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Selected aspects of the development of rural systems in Visegrad Group countries

Abstract. Primary objective of the study is the empirical verification of the hypothesis that countries of the Visegrad Group, although different in terms of the agrarian structures, face the same problems related to rural systems, population and conditions for growth in rural economy. We base on Eurostat data and literature studies to show the basic common and different characteristics of rural development in all four analysed countries. It can be considered that while the Visegrad Group countries are characterized by different models of agricultural development that affect the picture of rural areas in these regions, structural problems, such as unfavourable demographic trends and the general level of economic development in relation to the EU average remain at a similar level. It should be emphasized that it is agriculture as a sector, its diversity in particular countries, diversified level of development (agricultural productivity) that makes it difficult to integrate development mechanisms directed by individual countries to rural areas.

Keywords: Visegrad Group, urban-rural typology, population, GDP, rural areas, farms

Under increasing pressure from globalization, nation-states are seeking opportunities to develop the economy and increase competitiveness through cooperation in the framework of transnational agreements and arrangements. The creation of the European Union is one example of such initiatives, creating for Member States not only possibility of obtaining the benefits of the single market, but also the implementation of modern development policy instruments. EU enlargement to the countries of Central and Eastern Europe was for them an exciting development. It can be considered that the internationalization of the economies of the region favourably affected the level of development. At the same time cooperation within the region in the framework of the so-called agreement. The purpose of the Visegrad Group was to create a strong nucleus of cooperating countries, around which the social and economic integration of all countries of Central and Eastern Europe would follow.

An additional justification for such cooperation is also a way of political transformation, which passed these countries, and which has created a very complicated conditions for socio-economic development, resulting in specific problems they will not face the so-called state. Western Europe. The transformation process has proved to be a big challenge, especially for rural systems, ie. The development of the rural economy with agriculture as its central element.

The scope of the paper and data

The academic objective of the paper fits issues related to the search of the new paradigm in rural and agricultural development (Wilkin, 2009, Zegar, 2012, Czyżewski, Czyżewski, 2015). In the previous research work, the process was primarily identified with the acceleration of concentration with agriculture, and the rate of changes in this regard was deemed dependent on the opportunities for finding jobs outside agriculture (Bosc, 2014, Clark et al., 2015, Zegar, 2008, Cramer et al., 2001). Therefore primary objective of the study is the empirical verification of the hypothesis that countries of the Visegrad Group, although different in terms of the agrarian structures, face the same problems related to rural systems, population and conditions for growth in rural economy (Farágó, Varró, 2016, Grabbe, 2001). We base on Eurostat data and literature studies to show the basic common and different characteristics of rural development in all four analysed countries.

Rural-urban typology in Visegrad countries

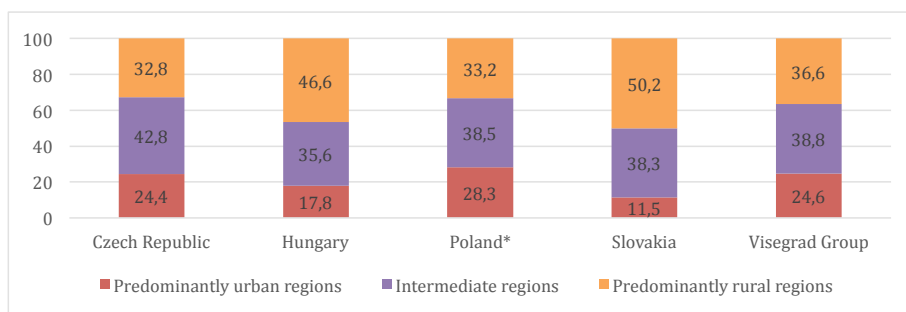
Of the countries analysed the largest and most populous is Poland, where in 2015 lived 38 million inhabitants, of which one third in the predominantly rural regions. A large proportion of the residents of rural areas characterized by particularly Hungary and Slovakia (Table 1).

Table 1. Population in Visegrad Group according to urban-rural typology, 2015

Specification	Czech Republic	Hungary	Poland	Slovakia	Visegrad Group
Predominantly urban regions	2 574 378	1 757 618	10 754 011	625 167	15 711 174
Intermediate regions	4 504 235	3 507 402	14 642 947	2 077 247	24 731 831
Predominantly rural regions	3 459 662	4 590 551	12 620 898	2 718 935	23 390 046
Total	10 538 275	9 855 571	38 017 856	5 421 349	63 833 051

Source: Eurostat, 25.02.16.

If we treat the area of the Visegrad Group as a whole, its area would be inhabited by over 63 million citizens, which is about 1/5 of the population living in the European Union. It can be observed that from this 48 million inhabitants would come from outside the cities, definitely projecting on the level of economic development of this area, but also this group determines the trend of changes in the quality of life. This is particularly important from the point of view of cohesion, where the obliteration of spatial differences is one of the pillars of the functioning of the European Union. Also in the Visegrad Group's system, the rural population and transitional areas constitute almost exactly two thirds of the total population in this area (Figure 1).

**Figure 1. Share of population according to urban-rural typology, 2015**

* For Poland population as on 1 January 2014

Source: Eurostat [urt_gind3], 25.02.16.

At the same time, trends in this area may be reported by the analysis of demographic changes taking place over the past few years in individual countries included in the discussed geographical body.

Table 2. Population change in 2006-2015 (2006=100)

Country/region		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Czech Republic	Predominantly urban	100.0	100.9	103.0	105.0	106.3	107.4	108.3	109.1	109.4	110.6
	Intermediate	100.0	100.1	100.6	101.0	101.0	101.0	101.0	100.9	100.7	100.6
	Predominantly rural	100.0	100.2	100.7	101.2	101.3	101.3	101.3	101.3	101.2	101.2
Hungary	Predominantly urban	100.0	99.9	100.2	100.8	101.4	102.1	101.7	102.2	102.7	103.5
	Intermediate	100.0	100.3	100.5	100.6	100.7	100.5	99.3	99.0	98.6	98.3
	Predominantly rural	100.0	99.6	98.9	98.3	97.7	97.0	96.9	96.5	95.9	95.4
Poland	Predominantly urban	100.0	99.9	99.9	99.9	99.2	99.4	99.5	99.6	99.6	99.8
	Intermediate	100.0	100.0	100.0	100.1	100.0	100.1	100.2	100.2	100.1	100.1
	Predominantly rural	100.0	99.9	99.7	99.8	99.6	99.6	99.5	99.3	99.1	99.1
Slovakia	Predominantly urban	100.0	100.0	100.1	100.4	101.0	101.3	102.4	103.4	104.4	105.5
	Intermediate	100.0	100.1	100.1	100.2	100.3	100.3	100.5	100.5	100.5	100.5
	Predominantly rural	100.0	100.0	100.0	100.1	100.2	100.2	100.3	100.2	100.2	100.2

Population as on 1 January.

Source: Eurostat [urt_gind3] as on 25.02.2016.

The processes of depopulation in rural areas occur to a different degree in individual countries of the V4. It is very well seen from the data in Table 2 that in the Czech Republic the highest population growth occurs in urbanized areas. However, an important determinant of population processes is the increase in the number of inhabitants on all types of areas. A similar situation, although to a lesser extent, can be seen in Slovakia, where a marked increase in urban populations was accompanied by a slight increase in rural areas. Unfavourable trends in this area were observed in Hungary, where a small increase in urban population takes place along with a large loss of rural population and in transitional areas. An interesting case is Poland, where from 2000 we observe the reversal of long-term tendencies (reaching 50 years) of population growth in cities, at the expense of villages (Chmieliński, Karwat-Woźniak, 2015). A closer analysis of this phenomenon showed that the increase in the number of inhabitants in rural areas concerned mainly suburban areas, which was associated with the outflow of people with a relatively good financial situation to the areas surrounding large agglomerations. This process was also captured in table 2, which shows the population decline in predominantly rural and urban areas and its lack in intermediate. Assuming general depopulation tendencies in Poland, the scale of these phenomena is even more pronounced.

Rural areas have been traditionally seen as a place where population involved in farming lived and worked. The transition period of the 1990s and adjustment to the European structures, as well as the EU membership strongly affected the changes that took place in villages, in all analysed countries. The early stage of

the economic transition, the increasing unemployment was primarily related to liquidation of enterprises that employed rural population beforehand. No opportunity for earning livelihood led to the situation where excess of workforce burdened family farms, which hampered changes towards higher efficiency in the private farm sector. In the case of rural population not involved in work on private farms, the transition was accompanied by a sudden increase in unemployment. Lack of jobs and years of negligence with regard to the satisfaction of the fundamental needs of the rural population became an impulse for starting own business activity (Zegar 2008, Csaki et al. 2000, Davidova, Thomson, 2014). In spite of that, newly created entities functioning on the market basis had no chance of creating as many jobs as the previously existing state-owned enterprises (which were usually characterised by excessive employment).

The improvement in the general economic situation immediately before and after the accession to the EU, and the increasing professionalisation of agricultural activity and the improving education level of the rural population contributed to the increase in their activity on the non-agricultural labour market. Free transfer of knowledge and information contributes to the erosion of the boundary not only between the urban and the rural lifestyle, but also between farming and non-farming families. Before the transition period of 1990s, the population from non-farming families employed in industrial plants benefited from the fact not only by obtaining income, but also additional benefits, and had greater access to culture and organised free time activities (FAO, 2014, Sikorska, 1995).

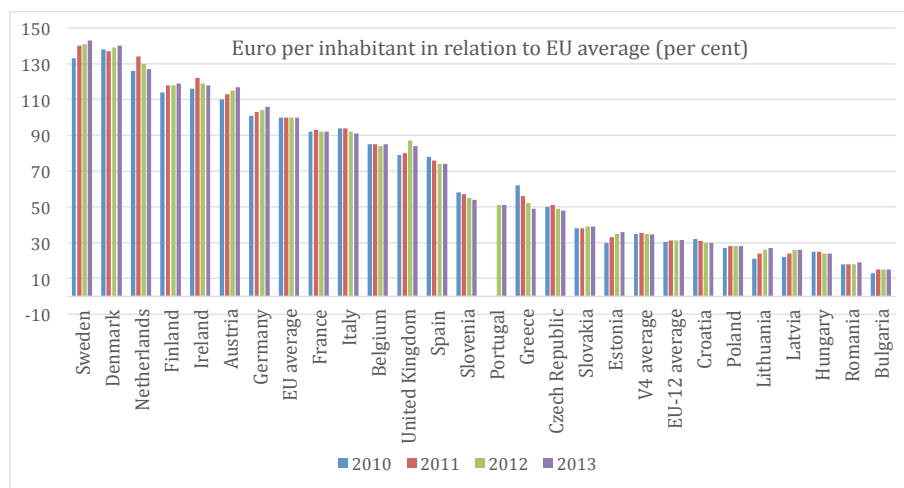


Figure 2. Gross domestic product (GDP) in predominantly rural regions, at current market prices*

* approximate data for Visegrad Group (V4) and EU12.

Source: Eurostat [urt_10r_3gdp], 16.02.2016.

Transformation has led to the backwardness of non-urban areas, especially those, predominantly rural. In addition to differences in the overall level of eco-

conomic development between EU countries, it should be emphasized that they occur in the case of rural areas (Figure 2). Rural areas in the countries of Central and Eastern Europe achieve the level of GDP at a level between 10 and 30% of the EU average¹. Considering the whole group, GDP would amount to one third of the average unification, while it is worth noting that it is Slovakia and the Czech Republic that can boast the largest part of GDP developed in rural areas. This is the reason for high level of industrialization of rural areas associated with the maintenance of large agricultural entities managing large production assets. In the case of income of the rural population, this image is reversed.

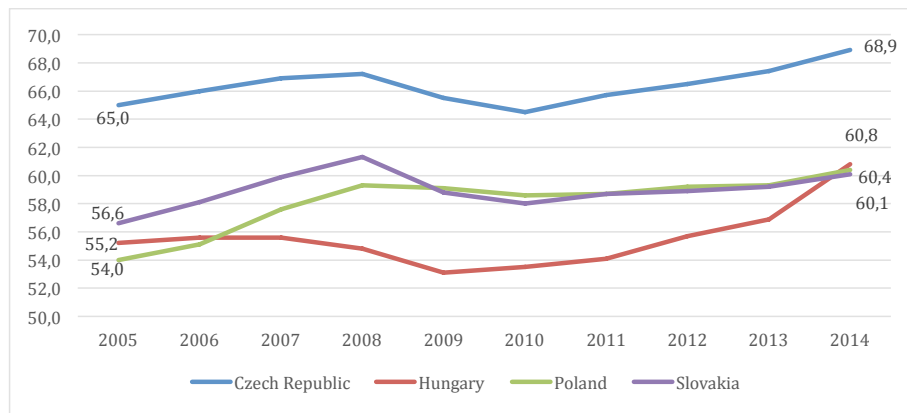


Figure 3. Change in employment rates of population aged 15 to 64 in predominantly rural regions in Visegrad countries, 2005-2014

Source: Eurostat [urt_gind3] as on 25.02.2016.

The positive effect of economic transformations connected with membership in the European Union for the Visegrad Group countries is a gradual increase in the employment of rural areas 15 to 64 in predominantly rural regions in these countries (Figure 3). In the years 2005-2014, in all countries, this increase amounted to around 3 percentage points. While in Slovakia, Hungary and Poland, this indicator was below 61% in 2015, in the Czech Republic it amounted to almost 70%.

Studies in this topic demonstrated the intensification of concentration processes in the agrarian structure (Józwiak 2013, Csaki et al. 2000, Davidova, Thomson, 2014). In most countries, their primary symptom was the clear drop in the number of private farms and the increase in the proportion of entities with relatively large agricultural area. In Poland over five years the number of people involved in agricultural activity was decreasing, and the proportion

¹ It should be noted that the significant difference in GDP per inhabitant in rural areas in the EU is demonstrated by the fact that only seven countries (Sweden, Denmark, the Netherlands, Finland, Ireland, Germany, Austria) were above the EU average (with a significant share as its components), while the remaining countries from EU28 were below the average, not to mention the position of the new member states in this ranking. (Figure 2).

of farms not active on agricultural markets grew from 13 to 20% (Sikorska 2014). The observed tendencies resulted mainly from the growing competitiveness on agricultural markets, weakening position of agricultural producers in the agri-business structures, which eliminated economically weaker entities, especially those with low production assets, from the market.

The prevalence of family farms in the agricultural structures results in the fact that the changes to the agrarian system are determined primarily by the mobility within this group. Due to the specific functions of family farms, where property, particularly land, is not merely a production factor, but the material family legacy passed from generation to generation, the scale of agricultural land trade is in a way limited a priori to a large extent, and the agricultural changes are evolutionary in nature (Niska, Vesala, Vesala, 2012). The scale of the ongoing change is determined by a number of various factors, the most important of which include the extent to which people leave farming and find jobs in other occupations (Sikorska, 2014, Terluin, Post, 2000).

Among the countries of the Visegrad Group, Poland and Hungary have the largest group of farms, while in the case of the agricultural model in individual countries there are major differences, which constitute a lack of grounds for comparison or grouping of these countries. Table 3 shows clearly that it is precisely in terms of agriculture that the V4 group is unable to find a common denominator, because in addition to family farming, as in Poland, we are dealing with one of the largest farms (in area) in the EU. In addition, in terms of economic size, the differences between the average value of SO farms in Poland and Slovakia is 5, and compared Poland to the Czech Republic, even 11 times higher.

Also, ownership matters in the case of farms remain different in different countries. While in Poland and Hungary, the owners remain the managers of farms, and work in it based on members of sole holders' family, in Slovakia and the Czech Republic they use the regular non-family labour force to a significant extent.

Table 3. Farm structure and use of labour force, 2015

	Czech Rep.	Hungary	Poland	Slovakia
Total number of holdings	26 250	491 330	1 429 010	23 570
<i>Economic indicators:</i>		<i>per farm</i>		
Utilised agricultural area – average	133.01	9.48	10.08	80.68
Standard output (SO) – average	169,408.15	11,352.30	15,253.54	76,886.83
Labour force (AWU):				
- Sole holders working on the farm	0.89	0.98	0.99	0.88
- Labour force – members of sole holders' family	0.99	0.98	1.44	0.78
- Regular Labour force, including:	5.03	2.16	2.49	3.39
o family labour force	1.88	1.96	2.44	1.66
o regular non family labour force	3.15	0.20	0.05	1.74

Source: Eurostat [urt_gind3] as on 25.02.2016.

Due to the relatively large share of regular family labour force in the labour force structure in most countries of the group, it should be emphasized that agriculture will remain a relatively important element for the labour market in these regions. In contrast, healthy, rural economy must also be based on non-farm employment.

According to Sikorska (2013) and Wilkin (2009) the issue of reduction in employment in agriculture and shift of labour resources from agriculture to non-agricultural sector has been seen as a basic prerequisite for improvement in the agrarian structure and the efficiency of farming and improvement in the income situation of residents of the countryside for many years. However, it was not the receptive non-agricultural labour market caused such processes, but the economic environment of agriculture, particularly brokers and processing entrepreneurs, and the opportunities provided to many farmers by launching support under the Common Agricultural Policy. In this context, the basic objective of the research will be a detailed examination of the extent to which rural development, economic activity of residents of villages and preservation of the existing settlement network are determined by the access to non-agricultural jobs, whose increase is pointed to as the basis of non-agricultural rural economy, reduction in rural poverty, as well as the factor for the increase in the multifunctionality of agriculture (Christensen, Lacroix, 1997, Davis 2006, Davidova, Fredriksson, Bailey, 2011, Wilkin, 2011). Hence, the development of non-agricultural economic activity of residents of villages is the primary driving force of growth in rural economy as well as an opportunity for the absorption of human potential, which becomes active on the labour market due to changes to private farming towards increased efficiency.

Dicussion

The discussion on the principles and preferences used in EU policy emphasises the role of family farms as the most important form of organisation in agriculture. The commonly accepted priority importance of this form of agricultural production was the reason for FAO declaring 2014 the year of family farms (FAO, 2014). As far as declarations are concerned, nearly all agricultural policies include care for the condition of family farms. What is stressed apart from their significance in agricultural production is their cultural value and their role in the preservation of biodiversity in the agricultural structure.

Over the years, polarisation of families according to their primary source of income was accompanied by the acceleration of agrarian changes. This phenomenon was significantly influenced by the unidirectional support for farms under CAP, primarily direct payments. As a consequence, development opportunities for farms were increasing, particularly with regard to entities with outstanding production assets, which could significantly increase their investment scale due to the cash influx. In the face of the land fragmentation,

they created the demand primarily for agricultural land to increase their production scale.

In most of Visegrad Countries, competition on agricultural markets and requirements imposed on agricultural producers by recipients of goods resulted in elimination of economically weaker entities from the market (Sikorska, 2013, Józwiak, 2013, Karwat-Woźniak, Sikorska, Chmieliński, 2015). Taking account of agrarian fragmentation and low production assets of a significant part of private farms, most of farming families were forced to look for an alternative source of income. But this situation mainly concerned Poland, where the majority of farms are family farms. There are no such problems in the Czech Republic and Slovakia. However, there is the problem of employment of external labour force in large farms, especially those located in peripheral rural areas, most at risk of depopulation. Even if small and medium enterprises started to play an increasingly important role on local labour markets, which gradually extended their spatial range, the markets are still rather tight in most cases and therefore cannot prevent migration and depopulation processes. Borders of local labour markets are determined by rural populations' commuting opportunities, and as the condition of infrastructure improved, the proportion of rural population working outside the place of residence is growing (Chmieliński 2013).

Often, the process of agrarian changed involved growth in phenomenon of the passive income agriculture (which has been studied by researchers to a relatively small extent), i.e. the situation where managers of small farms decide to maintain good agricultural and environmental conditions of the land primarily to obtain direct payments and/or financially secure their families (Brady et al. 2015, Sikorska 2014). This phenomenon, known as land blocking, is one of the barriers to the improvement to the agrarian structure (Csaki, et al., 2000, Cramer et al. 2001, Davidova, Thomson 2014). Permeation of the family system to farming, particularly the customary rules governing inheritance of production assets leads to the situation that farm management and decisions concerning the land are strongly conditioned by demographic features as well as social and occupational ambitions of individual family members and opportunities for pursuing them. Social conditions affect changes to agricultural land ownership in the circulation within a family, they also significantly affect the situation on the agricultural land market. It particularly concerns the supply, i.e. the tendency to dispose of the owned land by selling or leasing it out. These processes still stimulate non-farm labour market with supply of potential of those, formerly involved in farming activities, like in Poland or Hungary (Potori, Chmieliński, Fieldsend, 2014). In other cases (as in Czechia and Slovakia) big agricultural holdings are facing problems with seasonal and hired labour (Stolbova, Molcanova, 2009) as a result of the same socio-demographical reasons. It can therefore be concluded that the vitality of rural areas depends to a large extent on the condition of the non-agricultural economy (see: Zegar, 2012, Wilkin, 2011).

It can be considered that while the Visegrad Group countries are characterized by different models of agricultural development that affect the picture of rural areas in these regions, structural problems, such as unfavourable demographic trends and the general level of economic development in relation to the EU average remain at a similar level. It should be emphasized that it is agriculture as a sector, its diversity in particular countries, diversified level of development (agricultural productivity) that makes it difficult to integrate development mechanisms directed by individual countries to rural areas.

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