Bucek, Milan; Busik, Jozef

Conference Paper
Regional consequences of the economic and social transformation: Case study Slovakia

38th Congress of the European Regional Science Association: "Europe Quo Vadis? - Regional Questions at the Turn of the Century", 28 August - 1 September 1998, Vienna, Austria
Provided in Cooperation with:
European Regional Science Association (ERSA)

Suggested Citation: Bucek, Milan; Busik, Jozef (1998) : Regional consequences of the economic and social transformation: Case study Slovakia, 38th Congress of the European Regional Science Association: "Europe Quo Vadis? - Regional Questions at the Turn of the Century", 28 August - 1 September 1998, Vienna, Austria, European Regional Science Association (ERSA), Louvain-la-Neuve

This Version is available at:
http://hdl.handle.net/10419/113539

Terms of use:
Documents in EconStor may be saved and copied for your personal and scholarly purposes.
You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.
If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.
Regional Consequences of the Economic
and Social Transformation:
Case Study Slovakia

38th European Congress of the Regional Science Association
August 28 –September 1, 1998 Vienna, Austria

Bratislava, June 1998
1. Starting conditions of regional transformation

Regional consequences of the transformation process were affected by the starting conditions of a regional development and a regional policy formed in the previous period of the directive planning system of the "socialist" Czechoslovakia.

The demand and supply was balanced by administrative-bureaucratic methods, dominated in this system generally. The same method was used for regional balance of job opportunities for working population (balanced by districts). The manufacturing enterprises and other activities were located into districts to reach a full employment. In theory this process was called "the socialist location of activities," "District industrialisation," was a result of this approach signified by location of one or more large enterprises, which represented dominant economic activity and employment in the district.

The structure of the whole industrialisation process and domination of heavy industry, mechanical engineering and chemistry, was the reason for man’s employment prevalence. A female employment was caused by an additional location of consumer goods industry and services. This combination created a dual, mutually independent industrial structure of the districts.¹

Production growth in the districts was accompanied by central planning and financing of engineering and social infrastructure (central building of schools, shops, cultural facilities and so on). Building of a small local infrastructure played role through local initiation in scope of so-called "Action Z."

The employment was the predominant task for macro-economic and regional policy in governed economic conditions. It is true, the differences in economic development was rapidly diminished and the unemployment removed but the price was too high: low economic efficiency, huge redistribution between branches and regions, low income per inhabitant, a quality of production, technologic backwardness, degradation of environment etc.).

If we look on regional policy through the theoretic conceptions and regional policy strategies developed in a regional theory, we could summarise that:

- the regional differences was solving by mobility orientated strategy, it means by centrally planed location of enterprises and redistribution of investments,

¹ Moreover the Resolution of Czechoslovakian Government about location of military basis into regions exist, where the female employment opportunities was predominant (e.g. textile industry in northern part of Czech Republic)
• the role of enterprises was passive mostly without significant affect on strategic and mid-term location decisions,
• the role of regional and local was more to political lobbing towards institutions of central planing orientated,
• the location factors were formally accepted in their neo-classic function (proximity to sources, to consumers, freight expenses, and a local labour force), while real impact. was very small in practise in directive planing system, deformed prices, etc.
• the location’s decision was dependent on many non-economic factors (e.g. strategic, military aspects of location, self-sufficiency of districts, diminishing of cultural and social disparities, the „right., class structure of districts or town², location in relationship to other COMECON countries), so that unified strategy or theoretical concept can hardly be find.
• the instruments of regional policy were overcrowded by a dominant role of administrative regulations (regulation over plan with passive role of prices, currency and finance).

Three levels of planning (macro-economic, regional and country and town planing) should to create efficient interactive detention, what was not successful realised in a practise. Moreover the territorial structures and interregional relations were formed under the significant influence of branch-oriented administrative planing system.

The regional and space imbalance was caused by:
• absence of value criteria, which led to loss of rational use of material and financial sources and to global inefficiency,
• the enterprise don’t take advantage of agglomeration effects and externalities,
• a strong centralisation and suppression of self-government,
• the economy characterised by demand for energy and raw material caused heavy environmental damages.

2. Regional consequences of transformation after 1990

Radical transformation of CSFR economy and her displays in a decline of the production and employment as so as the depression of the most important enterprises in the regions caused a huge rise of regional disparities. In the most important enterprises of industrial structure of Slovakian regions e.g. in term from end of 1990 to end of first half of 1992 number of employees declined of 22% average and variations according to the districts was from 15 to 70.3%. Unemployment increased from 1,47% to 11,82% in one year and
regional differentiation was significant in that year (and it is persistent until 1998). Regional variations was from 6.0% (Bratislava) to 20.2% (Cadca). A record decline of arm production (about of 90%) was regionally concentrated into 3 - 4 districts and so decline of production in mechanical engineering, building, agriculture and so on.\(^3\)

The Slovak Government Resolution 390/1991 for the first time pointed out on needs to respect regional dimension of transformation process. Governmental Commission for Economic Strategy in co-operation with local authorities put into effect periodical monitoring of changes in the economic and social structure of the districts.

340 industrial enterprises were monitored which created industrial structures of Slovakia and represents all most important industrial branches. Important enterprises in building industry and agriculture joined them later.

Transformation process brought into difficult situation those districts, which had been already behind before (in production, consumption, infrastructure, and urbanisation). Their economic structure was based on one or more enterprises (flagships), in which production due to increasing price of inputs and quality was not competitive. Loss of markets in former USSR, absence of marketing, lack of information, limited sales of goods on domestic market, caused troubles with sale of goods, debts and increased insolvency. Agricultural enterprises also got into problems; especially those located in mountain and hills regions. Similar situation was also in building and constructing enterprises due to lower investment share. >From the demographic point of view these districts are typical either with demographic depression or they are districts with high emigration. Most of them are source of labour force for more productive districts. Former districts: Bardejov, Cadca, Dolny Kubín, Lucenec, Rimavská Sobota, Roznava, Spiská Nova Ves, Stara Lubovna, Trebisov, Velky Krtis belongs to this group.

Due to monostructure of production base or caused by conversion of arm production the economic and social situation is step by step getting worse also in Povazska Bystrica district and in microregions Bidovce, Brezno, Detva, Handlova, Kezmarok, Malacky, Sered, Snina, Sobrance, Spiská Stará Ves, Stropkov, Svidnik, Velky Meder, Vrable (see map in the enclosure).

Economic depression combined with a difficult adaptability on the market conditions was firstly marked in districts Velky Krtis, Lucenec, Rimavská Sobota, Roznava, Spiska Nova

\(^2\) With a need to enforce a share of workers was argued e.g. by the location of the BAZ car factory in Bratislava.
\(^3\) Results of monitoring of social-economical situation in Slovakian districts, The Council of Slovak Government for Regional Development, Bratislava, 1992
Ves and Trebisov secondly in districts Cadca, Dolny Kubin, Stara Lubovna, Bardejov and Povazska Bystrica (moreover also in combination with highest natural growth). These districts were stipulated as preferred and besides them other 13 microregions with socio-economic problems were selected. Their number was reduced on 9 in 1994 and after 1994 this selection was ceased. Besides that were selected 9 most polluted districts. In 1996 government has supported 9 districts, in the new territorial-administrative organisation were these divided into 16 districts and 7 new ones were added. A main criterion was unemployment over 20% and system of individual measures was taken for each district.

As to results of analysis of the Office for Strategy of the Society, Science and Technology Development of the SR is clear that most successful districts are Bratislava I. and Košice II. and weakest are Sobrance, Medzilaborce and Sabinov. The lowest level of socio-economic development are reached in districts Sobrance, Medzilaborce, Poltar, Rimavska Sobota, Gelnica, Snina, Vranov nad Toplou and from regions it’s Nitra and Presov.

After 1990 were the depressed regions a new phenomenon of development, but also positive growth impulses related to SME creating, influx of foreign capital, adaptability on new market conditions, the financial and consulting services, etc.

Capability of regional policy to react in the right way towards new challenges was also evoke by strong influence of regional research (until end of 1993 worked Research Institute for Regional Planing) in the beginning of transformation.

Disparity display also in a new territorial and administrative organisation of Slovakia (1996), (regarding to a smaller area of districts are disparities even bigger). Difference in GDP per inhabitant between regions of Slovakia was in 1997 6 folds (Bratislava and Presov region) and in unemployment 3,7 fold (Bratislava 4,9%, Presov 18,4%). Difference between district with highest GDP per capita (Bratislava 384 700 SK) and lowest (Stropkov, Svidnik 24300 SK) is 16 folds. If we use EU methodology and compare 10 best and 10 worst districts difference is 2,7 folds and in unemployment 4,9 folds.

---

4 The Slovak Government Resolution 390/1991
7 All tables and graphs in this part: Bucek, M.: Regional policy, admission of Slovakia into EU - advantages and disadvantages, Fridrich Ebert Foundation, Bratislava, 1997
<table>
<thead>
<tr>
<th>Region NUTS II</th>
<th>Region NUTS III</th>
<th>Share on inhabitants (% of SR)</th>
<th>Share on GDP (% of SR)</th>
<th>GDP/inhab. (SK)</th>
<th>Unemployment (%)</th>
<th>Investments (% of SR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Bratislava</td>
<td>Bratislava</td>
<td>11,5</td>
<td>35,0</td>
<td>292 900</td>
<td>4,9</td>
<td>52,1</td>
</tr>
<tr>
<td>2.West Slovakia</td>
<td>Trnava Trencin Nitra</td>
<td>10,2 11,3 13,3</td>
<td>25,4</td>
<td>70 070</td>
<td>12,3</td>
<td>20,9</td>
</tr>
<tr>
<td>3.Middle Slovakia</td>
<td>Zilina Banska Bystrica</td>
<td>12,8 12,3</td>
<td>19,3</td>
<td>73 975</td>
<td>13,6</td>
<td>13,8</td>
</tr>
<tr>
<td>4.East Slovakia</td>
<td>Presov Kosice</td>
<td>14,4 14,1</td>
<td>20,3</td>
<td>68 880</td>
<td>18,3</td>
<td>13,2</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td>12,5</td>
<td>25,0</td>
<td>96 500</td>
<td>13,4</td>
<td>25,0</td>
</tr>
<tr>
<td>SR total</td>
<td></td>
<td>100,0</td>
<td>100,0</td>
<td>96 500</td>
<td>13,4</td>
<td>100,0</td>
</tr>
</tbody>
</table>

**GDP IN REGIONS OF SR**

( NUTS II )

<table>
<thead>
<tr>
<th>REGION NUTS II</th>
<th>GDP/INHAB. (Sk)</th>
<th>GDP/INHAB. (ECU)</th>
<th>% OF THE EU AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bratislava</td>
<td>292 900</td>
<td>21 536</td>
<td>122,5</td>
</tr>
<tr>
<td>2. West Slovakia</td>
<td>70 070</td>
<td>5 152</td>
<td>29,3</td>
</tr>
<tr>
<td>3.Middle Slovakia</td>
<td>73 975</td>
<td>5 438</td>
<td>30,9</td>
</tr>
<tr>
<td>4. East Slovakia</td>
<td>68 880</td>
<td>5 065</td>
<td>28,8</td>
</tr>
<tr>
<td>SR</td>
<td>96 500</td>
<td>7 096</td>
<td>40,4</td>
</tr>
<tr>
<td>EÚ</td>
<td>17 580</td>
<td></td>
<td>100,0</td>
</tr>
</tbody>
</table>
Process of regional differentiation is more significant in a direction from Bratislava through districts of Southern and Northern Slovakia to the East.

<table>
<thead>
<tr>
<th>Region</th>
<th>University lecturer</th>
<th>University graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core region</td>
<td>51 %</td>
<td>52.3%</td>
</tr>
<tr>
<td>West Slovakia</td>
<td>12 %</td>
<td>13.9%</td>
</tr>
<tr>
<td>Middle Slovakia</td>
<td>15 %</td>
<td>13.4%</td>
</tr>
<tr>
<td>East Slovakia</td>
<td>22 %</td>
<td>20.4%</td>
</tr>
</tbody>
</table>

The finance and insurance services (92% i.e. 29 463 employees) and of R&D and business services (40.8% i.e.62602 employees) are located in Bratislava mostly. The concentration of foreign direct investment in Bratislava is very high: 62% of FDI, second largest amount there is in district Ziar nad Hronom – only 4.4% (by relatively low share of FDI in Slovakia – only 3.4% of V-4 countries – Hungary 44.6%, Poland 29%, CR 23%).

Summarising the regional differences and the competitiveness of the Slovak’s regions:

- Bratislava is a core region of Slovakia in the most activities and figures, then there are Kosice and the districts with developed and urbanised centres - Zilina, Banská Bystrica, Presov, Trnava, Trencin, and Nitra (centres of new regions). Bratislava has profited not only in relation to own inner strength, but in connection with location on the border with EU too. Reorientation of Slovak foreign trade from East to developed west market is
going to dominate the whole regional development of the SR. It will be the most important development impulses in the future. The relation between core and periphery needs to be considering from this point of view. Bratislava as a growth pole connects Slovakia with the EU and is operating as mediator of impulses from EU to other peripheral districts of Slovakia. It is one reason, why the position of Bratislava is so dominant compared with other regions of Slovakia (e.g. high share of foreign investments).

- the regional differences are caused by transformation changes in macro- and microeconomics (changes in share of primary, secondary and tertiary sector, service sector development and its regional displays, increase of the share of private sector on GDP, increase of the foreign and international enterprises, transformation of large state corporations and growing of the small and middle enterprises – all those changes are regionally relevant and different)

- the regional disparities and competitiveness of Slovak’s regions is caused by unequal allocation of hard and soft infrastructure (transportation, telecommunication, energy, water, environmental equipment etc.)

- regional allocation of research and science, technological development and the regional differences in qualification of labour force is very different too.

As Slovakia is an associated country with the EU, it would be appropriate to use clear criteria for regions, which needs support and to use a comprehensive system of regional policy instruments. Par example GDP per capita have to be calculated by Statistical Office of the Slovak Republic.

The enterprises were developed as „cathedrals in the desert„ in a planing economy without any adequate supporting environment of a market institutions. First consulting activities, focused on regional development, appeared in 1990-1991 already, many of them came from abroad. were In all 38 districts of Slovakia were Regional Information and Consulting Centers (RICC) grounded as initiations of Ministry for Economic Strategy. Many of them were consecutively transformed on private enterprises or merge into a new founded network of National Agency for Small and Middle Enterprises. 12 RICC with 5 branches and 5 innovation centres (BIC - Business Innovation Centre- see the map in enclosure)are working in Slovakia nowadays. Regional development agencies are established in most problem

---

8 Bucek, M. (1997)]
9 They are already existing in Zilina, Rimavska Sobota, Svidnik, Spiská Nová Ves, Roznava and Trebisov
Regional Development Foundation is a pilot project Povazsky and Kysucky entrepreneurial fund initiated (with the help of PHARE Programme). The National Agency for Regional Development shall be created in a short time. This National Agency shall co-ordinate activities of public administration and self-government in the field of regional policy. It shall improve the use of internal and external resources for regional development.

Regional Development Foundation is one of the main shareholder of investment fund Povazsky and Kysucky Entrepreneurial Fund in Zilina, which had to prepare and realise projects on revival and support of development in Upper Povazie districts.

National Labour Office (and his regional and district Labour Offices) try to solve the problems of unemployment in regions and districts. Some regional aspects can be find in activities of many state funds (State Fund for Housing, State Water Fund, State Guidance Fund for Agriculture and Food Processing, State Forest Fund, State Fund for Environment, State Road Fund and State Culture Fund „Pro Slovakia“).

A short tradition of program and project documents elaborating for regional development was established and is still developing on different level. State public administration offices, responsible for regional policy, are permanently processing documents of state regional policy in hierarchical system. According to „Proposal of state regional policy conception“ is important to create strategy for regional development on a governmental level. Higher self-government units (regions) should participate on creation of developing programs and projects and co-ordinate districts and of local government administration.

The instruments of a direct financial support are used with some restrictions. Direct governmental support is about 0,02% GDP (about 100 mil. SK per year). Most of this support is oriented to Regional Development Agency in Zilina and problem districts. hardly We cannot speak about a supportive regional policy in comparison with EU regional policy. Other instruments of financial motivation are not developed enough to influence a mobility of factors (labour, capital, technical development). The instruments of credit policy (state guarantee of credits, diminishing of interest rate, delay of credit payments, prolonging of payment) and instruments of tax policy (tax releases) are used mostly.

The state institutions and facilities dislocation (Central government administration, Ministries and e.g. new universities) outside of capital Bratislava is used very often in last time. Regional Economic and Social Councils for regional policy co-ordination were created in 1991 in mostly districts of Slovakia. Representatives from state territorial administration, local self-government, important enterprises from districts, representatives from research
institutes, universities, financial and consulting institutions, trade unions, association of cities etc are incorporated in this Council.

Slovakia begun to develop framework of modern regional policy instruments (information and consultancy, financial motivation, infrastructure, administrative regulations) - in spite of many problems. A rational combination of instruments, based on some development strategy in relation to enterprises, inhabitants and municipalities is needed. Sure, the means for redistribution between regions depends on a macroeconomic development.

Cross-border co-operation.

Many cross-border programmes are developed after the fall of iron curtain.

„Operational program of Slovakia and Austria - Program Intereg II/CBC“ is a most significant document from international point of view. This study contents current condition analysis (location, historical development, natural condition, human capital, economic development and infrastructure) but also profile of strong and weak points and priorities in most important areas of mutual interest.

Seven priority programmes of co-operation - technical infrastructure, economical and social development, ecology, labour force, planing and studies documents, networks, technical help and management- were suggested in this document.

Some analytic studies are elaborated on geoeconomical region Vienna-Bratislava-Győr. Demographic potential, labour market, international trade, comparative advantages, transportation, technical infrastructure, environment and protection of nature were the main questions involved.

Agreement between Slovakia and Austria about territorial planning and regional policy had been already prepared.

The co-operation in working group of Danube space countries (ARGE Donau) is very intensive in last years. The conception of co-operation between regions, cities and harbours in Danube territory (methodology of project),glossary of most important conception from area of regional and country and town planing, comparison study about tasks, planing organisation and instruments was elaborated.

The Slovak Centre for Strategic Studies in close co-operation with Poland central planning authority in Krakow was processed „Co-ordination Study of Development Slovak-Polish Border Region“ (transformation principles of border regions, conditions and strategic ways of development, proposal for the institutional co-operation). are Some legislative, institutional and personal questions about realisation of this agreement are solved nowadays.
3. Reform of the local public administration and local incentives

The organisation of the local public administration (as state public administration so local self-government) was radically changed in a process of transformation. Local state administration and municipal organisation were passed in 1990. Slovakia was divided into 38 districts and 121 municipalities. Quite radical reform of local state administration was in 1996 finished, when two level of state administration (8 regions and 79 districts) was constituted. Current situation can be seen at the next table and in organisational scheme in enclosure\(^\text{10}\).

Legal constitution of self-government on higher territorial units (probably regions) is being prepared. This level has to be responsible for regional development and policy.

Organisation on local public administration is very important, but for indigenous development are network of consulting, informational institutions, developing agencies and funds important too, but especially local participants, who create and realise a development as a long term process. They can understand strong and weak sides of their own region.

<table>
<thead>
<tr>
<th>Administrative organisation</th>
<th>number</th>
<th>Kind of institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Municipalities</td>
<td>2 871</td>
<td>Institutions of municipal self-government</td>
</tr>
<tr>
<td>Of which: towns</td>
<td>136</td>
<td>Militar districts administration</td>
</tr>
<tr>
<td>military districts</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>2. Districts</td>
<td>79</td>
<td>District offices(including 986 register offices)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Territorial offices of state administration</td>
</tr>
<tr>
<td>3. Regions</td>
<td>8</td>
<td>Regional offices</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Territorial offices of state administration</td>
</tr>
<tr>
<td>4. Slovak republic</td>
<td></td>
<td>government and organs of state administration</td>
</tr>
</tbody>
</table>

Municipalities are associating „bottom up“ into different unions in Slovakia, what is a very optimistic development. Very important is the Association of Towns and Municipalities of Slovakia and Union of Towns of Slovakia. Many interest groups of towns and municipalities had been already established (their number reached more than 50

\(^{10}\) Busik, J : Reform of the public administration and regional development in Slovakia, Region and public administration, 1/1997, Academia Istropolitana, Bratislava
associations, e.g. regions of Zahorie, Danube island, Liptov, Kysuce, Spis, but also municipalities around the nuclear power stations, committee of majors of regional towns etc.).

The development of local incentives - as significant aspect of self-government function on the territory - is very large. Municipalities and their associations elaborated and performed many projects and incentives in co-operation with consulting and information enterprises (e.g. Malokarpatska wine route) and elaborated marketing studies (opportunities for investors). Informal and formal ways of co-operation and co-ordination of local activities with entrepreneurs, agricultural enterprises, and also with church representatives, voluntary unions, branches of trade chambers and other nongovernmental institutions create new power for regional development. Towns and municipalities are still trying to secure the development not only from redistributed but also from own resources (local taxes and fees, securities, town-bonds\textsuperscript{11}).

**MUNICIPALITIES**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CENTRAL TAXES</td>
<td>13.33</td>
<td>20.35</td>
<td>26.94</td>
<td>29.75</td>
<td>24.74</td>
<td>24.71</td>
</tr>
<tr>
<td>(SHARE ON TOTAL INCOME)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LOCAL TAXES</td>
<td>8.70</td>
<td>16.22</td>
<td>25.27</td>
<td>17.95</td>
<td>13.69</td>
<td>15.27</td>
</tr>
<tr>
<td>(SHARE ON TOTAL INCOME)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

These activities are supporting also foreign organisation\textsuperscript{12} by expertise, informational help and partnerships between towns and municipalities (for this area is determined initiation of EU-Overture)

**Conclusion**

The progress in the reform process generally and gradual creation of standard economic environment in Slovakia highlights a need for a standard regional policy. It seems that instead of domination of one conception, the elements of different strategies are going to be combined in Slovak regional policy (e.g. in Bratislava we can emphasise technological and innovative conceptions and in periphery regions more mobility orientated and indigenous conceptions). Some problems to be solved to increase effectiveness of regional policy can be mentioned:

\textsuperscript{11} Bercik, P.: The local self-government financing in the SR, Ekonomicka fakulta Banská Bystrica a LSAG, 1998. The author present the town-bonds in 22 towns emitted in 1995-96 (e.g. Banská Bystrica 150 Mio.Sk, Trenčín 100 Mio.Sk, Nitra 60 Mio.Sk, but the smaller towns as Rajec 10 Mio.Sk, Revuca 20 Mio.Sk, Velke Kapusany 15 Mio.Sk are participating in this process too)
• co-ordination of regional economic and physical country and town planning system, due to unsuccessful and supplementary integration

• co-ordination of regional policy with other economic policies (specially environmental, industrial and agricultural policy),

• promotion of principles of subsidiarity into process of decisions making, in creation of programs, projects and incentives,

• to pay more attention to marketing and regional management,

• reinforcing the gradual approximation of Slovak regional policy towards regional policy of EU.

12 Very active in this field is Local Self-government Assistance Centre (LSGAC), USAID, Friedrich Ebert Foundation, British Know-How Fund etc.
Reform of Public Administration in the SR

Government of the Slovak Republic

STATE ADMINISTRATION

Min. of the Interior
Min. of Finances
Departmental Min.

Specialized State Administration

Regional Offices
Tax Boards
Other Offices of Special State Administration
Inspection

District Offices
Tax Offices

LOCAL GOVERNMENT

Higher Territ. Units
Villages and Towns

Busik, J.: "1997"
Most depressed regions and microregions in Slovakia

The Council of Slovak Government for Regional Development, Bratislava, 1992