

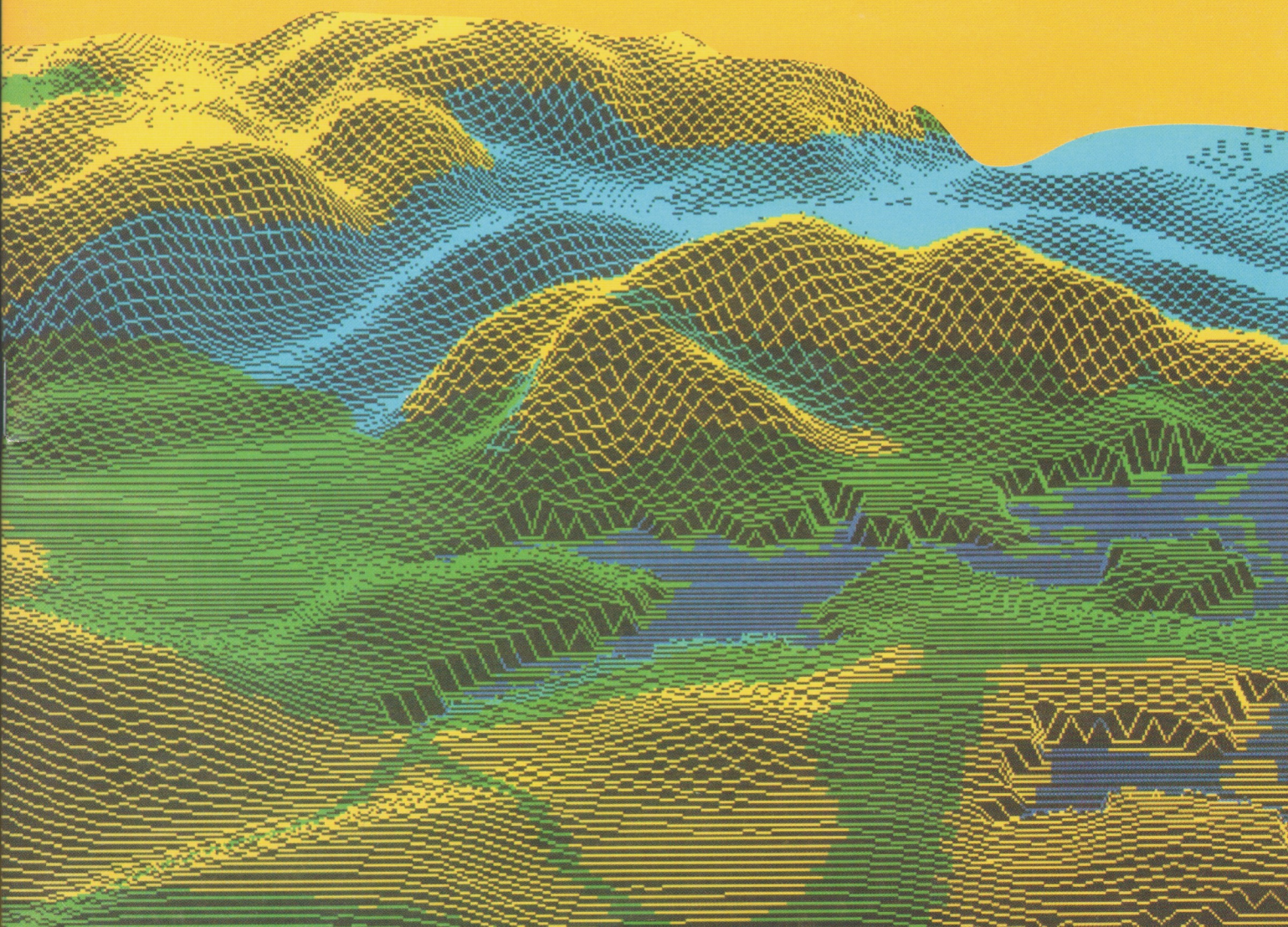
# MORAVIAN GEOGRAPHICAL REPORTS



VOLUME 4

NUMBER 2 1996

ISSN 1210 - 8812





# MORAVIAN GEOGRAPHICAL REPORTS

## EDITORIAL BOARD

Antonín IVAN, Institute of Geonics Brno  
 Jaromír KARÁSEK, Masaryk University Brno  
 Petr MARTINEC, Institute of Geonics Ostrava  
 Alois MATOUŠEK, Masaryk University Brno  
 Oldřich MIKULÍK, Institute of Geonics Brno  
 Jan MUNZAR (editor-in chief), Institute of Geonics Brno  
 Vítězslav NOVÁČEK, Institute of Geonics Brno  
 Antonín VAISHAR, Institute of Geonics Brno  
 Arnošt WAHLA, University of Ostrava

## EDITORIAL STAFF

Andrea PETROVÁ, executive editor  
 Martina Z. SVOBODOVÁ, linguistic editor

## PRICE

75 CZK  
 mailing costs are invoiced separately  
 subscription (two numbers per year)  
 145 CZK  
 including mailing costs

## MAILING ADDRESS

MGR, Institute of Geonics, ASCR  
 P.O.Box 23, CZ-613 00 Brno,  
 Czech Republic  
 (fax) 42 5 578031  
 (E-mail) ugn@isibrno.cz

## PRINT

PC - DIR, Ltd., Brno, Technická 2

© INSTITUTE OF GEONICS 1996  
 ISSN 1210-8812

## Contents

### Articles

Jaromír DEMEK - Jiří KOPECKÝ Sn.

- SLOPE FAILURES IN METAMORPHIC  
 BASEMENT ROCKS OF THE DYJE RIVER  
 VALLEY, PODYJÍ NATIONAL PARK,  
 CZECH REPUBLIC . . . . . 2**  
 (Poruchy svahů ve skalních horninách údolí řeky Dyje v Národním parku  
 Podýjí, Česká republika)

Ján LACIKA

- ANTHROPOGENIC TRANSFORMATION OF  
 RELIEF IN THE GABČÍKOVO WATERWORK  
 AREA (SW SLOVAKIA) . . . . . 12**  
 (Antropogenní transformace reliéfu v oblasti vodního díla Gabčíkovo na  
 jihovýchodním Slovensku.)

Hana HORSKÁ - Oldřich MIKULÍK - Antonín VAISHAR - Jana ZAPLETALOVÁ

- PERCEPTION OF THE DUKOVANY NUCLEAR  
 POWER PLANT (CZECH REPUBLIC)  
 BY LOCAL POPULATION . . . . . 19**  
 (Percepce jaderné elektrárny Dukovany místním obyvatelstvem.)

Petr CHALUPA

- ON THE LOW RATE OF UNEMPLOYMENT  
 AND ITS CONSEQUENCES  
 IN THE CZECH REPUBLIC . . . . . 35**  
 (O nízké míře nezaměstnanosti a jejích důsledcích v České republice.)

### Reports

Antonín VAISHAR

- SALZBURG CONGRESS ON URBAN PLANNING  
 AND DEVELOPMENT . . . . . 40**  
 (Salzburg Congress on Urban Planning and Development)

Antonín VAISHAR

- THE 28th INTERNATIONAL GEOGRAPHICAL  
 CONGRESS THE HAGUE 1996 . . . . . 43**  
 (28. Mezinárodní geografický kongres - Haag 1996)

Wolfgang FISCHER - Pavlína HLAVINKOVÁ

- THE REGISTRATION OF AREAS OF SUSPECTED  
 CONTAMINATION REGARDING DUMPS  
 IN THE BRNO CONURBATION . . . . . 45**  
 (Registrace možných uložišť pevného odpadu v zázemí města Brna)

Vítězslav NOVÁČEK

- THE XVIIIth ISPRS CONGRESS:  
 MEETING OF EXPERTS IN  
 PHOTOGRAMMETRY AND REMOTE SENSING . . . 50**  
 (XVIII. kongres ISPRS - Setkání odborníků v oblasti fotogrammetrie  
 a dálkového průzkumu Země)

# ON THE LOW RATE OF UNEMPLOYMENT AND ITS CONSEQUENCES IN THE CZECH REPUBLIC

Petr CHALUPA

## Abstract

*The development of unemployment in the Czech Republic is completely different from that in the other countries of the former Eastern bloc. It also differs from trends in the highly developed West European economies; their transition to the post-industrial society is accompanied by rather high rates of unemployment. The atypical features of the Czech labour market are reflected in the present state of the national economy.*

## Shrnutí

*O nízké míře nezaměstnanosti a jejích důsledcích v České republice.*

*Vývoj nezaměstnanosti v České republice je zcela odlišný od vývoje nezaměstnanosti v ostatních zemích bývalého východního bloku. Je rovněž rozdílný od trendů velmi vyspělých západoevropských ekonomik, jejichž přechod do postindustriální společnosti je spojen s vyšší mírou nezaměstnanosti. Netypické jevy českého trhu práce se odrážejí v současném stavu národního hospodářství.*

Key words: unemployment, economics background, consequences, Czech republic

## 1. Unemployment: a problem of the 1990's

The predictions made by the International Labour Organisation (ILO) for the development of unemployment between 1990 and 1995 have not proved applicable in the Czech Republic. In the 1980's, the rate of unemployment in the EU countries was approximately 10%. In the early 1990's, it increased to 11%, peaking in 1994. After the first six months of 1995, the unemployment rate averaged at 10.6%. At that time, the smallest proportion of people without any job lived in Luxembourg (3.8%) and the Netherlands (6.7%). The highest rates of unemployment were reached in Spain (22.2%) and Finland (17.1%). Consideration of demographic development indicates that the unemployment rate can reasonably be expected to decrease to 7.5% by the year 2000 if the yearly rate of economic growth in the European Union is 3-3.5%.

At the Third Conference of the European Commission, which was organised as part of the „Week of Employment” at the European Parliament in Brussels in early November 1995, unemployment was discussed as the main economic problem in Europe.

In comparison with the unemployment rates of 10-15% in Poland, Slovenia, Slovakia and Hungary in 1990-1995, the average rate of unemployment in the Czech Republic is low (less than 4%). The Czech trend is completely different from trends typical of other East European countries of similar economic potential and political background. The low rate of unemployment in the Czech Republic was pointed out at a UN conference

of more than 120 prime ministers and government representatives held in Copenhagen in March 1995.

## 2. Economic background

The creation of new qualities has always combined with transforming the cultural heritage and economic development of the past. In countries with a long history, new activity cannot start „from nothing”. It must deal with artefacts produced by previous generations. The creation of a new wholeness thus entails not only heading for the innovative but also returning to the historical roots of existence, to traditions and to realizing the continuity of economic development.

The necessity for economic reform in Czechoslovakia was evident from the mid 1980's when it became apparent that the country was lagging behind in the building of its manufacturing infrastructure, protection of environment and, above all, developing of a creative capacity in its population. The roots of a deformation which originated over a number of years are found as early as the foundation of the Czechoslovak Republic in 1918. The new republic inherited from the former monarchy both the most of its industrial potential and its rather extensive market. As much as 70% of the economic potential of the Austro-Hungarian Empire was concentrated in Bohemia, Moravia and Silesia with only 26% of the monarchy's population. Post-war financial operations prevented inflation, but it was not until 1924 that GDP (Gross Domestic Product) reached the level of 1914. The crisis in the latter half of the 1920's and in the early 1930's in particular resulted in GDP going

down to the level of 1928 in the late 1930's. In general economic terms, the 1930's saw Czechoslovakia falling from rank 11 to 13 in Europe and from rank 15 to 18 in the world.

The 1948-1989 development was affected by two major factors present at its very beginning in 1948, after the first period of removing damages caused by World War II had come to an end: economic models were transplanted from the Soviet Union and no consideration was shown for an economic situation based on different geographic conditions, historical development, democratic traditions and conditions socially and culturally different from those in the other countries of the Eastern bloc.

Between 1949 and 1989, the physical volume of the national income increased 6.5 times (the 1985 GDP per capita was 63% of the US GDP and 76% of the Austrian GDP).

In this period the metallurgical, engineering and power and fuel industries expanded in disproportion with other branches of the national economy. A serious deformation was caused by the armaments industry, especially in the Slovak Republic. The volume of industrial production grew 13.6 times, accounting for more than 85% of all exports. However, this growth was largely due to supporting mainly conventional industries with high requirements for power and materials (only a small part of production was based on innovation and quality). The environment suffered extensive damage, not only as a result of a lack of ecological principles in industry but also because of ruthless methods and techniques used in agriculture: careless cutting down of scattered vegetation, elimination of erosion control balks, waterway straightening, excessive use of industrial fertilizers, etc. Agricultural production increased by 70% by the mid 1980's (compared to the level of 1961-1965). In the 1961-1989 period fewer people working in agriculture together with labour-saving developments in technology and materials resulted in labour productivity increasing 4 times. Flats built between 1948 and 1989 account for about 60% of the present housing capacity.

After 1989, the level of subsidy to agriculture was reduced (8% of agricultural production). The reduction was nearly 5 times higher than that in the EU countries (48% of the EU budget is spent on supporting West European farmers; 77% of agricultural production is subsidized from the state budget in Switzerland, 70% in Japan, 76% in Norway, 56% in Austria, 23% in the United States). Unlike the Czech Republic, most of the countries listed above subsidize the agricultural sector in order to prevent population migration from rural areas and maintain ecological balance in areas outside industrial centres and large cities.

In the first half of the 1980's, the average consumption of industrial fertilizers was 260-270 kg/ha. Not only from the environmental standpoint was this amount

rather excessive. In 1991 consumption was 86 kg/ha (it has not been statistically recorded since) but it was estimated at only 50 kg/ha in 1993. Considering that less manure was available for fertilizing due to less livestock, this was also unfavourable.

Differentiation in wage tariffs is primarily a sign of the economic and social maturity of a country and the efficiency of its economy. In 1993, the minimum (state-controlled) wage in the Czech Republic was 2.200 CZK for 42.5 hours worked (40 922 CZK in Denmark; 35 532 CZK in Sweden; 32 270 CZK in Germany; 29 574 CZK in Luxembourg; 10 851 CZK in Greece; 9 574 CZK in Italy; 6 808 CZK in Portugal).

A large share of expenditure on foodstuffs in total expenditure indicates the economic efficiency of a country to some extent. The 1993 share of this expenditure in the Czech Republic was close to 33% among the working population and 45% among the retired (37.9% among the working population in Greece, 37.1% in Portugal). In the 1990-1993 period, prices in general grew by approx. 180%. The price liberalization of 1991 led to an increase of 159% in the prices of foodstuffs (compared to the prices of 1989). Butter consumption fell from 9.4 kg per capita in 1989 to its present value of 5.3 kg per capita. Beef consumption was 30 kg per capita in 1989 and 18 kg per capita in 1993. The consumption of milk and dairy produce in 1989 was 260 kg per capita and 182 kg per capita in 1993. More money spent on necessary foodstuffs and rising housing costs (electric power, gas, heat, water, housing services) reduced the physical volume of sales in non-foodstuffs.

Between 1992 and 1993 (in the course of economic transformation), the production of goods went down in all industries. A fall of more than 10% was seen in the mining, textile and clothing industries, the production of wooden goods, the production and processing of stone-ware and particularly the production of machinery and devices. Producers do not make products which do not sell.

In the late 1980's the engineering industry (electrical engineering and means of transport not included) accounted for 20% of total industrial production (the percentage in Austria, Belgium and Sweden was 9%). The GDP share of all industries was still high in 1991: 61% (32.7% in the EU, 29.2% in the United States). By 1993 it had dropped to 46.3%.

A research project carried out by the staff of the Geography Dept. of the Faculty of Education of Brno Masaryk University deals with the development of labour potential up to the year 2000. Surplus labour was revealed in all districts, ranging from 3% (Prague, Brno) to between 7% and 12%. Up to 1991 controlled employment, the soft CMEA market, a large number of connecting links in management and enforced stockpiling made full employment among the working population possible (despite the relatively high percentage of surplus labour)



and helped to eliminate the adverse impact of the great discrepancy between the jobs and employment in general and the effect of fluctuations in the growth of labour.

As the intensity of labour migration is still relatively low and there is no real market for flats, unemployment rate indicators in the districts are not exact. Consequently, neither problematic regions nor the influence of the converted production base can be determined exactly. Even in state-supported agricultural problem areas (such as Louny, Znojmo and Bruntál) the situation is different from that in industrial districts such as Ostrava, Karviná and Nový Jičín.

Although updated data on labour (provided by the Ministry of Labour and Social Affairs) have been used since April 1994, it is still rather difficult and potentially ineffective to specify a certain rate of unemployment as suitable for being subsidized by the state without a complex analysis of social and economic conditions and a knowledge of the differentiated regional development policy.

### *3. Development of unemployment in the Czech Republic*

The first wave of unemployment originated from changing the article of the Constitution which provided for the leading role of the Communist Party of Czechoslovakia in the early 1990's.

This was the frictional unemployment. Reducing the number of organizational segments and controlling institutions gave rise to the second unemployment wave which included people with university qualifications. The economic decline of companies whose solvency decreased mainly as a result of the loss of East European markets and the subsequent third wave of unemployment made people with secondary or vocational qualifications unemployed. This was the structural unemployment. The third wave was stronger in areas in which the conversion of the armaments industry was taking place.

The transition to market economy and the completion of economic transformation should bring another (the strongest) wave of unemployment in connection with the deferred bankruptcies of companies which will not be able to cope with economic pressure from abroad; unemployment indicators have not yet signalled this, however. Only after this stage is over unemployment in the Czech Republic will develop in accordance with the development of European unemployment model, of a cyclical nature.

In a period of time which is now difficult to estimate, there should also be the fifth unemployment wave due to the still remote boom of an established and well-functioning market economy.

There were 3 500 unemployed in the Czech Republic in March 1990. In December 1991, this number reached 221 600, and the unemployment rate was 4.1% (dropping to 2.6% before the end of 1992). The number of the jobless and the rate of unemployment at the end of 1993 were 185 200 and 3.5 %, respectively. From 1990, when the employment offices began operating, up to the end of 1994, 1.7 million people were registered. Regardless of changes resulting from new methods of processing statistical data and new criteria adopted by people looking for a job, 166 400 job applicants were registered in December 1994. The 1994 unemployment rate of 3.2% did not rise throughout 1995. The growing balance between supply and demand in the labour market was reflected not only in the extremely low unemployment rate (about 3%) but also in the number of vacant jobs, which was ranging between 50 000-80 000 (some 80% being manual jobs). On average, there were 1.6 applicants for each vacant job.

In the course of 1996, unemployment has grown in all districts except the new district of Jeseník in northern Moravia.

In terms of regional distribution, the rate of unemployment has traditionally been high in north-western Bohemia, northern Moravia and southern Moravia (border districts) and lowest in south-western and southern Bohemia (German and Austrian borders), central Moravia, a small area round Prague and spa areas of western Bohemia. The balance between supply and demand in the labour market is reflected in districts where the number of vacant jobs exceeds the number of applicants. There are 27 of these districts (including Prague) in the Czech Republic at present. On the other hand, there are districts where the number of vacant jobs is exceeded by the number of applicants by more than 2 000. These are the districts of Děčín, Chomutov, Louny, Most, Teplice, Třebíč, Bruntál, Frýdek-Místek, Karviná, Nový Jičín, Olomouc, Ostrava and Přerov. In the remaining districts the number of vacant jobs is exceeded by the number of applicants by more than 1 000.

### *4. Characteristics and consequences*

The unique development of the Czech labour market gives rise to contradictory assessments and differing opinions. The following general conclusions may be reached:

1. If the unemployment rate is low and GDP decreases and becomes stagnant, overemployment derived from the period of extensive economic development is difficult to remove and the process of restructuring the economic base is slow. An intensive tendency towards the growth of GDP and industrial production during 1995 was partly devalued by the approximate moving rate of inflation of 9.7% (the growth of inflation was higher than the growth of industrial production by nearly 1.9%). A decline in the national

economy and a slow reduction in the number of employed people also saw the level of productivity go down. Between 1989 and 1993, the GDP per person employed fell by 12%, thus widening the gap between the Czech Republic and other advanced countries. Hourly productivity is now lagging behind even further as a result of longer working hours (only some 36% of the hourly productivity in Austria). The declining production and productivity affected large businesses (25 or more staff) in particular. In 1993, as many as 31% of the total number of people working in the economy was employed by private firms. However, this boom for the private sector was not enough to balance the difficulties in the remaining sectors, where most of the country's production (88%) is concentrated. During the 1990-1994 period, GDP dropped by 20%, industrial the production by 39% and agricultural production by 27%.

The coupon privatisation has resulted in the division of what was formerly owned by the state among nearly 6 million private owners (80% of the adult population) and the concentration of the rights of disposal owned by minor shareholders (only 14 funds owned approx. 75% of all the shares held by funds after the first wave of coupon privatisation; similar to the situation after the second wave). This can make businesses, investment funds and companies behave in a way which prevents the millions of scattered primary shareholders from having any influence over their actions.

2. The emerging private sector seems to be able to absorb free labour in the growing third sector (services), especially in banking, the insurance industry, state administration and commerce. A comparison of the development of employment and changes in the structure of employment gives percentages comparable to the results achieved in this sector in highly developed West European countries. However, the number of people working in the fourth sector (research and development) is small; it has dropped by almost 72% since 1989, when about 138 000 people were employed in research and development (only 39 000 in 1994). Among the OECD countries, the Czech Republic ranks last in the per capita expenditure on research and development (USD 631 in the United States, USD 579 in Japan, USD 279 in Austria, USD 36 in Greece, USD 28 in the Czech Republic).

lic). The country's position in expenditure on basic research is similar. The funds spent on research and development account for 4.45% of GDP. In 1994, only 25% of the finance spent on research and development in 1989 were spent in the same field (inflation considered).

3. The present development of unemployment shows a tendency to preserve social stability at the cost of slow economic restructuring. In the developed economies, the transition to post-industrial society was accompanied by unemployment rates more than three times as high as the rate of unemployment in the Czech Republic at present.
4. The situation described is likely to become more complicated in the light of demographics: the population of the Czech Republic has been on the decrease since the mid 1990's. The number of people at retirement age (by present criteria) is expected to rise from 2.1 million to 2.2 million at the turn of the 21st century as a result of the diminishing birth rate (2.4-2.7 million in 2010, 2.5-3 million in 2020). The number of children (0-14 years) will decrease from today's 19.4% to less than 15%.
5. In the Czech sector of services, in addition to a sudden increase in employment, technology exists which is capable of providing cheap high-standard services requiring no excessive investments of time and labour. The third sector in the developed post-industrial society is marked by the reduced demand for labour and higher requirements for the education and qualification of employees. This is not happening in the Czech Republic.

The present state of affairs in the development of unemployment is not a mirage. It is a fact based on existing economic reality. The developments of 1996 and the years to follow will show whether the trends and tendencies of 1994 and 1995 towards an extremely low unemployment rate (in European terms) are of a lasting nature and whether only some 61% of the unemployed will rely on employment offices as of is the case today. It will be very interesting to observe the consequences of this rather atypical development. The correct setting of trajectories for the future development of a society is one of the major features of this society's economic and social life. However, for the labour and employment sector, it is a matter of crucial importance.

## References

- CHALUPA, P., MACKA, M. (1983): Prognózování potenciálu pracovních sil na oblastní úrovni v rámci ČSR. Spisy Pedagogické fakulty Univerzity Jana Evangelisty Purkyně (PdF UJEP), vol. 25, UJEP Brno
- CHALUPA, P. (1989): Prognóza vývoje potenciálu pracovních sil ČSR do roku 2000. Spisy PdF UJEP, vol. 38, UJEP Brno
- CHALUPA, P., IVANIČKA, K. (1992): Synergetický vztah sociálně- ekonomických a populačních procesů v ČSFR. Spisy PdF Masarykovy univerzity (MU), vol. 51, MU Brno
- CHALUPA, P. (1995): Specifika vývoje nezaměstnanosti v České republice. In: Geografie IV., PdF MU Brno
- IVANIČKA, K. (1991): Inštitucionálne prostredie a sféra pôsobnosti trhu. Ekonomický časopis, vol. 6, Bratislava
- JEŽDÍK, J. (1992): Statistika regionů v České republice. Statistika 1992, 10, p. 417-424, Federální statistický ústav (FSÚ) Praha
- MAREŠ, P. (1994): Nezaměstnanost jako sociální problém. SLON Praha
- SAMEK, S. (1992): Hrubý domácí produkt ČSFR v mezinárodním srovnání (podle WIW). Statistika 1992, 4, p. 165-173, FSÚ Praha
- SCHUT, P. (1992): Výsledky hospodářské politiky vlády od zahájení reformy. Statistika 1992, 12, p. 513-522, FSÚ Praha
- SCHUT, P. (1990-1996): Statistické přehledy Ministerstvo práce a sociálních věcí ČR - měsíční přehledy o vývoji počtu uchazečů o zaměstnání a o volných místech. Praha
- SCHUT, P. (1993): Zpráva o vývoji národního hospodářství ČR v roce 1992. Český statistický úřad Praha

## Author's address

*Prof. Dr. Petr CHALUPA, CSc.  
Masaryk University of Brno  
Pedagogical Faculty  
Department of Geography  
Poříčí 7, 603 00 Brno, Czech Republic*

## Reviewer

*RNDr. Antonín VAISHAR, CSc.*