ABSTRACT. The paper is an attempt of an answer how belonging to different political, economical and cultural structures has influenced diverse population processes and structures and their spatial diversity. As an example to the research of these phenomena there was chosen Germany that until 1990 were two separated socio-political and economical formations (the German Democratic Republic (GDR) and the Federal Republic of Germany FRG). This state, with a population number about 82 millions presently, as it turns out – besides passage of time – is characterized all the time by some diversity of procreation behaviors, population processes and structures in the Eastern (Ost) and the Western part (West) of Germany. It is claimed, the structures are going to some similarities, but the 15 years period (1990–2005) was too short to level all stated demographical differences and trends (1).

KEY WORDS: GDR, FRG, demographic structures, border.

This article sets out to answer the question how belonging to separate political and economic structures has contributed (contributes) to the emergence of diverse population processes and structures, as well as their spatial variations. As an example useful in investigating such phenomena Germany was chosen, that had constituted two different states – socio-political and economic organisms, i.e. the German Democratic Republic (GDR) and the Federal Republic of Germany (FRG) – until the year 1990.

In the space of history state borders have been, and unfortunately still are, a distinct element making countries separate physico-geographical and socio-economic entities. Nevertheless, the meaning of the word “border” as understood by the citizens of European countries, and especially those living in the European Union, has been gradually changing. How can we define the socio-economic or
physico-geographical borders between two countries when the only distinguishing element is the official language they use and only a roadside board informs that the border is being crossed?

The authors ask the question whether procreative behaviours and population structures and processes are shaped differently in the eastern and western part of the country whose population totals today 82 million people. Has the period that elapsed from the unification of the two German states been long enough to smooth out all consolidated dissimilarities and demographic trends?

While distinct material relics of the former system (neglected infrastructure, dilapidated housing stock, etc.) can sometimes be seen in the federated states (Länder) that used to belong to the German Democratic Republic (East Germany), “the demographic border” manifests itself in a more subtle manner. Even though older persons outnumber the younger ones on the streets of East German towns and villages (compared with the West Länder), it is difficult to assess explicitly the correctness of this observation without conducting an investigation.

This investigation is a preliminary attempt at explaining whether the demographic processes and structures existing in areas that formerly, i.e. to the year 1990, belonged to either the GDR or the FRG show any differences. Demographic variations were sought based on deviations (plus or minus) from the average values of three selected measures: the balance of migration (‰), the share of persons aged 65 and older in the total number of population (%), and the birth rate (‰).

The measures enabled the analysis focused on the period 1991–2005 (the 14 years that passed from the unification of Germany) to capture some differences between the eastern and western parts of the present Federal Republic of Germany (i.e. between the new and old Länder) (Środa, 2003, Szymańska, Środa, 2006).

While in 1991 in more than half of the federated Länder (9 units representing 56.1% of their total number), all being former West German Länder, the examined measures exceeded their average values (+ + +) calculated for the 16 Länder, at the end of 2005 only 3 such A-type (+ + +) Länder could be found, also in West Germany (Fig. 1).

In contrast, in four out of six East German Länder the values of all measures were below the average (type H/– − −) in 1991. The two exceptions were Berlin (type D/+ − −), the capital of Germany, where demography evolved differently after 1991 than in the other new Länder, and Saxony (type F/− + −) (Fig. 1). As for Berlin, the average was exceeded by the balance of migration, and in the other case it was the share of persons aged 65 plus in the total number of population. The two remaining measures were below the average in each case.

Interestingly, in 2005 Germany did not have a single Land where all three measures were lower than the average (− − −). In half of the western Länder
type C (+ – +) prevailed in which both the balance of migration and the birth rate exceeded the average, and the share of persons aged 65 years and older in the total number of population was less than average (+ – +). On the other hand, in all Länder of the former German Democratic Republic but Berlin the share of older persons in the total number of population was the only measure to exceed the average (– + –) (Table 1).

The above data offer the conclusion that in both 1991 and 2005 the border between the old and new Länder separated the population processes and structures in the Federal Republic of Germany (Fig. 1).

However, searching for demographic variations on the macro-scale only (at the level of Länder) seems insufficient. For that reason, an analogous analytical procedure was applied to counties (Kreise) and special towns with the county status (Kreisstädte), totalling 439 administrative units.

According to the investigation, 120 counties (27.3% of their total number) in 1991 were type A (+ + +) where the three analysed measures had above-average values, and all the counties belonged to the FRG. Another 124 (28.2% of their
The total number) counties where only the share of older persons in the total number of population was below the average (type C/+ – +) also belonged to the “old” Länder. It should be stressed that in 1991 the H-type (– – –) counties where the measures were below their average values accounted for 19.0% (83 counties) of the total and all but one were located in East Germany (Fig. 2).

In the remaining 31 East German counties (excluding Berlin), only the proportion of persons aged 65 plus in the total number of population exceeded the average.

Between 1991 and 2005 the number of counties where all measures exceeded their respective averages (type A/+ + +) went down from 120 to merely 28 units, with only two of them being located in the former GDR. The number of the H-type (– – –) counties where values of the three measures were lower than average also decreased, declining from 83 units in 1991 to 26 in 2005. It is worth mentioning that while in 1991 only one of the H-type (– – –) counties was located in West Germany, after fourteen years the number of such counties in that part of Germany expanded to 12 units (Table 2).

On the other hand, the number of counties where the balance of migration was the only measure to exceed the average (type D/+ – –) increased between 1991 and 2005 from 6 to 23 units. The number of the F-type (– + –) counties where the share of older persons in the total number of population was higher than the average also expanded, from 41 to 119 (Fig. 2). The growing proportion of older persons in the overall number of Germany’s population in the investigated period was caused by the declining number of births and by the extending human life expectancy.

Table 1. The structure of the federated Länder in the Federal Republic of Germany in 1991 and 2005 according to the table with signs

<table>
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</tr>
</thead>
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<td></td>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
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<td>1</td>
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<tr>
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<td>56.1</td>
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<td>6.3</td>
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<td>6.3</td>
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<td>4</td>
</tr>
<tr>
<td>EG</td>
<td>– –</td>
<td>– – – – –</td>
<td>– – – –</td>
<td>16.7</td>
<td>– –</td>
<td>1</td>
<td>16.7</td>
<td>– –</td>
<td>4</td>
</tr>
<tr>
<td>WG</td>
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<td>10.0</td>
<td>– –</td>
<td>– –</td>
<td>– –</td>
<td>– –</td>
<td>10</td>
</tr>
<tr>
<td>2005</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>3</td>
<td>18.7</td>
<td>– –</td>
<td>6</td>
<td>37.5</td>
<td>– –</td>
<td>– –</td>
<td>6</td>
<td>37.5</td>
</tr>
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<td>EG</td>
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<td>– – – – –</td>
<td>1</td>
<td>16.7</td>
<td>– –</td>
<td>– –</td>
<td>5</td>
<td>83.3</td>
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<td>50.0</td>
<td>– –</td>
<td>– –</td>
<td>1</td>
<td>10.0</td>
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</tbody>
</table>

Note: 1 – number of the federated Länder, 2 – share (%) in the total number of the federated Länder, G – Germany total, EG – East Germany, WG – West Germany

Source: author’s own study based on data from DESTATIS.
Fig. 2. The typology of the Federal Republic of Germany according to the table with signs (the balance of migration (‰), the share of persons aged 65 and older in the total number of population (%), and the birth rate (‰), years 1991–2005, by counties (Kreise)

Source: author's own study based on data from Destatis.

Table 2. The structure of the FRG counties (Kreise) in 1991 and 2005 according to the table with signs

<table>
<thead>
<tr>
<th>TYPE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(+ +)</td>
<td>(+ +)</td>
<td>(+ -)</td>
<td>(+ -)</td>
<td>(- +)</td>
<td>(- +)</td>
<td>(- -)</td>
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<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>G</td>
<td>120</td>
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<td>27</td>
<td>6.2</td>
<td>124</td>
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<td>6</td>
<td>1.4</td>
<td>27</td>
</tr>
<tr>
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<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>1</td>
<td>0.9</td>
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<td>–</td>
</tr>
<tr>
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<td>36.8</td>
<td>27</td>
<td>8.3</td>
<td>124</td>
<td>38.0</td>
<td>5</td>
<td>1.5</td>
<td>27</td>
</tr>
<tr>
<td>2005</td>
<td>G</td>
<td>28</td>
<td>6.4</td>
<td>34</td>
<td>7.8</td>
<td>130</td>
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<td>5.3</td>
<td>7</td>
<td>6.2</td>
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<tr>
<td>WG</td>
<td>26</td>
<td>8.0</td>
<td>28</td>
<td>8.6</td>
<td>124</td>
<td>38.0</td>
<td>16</td>
<td>4.9</td>
<td>25</td>
</tr>
</tbody>
</table>

Note: 1 – number of the FRG counties, 2 – share (%) in the total number of the FRG counties, G – Germany total, EG – East Germany, WG – West Germany

Source: author's own study based on data from Destatis.
In 2005, only 21 counties among all East German counties had the balance of migration in excess of its average, in another 10 counties the average was exceeded by the birth rate. These numbers correspond, respectively, to 18.6% and 8.9% of all counties in East Germany. In the other counties (103) on that territory the birth rates were lower than average. Two factors were behind this situation: following the unification of Germany the young population living within the former GDR became more concerned about their future, and additionally new career options became available (especially to women) – all this induced a rapid decline in the number of births (Birg, 2002). Indirectly, the drop in the number of births was also brought about by the huge outmigration from eastern to western Länder, especially among young persons (Mai, 2006). Consequently, the balance of migration recorded in West Germany in 2005 exceeded the average value in as many as 194 counties (5.5% of the western counties). The birth rates also surpassed the average in 227 counties representing 69.6% of all western counties (Table 2).

The conclusion is that in 1991 West Germany and East Germany had their specific population structures in both the Länder and individual counties. The main types of Länder in West Germany were A and C (the balance of migration and birth rates were higher than average), while on the territory of the former German Democratic Republic definitely predominated types of Länder where values of both the balance of migration and of the birth rate were below average (F and H) (Fig. 1). Analysing then the 2005 values of the measures by a federated Land we can see that Germany was clearly divided into her eastern Länder (where in most cases the balance of migration and the birth rates were below average and the shares of persons aged 65 plus in the total number of population were higher than average), and western Länder where the lower-than-average share of older persons in the total number of population co-occurred with values of the balance of migration and birth rates exceeding the average – type C (Fig. 1). As for the county level in 2005, the German-German “demographic border” was not so distinct as in 1991 (Fig. 2). At the beginning of the investigated period (1991) the structure of eastern counties in respect of the selected measures revealed two types – F and H, but in 2005 it was the mosaic of all types, with the clear prevalence of type F.

Therefore, that fact that until the year 1990 the two German states represented two diverse political, socio-economic and cultural structures contributed, and still contributes, to the different courses of population processes, with the resulting dissimilarity of demographic structures in the eastern and western parts of Germany, both among the Länder and at the county level.
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