Primary School Pupil Numbers and Demographic Change in Czech Municipalities

Abstract

Following a sharp fall in fertility to its historical minimum after 1990, the population of Czechia began to increase again gradually. Consequently birth cohorts of varying size are emerging and these then enter the education system. Moreover suburbanisation has led to a change in population distribution. These factors have mean that in some areas primary school capacity does not reflect the numbers of primary school age children, with some schools having insufficient places and others suffering from a lack of pupils. The aim of this dissertation is to analyse regional demographic change in Czechia after 1990, including changes in the spatial pattern of compulsory school age children (6–14 years). The information obtained is set against the changes in the spatial patterns of primary school pupils and maximum primary school capacity. The whole analysis is undertaken within the catchment regions for combined primary schools (schools that provide nine years of primary and middle school education), which were created on the basis of the shortest road distance from the district to the nearest combined primary school. Webb's graphs were used along with spatial autocorrelation since these are appropriate methods for conducting analyses at the regional level. After 1990 the spatial pattern of demographic change was transformed, with border areas that had originally recorded population growth beginning to see a decline in numbers, particularly as a result of migration, and the hinterlands of Prague and other cities that had previously seen population falls recording population increases, initially because of migration and then as a consequence of natural population growth. Throughout the period observed the populations along the south western and south eastern borders of Southern Bohemia experienced an overall decline, largely the result of negative natural population growth. The most notable increase in the number of compulsory school age children occurred in the Prague hinterland and later in the environs of Brno, while the number of pupils first rose in non-city catchment regions where the demand for school places was saturated. Later pupil numbers rose in other areas in the Prague and Brno hinterlands as well. It can be assumed that the long-term growth in the number of children reaching compulsory school age put pressure on the need for new capacity in districts that could no longer rely on it being available in nearby towns. The areas that saw a fall in the population aged 6–14 and a reduction in pupil numbers did not form as compact and stable an area as did the regions recording a growth in the number of children. Intermittent marked declines in the number of children and pupils were to be seen in the inner periphery and some border areas in particular. It is therefore logical that in these areas we find the catchment regions with the largest primary school reserve capacities. The smallest reserves are found in the catchment regions in the hinterlands of Prague, České Budějovice and Liberec, where the situation can be expected to deteriorate in the future. Primary school capacity in these areas is now almost exhausted as stage one primary school pupils gradually enter stage two. These areas are still seeing continued natural population growth and so there is unlikely to be a decline in the number of stage one pupils.

Keywords: population development, primary school capacity, regional differences, Webb's graphs, spatial autocorrelation, Czechia