

THE DEMOGRAPHIC PECULIARITIES OF RURAL POPULATION

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Abstract: The purpose of this paper is to determine differences in statistic characteristics between rural and urban population. The research was concentrated on the South Moravian Region and the data from the Population and Housing census were used. This study investigates relation between the number of family members of household and the size of municipality and dependence of the fertility level on the size of municipality. Moreover the phenomenon of ageing of the rural and urban population was studied. As a result it was found that households with higher number of family members are more characteristic for smaller settlements. Fertility is higher in rural areas and small towns. The ageing of population is widespread in rural areas as well as in urban areas.

Key Words: population, rural areas, fertility rate, municipality, rural ageing

INTRODUCTION

A considerable part of the literature is devoted to the population characteristics research of rural areas and their changes. Differences in fertility levels between urban and rural areas have been decreased over time, but these differences between various types of settlements still exist (Kulu 2013). Generally, the fertility rate is higher in rural areas and small towns, and it is lower in the big cities. This model applies for example to the United States, England and Wales, France, the Netherlands, Italy, Germany, Austria, the Scandinavian countries, the Czech Republic, Poland, Estonia and Russia. The studies of changes in fertility in urban and rural areas show very similar results, but it is not yet completely clear why it happens. The scientists, who discuss this phenomenon, occupy two competing hypotheses on spatial variation in fertility – there are compositional and contextual hypotheses. Compositional hypothesis suggests that fertility rates vary between municipalities just because different people live in different settlements. On the contrary, the contextual hypothesis suggests that factors associated with the immediate environment are critical.

The role of selective migration is also discussed. Couples, who are planning to have children, may decide to move to smaller settlements, which are more suitable for the child's upbringing, while people, who do not plan to start a family, often settle in larger cities. If the compositional hypothesis is considered, the fact is that the proportion of highly educated people is higher in cities than in small towns and rural areas (Andersson, Scott 2007). In many countries the fertility rate varies by education level of the population, with the lowest rate of university-educated people and the highest rate of people who had completed only primary education. Therefore lower fertility rates in larger settlements can be easily explained by the higher proportion of highly educated people. There are greater proportions of people in a marriage in smaller towns and rural areas and it is connected with parenthood (Hank 2002). Regarding contextual hypothesis, the context can affect fertility through economic opportunities and constraints, and cultural factors (Kulu 2013).

Low birth rate, which is not possible to compensate with the declining mortality rate, leads to continuing high natural population decline. Reproductive behaviour of the population of cities and rural areas converge as a result of taking over the reproductive patterns of urban population to rural population, but mainly as a result of population educational level equalizing in cities and rural areas. The education level has the great impact on reproduction. (Anderle 2003). The number of people, who primary concentrate on career and greater leisure opportunities, grew up after the year 1989. That caused

the postponement of the first or second child at a later time. This phenomenon is most evident in the big cities, especially in Prague (Nyvlt 2005).

MATERIAL AND METHODS

The South Moravian Region was selected for the study. Czech Statistical Office in cooperation with The South Moravia Regional Authority determined rural areas as settlements with population less than 4,000 inhabitants.

Family in the Czech Republic, hence in the South Moravia, has changed for the last decades. It copies European trend of delaying marriage and parenthood. According to the Czech Statistical Office in the South Moravian Region and all over the Czech Republic the number of new concluded marriages declined and a number of out of wedlock births increased. But this fact does not mean that children grow up in incomplete families, but the pattern of traditional marriage is changing. The South Moravian Region has the fourth place in the birth rate after the Central-Bohemian Region, the Prague City and the Moravian-Silesian Region. (Concept of family policy of the South Moravian Region for years 2015–2019).

Firstly relation between the number of family members of household and the size of municipality was analyzed. The data were taken from Population and Housing census and the results of years 2001 year 2011 were compared. Investigation of dependence of the fertility level on size of municipality was the next aim of this study. The number of new-born children per 1 000 women of fertility age were calculated to fulfil the purpose of this investigation. Data from the Czech Statistical Office were used. Finally the age structures of different types of municipalities were compared and data changes for year 2001 and 2011 were analyzed.

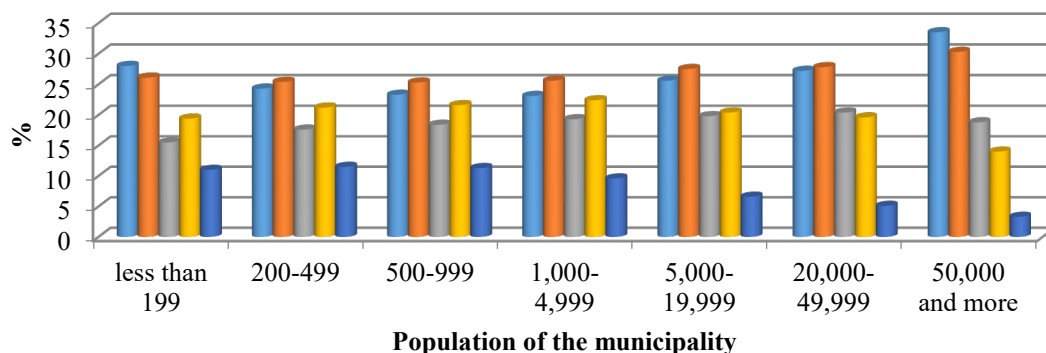
RESULTS AND DISCUSSION

Relation between the number of family members of household and the size of municipality

The results of the Population and Housing census of years 2001 and 2011 are presented in Figure 1. Bar charts show that the percentage of one-person household predominates in municipalities with population less than 199 and more than 50,000 inhabitants. Moreover this indicator increased from year 2001. This fact could be caused by a high number of old people, who remain alone (rather in villages) and young lonely people in big cities. Households with higher number of family members are more typical for settlement with population 200–4,999 inhabitants, these settlements can be classified as rural areas and small towns. Furthermore a number of 1 and 2-person households increased there from year 2001. Usually people from rural areas and small cities try to keep tradition attitudes and life style with large family tendency (Kulu 2013).

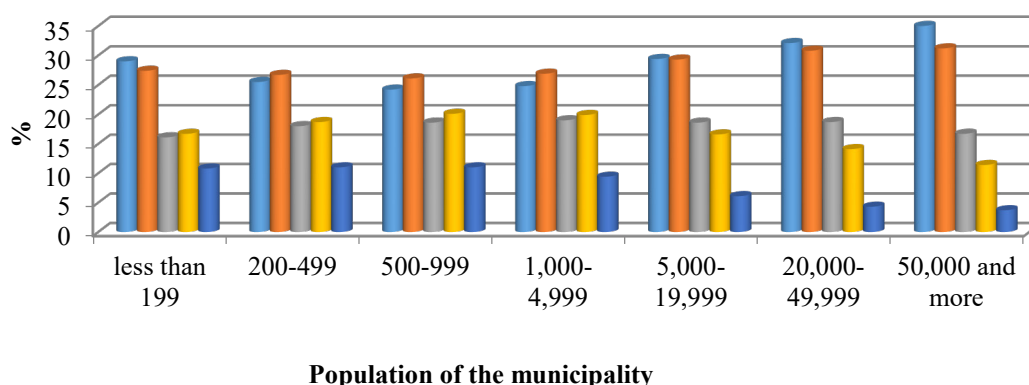
Figure 1 Relation between the number of family members of household and the size of municipality, the South Moravian Region, CR

A) year 2001



Legend: Number of family members in the household 1 2 3 4 5 and more

B) year 2011



Legend: Number of family members in the household ■ 1 ■ 2 ■ 3 ■ 4 ■ 5 and more

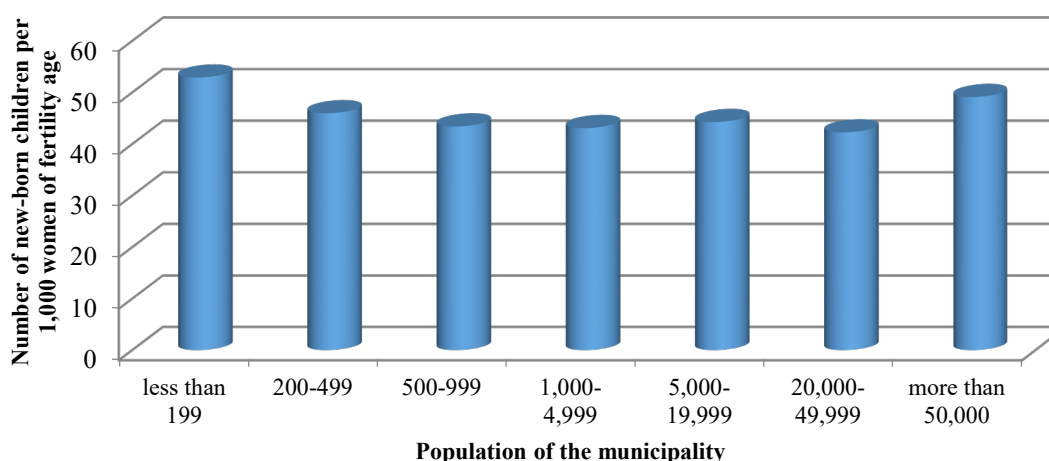
Dependence of the fertility level on the size of municipality

The numbers of new-born children per 1,000 women of fertility age in different types of settlements were calculated to find relation between fertility and size of municipality. The statistic data for the South Moravian Region for year 2013 were used for this calculation (Czech Statistical Office). Results are presented in Table 2 and Figure 2.

Table 2 Number of new-born children per 1,000 women of fertility age and the size of municipality

	Population of the municipality						
	less than 199	200–499	500–999	1,000–4,999	5,000–19,999	20,000–49,999	50,000 and more
Number of new-born children per 1,000 women of fertility age	52.9	46.0	43.4	43.1	44.3	42.3	49.1

Figure 2 Dependence of the number of new-born children on the municipality size, CR, 2013



Bar chart in figure 2 shows that fertility declines from smaller to bigger settlements. Municipalities with population more than 50,000 inhabitants are exclusion in this case too. Only one Brno city with population more than 380,000 inhabitants represents this category. Anyway correlation coefficient for fertility and size of municipality is 0.34, so it is the average correlation. If the data for Brno were not taken into consideration, the correlation coefficient will be – 0.46, therefore it will be already high negative correlation. The cultural factors can influence the differences in fertility between

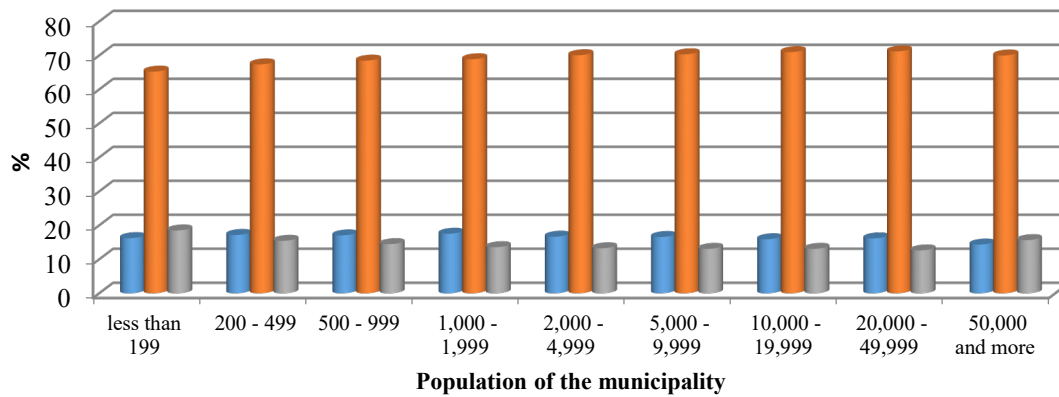
urban and rural areas. Moreover it is known that raising children is more expensive in cities than in rural areas (Snyder 2006).

Dependence of the age structure of population on the size of municipality

The last part of the research was the investigation of the age structure of population of different settlements and the phenomenon of ageing. According to the bar chart in figure 3 old people presented higher percentage in smaller settlements in year 2001, but the situation have changed in year 2011.

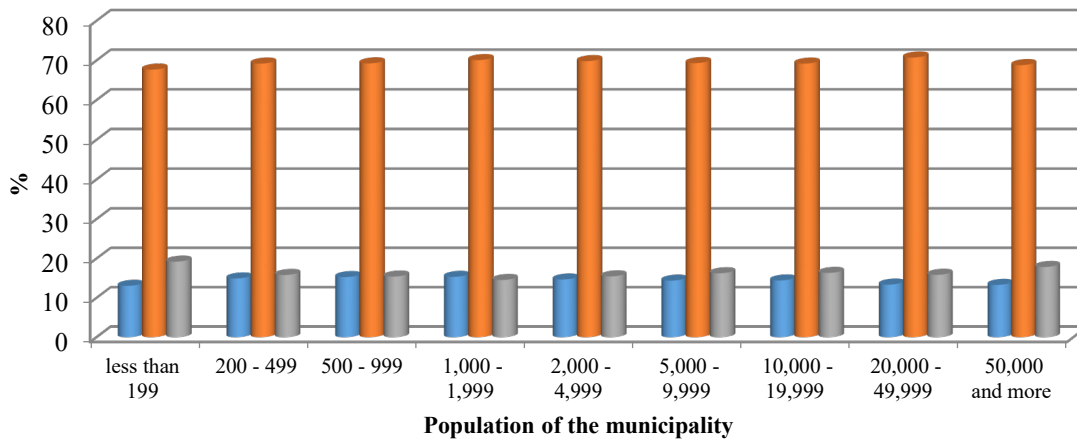
Figure 3 Dependence of the age structure of population on the size of municipality, the South Moravian Region, CR

A) year 2001



Legend: Age 0-14 14-64 65+

B) year 2011

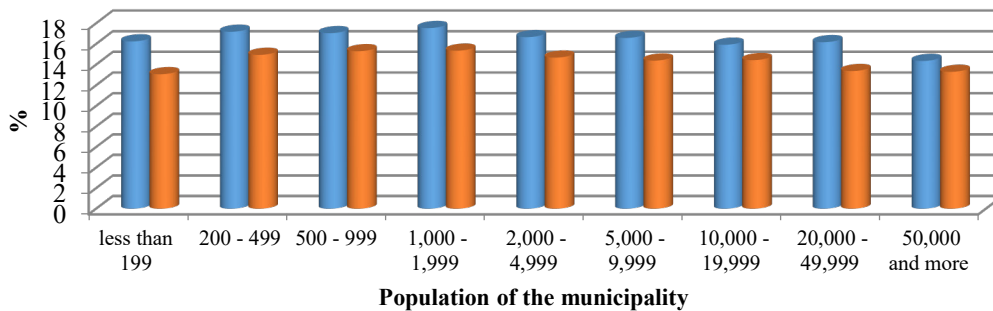


Legend: Age 0-14 14-64 65+

Bar charts in figure 4 are presented to do more detailed analysis. As it is shown in bar charts the percentage of older people in all settlements has raised and percentage of children and people younger of 65 years in the contrast has declined in years 2001–2011. Only settlements with population lower than 2,000 have a little bit increment of 14–65 years old people. Therefore the phenomenon of population ageing is typical for all types of settlements in the South Moravian Region.

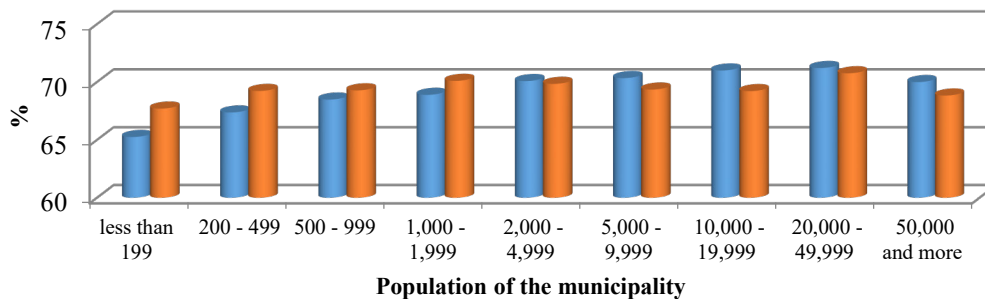
Figure 4 Percentage of different age groups in population structure in years 2001 and 2011, the South Moravian Region, CR

A) 0–14 years old



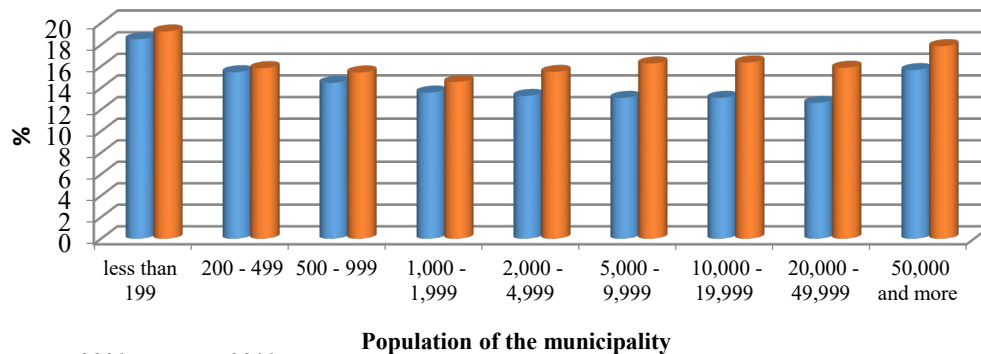
Legend: ■ year 2001 ■ year 2011

B) 15–65 years old



Legend: ■ year 2001 ■ year 2011

C) 65 years old and older



Legend: ■ year 2001 ■ year 2011

The results of recent population censuses in many advanced industrial countries proved the phenomenon of rural ageing. Moreover future increase of the older population during the next few decades much larger than in metropolitan areas is projected (Milbourne 2012).

CONCLUSION

The results of the research point to connection between size of municipalities and number of family members in the household. For instance higher number of family members is more typical for rural settlements. Only municipalities with population less than 199 inhabitants are exclusion, because households with 1- and 2-person dominate here.

Investigation of the relation between fertility and size of municipality was the next stage of the research of the statistic features of rural population. As a result of this study it was found that

villages and smaller towns have higher number of new-born children per 1,000 women of fertility age, only Brno city is exclusion. Substantial portion of a spatial fertility variation depends on housing conditions and contextual factors. The rural and small town environment gives more possibilities for couples to reach their desired family size in reality. In urban areas, in contrast, the desired family size is smaller and in large cities, in particular, some couples never reach their desired family size, because they have bad housing conditions and/or bad financial situation (Kulu 2013).

The comparison of the age structure of population in years 2001–2011 proved the fact of ageing population in rural areas as well as ageing in all types of settlements in the South Moravian Region. Nevertheless in rural areas people are more threatened and more vulnerable than in urban areas. Rural seniors are threatened by a lack of social and medical facilities and services; respectively they need to travel for this care. The scientists who carried out the International Rural Ageing Project supposed that in future studies the rural ageing can be considered as ‘global challenges’ and can be grouped as social, economic and political, technological, relating to climate change, or related to agriculture and food security (Burholt, Dobbs 2012).

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