8th International Scientific Conference
"Business and Management 2014"
May 15–16, 2014, Vilnius, LITHUANIA
Section: Social and Economic Business Enviroment
http://www.bm.vgtu.lt

ISSN print 2029-4441/ ISSN online 2029-929X
ISBN print 978-609-457-652-2/ ISBN online 978-609-457-651-5
Article number: bm.2014.062
http://dx.doi.org/10.3846/bm.2014.062

PROBLEMS OF REINDUSTRIALISATION IN DEPRESSIVE REGIONS: CASE OF BULGARIA

Ivaylo Ivanov

University of Forestry, Faculty of Business Management,
10 St. Kliment Ohridski blvd., Sofia, 1756, Bulgaria
Email: ihivanov@hotmail.com

Abstract. The depressive regions are one of the main factors of regional inequality. The solving of problems of depressive regions would reduce regional disparities. The reindustrialisation of these regions is a key for stopping of depopulation, increasing of production, improving of living condition. In article are presented results obtained by research of the depressive regions and the problems that concomitant the process of reindustrialisation in old industrial areas in Bulgaria. There are proposed approaches to improve of business conditions in these territories, to attract investors, to effective using of natural and human resources.

Keywords: regional development, regional policy, reindustrialisation, depressive region, old industrial region.

JEL classification: O18, P25, P48, R58.

1. Introduction

The regional differences are a result of influences of many factors. Some of them are consequences by objective reasons such as geographic location, climate, relief, water, mineral and etc. natural resources, altitude and etc., others of them are outcome by planed and unplanned human activities – such as using of resources (natural and human), level of development, regional policy and etc. These inequalities have economic, social, demographic, ecological, investment, infrastructural and etc. meanings for local, regional and national development.

The research aim is to propose approaches for solving of the problems of depressive regions in Bulgaria.

The objects of research are the depressive regions in Bulgaria.

The data set is obtained by the National Statistical Institute of Bulgaria on section Regional statistics (NSI 2014).

2. State of problem

The literature review shows that there are many scientific publications related to regional development in Bulgaria in recent years.

Yankova studies the main kinds of regions in Bulgaria (municipalities, districts, planning regions) by the level of development and outlined the slow districts in Bulgaria, puts in order and makes groups of territorial entities by generalizing measurers, characterizing different aspects of the development, and determines an integral evaluation, characterizing the level of development of the regions (Yankova 2002, 2005, 2008).

The differences in the investment capacity of the Bulgarian municipalities, districts and planning regions are examined by Kirilova which analyses and evaluates the ranking and differentiation of the territorial entities by indexes of investment capacity and presents the dynamics of the changes in the ranking (Kirilova 2008).

A research by Shopov is about social differences between the territorial entities. The regions are studied by using a model, based on the taxonomic method. Shopov calculates and analyses generalise evaluations of the social state of the territorial entities in Bulgaria (Shopov 2006, 2008).

Chkorev (2008) makes an attempt to range all municipalities in Bulgaria concerning the requirement for achieving a sustainable environmentally development. The group of municipalities, which create substantial ecological failures, respectively forming depressive territories, are outlined by using a taxonomic approach and emission and immission characteristics.

Totev analyses regional differences and regional policy in Bulgaria by comparison with other EU regions and studies the changes in economic

structure of the regions in Bulgaria which would favour the economic development, according to the actual competitiveness and efficiency of the economy (Totev 2004, 2011).

The development of the regional differences and the integration processes in EU in accordance with the changes of the regional specialization and the industrial concentration – theoretical and empirical aspect is discussed by Totev. The expected tendencies according to the level of economic development, branch structure and regional differences are determined in context of the similar processes running in some countries members of EU and the potential winning and losing regions are defined on the base empirical analysis (Totev 2006).

Dobrev and Kolev are focused on the state and progress of the undeveloped rural regions in Bulgaria. The authors establish by questionnaire survey in one municipality that the micro system of the local population is blocked by many discrepancies between the available resources, the desires of entrepreneurs and workers, the clear understanding of the opportunities and priorities and the lack of real and adequate actions (Dobrev and Kolev 2009).

One of the main factors affected on the regional development – the migration – is studied by Zhekova. The author analyses the trends and stages of the internal migration processes from 1956 until 2001 on the bases of the last five censuses in the country and summarizes that the great internal mobility of the population in the 1956–1985 has evolved into a high intensity of the international migration during the years after 1989. Emigration has very essential and direct after-effect on the population and the labour force. The major part of the emigrating population is on the age 20–35 with of higher education and qualification standards (Zhkova 2006).

The regional dimensions of social infrastructure are studied by Chankova (2003). The author analyse the key sectors – education and healthcare and characterizes the differences in the network of schools (for primary, high and higher education) and of medical clinics, insured with relevant personnel, as well as of specialized places for providing social services.

Anastasova-Chopeva (2010) analyses the demographic aspects of regional development and makes a comparative analysis of the natural movement processes of the urban and rural population in the period 2001–2007. The author discloses the key reasons for differences between the cities and the villages.

The typology of the rural areas on the basis of the official definition in Bulgaria, as well as on this of the most broadly used in the EU countries – the definition of OECD is examined by Yanakieva (2007).

Sarijski and Totev studies the regional specialisation by processing industry sectors in Bulgaria through calculating coefficients of absolute and relative specialisation and disclose that the specialisation of the regions in Bulgaria is yet to begin through applying cluster and discriminate analyses (Sarijski and Totev 2005).

The tendencies and problems of administrative-territorial system on local level in Bulgaria are examined by Dokova (2012). The author concludes that the effective administrative-territorial organisation is among active and important elements of the development of public relations.

Goev publishes results of a survey among foreign investors from Western Europe in Bulgaria regarding: motivation of foreigner investors to locate their activities in Bulgaria, strategies for entering the Bulgarian market and etc. (Goev 2010).

The Institute for Market Economics published profiles of regions in Bulgaria for 2012 and 2013 years. The research is based on 58 indicators of development which are integrated in the system of 8 categories (economy, taxes and administration, infrastructure, demography, education, healthcare, environment and social environment). The regions in Bulgaria are grouped into 8 types according to their socio-economic situation and development. The used types are: Very poor socio-economic condition and negative development trends; Poor socio-economic condition; Average socio-economic condition, average rate of development; Contrasts in the socio-economic condition, negative trends; Contrasts in the socio-economic condition, negative trends; Contrasts in the socio-economic development; Good development trends; Good socio-economic condition; Very good socio-economic condition (Nikolova *et al.* 2012; Nikolova *et al.* 2013).

The regions on NUTS3 level (Nomenclature of territorial units for statistics) are studied from 2005 to 2010 by index of competitiveness. They are arranged into three groups: regions with high competitiveness, regions with moderate competitiveness and regions with low competitiveness on the base of 10 indicators: Population density per sq. km, Natural increase, Rate of employed persons, Share of population on age between 25-64 with higher education degree, Foreign direct investment in non-financial enterprises on cumulative basis, Expenditure on acquisition on tangible fixed assets, Productivity, Turnover per capita, Gross domestic expenditure on research and development activity per a person engaged in research and development activity, Share of persons

on age between 16 and 74 years who used Internet in last 12 months (Ivanov, 2010, 2012a,b).

Analyses of regions in Bulgaria are made also in strategy documents for regional development as plans, programs and etc.

The review of scholar articles shows that depressive regions in Bulgaria and their problems are not very well studies in recent years.

3. Terminological and methodological notes

The depressive regions are areas that had a high share of industry in GVA (Gross value added) in the past but as results of cyclic development of economy and structural changes they lost their advantages and in the present are characterized with low level of industrial production, high level of unemployment of persons with knowledge and skills. Usually, the depressive regions have a monostructural economy with one main enterprise commonly in mining, oil, metallurgy, military, chemical, engineering, textile or clothing industries. As synonym of the term *depressive region* it is used also old industrial regions.

The research is done on three territorial levels by using the NUTS classification. This is a hierarchical system for dividing up the economic territory of the EU for the purpose of: the collection, development and harmonisation of EU regional statistics; socio-economic analyses of the regions; framing of EU regional policies (EUROSTAT 2014).

The first studied level is a state. On this level it is estimated the share of industry in GVA (Gross Value Added) by formula (1).

$$\text{Share of industry in GVA} = \frac{\text{GVI by industry}}{\text{Total GVI}}.100 \quad (1)$$

The aim is to identified the level of industrialisation of Bulgaria, its changes in time and where is Bulgaria in according to the EU target that the industrial sector could play a leading role in the economy of the EU, given that the Commission estimates that for every 100 jobs created in industry, between 60 to 200 new jobs can be created in the rest of the economy; whereas, however, between 2008 and 2011, industrial production fell from 20% to 16% of the EU's GDP and the number of jobs in the sector fell by 11% (The European Parliament 2013).

The second level is statistical regions which correspond to the NUTS2 level. The statistical regions in Bulgaria are 6. They do not have administration and governor and they are used only for regional planning and regional analysis. On this level it is estimated the share of industry in the statistical region in GVA of the region by using formula (1) and it is compared with other regions.

The coefficient of GVA's variation in terms of the dispersion is estimated by formula (2) (Stoenchev 2013).

$$V_{\sigma^2} = \frac{\sigma^2}{\bar{x}}.100, \quad (2)$$

where:

V_{σ^2} – the coefficient of GVA's variation in terms of the dispersion;

σ^2 – the dispersion of GVA estimated by formula 3 (Stoenchev, N. 2013);

$\bar{x}$ – the average mean of GVA estimated by formula 4 (Stoenchev 2013).

$$\sigma^2 = \frac{\sum_{i=1}^{N}(x_i - \bar{x})^2}{N}, \quad (3)$$

where:

σ^2 – the dispersion of GVA;

x_i – the mean of GVA for the i^{th} unit (region);

$\bar{x}$ – the average mean of GVA estimated by formula 4;

N – the number of units (regions).

$$\bar{x} = \frac{\sum_{i=1}^{N} x_i}{N}, \quad (4)$$

where:

$\bar{x}$ – the average mean of GVA;

x_i – he mean of GVA for the i^{th} region;

N – he number of regions.

The coefficient of GVA's variation in terms of the dispersion shows difference (inequality, dispersing) between studies territorial units (regions).

The third level is districts which correspond to the NUTS3 level. The statistical regions in Bulgaria are 28. They are called in Bulgarian 'oblast'. The districts are governed by a regional governor appointed by the Council of Ministers. The regions are administrative territorial units for the conduct of a regional policy, the implementation of state governance on a local level, and the ensuring the concurrance of national and local interests. They include several municipalities which are the basic administrative territorial unit at the level of which self-government is practiced.

In research is used a coefficient of correlation calculated by formula (5) (Stoenchev 2013).

$$r = \frac{\sum_{i=1}^{N} (x_i - \bar{x}).(y_i - \bar{y})}{N.\sigma_x.\sigma_y}, \quad (5)$$

where:

$\bar{x}$ – is the average mean of independent variable calculated by formula (4);

x_i – the mean independent variable for the ith region;

$\bar{y}$ – the average mean of dependent variable calculated by formula (4);

y_i – the mean dependent variable for the ith region;

σ_x – the standard deviation of independent variable calculated by formula (3);

σ_y – the standard deviation of dependent variable calculated by formula (3);

N – the number of regions.

The coefficient of correlation shows the influence of an independent variable on a dependent variable.

4. Results and Discussions

4.1. Industrialisation on macro level

The industrialisation on the state level is presented in Fig. 1. The results show that the share of industry sector in GVA for period from 1995 to 2011 is changed from 23.8% in 1996 to 32.4% in 2007. The trend for whole period is ascending nevertheless that in the last years is observed a drop by 1.9 points.

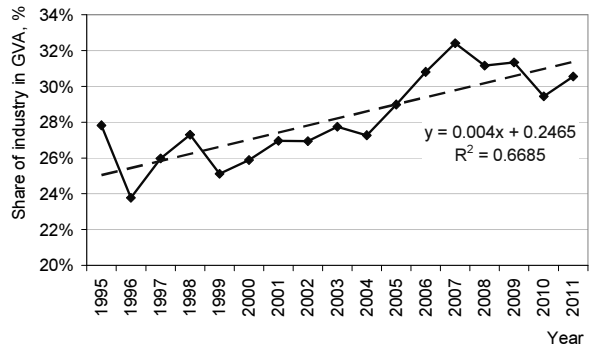

Fig. 1. Share of industry sector in GVA in Bulgaria by years, %

The situation in Bulgaria in terms of industrial production is on higher level of the EU target but aggregated data do not give possible to identify regional inequalities.

4.2. Industrialisation on meso level

The difference in industrialisation on NUTS2 level is presented of Fig. 2. The South-East statistical region in Bulgaria is the most industrial in the country. The share of industrial sector in this region is 43.5% in 2011. The reason for this are ones of the biggest enterprises in Bulgaria – the oil company LUKOIL Neftohim and the energy complex Maritsa Iztok. The results of research show increasing of the share of industry sector in GVA for all statistical regions except South-East Region.

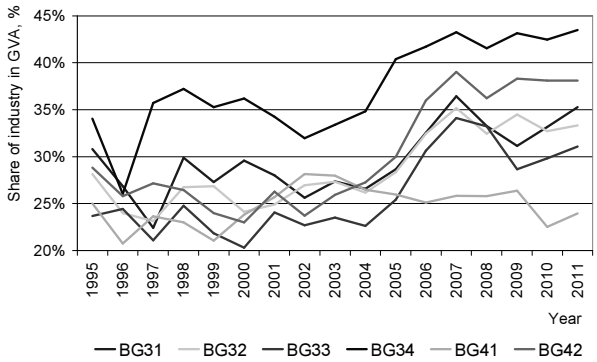

Fig. 2. Share of industry in GVA in Bulgaria by statistical regions and by years, %

Legend: BG31 - North-West Bulgaria, BG32 - North Central Bulgaria, BG33 - North-East Bulgaria, BG34 - South-East Bulgaria, BG41 - South-West Bulgaria, BG42 - South Central Bulgaria

The analysis of internal regional disproportions evaluated by coefficient of variation of GVA and presented in Fig. 3 shows their increase. The lowest levels are observed in 1996 (0.17%) and in 2003 (0.32%). The level are highest in 2010 (1.34%) and 2011 (1.19%).

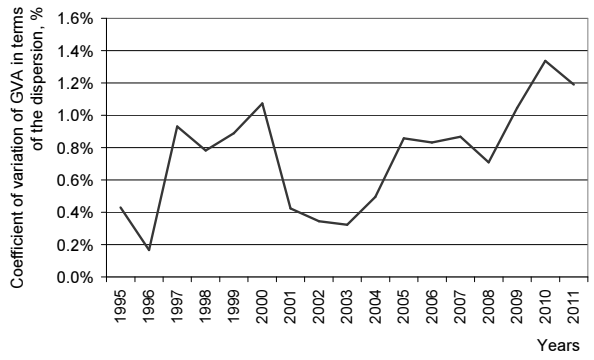

Fig. 3. Coefficient of variation of GVA in terms of the dispersion in Bulgaria by years, %

4.3. Industrialisation on micro level

The analysis on level NUTS3 will help to identify depressive districts in Bulgaria in compare with other districts in each statistical region. The results are presented in Figs 4–10.

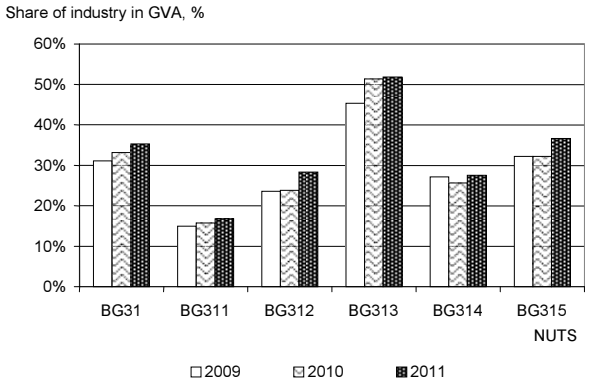

Fig. 4. Share of industry sector in GVA in North-West statistical region in Bulgaria by districts and by years, %
Legend: BG31 - North-West Bulgaria, BG311 – Vidin, BG312 – Montana, BG313 – Vratsa, BG314 – Pleven, BG315 – Lovech

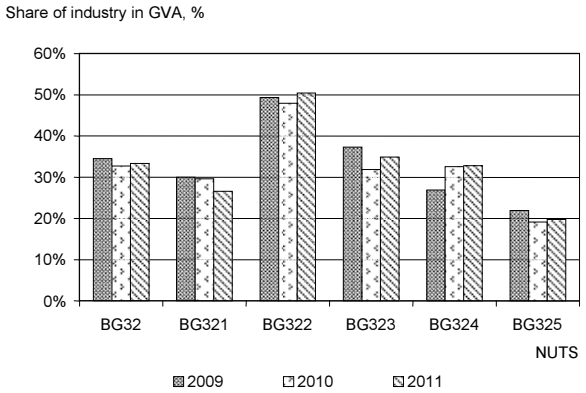

Fig. 5. Share of industry sector in GVA in North Central statistical region in Bulgaria by districts and by years, %
Legend: BG32 - North Central Bulgaria, BG321 - Veliko Tarnovo, BG322 – Gabrovo, BG323 – Ruse, BG324 – Razgrad, BG325 – Silistra

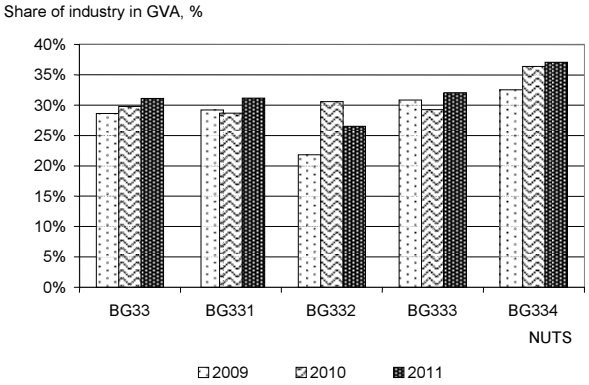

Fig. 6. Share of industry sector in GVA in North-East statistical region in Bulgaria by districts and by years, %
Legend: BG33 - North-East Bulgaria, BG331 – Varna, BG332 – Dobrich, BG333 – Shumen, BG334 - Targovishte

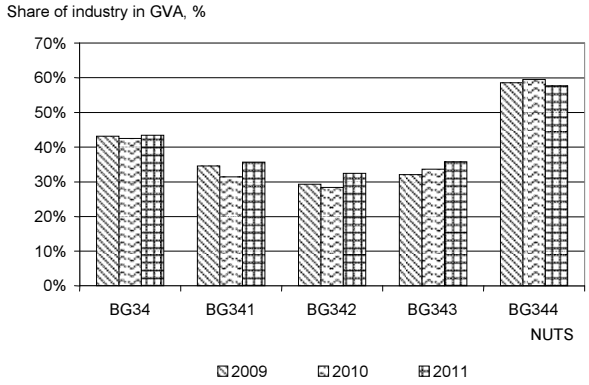

Fig. 7. Share of industry sector in GVA in South-East statistical region in Bulgaria by districts and by years, %
Legend: BG34 - South-East Bulgaira, BG341 – Burgas, BG342 – Sliven, BG343 – Yambol, BG344 - Stara Zagora

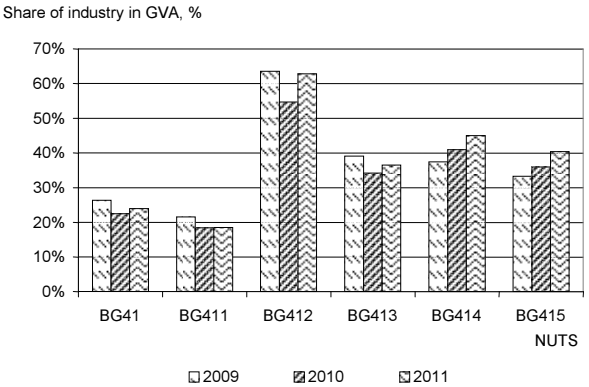

Fig. 8. Share of industry sector in GVA in South-West statistical region in Bulgaria by districts and by years, %
Legend: BG41 - South-West Bulgaria, BG411 - Sofia capital, BG412 – Sofia BG413 – Blagoevgrad, BG414 – Pernik, BG415 – Kyustendil

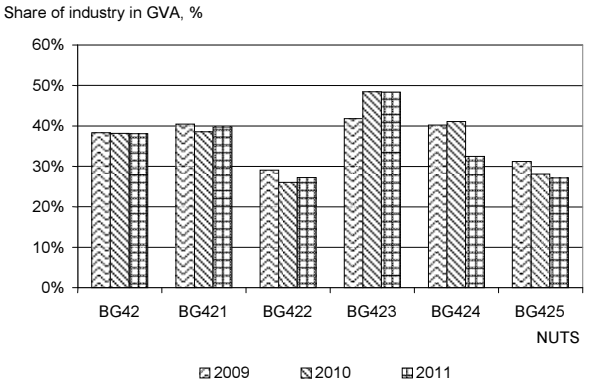

Fig. 9. Share of industry sector in GVA in South Central statistical region in Bulgaria by districts and by years, %
Legend: BG42 - South Central Bulgaria, BG421 – Plovdiv, BG422 – Haskovo, BG423 – Pazardzhik, BG424 – Smolyan, BG425 – Kardzhali

North-West statistical region in Bulgaria is the most underdeveloped region in the EU. The least industrial district in this region is Vidin district. The share of industrial sector in GVI for the last three years in Vidin is changed from 14.9% (2009) to 16.8% (2011) and for whole period grows. Vidin district is the only district in this region that does not achieve the EU target for level

of industrial production. The most industrial district is Vratsa where is located the nuclear power station. The difference between the most industrial district (Vratsa) and the least industrial district (Vidin) is more than three times.

North Central statistical region is characterised also with unequal structure. The industrial production in Silistra district is close to the EU target for 20% share of industry sector in GVA. The situation is not very bad because Silistra located in area with very good conditions for agriculture and analysis of GVA structure shows that share of agricultural sector is increased and decreasing of share of services sector. As district that is needed by special attention is emerged Veliko Tarnovo district. For whole period the share of industrial sector is decreased by 3.4% points from 30.0% (2009) to 26.6% (2011). If the trend stays the same during the next years Veliko Tarnovo district will go down under the EU target.

The shares of industrial sector of districts in North-East statistical region are close to the values for the whole region. It is not observed decreasing of the share of industrial sector in GVA and all districts cover and exceed the EU target by 6.5% points.

South-East statistical region is most industrial developed area in Bulgaria but area where the difference between districts is significant. The gap of shares in industrial sector in GVA is more than 2 times. Stara Zagora district has the biggest share of industrial sector in GVA because of coal mining and power stations industries. In this region it is hard to define underdeveloped industrial region by the EU criteria because for all districts the value of share in industrial sector in GVA is more than 32.4%.

The most industrial district in Bulgaria is located in South-West statistical region and this is Sofia district. The reasons for this are many. The district is bordered to the capital of Bulgaria. Many companies prefer to choose territory for industrial sites outside of the big city because of value of rent but not to far from the market and from the transport terminals. That explains the fact that the capital Sofia has share of industrial sector in GVA 18.5% (2011) and the capital is the one of three districts in Bulgaria with share under the EU target.

The districts with negative developed tendency in South Central statistical region are two Haskovo and Kardzhali. They have at the same time low level of the share of industrial sector in GVA and decreasing of this value that decline to the EU target.

The inequality of industrial production between districts in the one region is visible by results in Fig. 10 where is presented a coefficient of variation of GVA in terms of the dispersion calculated by formula 2. The coefficient is a measure for difference between shares of industrial sector in GVA of districts.

As the homogeneous region could be defined North-East statistical region. In this region variation between districts is less than 0.45% (2011). The other five regions are heterogeneous. In South-West statistical regions the gap between districts measured by the coefficient of variation of GVA is 8.53% (Fig. 10).

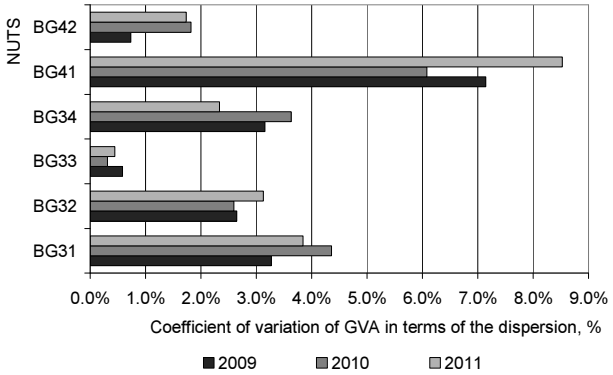

Fig. 10. Coefficient of variation of GVA in terms of the dispersion by statistical regions in Bulgaria and by years, %
Legend: BG31 - North-West Bulgaria, BG32 - North Central Bulgaria, BG33 - North-East Bulgaria, BG34 - South-East Bulgaria, BG41 - South-West Bulgaria, BG42 - South Central Bulgaria

5. Conclusions

The results of research of share of industrial sector in GVA by statistical regions and districts outline a few problems.

There is a big gap between regions and districts where are located major cities in Bulgaria and this gap is increased nevertheless that 25 of 28 districts in Bulgaria have a share of industrial sector in GVA over the EU target of 20%. This fact is confirmed by the GDP per capita in different regions and district (Fig. 11).

There is not correlation between shares of industrial sector in GVA and GDP per capita. The value of correlation coefficient by data for 2010 is 0.109 and it is calculated by formula (5). This means that the industrial production is ineffective, the resources are used inadequate, the used technologies are old and non-innovative and etc. It can be assumed that there is no correlation between wages and the share of industrial sector in GVA that should be verify by additional research.

It is hard to identify which are the depressive regions (district) in Bulgaria using only one measure as share of industrial sector in GVA or com-

paring this measure with some level or standard. According this the capital Sofia is needed by reindustrialisation, but if this is done the result will be decline of GDP.

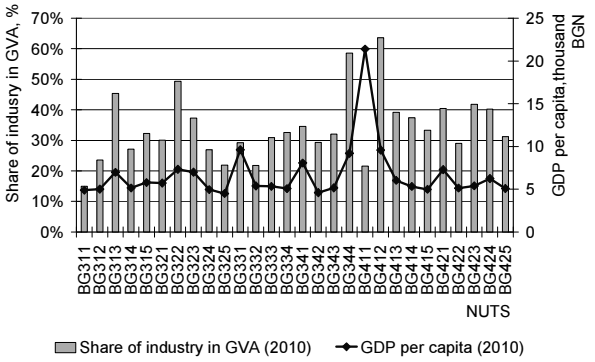

Fig. 11. Share of industry sector in GVA and GDP per capita in Bulgaria by NUTS3 (districts) for 2010
Legend: BG311 – Vidin, BG312- Montana, BG313 – Vratsa, BG314 – Pleven, BG315 – Lovech, BG321 - Veliko Tarnovo, BG322 – Gabrovo, BG323 – Ruse, BG324 – Razgrad, BG325 – Silistra, BG331 – Varna, BG332 – Dobrich, BG333 – Shumen, BG334 – Targovishte, BG341 – Burgas, BG342 – Sliven, BG343 – Yambol, BG344 - Stara Zagora, BG411 - Sofia capital, BG412 – Sofia, BG413 - Blagoevgrad, BG414 – Pernik, BG415 – Kyustendil, BG421 – Plovdiv, BG422 – Haskovo, BG423 – Pazardzhik, BG424 – Smolyan, BG425 - Kardzhali

All this facts make the explanation of necessity of industrialisation and reindustrialisation very difficult. In the case of Bulgaria the term "reindustrialisation" should be understood as the development and investment in innovative productions.

The world practise knows three approaches for purposefully industrial policy.

First of them is development of big companies. This approach is applied in case of using of mineral and natural resources or building of big infrastructure projects. The experience of Bulgaria knows good and bad practices all is connected to the management. Because of primary huge investments it is not necessary reopen the whole company. The first steps are a recovering of part of the production where because good equipment the final result will be effective production. The aim is a careful study of market and selection of good team of managers. The problem here is how long company is not working and do workers have lost their knowledge and experience.

Second approach is development of productions around a big financial institution and using its capital. The problem is not necessarily in the money and in the lack of a strategy for the development of a main branch and from there the development of accompanying industries. The climate conditions give opportunities for development of food industry and on this base development of manufacture of machines for production, transport, keeping and etc. of raw products, outputs and goods. These enterprises will affect in build of roads, in development of tourism and etc.

The third approach is a support of small and medium-sized enterprises; companies oriented toward production by applied innovations and researches. This approach does not need by huge financial resources. The advantages are: giving chance of everyone to develop own potential; creating new jobs; connecting and linking education, research and business; a part of activities could be done by using flexible methods as working at home. The risks are connected with the way of selection and evaluation of the project proposals, funding, assessment of the results and etc.

In conclusion it could be summarized that most districts in Bulgaria have characteristics of depressive area nevertheless that do not meet the formal criteria. The main problems are connected with justification of the need for reindustrialisation. The aim should be a support of business (mirco, small, medium-sized, big companies) for a modern, innovative, effective and efficacious manufacture; stimulation of research in enterprises, encourage the applied research in the universities.

Acknowledgement

This document was supported by the grant No BG051PO001-3.3.06-0056, financed by the Human Resources Development Operational Programme (2007–2013) and co-financed jointly by the European Social Fund of the European Union and the Bulgarian Ministry of Education and Science.

References

Anastasova-Chopeva, M. 2010. Development of Demographic Processes in the Villages from different Planning Regions and Districts, *Economic Thought*. 2: 69–83.

Chankova, L. 2003. Social Infrastructure of Bulgaria: National and Regional Dimensions, *Economic Studies*. 1: 3–24.

Chkorev, G. 2008. Ecological Parameters and Territories, *Economic Studies* 1: 126–165.

Dobrev, D.; Kolev, K. 2009. State and Development of the Undeveloped Rural Regions in Bulgaria: The Example of Dulgopol Municipality, *Economic Studies* 2: 167–197.

Dokova, S. 2012. The tendencies and problems of administrative-territorial system on local level, *Economic and social alternatives* 4: 35–49.

EUROSTAT. 2014. NUTS - Nomenclature of territorial units for statistics. Introduction. Eurostat. http://epp.eurostat.ec.europa.eu/portal/page/portal/nuts_nomenclature/introduction

Goev, V. 2010. Relocation of Westeuropean enterprises in Bulgaria (Results of survey among foreign investors), *Research paper* 2. http://research.unwe.bg/?id=19

Ivanov, I. 2012a. The Regional Competitiveness in Bulgaria at the Time of Economic Crisis, *Scientific Journal of RTU*. 3. series. Ekonomika un uzņēmējdarbiba 22: 75–79. https://ortus.rtu.lv/science/en/publications/14037;jsessionid=98D31BA816A7CB427DFBC22389D79431/fulltext.pdf

Ivanov, I. 2008. Evaluation of the competitiveness at the local level, in *The 5th International Scientific Conference "Business and Management 2008"*. Conference Proceedings. VGTU, Vilnius. 2008. 16-17.05.2008. Vilnius, Lithuania. (CD).

Ivanov, I. 2010. Index of Competitiveness of the region in Bulgaria, in *The 6th International Scientific Conference "Business and Management 2010"*. Selected paper, volume II. Lithuania, Vilnius: Technika, 619–626.

Ivanov, I. 2012b. The impact of economic crisis over the regional competitiveness in Bulgaria, in *Trends in Economics and Management for the 21st Century*. International Conference. September 20th-22nd. Brno. Czech Republic. 2012, ISBN 987-80-214-4581-9. (CD).

Kirolova, Y. 2008. Differences in the Investment Capacity of the Territorial Entities – State and Changes, *Economic Studies* 1: 85–102.

Nikolova, D. *et al.* 2013. *Regional Profiles: Indicators of Development*. Institute for Market Economics. Sofia. http://www.regionalprofiles.bg/en/

Nikolova, D. *et al.* 2012. *Regional Profiles: Indicators of Development*. Institute for Market Economics. Sofia. http://www.regionalprofiles.bg/en/

NSI. 2014. Regional statistics. National Statistical Institute. Sofia. http://www.nsi.bg/en/content/11262/regional-statistics

Sarijski, G.; Totev, S. 2005. Specialisation of Regions in Bulgaria by Processing Industry Sectors, *Economic Thought* 6: 42–59.

Shopov, G. 2008. Social Differences between the Territorial Entities – State and Changes, *Economic Studies* 1: 103–125.

Shopov, G. 2006. Social Differences between Municipalities in the Beginning of XXI Century – State and Changes, *Economic Studies* 1: 90–111.

Stoenchev, N. 2013. *Statistic*. University of Forestry. Sofia: 91, 108-109, 201. (in Bulgarian).

The European Parliament. 2013. *Report on regional strategies for industrial areas in the European Union*. The European Parliament. Committee on Regional Development. 2012/2100(INI). 26.04.2013. http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A7-2013-0145+0+DOC+XML+V0//EN

Totev, S. 2004. Regional Economic Differences in Bulgaria and the Other Countries Applying for Membership of the EU, *Economic Thought* 2: 3–17.

Totev, S. 2006. Comparative Analysis of the Processes of Regional Specialization and Concentration in EU, *Economic Studies* 1: 67–89.

Totev, S. 2011. Regional Differences and Regional Policy in Bulgaria, *Economic Studies* 3: 33–52.

Yanakieva, I. 2007. Typology of Rural Areas in Bulgaria, *Economic Thought* 1: 23–41.

Yankova, N. 2002. Differences and Sustainability in the Development of the Municipalities in Bulgaria in the Period 1996–1998, *Economic Studies* 2: 3–19.

Yankova, N. 2005. Differences in Development of the Territorial Entities in the Country for the Period 2003-2004, *Economic Studies* 3: 58–84.

Zhekova, V. 2006. Internal and International Migration of Population in Bulgaria, *Economic Studies* 2: 175–204.