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**MEASURING ECONOMIC RESILIENCE
BY LABOUR MARKET TRENDS
IN THE DISTRICTS OF
MORAVIAN-SILESIA REGION**

Introduction

The districts Ostrava-city and Karviná are traditional industrial areas, which belonged to the most prosperous regions until 1989. Then there was the transformation and subsequent restructuring, which led to a decline in industry. This fact completely changed the position of the region, which among other things, had to contend with a massive increase in unemployment. Government support alone wasn't targeted in the right direction, so the local initiatives began to interfere with the development of the region. There began to be supported the creation of industrial zones to attract new investors. The region still faces problems caused by not very happily performed transformation. Problems in the region were deepened by the recent economic crisis, which has again signed to the deterioration in the labor market.

The aim of the article was the comparison of the development of labor market and analysis of resilience to trends in the districts of Ostrava-city and Karviná.

1. Brief description of the situation in the labour market before the crisis in the districts of Ostrava-city and Karviná

Districts of Ostrava-city and Karviná are located in the Moravian-Silesian Region (MSR), which borders with Poland and Slovakia, in the northeastern part of the Czech Republic. They border with districts Frýdek-Místek, Opava and Ostrava-city district in addition with district Nový-Jičín in MSR. They have only an area of approximately 688 km², which represents 12.7% of area of the Moravian-Silesian Region. Districts of Ostrava-city and Karviná are the smallest in MSR, but there is the highest number of inhabitants. Their number was 603 991 inhabitants on the 31.12.2010. It is almost half of the population of the MSR, when district of Ostrava-city still remains with population of 333 579 the center of the Region. Both districts record annual population decline. This is due to declining birth rates and high emigration balance.

Contemporary economic position of districts is strongly influenced by the previous long-term historical development. A turning point in the development of this area occurred due to the finding of coal. Ostrava agglomeration has been as a traditional industrial area with a focus on heavy industry, especially coal mining and metallurgy, the core of the Region since the 19th century. The economic significance of the Ostrava's industrial area was unquestioning for the

whole of Czechoslovakia before 1989; in the national production 86% of black coal (about 24.5 million tons per year), 82.5% of the coke (7.6 million tons per year), 66.8% of pig iron (6.6 million tons per year) and 60.3% of steel production (9.2 million tons per year) accounted for her in the eighties (Sucháček, 2005b, p. 79). Almost all production of black coal of the Czech Republic is concentrated here, although there is a decrease of extracted quantities.

Ostrava industrial region was in the very difficult position at the beginning of the transition period. Extensive restructuring of the economic base began here in the early 90s of the 20th century and whole area gradually began change its face. The new post-communist government sharply reduced subsidies in coal mining and metallurgy. Reducing of demand for production led to a significant reduction in coal mining and industrial production. The companies began lay off redundant labor force. The required number of new jobs wasn't created for the unemployed. This was a long-term structural mismatch between supply and demand in the labor market. The numbers of unemployed have increased and the Region and individual districts began to cope with increasing unemployment rate, which increased until 2004 (Krpová, Stachoňová, 2011).

The intensity of increase in unemployment and the rate of decline in staffing conditions by employers were the most pronounced between years 1997 and 1999 in both districts, when the unemployment was rising sharply and the employment was decreasing significantly. Since 2004, the labour market situation has started to slowly turn for the better, despite the still lingering impact of restructuring. The number of registered job seekers was decreased from 56 699 persons in 2004 to 32 258 people registered at the end of 2008. The positive development in the labour market was halted due to the impact of global crisis and registered unemployment has started to increase since 2008 again (MLSA, 2010).

2. The period of crisis and the labour market in the districts of Ostrava-city and Karviná

2.1. The unemployment

Moravian-Silesian Region has one of the highest unemployment rate in the Czech Republic. The highest unemployment rate was recorded in the Moravian-Silesian Region in 2003, when its value reached 16.8%. Then it began to decrease. Its decline was halted to 8.5% in 2008.

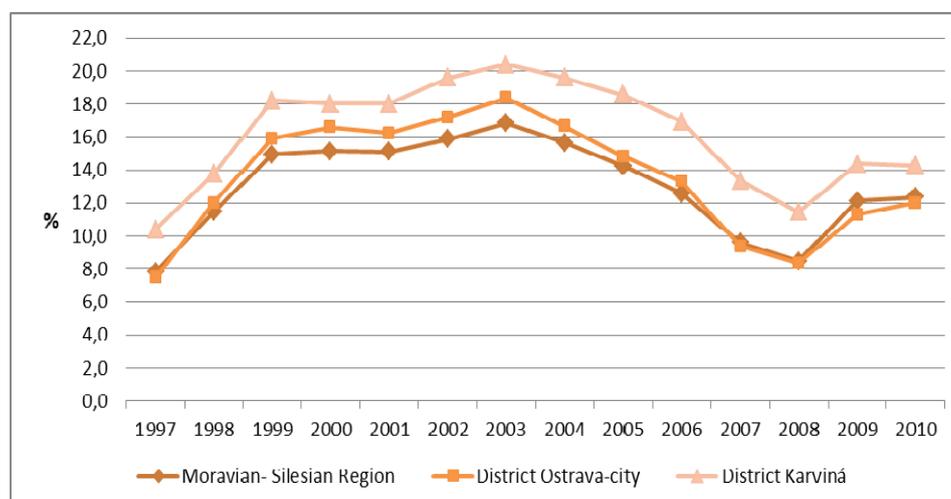


Figure 1. The changes of the registered unemployment rate in MSR and districts of Ostrava-city and Karviná in 1993-2010

Source: (Křpcová, Stachoňová, 2011); based on: portal CSO (2012).

The first signs of the worsening economic situation have begun to show at the end of 2008 and unemployment started to increase gradually. An annual increase rate of unemployment was recorded of 3.6% in the Region in the 2009. At the end of 2010, the Region struggled with 12.4% unemployment rate, which constantly exceeds the national average of 2.8%.

The changes in the labour market in both districts copied the trend of unemployment rate of the Region, but with higher values of the indicators. Both districts registered the highest unemployment rate in 2003 (Ostrava-city 18.4%, Karviná 20.4%) and then the unemployment rate began to decline as well as the values for the Region. After 2008, there was a significant increase in unemployment due to economic crisis and subsequent economic recession. Between 2008 and 2010, its value increased by 3.6% in the Ostrava-city district and by 2.8% in Karviná district. As follows from the graph above, district of Karviná was recording an average of almost 3% higher unemployment rate than district of Ostrava-city in the years 1997-2010.

Table 1

The changes of unemployment rate in the districts and MSR in 2007-2010

Category	31.12.2007	31.12.2008	31.12.2009	31.12.2010
Karviná	13.4	11.5	14.4	14.3
Ostrava-city	9.4	8.4	11.3	12.0
MSR	9.6	8.5	12.1	12.4

Source: (Křpcová, Stachoňová, 2011); based on: portal MLSA (2012).

District of Karviná recorded the second highest unemployment rate in the Region and it was ranked in seventh place between districts in the Czech Republic in the 2010. In the district there is the most pronounced decline in employment in mining and quarrying.

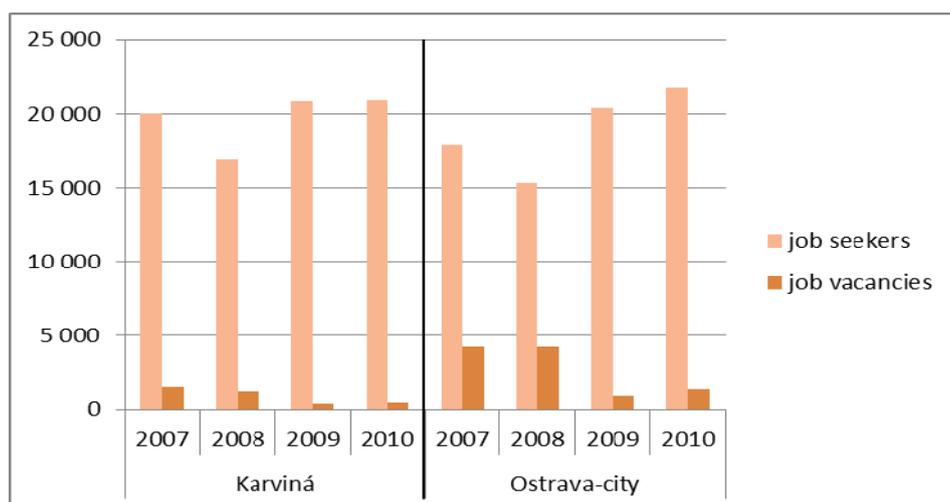


Figure 2. Job seekers and job vacancies in the districts of Ostrava-city and Karviná in 2007-2010
Source: Ibidem.

The labor market in the Moravian-Silesian Region recorded increase in the number of job seekers about 16 960 persons in the years 2007-2010. The district of Ostrava-city recorded the highest increase of job seekers, that is 3879 persons in this period (5038 people between 2008 and 2009). But the highest number of job seekers has long recorded in the district of Karviná. However, there was recorded an increase in this indicator only about 904 people in the years 2007-2010. At the end of 2010 these two districts registered 42 672 job seekers, which is 51.6% of all applicants in the Moravian-Silesian Region (82 776 people). The greatest share of job seekers in terms of age structure was formed by persons aged 50-54 years in the period 2007-2010. According to the educational structure ran for a job the most people having completed secondary vocational education without graduation and then people with basic education in the mentioned period.

There is an insufficient number of job vacancies due to the number of job seekers. The lowest number of job vacancies 386 in district of Karvina (i.e. 53.9 job seekers/one vacancy) and 889 in the district of Ostrava-city (i.e. 22.9 job seekers/one vacancy) was recorded during the period on 31.12.2009. Ostrava-city district recorded the greatest reduction of offered job vacancies (about 3383)

within the Region between 2008 and 2009. Although the district still offers the greatest number of job vacancies within the Region. In the next year, there was an increase of the number of job vacancies in both districts, but also an increase of job seekers. According to the breakdown of employed, the most job vacancies belonged in the class “Craftsmen and qualified producers and related trades workers” and the least in class, “Skilled workers in agriculture and forestry (including related fields)” in the period 2007-2010. The long-term unemployment is still very serious and persistent problem in the labour market in the district of Ostrava-city and district of Karvina. The districts show the highest long-term value within the Region.

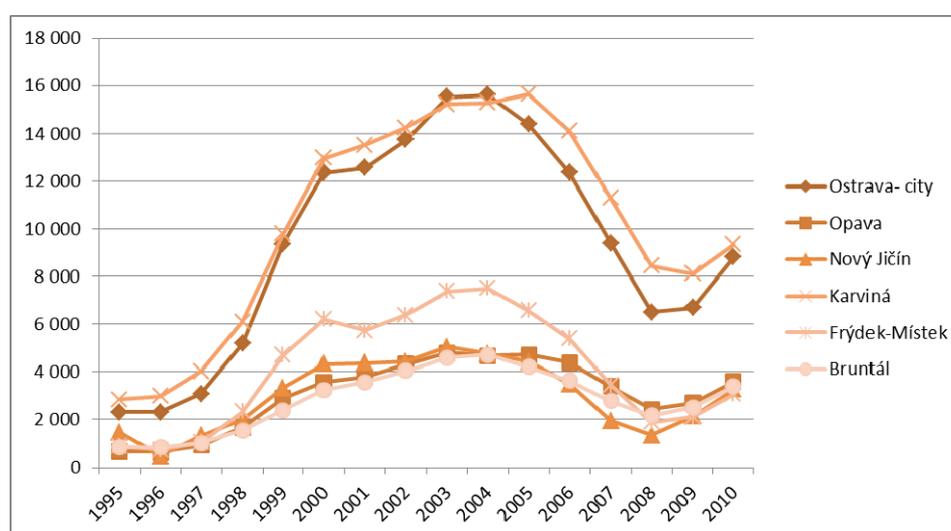


Figure 3. The changes of long-term unemployed people in the districts of MSR to 31.12.
Source: Ibidem.

There was a growth of this indicator from about the mid 90s of the 20th century until 2004-2005, when it reached the highest values. Subsequently, there was a decrease in the number of registered job seekers unemployed for more than 12 months due to positive economic development and the coming of investors who have contributed to the creation of new jobs. After 2008 there was again the worsening of the situation due to the economic crisis. In late 2010, there was recorded 63% from the total number 31 478 of long-term unemployed persons in the Region in these two districts (8813 in the district of Ostrava-City and 9334 in district of Karviná).

3. Impact of the world economic crisis on the labour market in the Ostrava-city and Karviná districts

The global economic crisis hit the Czech Republic in the second half of 2008. The first indications of the crisis in the Czech Republic exerted slightly, at first it influenced glass and automotive industry. Next it began to spread to all remaining sectors of industry.

3.1. Ostrava district

The employment rate in Ostrava district was positive in 2007. There were monitored the number of companies with more than 26 employees. In year 2007 increased this number by 91 companies. Annual employment growth was 1051 persons in companies operates in real estate and lease branch. Employment in automotive industry increased by 1050 persons. On the other hand, food industry, tobacco industry and mining had decreased rate of employment. Also year 2008 brought 14 new companies with more than 26 employees in Ostrava district. Manufacturing and transportation companies were most growing. Automotive industry increased by 1548 persons. However, textile industry had decreased number of employees. Year 2009 was affected by consequences global economic crisis. In year 2009 decreased the total number mostly in wholesale and retail, repair of motor vehicles and construction. The number of employers increased in information and communication branches. The decrease of 2 732 persons was mostly share of companies from manufacture of basic metals, fabricated metal production and foundry. The decrease was monitored also in transportation industry (791 persons) and construction (643 persons).

Manufacture was most contributing industry to decrease the number of monitored companies in 2010. The annual decrease was caused mostly by companies operating in wholesale and retail, repair of motor vehicles, construction, transportation and storage. The biggest number of new unemployed registered to Labour Office in January and September. The employment increase has been only in companies from manufacture of basic metals, fabricated metal production and foundry, production of metal constructions and metalworking products.

3.2. Karviná district

The trend of gradual decrease of employment by employers is long-term in Karviná district, because it started in 1997 already. The most impactful to this change were coal mines. The mines were denationalized, then restructured and other organizational changes happened.

In 2007, the biggest employment decrease was registered in mining industry; it was decreased by 12.2%. Annually, employment decreased by 1425 persons in mining plants. The most significant was the fall in attenuator plant Dukla in Havířov.

In 2008 was again most decreasing branch the mining with 465 persons less. Mostly the share of dropping employment was in mining plants. Some of OKD, a.s. suppliers had decreasing tendency in employment as well. The employment in machinery industry was reduced by 26.1% during year 2008. It was caused by changes of mining plants under other subjects.

Year 2009 is connected with most significant fall of employment in metallurgical and steel industry. The employment decreased by 17.7%, concretely 1156 persons. The reason of this fall was global economic recession, which caused cut of demand in the market not only in domestic market, but also in foreign customers. Some companies reduced their production due to this reason. This reduction caused the fall of employment. The transportation and warehousing branch had decreased of employment by 13.9%, because there were drop of goods transportation on railways and there were organizational changes in road transport. Mining industry decreased by 4.7%. It was caused by drop of orders and transfers of surface employees. Construction industry lost 580 employees, mostly caused by influence of global economic crisis. Two companies had to stop their business and another company moved its production to Ostrava in the first half of 2009.

The transportation and warehousing branch decreased employment in 2010 by 476 persons, because rail transport companies decided to drop the employment for economic reasons. In mining industry decreased employment by 377 persons (3.1%). This change was caused mostly by Government Regulation 363/2009, where employees were able to go to retirement 5 years earlier.

4. Resilience to trends in the labour market in the districts of Ostrava-city and Karviná

The transformation of this industrial area was not properly grasped. After 1990 there was a centralization of public administration. Regional and local issues were not given sufficient attention. The development of new activities in the region was based primarily on the initiative of local actors.

The emergence of informal civic association called The Economic and Social Council of the Ostrava agglomeration played the crucial role in the development of the region and of the Moravian-Silesian Region. This association acted as a representative of the interests of regional institutions. The first activi-

ties of this association consisted in research studies that outlined the future developmental possibilities of the region. On the basis of this studies the Council submitted action proposals to the government, which were accepted and reflected in the Government Decree No. 245 of 1991, Measures for the Restoration and Development of the Ostrava agglomeration for 1991-1992 with an outlook until 1995. The government provided CSK 200 million for the small enterprise development and the creation of new jobs in 1991 and 1992. At the beginning of 1995, Economic and Social Council of Ostrava agglomeration was transformed into the Union for the Development of Northern Moravia and Silesia that strived mainly for deeper co-ordination of its own activities with Regional Entrepreneurial Fund and Regional Development Agency. Union for the Development of Northern Moravia and Silesia and its ancestors contributed among others to the establishment of the first duty-free zone in the country, further to the creation of regional bank (that bankrupted recently, however) as well as to the modernization of the railway corridor that facilitates the connection with the other regions (Sucháček, 2005a, pp. 9-13).

In the second half of the 90s of the 20th century several smaller industrial zones have been established with the support of the Ministry of Industry and Trade in the Region. The newly planned industrial zones have been one of the main tools for reducing unemployment. Unfortunately, these primarily based industrial zones have not attracted any major investor so far. This unfavourable situation was caused mainly by the less advantageous investment incentives in comparison with neighboring Poland (and Katowice conurbation) – (Sucháček, 2005a, p. 13).

The first industrial zone in Ostrava agglomeration was Karviná-Nové Pole, which was financed by the first state grant. The industrial zone was prepared and implemented in 1998-2000. In the Czech Republic, this project placed the first in the category Industrial Zone with the greatest social benefit in the years 2000, 2001 and 2002. Zone has been gradually filling the investors and is currently fully occupied by 10 companies on 45 hectares area, which have created almost 1500 jobs. The most workers are from Karviná district, 75% people are from Karviná and about 15% are from Orlová. Others industrial zones that contribute to reducing unemployment in the district are Orlovská industrial and business zone and Český Tešín-Pod Zelenou. While the first of them still offers investors the free areas, about 700 people already found a job in a fully occupied industrial zone in the Český Tešín.

In the Ostrava-city district found several industrial areas such as industrial zones Mošnov, Hrabová, development zone Hrušov and Science and Technology Park Ostrava. Mošnov Industrial Zone is situated on 200 hectares and was

created in 2000. Today it is fully equipped industrial zone. The first investors namely Behr and Plakor Cromodora Wheels appeared in the industrial zone in 2006. Investors invested more than 1.03 billion crowns in the zone in 2009. In the future, is expected to increase by 1300 new jobs.

Implementation of Industrial zones Hrabová took place 2000-2007. CTP expanded the original intention to create an industrial area of 30+ 30 hectares by a further 50 hectares. The total investment was above 7.7 billion crowns in the zone in December 2011 and was created 6955 new jobs. Today is in the industrial zone located of over 40 companies. In 2004, 2005, 2007 and 2009 was the zone awarded in the competition for industrial real estate of the year by the Ministry of Industry and Trade.

Three local universities namely VSB-Technical University Ostrava, Ostrava University and the Silesian University in Opava, in cooperation with the City of Ostrava and the Agency for Regional Development became the founder of Science and Technology Park Ostrava, which serves also as an incubator for new businesses. Area of the complex amounted to 10 hectares at the end of 2011. Project of Science and Technology Park Ostrava is implemented in stages in order to build the area for commercially oriented scientific and technological research, industrial acquire of research results, product innovation and business development.

The arrival of South Korean investor to Nošovice industrial zone had an affect the reduce unemployment in the region in times of economic crisis. About 2400 people living in the Region commute to work in Hyundai. Karviná district has the largest share of employment in Hyundai and Ostrava-city district moves to third place.

In the year 2012-2014 is expected with the project “Gravity drainage Hrušov” that creates an industrial area in size of 40 hectares, especially for small and medium enterprises. The project will increase the field by about 3.5 meters and total investment will amount to 2 billion crowns. This will provide an industrial area with good transport links along the D1 motorway and railway line to the inland, in the direction of Poland and Slovakia.

In recent years, interest of investor comes alive about the Moravian-Silesian region. Companies are returning to the projects, whose implementation has slowed considerably emerging economic crisis. Investors are attracted by the Moravian-Silesian region which is equipped with a sufficient number of industrial zones, high-quality infrastructure, strategic location, skilled workforce and good quality secondary and higher education. This fact is confirmed by the 75% occupancy of industrial zones.

Due to the number of industrial zones, the focus of investors and other factors Ostrava-city district offers a more diverse and wider range of job oppor-

tunities, unlike Karvina district that does not diverse range of jobs due to unilateral economic focus.

Labour offices contributing to improve the situation in the labour market in the districts. One of the tools is an active employment policy, whose main purpose is to regulate the labor market so that it can be able most effectively respond to fluctuations in the economy.

Table 2

Expenditure on Passive and Active Employment Policy in Ostrava-city and Karviná districts 2007-2010

Years	Ostrava-city district Index (in thousands of crowns)			Karviná district Index (in thousands of crowns)		
	Expenditure on total employment policy	Passive employment policy	Active employment policy	Expenditure on total employment policy	Passive employment policy	Active employment policy
2007	723 068	247 500	418 286	367 195	224 943	119 223
2008	527 939	220 765	232 145	313 704	196 422	88 594
2009	668 744	462 534	134 282	521 746	370 069	99 999
2010	754 563	411 314	226 745	506 146	315 565	133 252

Source: Calculated by Stachoňová. Based on: Portal Ministry of Labour and Social Affairs (2012).

As we can see in the table, most resources, totally 754 563 thousands crowns, was used for the state employment policy in Ostrava district in 2010. In 2009, was totally used 462 534 thousands crowns for passive employment policy, the most of all years. While in 2007 was the most spent on active employment policy 418 286 thousands crowns. Most resources, totally 521 746 thousand crowns, was used for the state employment policy in Karviná district in 2009. In 2009, was totally used 370 069 thousands crowns for passive employment policy, the most of all years. While in 2010 was the most spent on active employment policy 133 252 thousands crowns. We observe an increase of funds passive employment policy in a period of economic crisis.

Most means of active employment policy is targeted at socially useful jobs, public works and retraining in the districts of Ostrava and Karviná. These tools are considered appropriate having regard to the demand for jobs in the labor market.

Professional structure of socially useful jobs is not very different each year in the districts. The largest number of socially useful jobs is constantly created in services, in business, production and craft activities. Karviná district has a high success rate of the instrument because of low return people back to the records.

Retraining targeted to a specific job seems to be most effective in Karviná district. The greatest demand is for computing courses, welding and specialty drivers. Retraining courses have a substantial impact on the quality of human potential and their success reaches 30%. In the Ostrava-city district are the most used retraining courses such as welding, computer courses, operation of motor trucks and courses to prepare for the self-employment. 90.5% of retraining courses were successfully completed in 2010.

Instruments of public works are the most costly in terms of average cost. Public works have only short-term, often seasonal in character and therefore the return of persons to register is very high. Nevertheless in the district of Ostrava-city emerges as a powerful tool and it focuses primarily on low-skilled and people registered long-term at the employment office. These include auxiliary and cleaning works, but also charitable activities and the labour in social spheres.

Creating employment through the above-mentioned instruments of active employment policy is depending on the current economic situation, which affects the development of the labour market. But we must take into account that funds of active employment policy aren't always effectively targeted to individual instruments.

Conclusions

The districts of Ostrava-city and Karviná have constantly faced specific problems caused by changes that have taken place here since 1989. Not very well grasped transformation process is negatively reflected in economic, social, and institutional environment. As a result of restructuring there occurred a decline in industry production and then to massive layoffs in half of nineties. There was an imbalance between supply of jobs and demand for labor. The growing unemployment rate reached the highest values in 2003. In the next years, the situation much has changed and there were the positive changes in the labor market when there was a decline in the unemployment rate. This situation lasted only until October 2008, when the economic crisis deepened the difficult situation in the region. The big companies that operate in sectors with the greatest attenuation were forced into layoffs of employees. It was reflected to the increase in the unemployment rate and to the number of job seekers. At the same time the number of offered vacancies was reduced.

The coming of investors into the industrial zones helps to reduce the number of unemployed persons in the districts. They create new job vacancies. Total six industrial zones were already created in the districts. An important instrument for promoting employment is an active employment policy, which affects

the labour market situation and provides permanent jobs. The most funds were provided on active employment policy in the Ostrava-city district in 2007 and in Karviná district in 2010. The most effective tools, given the demand for jobs in the labor market, are socially useful jobs, public works and retraining in both the districts.

Although the districts faced the same problems in the past, the subsequent development of employment had a different course. It turned out that the district of Ostrava-city could respond on the incoming changes more flexibly. The result is a diverse and greater offer of job opportunities. Because of economic mono-structure, district of Karviná doesn't offer such a diverse range of job. Therefore, the district of Ostrava-city became one of the main centers of commuting from neighboring districts.

In late 2010, the labor market situation partly improved in the districts. Nevertheless, barriers of the development remain there, such as industrial mono-structure, lack of innovative milieu, rigid institutions, or limited social and environmental attractiveness. Further development of indicators in the labour market is unclear. It will depend on the activities of public administration and on the state of the economy due to orientation of most companies to export.

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