**Analele Universităţii din Oradea – Seria Geografie** Tom **XX**, no. **1/2010** (**June**), pp. **76-85**
ISSN **1221-1273**, E-ISSN **2065-3409** Article no. **201109-473**

# THE CONTRADICTIONS OF THE RELAUNCHING OF THE POPULATION FERTILITY INDICATORS IN CONTEMPORARY EUROPE

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**Abstract:** This study is part of the theoretical substantiation of the research program afferent to contract no. 1007/2009, code CNCSIS ID-1987 (entitled *The quality of transport infrastructure as a premise of the differentiation of rural areas in Moldova*). The starting point is the finding that Romania is one of the few European countries in which the relaunching of the demographic indicators of fertility has not been very obvious during the last years in spite of the efforts of implementing policies that are trying to be „friendful" to families. The study attempts at grasping the territorial differentiations brought about by the change of the demographic behaviour at the national and European level. It also comprises a comparative analysis between Romania and Ukraine, two neighbouring countries with considerably different evolutions in this context. The differences that have been noticed, generally in disfavour of Romania (and especially of the traditionally prolific areas in the North-East of the country) can receive diverse explanations that refer both to the diminution of the baneful effects of the transition to a market economy and to the erosion of the demographic vitality due to some strong emigration flows especially after 2001. The study is also intended to go thoroughly into the conclusions extracted from some pertinent analyses conducted by researchers abroad (Haub, 2009; Caltabiano, 2009 etc.), which certify a clear differentiation at the national level within Europe, especially between the South and North part of the continent.

**Key words**: territorial differentiation, total fertility rate, geo-demography, Romania, rising states

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## PRELIMINARIES

The starting point of this study is a recent article published by Carl Haub on the *Population Reference Bureau site* (2009) on the differentiation of two categories of countries in Europe: on the one hand states that deal with a recovery of the total fertility rate (TFR), often spectacular as in the case of Russia (the so-called „rising states"); on the other hand, states in which this reversal is either hardly noticeable or even absent as it is the case in Romania („continuing decline"). This takes place under the circumstances in which most European countries have implemented family-stimulating measures. This phenomenon has drawn the attention of the European researchers, their explanations being diverse. Thus, for the countries in South Europe they invoke especially cultural and institutional characteristics, which are thought to have led to the postponing of motherhood and to the increase of marriage age, in the context of the rise of the feminine population's educational

level (Caltabiano, 2009; Baizán, 2009). In Eastern European countries they assign decisive importance to the transformations triggered by the transition to a market economy (Seys, 1998).

In this way, in Poland they invoke the discrimination of the feminine population within the labour market (Mishtal, 2009). In Lithuania, the defective family policies inherited from the communist period are regarded as the main responsible element (Stankuniene, 2006). In Romania, one can notice an alternation between genuine periods of demographic crisis (1990-1994, 2001-2003) and periods of adjustment, generated both by the change of the demographic behaviour and the adaptation to the defiances of globalization (Muntele, 2006, 2008). Certain authors foresee the entry of the whole planet in what they have called "demographic recession" (Chesnais, 2000).

In order to point out the present territorial disparities (including from the perspective of their genesis) the evolution of the total fertility rate (TFR) was subject to two analyses at both the European and national level for the period 1990-2008. Furthermore, there is a comparative analysis between two countries which apparently belong to the same East European demographic pattern but which have experienced rather divergent evolution tendencies (Romania and Ukraine). The period is long enough to confirm the tendencies presented in the above mentioned article and to ground some working hypotheses able to explain Romania's characteristics in this context, from a geographical perspective.

## EUROPE OF THE NINE DEMOGRAPHIC "SPEEDS"

*The TFR analysis at the European level* involved creating a complete data basis on the data series necessary to calculate this indicator. The information was acquired from highly reliable institutions (EUROSTAT, INED, Population Reference Bureau of U.N.O and national statistical institutes endowed with *sites* which are generous from this point of view and accessible on the *web* page of INSEE in France) and a series of publications systematically providing gross or processed geo-demographic information – mainly the Population magazine of INED in France.

The analysis assumed elaborating an ascendant hierarchical classification meant to separate classes which are unitary and homogenous from the view point of the evolution tendency of the indicator taken into account. The values were related to the European average (the analysis also took into consideration Turkey, Georgia and Armenia even though, regarded geographically, they are not necessarily European). The European average was always under the generation replacement level: 1.85 in 1990, 1.45 in 2002 (when it reached its minimum value) and 1.55 in 2008, after several years of re-inflation.

There were delimited three categories of states with very clearly differentiated tendencies (figures 1, 2a, 2b):

a). *states with a TFR level preponderantly superior to the continental average*. Three distinct groups can be distinguished within this category:

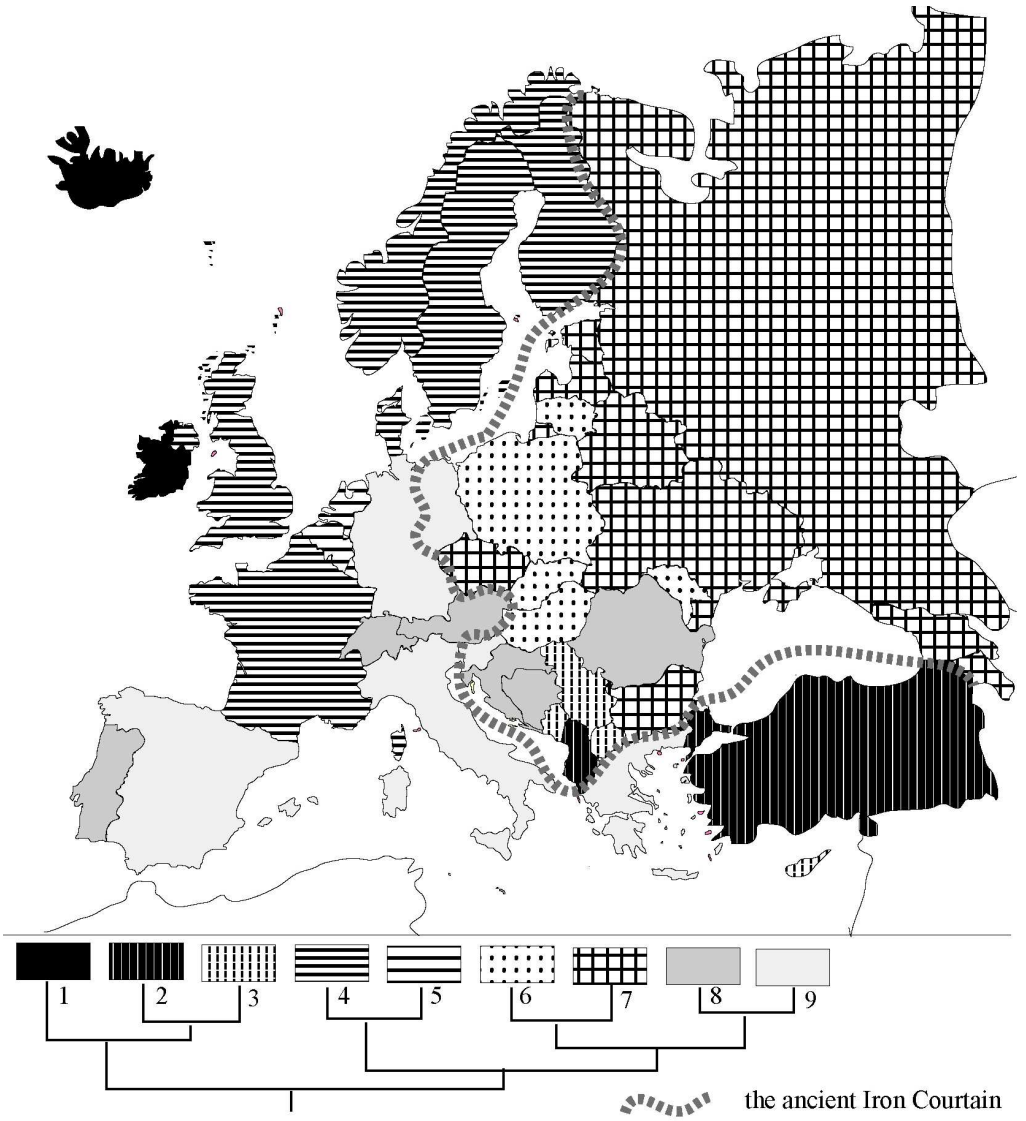
- Ireland and Iceland, states that permanently experienced a positive rise of the standard deviance to the European average, thus having a divergent evolution as compared to the other countries on the continent (type 1);

- Albania and Turkey (Asian part included), mainly Muslim countries with a previous evolution different from the rest of Europe The continuous decrease of TFR, extremely fast in the case of Albania, to values around the average is a sign of the demographic transition on the whole continent coming to an end (type 2);

- the ensemble made up of Serbia-Montenegro (before separation) and the former Yugoslav Republic of Macedonia, states with an important percentage of Muslim population (Albanese, Turks or Slavs) which provided a relatively high TFR as compared to other Balkan states. This level started to dramatically decrease after 2000, reaching values inferior to the continental average, this tendency being imputable both to the completion of the demographic transition and to the precarious economic situation sharpened by the consequences of the war (Djurdjev, 2000).

b). states that experienced a *continuous positive detachment from the continental average* (types 4 and 5). They are the typical examples of the manifestation of the new demographic

transition [Vand der Kaa 2001]. They lie in North-West Europe, overlapping the area where the demographic transition started (France, Great Britain, The Netherlands, the Scandinavian countries etc). Nowadays most of these states have reached TFR values close to the generation replacement level (1.8-2). The role of the migratory contribution can be invoked in order to support this tendency but the change of the demographic behaviour in favour of the families with 2-3 children is also of great importance. Within this category Belgium, Holland and Luxembourg stand out by their end-up TFR values after 2000- as a possible consequence of the change of the structure by age groups of the feminine population;




Source of statistical data: EUROSTAT, webpages of the national institutes of statistics, the collection of Population review of INED (1990-2005), WPDS published by the Population Reference Bureau of ONU (1990-2009)

**Figure 1**. Typology of TFR dynamics in Europe (1990-2008)

c). *states that continue to score values which are inferior to the European average* – they generally lie in the South, Centre and East of the continent. Two groups can be distinguished:

- the former communist states (with certain exceptions), in which the TFR decline after 1990 reached dramatical values, the minimum level being registered, according to the case, between 1995-2002, this evolution being followed by a tendency of stagnating at a high level or of rebalancing, after the year 2000 (types 6 and 7). A clear distinction separates the countries that at the beginning of the period preserved higher values of TFR and in which the decline was rather tardy but more long-standing at the same time, the recovery being only at its beginning (Poland, Hungary, Lithuania, The Republic of Moldova) from the states in respect of which we can talk of a sudden change of the trend, from a chronic decline to a spectacular overlaunching, often imputable both to natalist policies (as in the Russian Federation or Ukraine) and to the changes of the demographic behaviour, generalized at the continental level, in various degrees (postponing of motherhood, rise of the frequency of families with 2 children etc, as in The Czech Republic, Estonia etc). This recovery may be considered circumstantial, most of these countries still benefiting from numerous contingents of young feminine population (aged 20-35) originating in the last part of the totalitarist regime domination (the years 1975-1990). It was upon them that the above mentioned changes had repercussions.

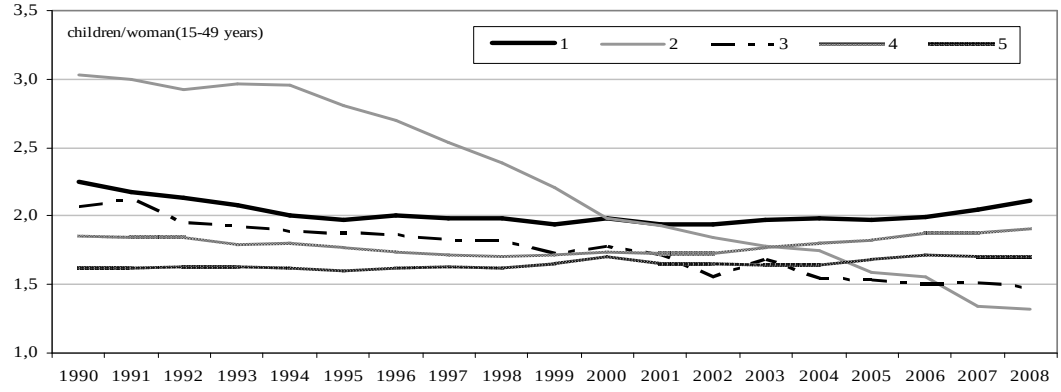



**Figure 2a**. Profile of types 1-3

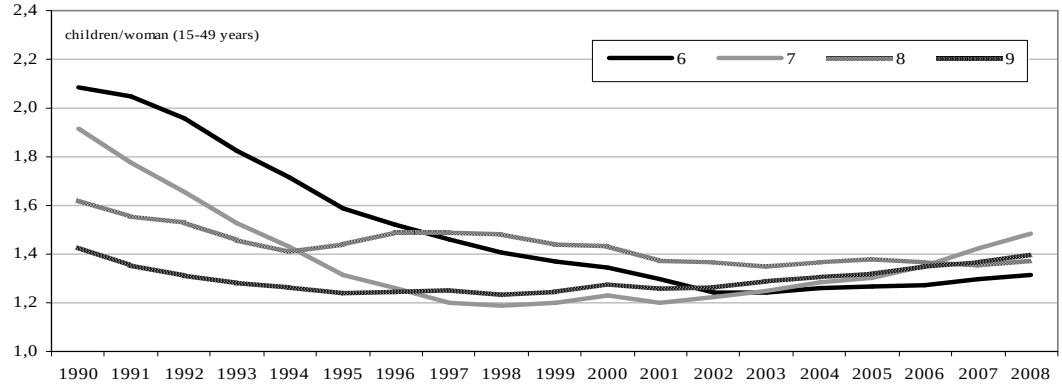



**Figure 2b**. Profile of types 4-9

- the states in the South and Centre of the continent which at the beginning of the 90's registered the smallest TFR values and which rather stagnated, without manifesting certain rebalancing tendencies or experiencing a rebalancing that can be imputed to immigrations (especially in Spain). Thus there is a clear differentiation between the important Mediterranean states (Greece, Italy, Spain) and Germany on the one hand (type 9) and the group made up of

Romania, Austria, Switzerland, Croatia, Portugal etc (type 8) on the other hand. This distinction refers to the much lower level the TFR reached and to the more visible signs of rebalancing in the case of the first group, especially during the last years. Thus *Romania belongs to a category of states which nowadays seem to pass through the most unfavourable demographic situation*. In the case of our country the importance of emigration can be appealed to but we can also take into consideration the more precocious manifestation (starting with the years 1995-2000) of the change of the demographic behaviour (especially the postponing of motherhood) which led to a later attainment of the TFR minimum level (the year 2003 in the presented cases), a level that still exists at the present despite the manifestation of an extremely timid recovery. The other states (Austria, Switzerland, Portugal) justify this trend by means of keeping a behaviour which is favourable to the restricted family in spite of their strong immigration.

**ROMANIA, BETWEEN TFR REBALANCING AND CRISIS DEEPENING. END OF SOME CLASSICAL DEMOGRAPHIC DISPARITIES**

*The analysis of the same indicator at the national level*, taking Romania as a case study, points out the existence of certain territorial disparities that don't necessarily mould on the cleavage lines that have already become traditional from a demographic perspective, between the prolific North-East and the denatalist South-West (figures 3 and 4). We can state that the tendencies that have been noticed at the European level take place, in a differentiated manner, at the local or regional level, the national averages being the result of their combination. In the specific Romanian case, the trends that denote a strong erosion of the demographic vitality are predominant, without a certain relaunching; on the contrary, on vast areas the crisis is growing deeper and deeper. Thus, at the national level there can be distinguished six essential tendencies, expressions of the adjustments to the contradictory evolution characteristic to the final stage of the demographic transition, against the background of a visible similitude of the TFR values at the county level:

- a first group comprises the counties lying in the North-East of the country (most part of Moldova and Northern part of Transylvania), regions that preserved a remarkable demographic vitality for a longer period of time. In this case the importance of the recent migratory movements (after 2001) stands out within the evolution of the analyzed indicator, the general trend being decreasing and approaching the average values but having a clear superior level as starting point (Muntele, Iaţu, 2008);

- a second group is made up of the counties lying in the South-East part of Transylvania, Crişana and South-East part of Muntenia, areas that experience a recent tendency of rebalancing of the fertility indicators up to values which are superior to the counties in the first group. The importance of the ethnic component (Hungarians or Gypsies, according to the case) cannot be estimated yet, needing laborious demographic surveys, but seems to be certified by the results of the last population census which prove the resistance of some demographic behaviours which are traditionalist in these situations;

- a third group includes most of the counties that lie in the Southern part of the country, which until the year 2000 registered an evolution which was similar to the previous group's, afterwards standing out by the fact that the fertility indicators continued to depreciate. In this case we can also invoke the population ageing process, which triggered a decrease of the percentage of women in the first layer of fertile age (15-30 years old);

- a fourth group comprises Constanţa, Ilfov, Braşov, Arad and Timiş counties, which have a high urbanization degree and a long migratory attractiveness, a context which was in favour of inserting new demographic behaviours that brought about the recent rebalancing of the TFR;

- a fifth group is made up of counties which have a similar profile (high degree of urbanization etc) but which hardly bear the rigours of transition, not experiencing the previously noticed rebalancing (Hunedoara, Caraş-Severin, Brăila, Prahova, Argeş);

- a last group includes Cluj county and Bucharest municipality, which registered the most abrupt collapse of the fertility indicators after 1990 but in which their rebalancing was by far most

visible (somehow similar to the specific situation of other states in East Europe, where the capitals and the more dynamic cities gave the lead of this rebalancing). The continuous approach to the average values is correlated to the metropolization process and to the more advanced integration in the international economic structures.

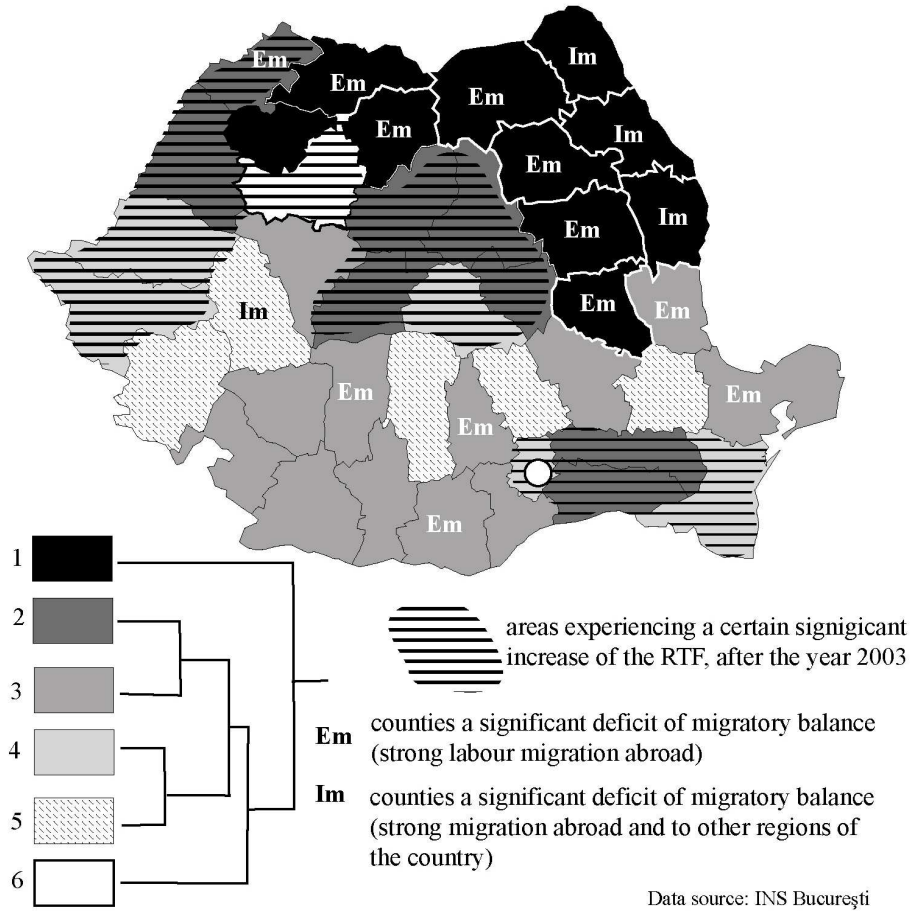



**Figure 3**. Typology of TFR evolution in Romania (1990-2008)

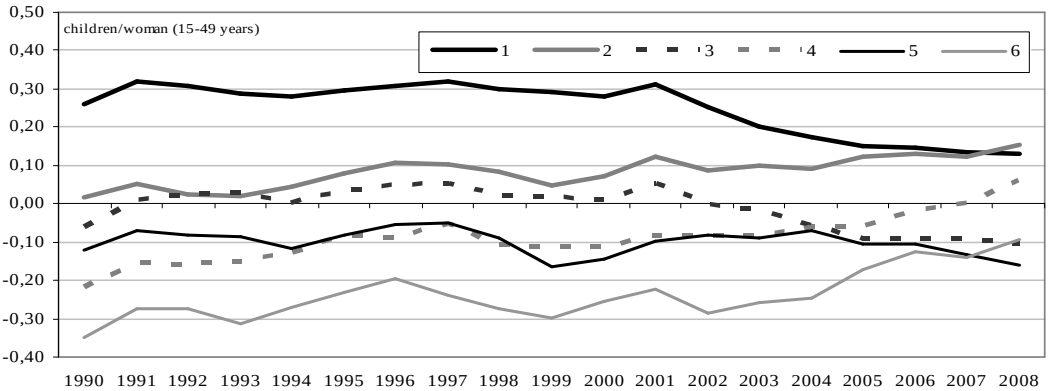



**Figure 4**. Typology of TFR evolution in Romania (1990-2008) – deviance to the national average

The conclusion of these analyses converges to establishing strong correlations between the economic situation and the demographic one, or between the latter and a series of variables such as the urbanization degree, the labour force occupation degree, the level of the migratory balance, the duration of the demographic transition etc, to which we can also add a series of cultural characteristics. Romania's position in this context is rather unfavourable and there is no evidence of the change of these trends. The estimations for the year 2009 of the National Institute of Statistics support these statements.

**WHY IS ROMANIA NOT A "RISING STATE"?**

As previously stated, nowadays Romania belongs to the category of European states in which the phenomenon of rebalancing of the fertility indicators of the feminine population is not enough noticeable. In this context we felt legitimate to search for some arguments which are able to identify the mechanisms that have led to this present situation. Therefore we proceeded to a comparative analysis allowing us to notice the resemblances and especially the differences between Romania and a neighbouring state that, prior to the analyzed period (1990-2008), did not essentially stood out from this point of view. We chose Ukraine simply because it suits better the characteristics of the "rising states" phenomenon than other neighbouring countries. The official information was graphically processed, following on the one hand the result of these evolutions (the number of live births) and on the other hand the general fertility of the feminine population aged 15-49 (the statistical expression of these evolutions) and its thorough analysis by age groups. In this way the moments of the installation of certain tendencies or the speed of their evolution could be grasped with enough pertinence.

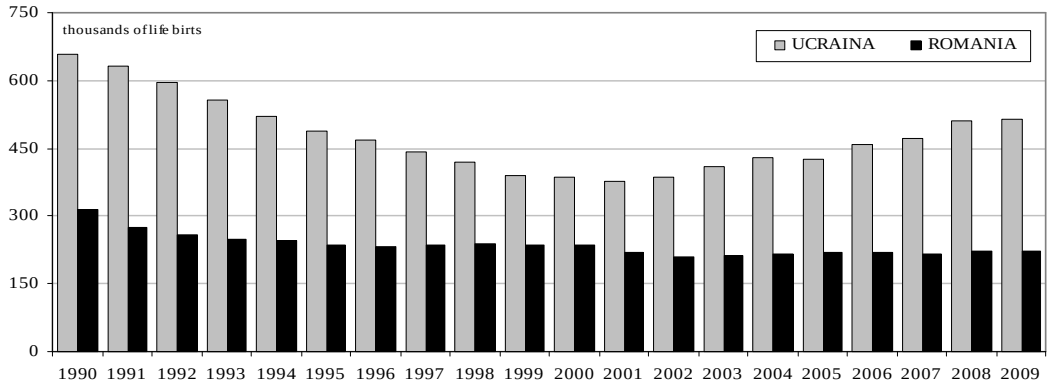



**Figure 5**. Evolution of the number of life births in Romania and Ukraine (1990-2009)

The first graph, displaying the evolution of the number of life births in the above mentioned period (the data for the year 2009 being provisional), certifies a first major difference between the two states: in Romania, the post communist decline was slower and softened by a rather long period (about 10 years) of relative stability; in Ukraine, it was faster, being followed by a significant rebalancing after reaching a minimum level during the studied period, one year earlier than Romania (the year 2001 as opposed to the year 2002). This difference also stands out when comparing the minimum level to the value of the year 1990: in Romania, the drop of the number of live births did not exceed 50% (from 315, 000 to 211, 000) while Ukraine practically experienced its reduction to one half (from 659, 000 to 377, 000). After reaching the minimum level, the rebalancing was hardly visible and vacillating in the case of Romania (5%, up to 223, 000 according to the preliminary data for the year 2009) but extremely strong and ceaseless in the case of the neighbouring country (36.5%, with a number of 513, 000 live births in 2009).

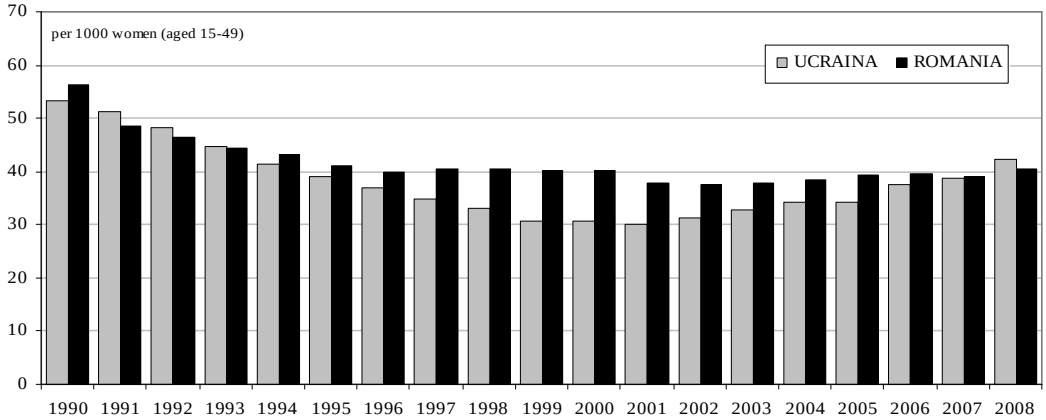



**Figure 6.** The comparative evolution of population general fertility in Romania and Ukraine (1990-2008)

The analysis of the graph that reveals the evolution of the feminine population's general fertility underlines the same differences but it emphasizes the differences of demographic behaviour, which are rather favourable to our country. Thus, the drop of this indicator was more abrupt in Romania (while in 1990 its values were clearly superior, they became inferior to the level reached in the neighbouring country between 1991-1993); afterwards, between 1994-2006 our country preserved a clear advantage, the values being around 37-41%, the neighbouring state tending to 30%. The last years certify the fact that in Romania the feminine population's fertility has stagnated at the same level as different from Ukraine, which passes through a visible relaunching. At this point of the analysis we can state that in Romania there may have taken place a stabilization of the level of this indicator while in the neighbouring country we deal with a contrasting evolution between deep crisis and rebalancing. In this context, the more spectacular increase of the number of life births is also the consequence of a more favourable structure by age groups of the feminine population and at the same time of the manifestation at a smaller scale of the population's emigration, which in Romania mainly affected the young feminine population.

The graphs that display the evolution of the fertility rate by age groups illustrate significant differences in the demographic behaviour, which are useful in explaining the above revealed evolutions. Thus, in Ukraine this indicator was originally higher at the group aged 20-24 due to a precocious average age at first marriage and a tardier insertion of the general European phenomenon of increasing the age at marriage and first birth. It was only during the last years that the fertility of the groups aged 25-29 and 30-34 noticeably recovered (in the case of older ages it is hardly perceptible). In contrast to this, in Romania, immediately after 1990, the mentioned phenomenon took place earlier so that the highest level was reached after 2003 in the case of the group aged 25-29, while the group aged 30-34 experienced a continuous rise throughout the whole period. At the same time, in the case of the older ages, this indicator was sensibly higher than in Ukraine. Concurrently, the fertility of the group aged 15-19 held out better than in Ukraine as a consequence of some deeper internal disparities at the socio-territorial level, especially if we think of the presence of some extremely traditionalist communities (such as the Gypsies) Thus we can conclude that although in Romania the new pattern of demographic behaviour seems to have been fully inserted, there still subsist significant segments of the population that are far from lining up to it. On the contrary, Ukraine seems to still be looking for a level of equilibrium, the spectacular increase of the last years actually being the effect of the insertion of the above mentioned pattern, superposed on the existence of some generations of numerous feminine population precisely within the most fertile segments (20-29 years old).

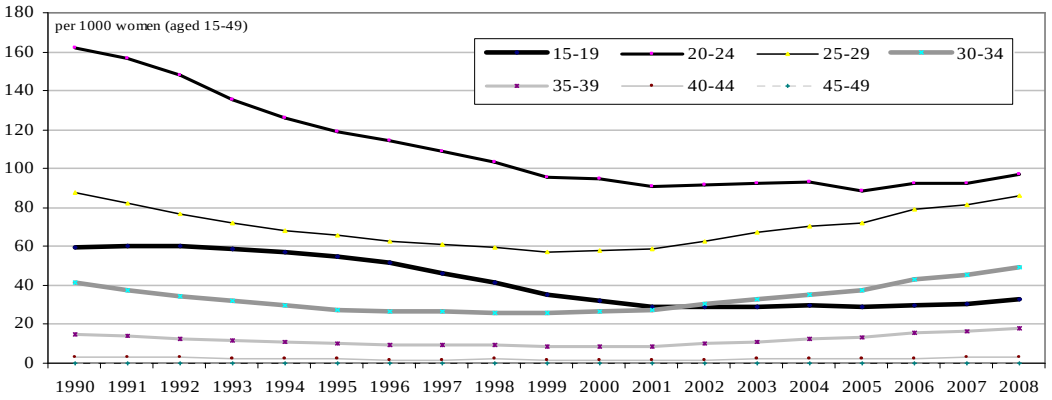



**Figure 7**. Evolution of fertility rate by age groups in Ukraine (1990-2008)

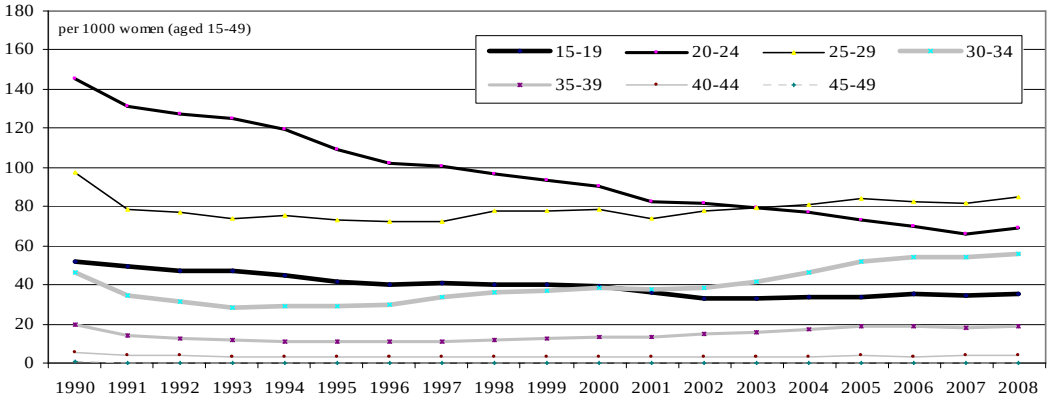



**Figure 8**. Evolution of fertility rate by age groups in Romania (1990-2008)

## CONCLUSIONS

Starting from the previously presented comparative analysis we can assume that the differentiation of the European countries in the two categories put forth by Carl Haub seems rather circumstantial, everything depending to a great extent on the structure by age groups of the fertile feminine population and on its interference with the migratory phenomenon. But during the next decade all European states will have to face the accession in this category of some generations that have been affected by the decline that took place after 1990. Compared to other East European states, for the time being Romania seems to rather enjoy an advantage due to the temporizing of this decline towards the middle of the 90's. But will it know how to preserve this advantage? One cannot leave out the fact that a great part of the generations corresponding to these years already lives in other European states, bringing its contribution to the "rising states" phenomenon. The key to taking advantage of this demographic opportunity is to solve out the serious problem of employing the feminine labour force (endowed with a higher and higher educational level) and to keep or improve those measures which are favourable to family and children. We could say that we lie in the center of a new demographic crossroads on which the temporizing of population decline (if not bringing it to an end – rather impossible to achieve under the present circumstances) depends – this alternative being better than a drop with unpredictable repercussions.

**Acknowlegments**

This contribution presents some results from research projects no. 1007/2009, code CNCSIS ID-1987 (entitled *The quality of transport infrastructure as a premise of the differentiation of rural areas in Moldova*).

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| Submitted: | Revised: | Accepted: | Published online: |
|---|---|---|---|
| October 28, 2009 | February 26, 2010 | June 24, 2010 | June 30, 2010 |