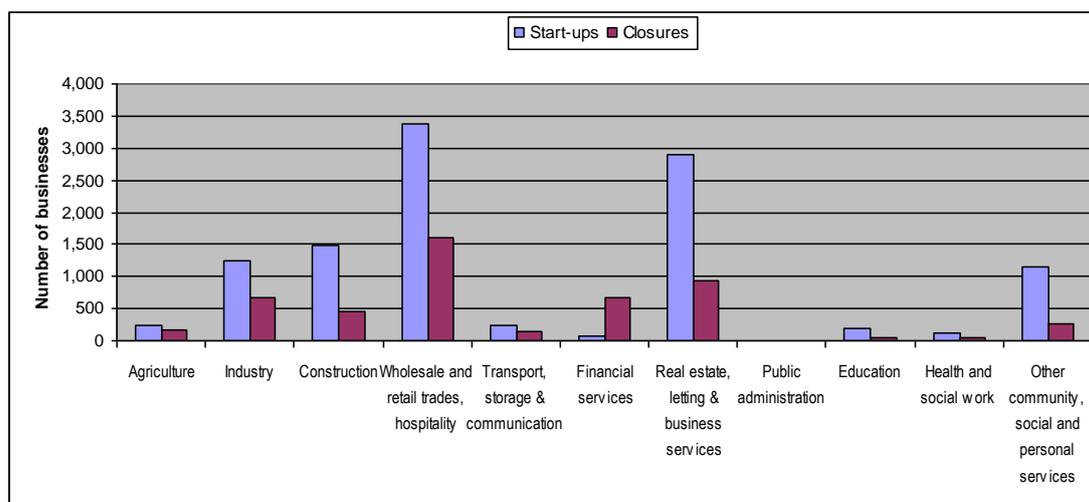


Figure 8: Business start-ups and closures in Jihomoravský kraj by sector, 2007

2.3 Rural Primary Industries

As noted above, the relative significance of agriculture in the regional economy of Jihomoravský kraj has reduced since the early 1990s. Although agricultural GVA has increased marginally, from €241 million in 1995 to €319 million in 2005, its share of regional GVA fell over the same period from 5.9% to 3.5%.⁹ Similarly, although there was a slight increase in the total number of employees in agriculture in 2007, the overall trend during the previous decade has been downwards, from over 25,000 full-time equivalent workers in 2001 to around 20,000 in 2007, comprising less than 5% of total employment in Jihomoravský kraj. The level of employment in agriculture is notably higher, however, in rural districts, especially in Břeclav and Hondonín districts, and can account for up a third of the working population in some villages. Almost a quarter of all agricultural employment in Jihomoravský kraj is in Břeclav district.

Nearly two-thirds of people working in agriculture are employed by a corporation or agricultural entrepreneur, only around a third are own account farmers. In 2005, there were 8,660 farms in Jihomoravský kraj, but the number is decreasing. Small farms predominate, with 79% of farms having land-holdings of less than 5 hectares and only 7% holding more than 50 hectares. The mean farm size of 41.9 hectares is lower than for neighbouring regions in the Czech Republic, but is the third highest of the DERREG case study regions reflecting the considerable size of the few large farms and the legacy of collectivisation.¹⁰ Only 20% of farms in Jihomoravský kraj are owned by individual farmers and 80% of cultivated land is rented. The majority of farms in the region are corporately owned, 36% by joint stock companies, 22% by limited companies and 21% by cooperatives. However, 44% of farms are engaged in semi-subsistence farming, the second highest proportion in the Czech Republic.¹¹ Almost half of all farmers are aged over 55, including a fifth who are aged over 65. Eight in ten farmers are men.¹²

⁹ Eurostat

¹⁰ EU Rural Development Report 2008

¹¹ Ibid.

¹² Eurostat

As such, agriculture in Jihomoravský kraj is polarised, with a large number of very small farms, often engaged at least in part in subsistence farming, but also a small peak of very large corporate farms that account for the majority of farmland, farm employment and agricultural production.

Agricultural land covers 62% of the territory of Jihomoravský kraj, particularly in the south and west, and most of this land is in arable production. The land is generally of high quality, with only 8% classified as 'less favoured areas' – the second lowest of the DERREG case study regions, after Westerkwartier. Jihomoravský kraj has consequently long been an important agricultural region in the Czech Republic, especially for cereal production, fruit growing and viticulture, supported by good climatic conditions and fertile soils.

Jihomoravský kraj is the most important fruit growing region in the Czech Republic, yielding around 40,000 tons per annum of fruit from 4,993 hectares, mostly apples (70% of production), peaches (12%), apricots (7%), sour cherries (6%) and plums (4%). There are nearly 350 enterprises involved in fruit cultivation, with an average planted area of 24 hectares, mainly located in the Břeclav, Hodonín and Znojmo districts. Most fruit is produced for domestic markets, with the majority of soft fruits and cherries bought for further processing. Jihomoravský kraj also dominates Czech wine production, with 90% of Czech vineyards located in the region, especially in Břeclav district. The total area cultivated as vineyards has increased from 14,055 hectares in 1995 to 17,362 hectares in 2007.

Livestock production is much less significant and has experienced mixed fortunes. Poultry production is increasing, but pig farming (mainly centred in Znojmo district), and cattle farming (focused on the Blansko, Brno-venkov and Znojmo districts) are decreasing. There is also some limited farming of sheep, horses and goats. Nearly half of farmers (48%) are involved in other gainful activity outside agriculture, and a majority of farms have on-farm diversification. Just over half of farms are involved in food processing, and 13% have incomes from direct sales of food stuffs and from animal husbandry.

Forests and woodland comprise over a quarter (28%) of the territory of Jihomoravský kraj, mostly in the more mountainous north and east of the region, however forestry is not particularly significant as a economic sector. There is lignite mining from one mine at Mikulčice in Hodonín district, and some extraction of oil from the Vienna Basin oil and natural gas field. Oil extraction in the region supplies 4% of Czech national demand, but makes a relatively small contribution to the regional economy.

2.4 Tourism

Tourism has been identified as a potential growth area for the Jihomoravský kraj economy, emphasising the region's distinctive natural and cultural heritage and the relative proximity of cities such as Prague and Vienna. Figures for the wider Jihovýchod region, including neighbouring Vysočina kraj) indicate that tourist numbers increased by more than 25% between 2000 and 2007, from 1,219,457 to 1,598,815. Domestic tourists account for the majority of visitors, with only 31% of tourists to Jihovýchod in 2007 coming from outside the Czech Republic, marginally up from 29% in 2000 (figure 9).¹³ The development of tourism infrastructure, however, has been uneven. Although the number of hotels in Jihomoravský kraj increased by 21% between 2000 and 2007, the number of other establishments providing accommodation for tourists fell by 13% over the same period,

¹³ Eurostat

and the total number of bed places available in the region fell by 16% between 2000 and 2006.¹⁴

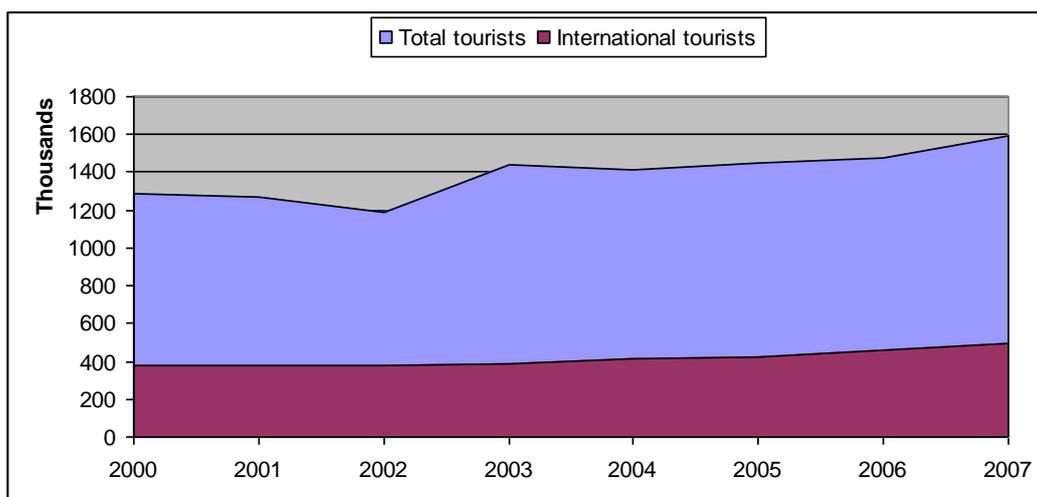


Figure 9: Tourist numbers visiting Jihovýchod NUTS2 region, 2000-2007
(Source: Eurostat)

2.5 International Integration

The international integration of the Jihomoravský kraj economy was constrained during the Communist period, with the emphasis placed on national planning. Industry and agriculture in the region were developed to meet national markets and became disconnected both from localities and from international networks. Since economic liberalisation, the regional economy has both re-established its local character (discussed further in section 4 below) and been integrated into transnational and international economic relations.

The most notable dimension of internationalisation has been foreign direct investment in the region. Between 2002 and 2006, €13 billion (349 billion CZK) was invested in Jihomoravský kraj by foreign investors, of which 62% went to Brno, 17% to the peri-urban Brno-venkov district, and 21% to the remaining rural districts.¹⁵ During the fourth quarter of 2008, 6,085 business licences were awarded to non-Czech nationals in Jihomoravský kraj. However, at 3.1% of all business licences issued, this is below the national average for the Czech Republic, even if Prague is excluded.

Foreign investments have included the purchase of farmland and agricultural enterprises, and the arrival of international retail chains, especially in new retail parks. At the same time, major new retail parks such as Avion and Olympia have been located close to transport intersections and are designed to service a transnational market with custom from Slovakia. Other examples of foreign investment include the Czech Technological Park in Brno, established as a joint venture between Brno City and the British firm P&O, which has attracted transnational corporations including Siemens, IBM, FEI, SGI, Vodafone, Honeywell Controls and Symbol Technologies, and the Central Trade Park at Modřice, developed by a Dutch company, which has also attracted international firms including Andrew Telecommunications, Danaher Motion, Tyco, IFE/Knorr Bremse, and IMI Norgren.

Other opportunities for developing international trade are focused on wine exports and tourism. In addition to rural tourism, Brno is an important convention and trade fair venue,

¹⁴ Eurostat; EU Rural Development Report 2008

¹⁵ Czech National Bank

with the company Trade Fairs Brno (owned by Düsseldorf Messe and the City of Brno) organising 55 trade fairs in 2009 that were attended by 2,130 international exhibitors and 46,000 international visitors.

3. Population and Migration

3.1 Population Development

The population of Jihomoravský kraj has remained essentially stable over the last two decades, with a small decrease of 8,787 people (less than 1%) between 1991 and 2007 (table 3). A natural fall in the population, with the death rate exceeding the birth rate, has been largely off-set by a small net migration gain. Between 1999 and 2008, 95,253 people moved into Jihomoravský kraj, compared with 75,340 who migrated out of the region, resulting in a net gain of just under 20,000 people, or 1.7% on the 1999 population. In-migration has increased significantly over the decade, peaking at 16,883 arrivals in 2007; out-migration has fluctuated over the same period, with peaks of more than 9,000 out-migrants in 2002, 2004 and 2007 (figure 10). Out-migration exceeded in-migration in 2001 and 2002, but there has been a steady accumulation of net in-migration since, mainly due to increased in-migration rather than reduced out-migration.

| 1991 | 1995 | 1999 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1,145,287 | 1,148,800 | 1,144,800 | 1,127,718 | 1,130,200 | 1,129,200 | 1,129,900 | 1,130,300 | 1,131,500 | 1,136,500 |

Table 3: Population of Jihomoravský kraj, 1991-2007
(Source: Eurostat)

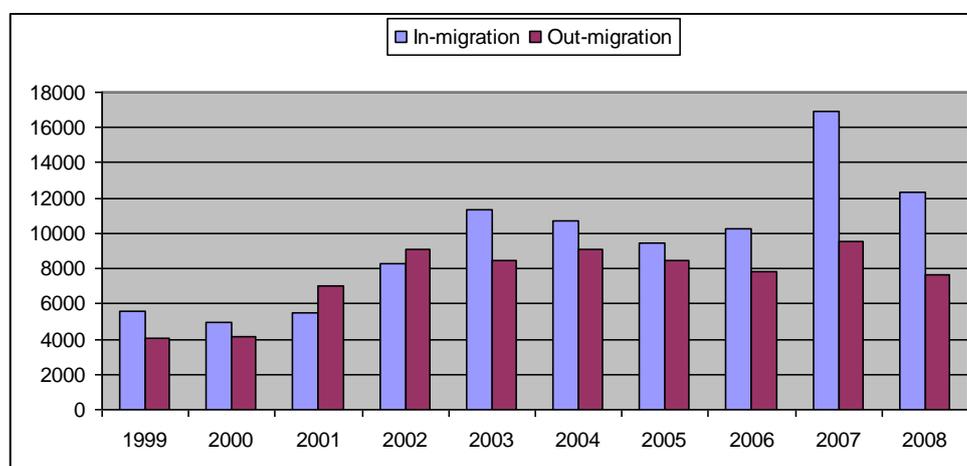


Figure 10: In-migration and out-migration to/from Jihomoravský kraj, 1999-2008
(Source: Eurostat)

Whilst the majority of migration to Jihomoravský kraj is from other parts of the Czech Republic, there is evidence that international migration makes an increasing minority contribution. A third of residents recorded in the 2001 census as having lived outside the region a year previously had come from outside the Czech Republic. The volume of international in-migrants increased from 2,099 in 2001 to 4,835 in 2006. No figures are available for the destination of out-migrants.

3.2 Demographic and Household Characteristics

The median age of residents of Jihomoravský kraj is 33, comparable with many of the other DERREG case study regions. Just over 10% of the region's residents are aged over 70, and 16% are aged under 15 (figure 11), again in line with several of the other case study regions. The proportion of residents aged between 20 and 29 (16.3%) is the highest of the case study regions, and can be explained by the presence of over 84,000 university students in Brno. Outside Brno, the smaller municipalities have a more characteristically rural population profile, with a greater proportion of elderly residents and children relative to the working-age population. In the smallest villages, the number of elderly residents exceeds the number of children. The balance of the male and female populations has remained fairly constant since 1991, with a ratio of 1.05 women to every man in 2007.

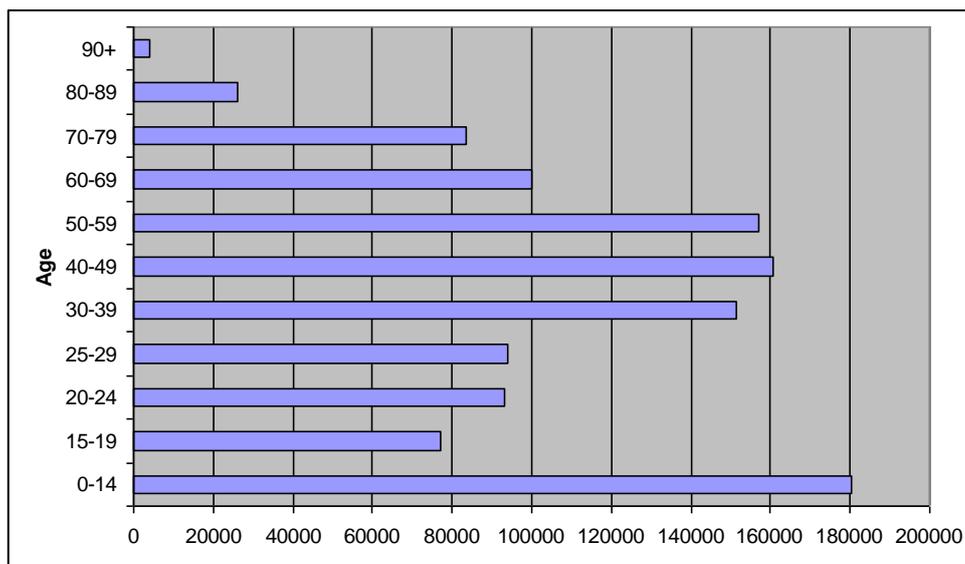


Figure 11: Age structure of Jihomoravský kraj population, 2001
(Source: Eurostat)

Typical household size is lower in Jihomoravský kraj than for most of the other DERREG case study regions, with 11% of the population living in single-person households and only 4% living in households of six or more people. In 2001, there were 16,352 vacant properties in the region (3.8% of all dwellings), and only 113 properties identified as second or seasonal homes. There has been an accelerating increase in property prices in Jihomoravský kraj (as in the Czech Republic as whole) in the last decade, with the average price of apartments increasing by 32.5% in 2007 and the average price of family houses by 14.9% (table 4).

| | 2005 | 2006 | 2007 | 1 st half-year, 2008 |
|---------------|-------|--------|--------|---------------------------------|
| Apartments | +4.4% | +16.3% | +32.5% | +7.4% |
| Family Houses | +3.1% | +7.2% | +14.9% | +7.5% |

Table 4: Year-on-year increases in average property prices, Jihomoravský kraj

3.3 Non-national Residents

Historically, southern Moravia had a mixed population of Czech, German and Jewish peoples, as well as a small Croatian community, reflecting its position on historic transit routes. The cultural heterogeneity was disrupted by the Second World War and by the

policies of the Communist regime, and in the post-war period a more culturally and ethnically homogeneous population was consolidated in the region. Since the opening of international borders in 1990, international migration has resumed, as noted above, but the non-national population remains fairly small. In 2001, there were 41,080 non-Czech nationals recorded as living in Jihomoravský kraj, which at 3.4% of the population is a smaller proportion than for any of the other DERREG case study regions, except Alytus. The largest group of foreign nationals resident in Jihomoravský kraj are from other countries in Central and Eastern Europe, followed by citizens of former Soviet republics. Census data suggests that there were only around 2,000 residents born outside Europe in the region in 2001 (less than 0.5% of the population).

There were just over 5,000 migrant workers from outside the European Union in 2001, plus a further 463 migrant workers from (pre-enlargement) European Union. Just over half of the migrant workers were employed in the service sector, with a further 38% employed in industry. Foreign migrant workers constituted 1% of the employed population.

4. Environment and Sustainable Development

4.1 The Regional Environment

The environment of Jihomoravský kraj is characterised by the transition from the fertile lowlands of the south and west, dominated by agricultural farmland, to the more mountainous country of the north and east, with larger expanses of forest (figure 12). Nearly sixty percent of the region's territory is agricultural land, including 357,000 hectares of arable land, 30,000 hectares of permanent grassland, 17,300 hectares of vineyards and 9,250 hectares of orchards. Forests and woodlands cover 201,000 hectares, or 28% of the total land area, whilst over 14,000 hectares (2%) is built-up land. The distribution of land use has remained fairly consistent over the period since 1991, with a 1% increase in the built-up area more than compensated for by a decrease in the area of industrial land uses.

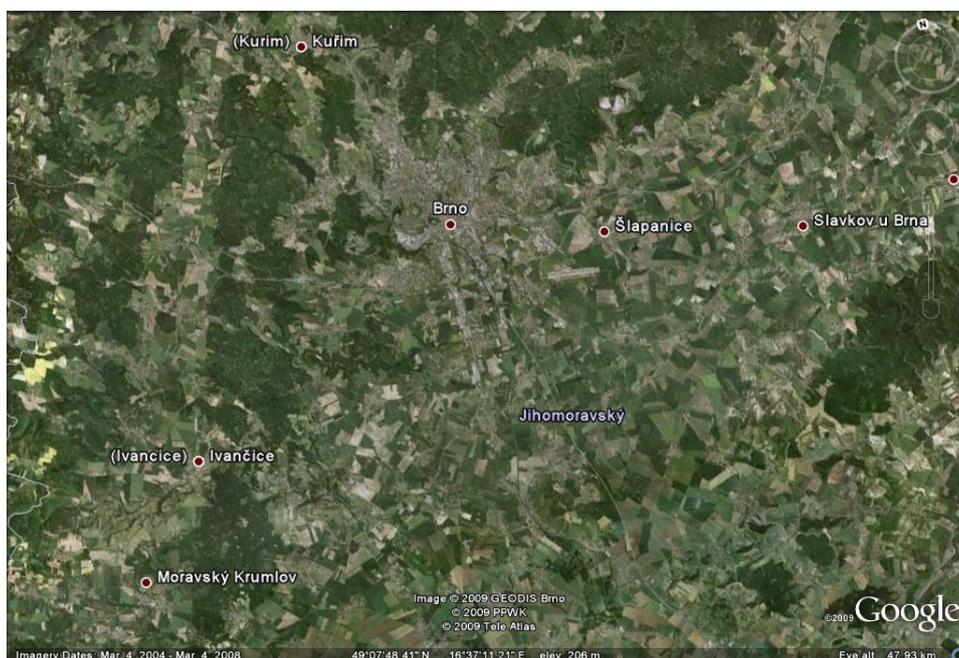


Figure 12: Aerial view of Jihomoravský kraj landscape
(Source: Google Earth)

Most of the region is classified by the European Environment Agency as primarily a composite landscape, combining large areas of non-irrigated arable land, some broad-leaved and coniferous forest, and built-up settlements, with a secondary landscape of broad-pattern intensive agriculture.¹⁶ Water bodies occupy around 2% of the land area, including Dyje, Jevisovka, Morava, Svatka and Svitava rivers, and Nové Mlýny reservoir, which form part of the Danube drainage basin. There are some issues of pollution associated with former industry and intensive agriculture, and atmospheric concentrations of nitrogen oxides, ozone and particulate matter measured at Brno-Turany airport are relatively high in comparison to most of the other DERREG case study areas.

4.2 Protected Areas

Significant areas of the Jihomoravský landscape have been afforded protection by national and international designations reflecting their environment importance. The Podyjí National Park was established in 1991 covering 63km² of primeval forest in the Dyje river valley along the Austrian border (figure 13). The corresponding Thayatal National Park was established on the Austrian side of the border in 2000. The Czech and Austrian authorities cooperate in the management and promotion of the area, signing an agreement on cross-border crossings by tourists hiking in the parks in 2006 and developing the Podyjí-Thayatal Visitor Centre through a partnership utilising INTERREG III funding.¹⁷



Figure 13: The Dyje river valley in the Podyjí National Park

The Pávlav limestone hills in the south of the region were designated as a UNESCO Biosphere Reserve in 1986, and the reserve was extended in 2003 to include the floodplain forests at the confluence of the Morava and Dyje rivers and the landscape of the Lednice-Valtice area, forming the new Lower Moravia Biosphere (Dolní Morava), encompassing 24,200 hectares between Nové Mlýny reservoir and the Austrian and Slovakian borders (figure 14). The area of the Biosphere reserve includes a strictly protected 6,900 hectare core, 9,000 hectares of buffer zone, and 8,834 hectares of transition zone. Around 20,000 people live in the Biosphere area, mainly in the transition

¹⁶ European Environment Agency, CORINE database

¹⁷ Inforegio

zone.¹⁸ As with all UNESCO Biosphere Reserves, the management plan includes objectives for both nature conservation and sustainable development, with a particular focus on sustainable tourism.

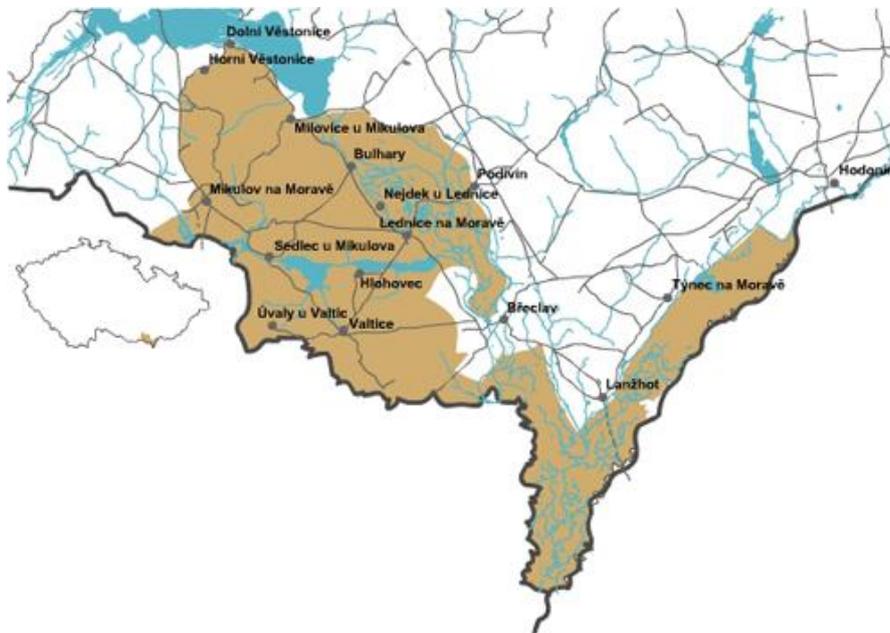


Figure 14: The Lower Moravian UNESCO Biosphere Area

The Lower Moravian Biosphere Area includes the Lednice-Valtice Cultural Landscape, which was separately recognised by UNESCO as a World Heritage Site in 1996. The 283 km² area protects the landscape fashioned by the Dukes of Liechtenstein in the 17th, 18th and 19th centuries, combining Baroque architecture, Neo-Gothic castles and countryside landscaping reflecting a European romantic tradition (figure 15). The Tugendhat Villa in Brno was also designated as a UNESCO World Heritage Site in 2002.

There are additionally eight Natura 2000 Special Protection Areas designated in Jihomoravský kraj, covering a total of 11,725 hectares, and three Ramsar sites including the Lednice fishponds (designated 1990), Lower Dyje floodplain (1993) and the Punkva subterranean stream (2004). The Czech and South Moravian authorities have further designated three Protected Landscape Areas (Moravský kras; Pálava; and Bílé Karpaty) and 282 small protected areas, including 175 sites of European value. The small protected areas include 18 national natural reserves and 13 national natural monuments. The total area of protected landscapes exceeds 50,000 hectares.

4.3 Sustainable Development

Engagement with sustainable development in the Jihomoravský regional development programmes has been uneven. The clearest policies have been developed with respect to renewable energy production, and this sector has grown in response. Small hydro-electric plants have been installed on the Dyje river at Bulhary, Nové Mlýny, Vranov and Znojmo, on the Morava river at Hodonín, and the on the Svratka river at Brno-Kníničky, and together generate 8.5% of the region's power capacity. There are also four wind power plants, generating 1.15% of power capacity, ten small solar panel power plants, and twelve biomass, biogas or landfill gas power plants. Most of these renewable energy plants have

¹⁸ UNESCO

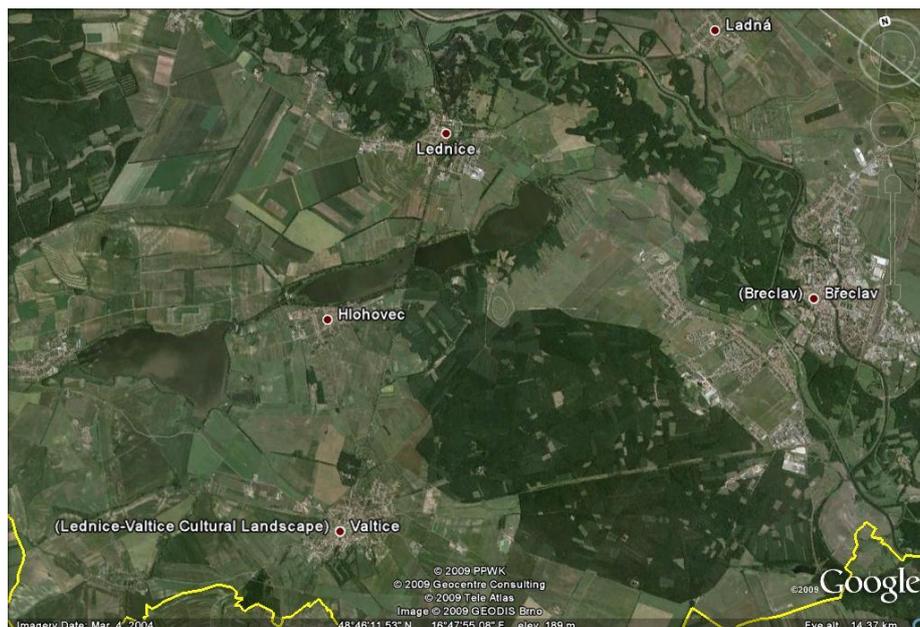


Figure 15: Area covered by the Lednice-Valtice Cultural Landscape UNESCO World Heritage Site

been developed by Czech companies, but there is some investment by transnational corporations including E.ON (Germany) and WEB Windenergie (Austria). There are also two carbon-based power plants in Jihomoravský kraj – a thermal power plant at Hodonín and a natural gas plant at Brno – but most of the region’s energy use is supplied by the Dukovany nuclear power station in Vysočina region.

The development of sustainable agriculture has been less comprehensively addressed in regional strategies and progress has been more limited. There are 130 registered organic farms in the region, representing 1.3% of all farms; but land under organic cultivation constituted only 0.013% of all agricultural land in the larger Jihovýchod NUTS2 region in 2005.¹⁹ There are also a small number of local food marketing and processing initiatives, including the ‘Golden Fruits of South Moravia’ scheme run by the regional government and the ‘Golden Taste of South Moravia’ scheme operated by the regional chamber of agriculture in partnership with local universities.

Ecotourism has also been identified as a potential area for sustainable development, but has not yet made a significant impact.

4.4 Environmental Issues

The significant environmental concerns in Jihomoravský kraj tend to centre around issues of development, waste and pollution. Major issues include the extended suburbanisation of Brno and the development (or lack of development) of brownfield sites abandoned by industry and intensive agriculture; the construction of new roads; the further development of the Nové Mlýny reservoir; and the construction of new wind and solar power plants. Other issues concern the low level of waste recycling and problems of cyanobacterial contamination at Brno dam.

None of these issues have become focal points for international campaigning, but there is an active environmental movement in Jihomoravský kraj. Leading environmental NGOs

¹⁹ EU Rural Development Report 2008

include the Czech Union of Conservationists, Děti Země (Children of the Earth), Hnutí Brontosaurus, Hnutí DUHA (Czech Friends of the Earth), and Rezekvítek (Forget-me-not). There are also a number of specialist environmental research and educational centres and conservation initiatives. The Green party has a small but increasing level of support, especially in Brno.

5. Regional Development and Innovation

5.1 Regional Development Programmes

Regional economic and social development is a shared responsibility between the national, regional local governments. The framework for economic development in Jihomoravský kraj has been provided by the Regional Development Programme, most recently published in 2003 and 2007. The Regional Development Programme sets an overarching strategy across economic sectors, but has been criticised for focusing on economic growth and not sufficiently incorporating environmental and social concerns. The programme can also be critiqued for not sufficiently incorporating civil society groups in policy development or implementation, at variance to the principles of the Cork Declaration on Rural Development in Europe.

Since the accession of the Czech Republic to the European Union in May 2004, Jihomoravský kraj has been in receipt of support from the European Regional Development Fund (ERDF). The whole of Jihomoravský kraj is included in the Jihovýchod Convergence Region for the 2007-13 Structural Funds programme, together with neighbouring Vysočina kraj. The regional operational programme (ROP) for the convergence region is supported by €704.45 million from the ERDF, with €124.31 million in match-funding from Czech national and regional authorities. In addition, Jihomoravský kraj will also benefit from EU Structural Funds delivered through national operational programmes, and transnational programmes with Austria and Slovakia. The total estimated allocation of funding from these programmes to Jihomoravský kraj is outlined in table 5.

Specific initiatives supported by the European Structural Fund programmes in Jihomoravský kraj include:

- South Moravian Regional Grant Programme for start-up entrepreneurs
- Fund for small projects on the Czech-Austrian border
- Cross-border cooperation programme with Slovakia, funding microprojects
- Region Bílé Karpaty microprojects fund
- Jihomoravský kraj Grant Programme for Farming and Forestry – supporting ecological and nature-friendly technologies
- Jihomoravský kraj Environmental Fund – with funding streams for water management, waste management, and flood protection.

The Czech Republic also replicated the EU's LEADER+ scheme prior to accession through its own Czech Leader+ Programme. This programme supported the work of twelve local action groups (MAS), covering two-thirds of municipalities and around a fifth of the population (see table 6 and figure 18).

| Programme | Total allocated funds for 2007-2013 Czech koruna (CKs) | Total allocated funds for 2007-2013 Euro |
|--|---|---|
| Jihovýchod Convergence Region Operational Programme | 10,923,000,000 | 409,200,000 |
| Environment Operational Programme | 11,059,730,000 | 414,317,000 |
| Enterprise and Innovation Operational Programme | 6,840,157,500 | 256,245,000 |
| Education and Competitiveness Operational Programme | 4,074,427,500 | 152,636,000 |
| Integrated Operational Programme | 3,492,252,500 | 130,826,000 |
| Human Sources and Employment Operational Programme | 4,081,605,000 | 152,905,000 |
| Czechia-Austria Cross-border Programme | 155,512,500 | 5,825,500 |
| Czechia-Slovakia Cross-border Programme | 126,802,500 | 4,750,000 |
| Total | 40,753,487,500 | 1,526,700,000 |

Table 5: European Structural Fund allocations for Jihomoravský kraj, 2007-13, by programme

| Group | District | Date Formed | Main objective | Target groups | Population covered |
|--|-------------|-------------|---|---|--------------------|
| 1) Kyjovské Slovácko v pohybu | Hodonín | 2004 | Optimising local cultural & natural resources | Youth Women | 60,035 |
| 2) MAS Boskovicko PLUS | Blansko | 2006 | | Youth Women | 33,880 |
| 3) MAS Dolní Morava | Břeclav | 2004 | Connecting local products to markets | Youth Women Seniors | 43,278 |
| 4) MAS Mikulovsko | Břeclav | | | Youth Women Seniors Unemployed | 20,332 |
| 5) MAS Moravský kras | Blansko | 2006 | | | 41,578 |
| 6) MAS Partnerství venkova | Blansko | 2005 | Optimising local cultural & natural resources | Youth Women Seniors | 17,725 |
| 7) MAS Znojenské vinařství | Znojmo | 2005 | Improving quality of life in pastoral regions | Youth Women | 32,975 |
| 8) MAS Hustopečsko | Břeclav | 2007 | | | 36,262 |
| 9) MAS Společná cesta | Vyškov | 2004 | | Youth Women Seniors | 24,333 |
| 10) OS MAS Za Humnama | Brno-Venkov | 2006 | Optimising local cultural & natural resources | Youth Women Seniors Unemployed | 44,514 |
| 11) Strážnicko MAS | Hodonín | 2005 | Optimising local cultural & natural resources | Youth Women | 16,590 |
| 12) Živé pomezí krumlovsko-Jevišovicko | Znojmo | 2006 | | | 21,380 |

Table 6: Leader Local Action Groups in Jihomoravský kraj

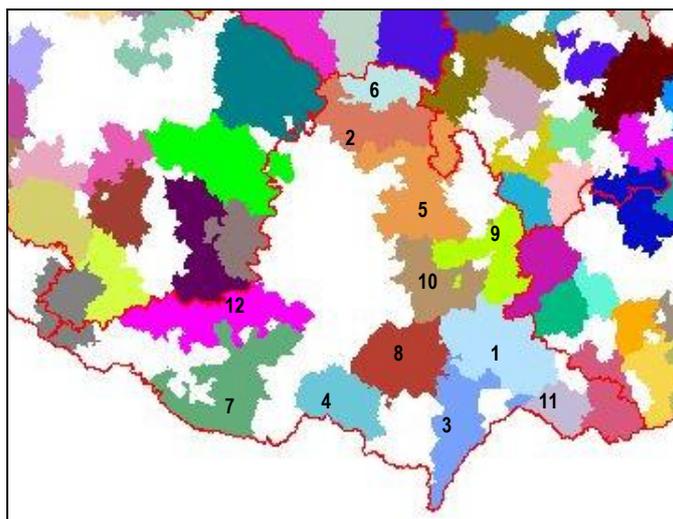


Figure 16: Leader Local Action Groups in Jihomoravský kraj
 (For key see table 6)
 (Source: Czech Leader Programme)

In addition to the LEADER local action groups, there are fourteen voluntary micro-regional associations that cover the majority of the territory of Jihomoravský kraj, as well as national initiatives such as the Association for Rural Reconstruction (Spolek pro obnovu venkova). Jihomoravský kraj is also part of the Euroregion Pomoravi, established in 1999 and connecting municipalities in Jihomoravský with municipalities in the neighbouring Austrian border region of Wienviertel and the Slovakian region of Záhorie (Figure 17). Euroregion Pomoravi aims to strengthen cross-border co-operation in cultural, social, economic and environmental activities and to promote sustainable development. There are 75 municipalities in Jihomoravský kraj that are affiliated to the Euroregion, but as figure 17 shows, many of these are located away from the poorer border districts.

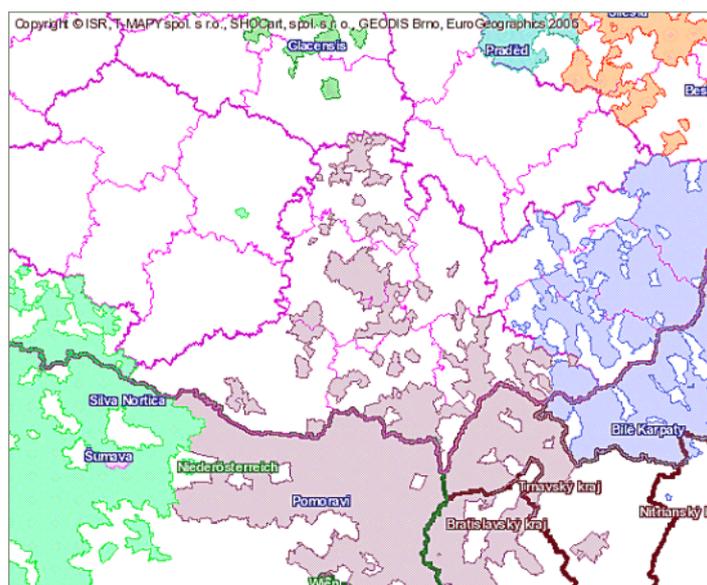


Figure 19: Territory of the Euroregion Pomoravi
 (Source: www.somjm.cz/euroregion-pomoravi.html)

5.2 Regional Skills-base and Infrastructure

Jihomoravský kraj has a relatively strong skills-based and infrastructure for research and development, thanks largely to the position of Brno as a cultural and educational centre. There are eleven universities (6 public or state-controlled, 5 private) in the city, together with eight institutes of the Czech Academy of Sciences and several other research institutes, creating a population of over 80,000 students and several thousand researchers and scientists. The public universities include the Brno University of Technology (founded 1899), Masaryk University (1918), the University of Veterinary and Pharmaceutical Sciences (1918), Mendel University of Agriculture and Forestry (1919) and the Janáček Academy of Musical and Performing Arts (1947). The state-controlled University of Defence, established in 2004, is also located in the region.

The scientific expertise has provided a nucleus for research and development activity and the growth of hi-tech and science-based industry. The Czech Technological Park has been established close to the University of Technology and has attracted hi-tech companies such as IBM and Siemens. A multifunctional medical technology park, the International Centre of Clinical Research, is currently being developed in the area of the St Ann Faculty Hospital and is designed to connect the region into European and American medical research and development projects. The prestigious Mayo Clinic in Rochester, Maryland, is one of the partners investing in the initiative.

However, there is also evidence that the benefits of this technical nucleus are largely restricted to Brno and to a few towns that host individual research institutes or centres. Across the NUTS2 region of Jihovýchod, 5.3% of the workforce were employed in hi-tech industries in 2007. The figure is likely to be higher in Jihomoravský kraj itself, but this level of hi-tech employment is lower than the average across the DERREG case study regions. Similarly, investment in research and development activities in Jihovýchod is at €179 million in 2005 the second lowest for NUTS2 regions containing the DERREG case study regions, whilst employment in research and development activities is a little above average at 1.63% for Jihovýchod as a whole.²⁰

There are also geographical variations within the region in terms of the level of educational attainment of residents. Overall, 16% of the adult population in Jihomoravský kraj have a tertiary qualification, which is a little below average for the DERREG case study regions, and the proportion drops to only 5% in some rural municipalities.²¹ However, figures for the larger region of Jihovýchod suggest that the proportion of adults with 'medium or high educational attainment' is comparatively high at 91.6%, yet the proportion of adults in the Jihovýchod region recorded as participating in education or training is relatively low at 6.3%.²²

The technological infrastructure can also be limited outside Brno and other larger towns, with only 46% of households in the Jihovýchod region having internet access in 2008 (the second lowest of the DERREG case study regions), and only 36% of households having access to broadband (again the second lowest of the DERREG case study regions).

²⁰ Eurostat

²¹ Eurostat; Local data

²² EU Rural Development Report 2008

6. Summative Analysis

The contemporary economic, social and environmental situation of Jihomoravský kraj is characterised by:

- The dominant presence of a single large city that acts as a primate city in the region, as home to a third of the population and as the economic, administrative and cultural centre.
- A gradient of decreasing population density from the urban centre of Brno, through a peri-urban commuter belt to remoter rural districts, which is also a gradient of decreasing socio-economic development and prosperity.
- A relatively strong industrial sector that is the legacy of socialist economic planning, but which is undergoing re-alignment towards hi-tech and science-based activities.
- A polarised agricultural sector in which a small number of large, corporate farms account for the majority of production and GVA, balanced against a large number of small farms, many of which are engaged in pluriactivity and/or semi-subsistence farming.
- A small but developing tourism sector and the modest development of specialist agricultural sectors, particularly viticulture.
- Significant economic growth over the last decade, with business expansion and falling unemployment, but still with comparatively low GDP and household income relative to other European regions.
- International borders and relative proximity to major cities in neighbouring countries.

Several of these features are shared with other DERREG case study regions, but the combination of characteristics is unique to Jihomoravský kraj. In van der Ploeg et al's (2008) typology of European rural regions, Jihomoravský kraj corresponds most closely with the category of 'segmented areas', in which specialised economic sectors have emerged alongside specialised agriculture, and where multifunctional land use, rather than multifunctional enterprises, is the distinctive feature. However, it could also be argued that van der Ploeg et al's typology does not sufficiently take account of the structural legacy of communism in shaping the political-economic character of regions in Central and Eastern Europe, and as such Jihomoravský kraj could be positioned as an example of a further category of 'liberalising post-socialist areas', characterised by strong economic growth, a stable population, relatively high industrial employment and a structure of large, corporately owned farms. From this perspective, Jihomoravský kraj might be aligned with other regions along the western face of Central Europe, including regions in eastern Germany, Poland, Slovakia, Hungary and Slovenia as well as in the rest of the Czech Republic.

The engagement of Jihomoravský kraj with globalisation has been strongly associated with and conditioned by the period of economic and political liberalisation since 1990, particularly the re-opening of closed borders and the legalisation of foreign investment. The experience of globalisation in the region has consequently been largely reactive, rather than proactive, and has most commonly involved connections with neighbouring countries as opposed to integration into more distanced networks. Notable expressions of globalisation evident in Jihomoravský kraj from our initial analysis include:

- Extensive foreign corporate investment, including the purchase of agricultural land and industrial enterprises, penetration of the retail market and investment in research and development and new technological parks.
- The re-establishment of historic transport links with neighbouring countries and cities, and the re-positioning of Jihomoravský kraj as part of important transnational transit corridors.
- The development of cross-border initiatives and partnerships with neighbouring regions in Austria and Slovakia, particularly with respect to economic development and environmental management.
- The designation of large areas of territory in Jihomoravský kraj as landscapes protected by EU or international status, and the associated introduction of international standards of environmental management.

The nature of these global or transnational relations, together with the distinctive socio-economic character of the region, creates both opportunities and vulnerabilities for future regional development. The opportunities are presented by:

- The proximity of Jihomoravský kraj to international borders and to regionally-important centres, including Bratislava, Prague and Vienna, as sites for trade and sources of tourists.
- The scientific and educational infrastructure of Brno and the potential for developing research and development and hi-tech industries with a global reach.
- The renowned natural environment and landscape of the region and the capacity to develop both domestic and international tourism.
- The potential for the commercialised agricultural sector in Jihomoravský kraj to develop niche markets and export opportunities, especially in viticulture.
- The availability of significant support from the European Structural Funds for regional development activities.
- The presence of a strong regional government.
- The continuing competitive advantages of the Czech economy within the European Union.

At the same time, however, our initial analysis suggests that regional development in Jihomoravský kraj is vulnerable to both global and endogenous pressures and challenges in a number of ways. These include:

- The transformation of the industrial sector into a branch plant economy through foreign investment and the consequential vulnerability to distant decision-making and relocation of production to more cost effective regions.
- The loss of competitive advantages such as labour costs as the economy strengthens.

- The large number of small and often elderly farmers, with limited market integration.
- The concentration of investment and economic development in Brno, and the challenge of extending benefits to more peripheral districts, and, associated with this, the potential challenge of growing spatial inequalities within the region.
- The relatively poor infrastructure in more peripheral regions, including limited IT infrastructure and limited infrastructure for tourism.
- The large number of very small rural municipalities with a limited capacity to act, and the incomplete coverage of LEADER local action groups and other cooperative initiatives.

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