

JIU VALLEY'S DEMOGRAPHIC DIMENSIONS AT THE INTERSECTION OF SOCIO-ECONOMIC TRANSFORMATIONS

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ABSTRACT: *In the national context of post-revolutionary social and economic transformation, the population of Jiu Valley was influenced and affected by the social problems generated by industrial restructuring in this area. In the last two decades, there have been major changes in terms of phenomena and processes on the numbers, geographic distribution, structure, density, movement and composition of the human population, as direct consequences of dysfunctional economic segment junction –the closure of the mining enterprises and social segment. The objective of this analysis is to review the demographic changes in several dimensions of the Jiu Valley in the context of the socio-economic post-revolutionary transformations. In conducting this descriptive type study there were used three research methods: documents analysis, statistical data analysis and comparative analysis. The analysis period of the targeted indicators is: 1990-2011.*

KEY WORDS: *Demographic dimensions, Jiu Valley, socio – economic transformations*

1. JIU VALLEY AT THE CROSSROADS OF POST-COMMUNIST SOCIO-ECONOMIC TRANSFORMATION

For several decades, the Jiu Valley economy depended on the coal mining (and associated industries). Due to post-revolutionary restructuring of the mining industry and lack of alternative jobs along the corridor formed by the valley of the mountains, including the towns Petrila, Petrosani, Aninoasa, Vulcan, Lupeni and Uricani, diverse social phenomena as poverty, insufficient income of the dismissed families to live a decent life, unemployment, migration of the active population seeking employment in other geographic areas, population birth rate declining, aging population and the expansion of this segment issues have currently escalated.

The situation in the Jiu Valley, Hunedoara County generated in all years after 1990 serious economic and social problems. Amid the economic losses caused by the National Company of Huiliei and RAs companies or autonomous administrations that it has inherited, the social and economic situation of workers in the Jiu Valley miners worsened and whenever there were problems with either the payment of salaries, or those related to the economic privileges that they benefited, the union movements were very strong, not infrequently beyond the legal limit ("mineriads"). This behavior caused the area to be considered difficult and hardly open for a business environment, so even if it was declared LFA in 1998, few companies have tried to benefit from the facilities obtained from this status.

Consequently, it remained mono-industrial, mining dependent regarding the jobs and the economic activity for quite a long time.

After 1997, the governors have tried to resolve the situation in mining through a restructuring program and mass layoffs of staff. Thus, in less than two years 18,343 miners were fired upon request by providing redundancy payments, 87% of whom were included in the first wave of layoffs in the autumn of 1997 with no alternative protection program or retraining, except for the funding made available to those who chose the dismissal (ANDRION, 2008). The area has received numerous support programs with external funding - either professional conversion or support private entrepreneurs - but they could not change the overall situation of the region still characterized by high unemployment and few opportunities. (Ibidem)

After post-December 1990 period, following the closure of state institutions and massive staff layoffs, the population of Jiu Valley has experienced great social problems such as: poverty, the high number of families with many children who have a minimum subsistence source, lack of alternative employment, low educational and informational level of the population.

Percentage of comings in and goings from the region suggests the image of a transit zone, even if mining companies were closed and there is a lack employment alternatives. 9/1997 and 22/1997 Government Orders led to massive layoffs in the mining industry. The impact of these economic measures are fully felt now amplified by the lack of alternatives for providing jobs for off people.

2 DEMOGRAPHIC DIMENSIONS ANALYSIS OF JIU VALLEY DURING 1990-2011 IN THE CONTEXT OF SOCIAL AND ECONOMIC TRANSFORMATIONS

In the national context of post-revolutionary social and economic changes and in the world economic crisis context, the Jiu Valley population was influenced and affected by social problems generated by industrial restructuring in the area. In the last two decades, there have been made major changes in terms of phenomena and processes on the number, geographic distribution, structure, density, human population movement and its composition. The objective of this analysis is to review the demographic changes in several dimensions in the Jiu Valley socioeconomic context of post-revolutionary transformations. In conducting this descriptive type study there were used three research methods: documents analysis, statistical data analysis and comparative analysis. The analysis period of the targeted indicators is: 1990-2011.

In selecting the methods of the present study, we started from the idea that quantitative model "implies a objectively structural, exterior social reality, using positivist type descriptions and explanations (nomotetic)" (Iluț, 1997, p.41) and the qualitative model "relies on the human subjectivity, on the social constructed and interpreted by interacting individual and group symbols, motivations, expectations and representations, the knowledge being comprehensive and idiografic type", using for this purpose three methods of analysis: document analysis, statistical analysis of data and comparative analysis.

In this study there were targeted the following dimensions of analysis: a) population dynamics in the Jiu Valley during 1990 - 2011; b) evolution of the population in the Jiu Valley during 1990 - 2011; c) evolution of births and deaths in the Jiu Valley; d) migration of the population from Jiu Valley during 1990-2011.

In the analysis of the documents, we relied mainly on the study of the following: "The dynamics of social services in the Jiu Valley" (ANDRION, 2008); and "The dynamics of the institutional system of social work development in the Jiu Valley" (Anghel, 2014).

In Anghel M.'s opinion (2014) according to the results of the analysis "The Dynamics of the institutional system of social development in the Jiu Valley", the statistics show a continuing decline in population since 1990 and continued until 2011 in the Jiu Valley due to numerous industrial restructuring actions and their repercussions. According to the mentioned analysis, a first period between is distinguished between 1990 - 1997 being characterized by a very slight increase in population, the increase being more pronounced in localities such as:

- Anina has reached a population increase of almost 50% in that period;
- Uricani is growing from 12,321 inhabitants in 1990 to 13,422 inhabitants in 1997;
- Petrila also knows an increased from 28,617 inhabitants in 1990 to 30,695 inhabitants in 1997;

In other localities of the Jiu Valley, Lupeni, Petrosani and Vulcan respectively, the trend of population growth is indistinguishable (figure no. 1).

The second period was between 1998 and 2011 which is marked by redundancies in mining. The first mining massive layoffs occurred in 1997 by GEO 22/1997 and resulted in an immediate decrease in the population of the Jiu Valley. This makes its presence felt in all localities in the Jiu Valley. In just one year (1998) population Jiu Valley fell by over 6%.

The next years, after the sharp decline in 1998, are characterized by a decrease much less pronounced, but also being a trend to reduce the number of inhabitants (figure no. 2).

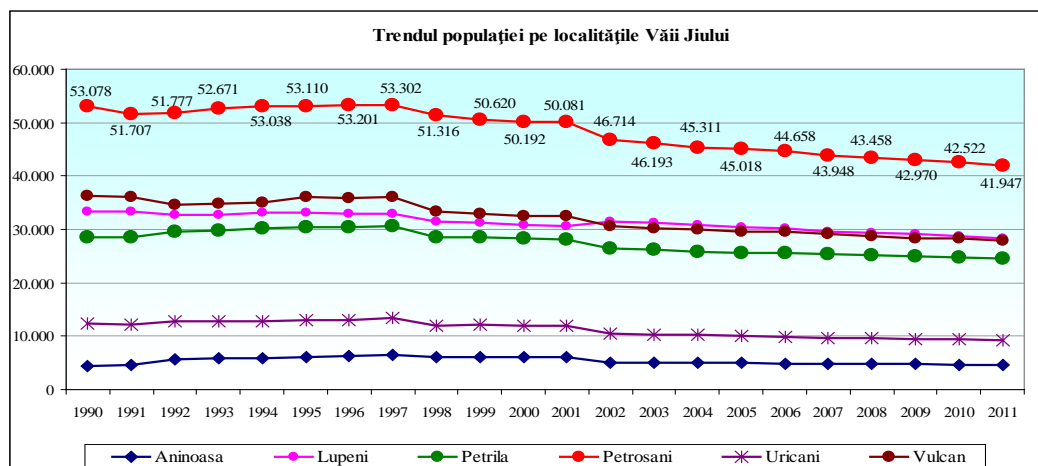


Fig. 1. Fig. 1 Population Dynamics in the Jiu Valley localities during 1990-2011 (No. Persons)

* Source: County Department of Statistics Hunedoara; Anghel, 2014

This decrease which is less pronounced is due the fact that the people made redundant during 1997 - 1998 received compensation for a period of two years and unemployment benefits for another year. After three years together with the fact that there were not created

enough jobs to absorb the redundant labor in the area, another significant decrease in population in the Jiu Valley followed in 2002 (population decreased by more than 5% to 2001).

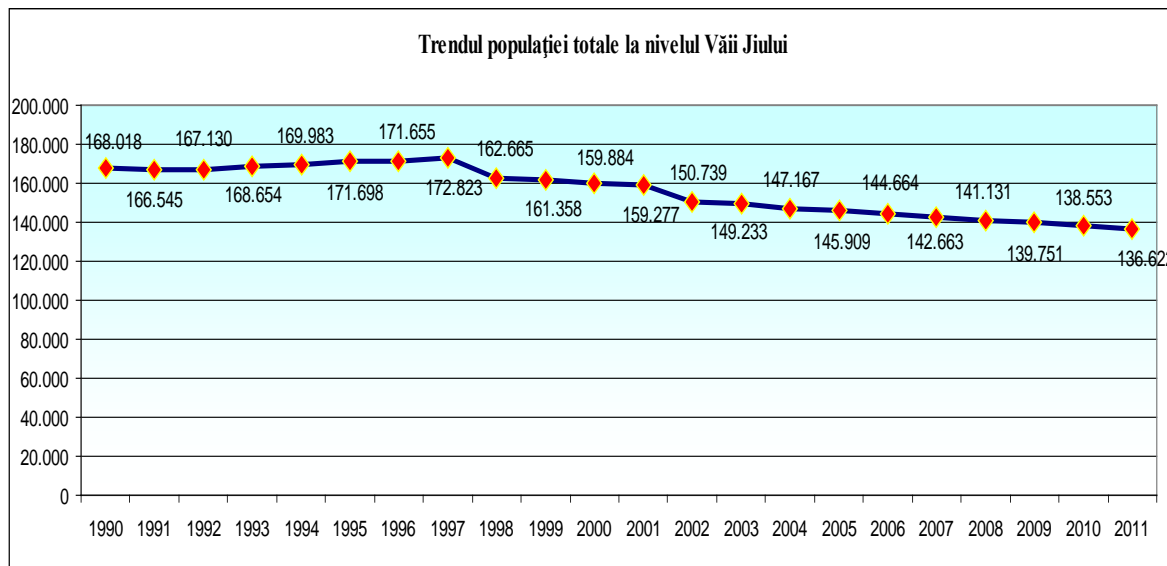


Fig. 2. Evoluția Evolution of the Jiu Valley population during 1990 - 2011 (no. persons)
 * Source: County Department of Statistics Hunedoara; Anghel, 2014

From 2003 until today, both the total population of the Jiu Valley and the population of each locality of the Jiu Valley experienced a steady decline from year to year. This decrease of the population reach over 26% in 2011 compared to 1997.

According to the *Local Development Strategy of the microregion Jiu Valley*, in 2007 the share of the population in the Jiu Valley, represented one third of Hunedoara County. Meanwhile, concerning the Western region's population, the Jiu Valley region concentrated 7.5% of the population.

Jiu Valley population is formed in the majority share by Romanian nationality residents (91.19%), Hungarians (7.40%), Roma (1.34%) and other nationalities (Germans, Serbs, etc.).

As to religion, the population is Orthodox majority (83.50%) followed by Roman Catholics population (5.54%) and population adherent to Pentecostal cult (2.95%).

The same strategy shows that the share of young people under 14 years is 17.95% and the working age population (15-64 years) is 72.70% - much higher percentage compared to the county 14.86% for young and 71.11% respectively for older people working. The report is reversed for people over 65 years in the county 14.03% to 9.35% in the Jiu Valley.

In the same study made by Anghel (2014) there are highlighted the trends in fertility and mortality in the Jiu Valley that are outlined in the population dynamics in

the area of social space. In this sense, the statistics reveal a declining trend in the birth rate in the Jiu Valley. One can notice a significant decrease in the number of live births in all Jiu Valley localities (figure no. 3).

The analysis of statistical data and expert consultation document shows that the evolution of birth in the Jiu Valley maintains a downward trend at national level during and post-revolutionary period. This trend was influenced by the legislative changes on measures of contraception and repealing the laws banning and abortion.

Nationally, in the *„Birth and death evolution in Romania” study (2012)*, is noted that the period between 1990 - 2010 saw a rapid decline in the birth rate from 13.6 live births per 1,000 inhabitants (1990) to 9, 9 births per 1000 inhabitants (2010). The declining birth rate, Romania has aligned to the European general trend (Apud Anghel, 2014).

In the same period, the Jiu Valley falls within the same decreasing trend, seeing a much higher downward trend in the birth rate. Thus, in 1990, the Jiu Valley experienced a birth rate of 17.65 births per 1,000 inhabitants, far above the national one, in 2011 it reached 7.13 births per 1,000 inhabitants, far below the national. The number of live births staff decreased, at the Jiu Valley, from 2966 in 1990 to 975 in 2011 (Figure 3).

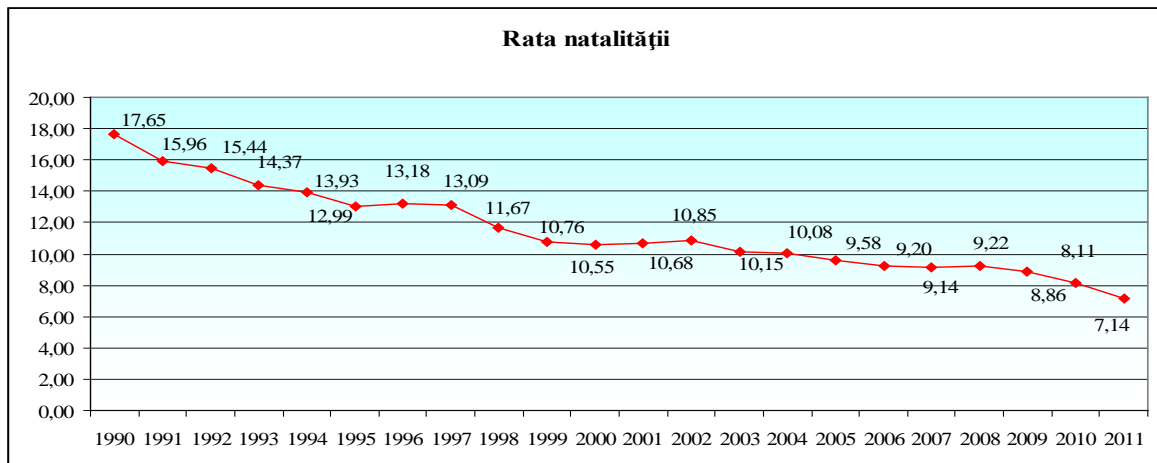


Fig. 3 The evolution of the birth rate in the Jiu Valley during 1990 - 2011 (no. of live births per 1,000 inhabitants ‰)

* Source: County Department of Statistics Hunedoara

Out of those listed, it can be concluded that the decrease in the birth rate at the Jiu Valley level was also influenced, in addition to the factors mentioned above, by a series of specific local factors (unemployment rising, insecurity of tomorrow and territorial and social mobility of young people).

Considering the statistics on mortality developments in the Jiu Valley, in the same studied period, we found that the mortality rate in the Jiu Valley is within the same upward trend in mortality like the national one.

The data studied, it appears that in 1990 the mortality rate nationwide was 10.6 deaths per 1,000 inhabitants, which increased in 2010 to 12.1 deaths per 1,000 inhabitants. The gradual increase still having many variations and having two peaks during the years 1996 - 1997 and 2002-2003.

Constant upward trend in overall mortality rate is explained mostly by emphasizing the demographic aging of the population, by the growth of the elderly population in whom the mortality is higher.

According to the graphical representation (figure no. 4) at the Jiu Valley level, it is observed the same steady increase in the death rate from 7.8 deaths per 1,000 inhabitants in 1990 to 10.09 deaths per 1,000 inhabitants in 2011. This increase is the same with the national values having many fluctuations and knowing a peak in 2003. Nationally reported there can be observed that in the Jiu Valley, the mortality rate falls consistently below the national average.

This situation is probably due to the fact that the population percentage over 65 in the Jiu Valley, is below the national average according to the „Local development strategy of the Jiu Valley micro-region” mentioned above.

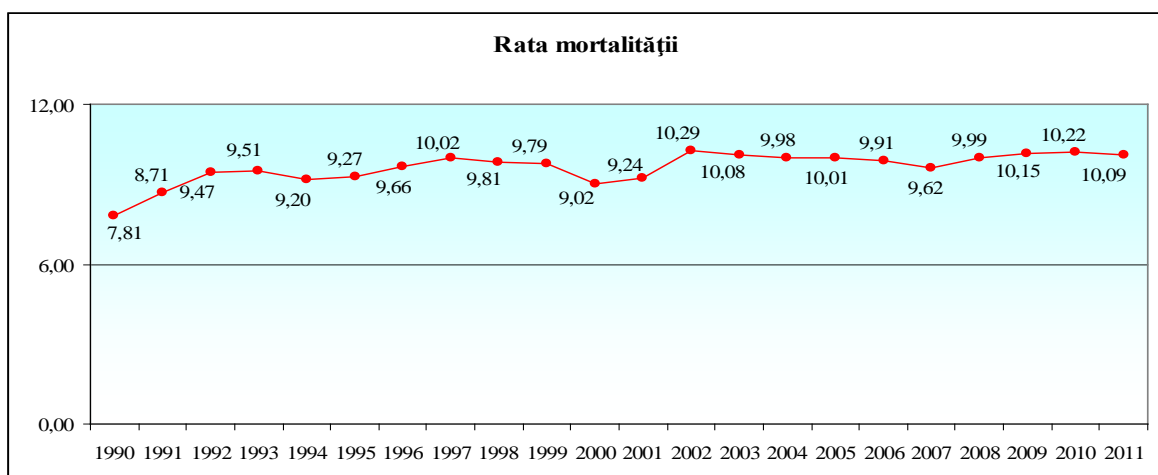


Fig. 4. Evolution of mortality in the Jiu Valley during 1990 - 2011 (no. Deaths per 1000 inhabitants ‰)

* Source: County Department of Statistics Hunedoara; Anghel, 2014

The number of inhabitants of a country or an administrative territorial unit changes not only due to have effects on the population of origin, the population of destination, and the migrants themselves. Both areas

inflows and outflows due to births and deaths, but also from immigration and emigration. The migration to be migrated from and the areas to be migrating in can be either positively or negatively influenced, depending

on a number of other factors. In this way, a migration that involves a large number of people, generally young age can cause a deficiency of labor force in the population of origin and thus a weakening of activity, a decrease in birth rates, an aging population. If we state an area initially overpopulated, migration generates the demographic pressure weakening and improve the situation of the left, particularly if migrants send home to the remaining ones, goods and money. The situation of the population in the reception area can also be affected in both directions. During the periods of economic growth, immigrants contribute to the replenishment of the labor force, however, during recession, they participate at the increasing the number of unemployed, being the most exposed to layoffs and causes additional consumption of resources. Another particularly interesting aspect is the integration of migrants in the host society. In the case of internal migration (in the same country) the focus is particularly on the adaptation of the people coming from rural areas to urban life and industrial work.

Below we highlight some aspects of the migration process in localities in the Jiu Valley. In a short overview of the period of industrialization and urbanization, between the years 1966 – 1990, by measures directed to increase the mining staff and by targeting the available labor force to a sector highly attractive in terms of wages, points out an increase in population in each locality of the Jiu Valley in the efectives that had migrated from rural to urban.

In the next period, namely the years 1991 - 1992 the number of people that arrived in order to reside in the Jiu Valley decreased significantly due to the stopping of the personnel mining increase. In 1991 the Jiu Valley Mining Plant is abolished and the Romanian Coal Autonomous Administration is established, beginning a major reorganization.

Between 1992 - 1997 the number of those arriving in the Jiu Valley towns has increased significantly in

Petrosani, where there was a significant upward jump in 1993, and Vulcan where there was a significant jump in 1995. In Uricani and Petrila, the increase was very small, and in Lupeni and Aninoasa the number of arriving residents even recording a decrease.

Since 1997, following the massive layoffs of personnel, it is observed that the number of arrivals decreases steadily until 2005. In 1998, the biggest difference is recorded at the Jiu Valley, the number of arrivals recorded a decrease of over 40% in comperison to the previous year.

Between 2005 -2009 both in each locality in the Jiu Valley is is noted that the number of arrivals remains constant. In the past two analyzed years 2009 - 2011 the number of arrivals decreases both at the Jiu Valley level and in each locality.

During 1992 - 1997, both at each location and at Jiu Valley level, the number of residents who left is relatively constant. This is a consequence of the fact that during this period, the Jiu Valley mining sector experienced a relative stability.

Between 1999 - 2002 the number of people leaving the Jiu Valley localities falling steadily. After 2002 and until 2010 there is a consistency in the number of people departing from the Jiu Valley. In 2011 also due to the fact that they started the planning ski areas in Straja, Parang and Vâlcan Pass, there is again a decrease in the number of people leaving the Jiu Valley.

In order to conclude we must look at both the Jiu Valley resident arrivals and departures as a whole, for which we make a calculation of migration growth. Migration growth rate is the difference between the number of incoming and outgoing persons in the migration. If the number of arrivals is greater than the number who left, migration growth is positive and if the number of arrivals is lower than the migration growth has gone negative.

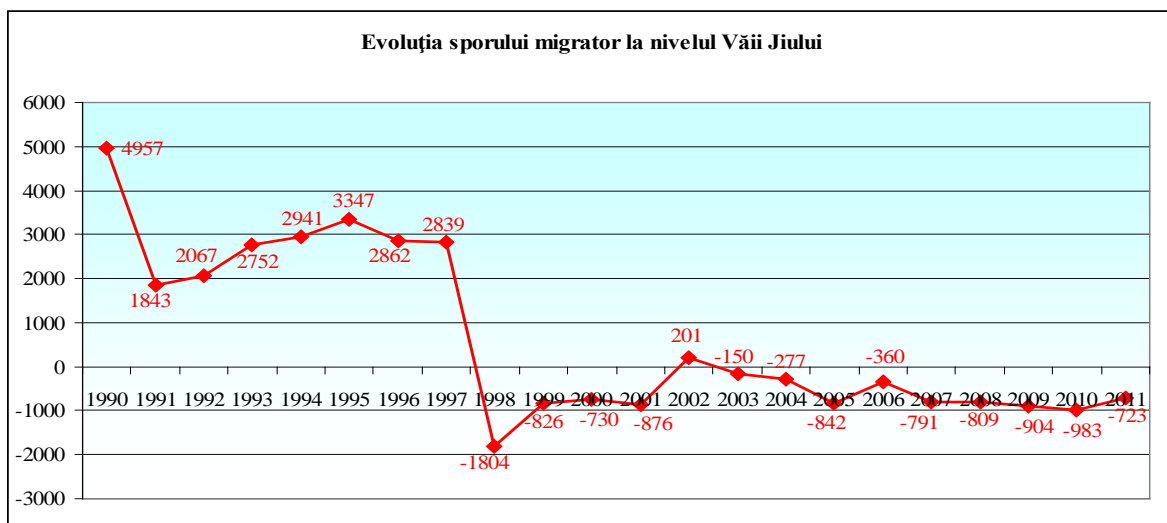


Fig. 5. Evolution of migration growth in the Jiu Valley during 1990 - 2011 (no. persons)

*Source: County Department of Statistics Hunedoara

The analysis of graphical representation (figure no. 5) shows that the migration growth in 1990 was of great value primarily due to the urbanization and industrialization policy until this year. This greatly decreases in 1991 with the start of reorganization of the mining sector and after the negative impact the mineriads had in mid-1990. However, due to the salary levels still high in mining, migration growth increases until 1997, reaching a peak in 1995. The biggest layoff in Jiu Valley in the years 1997 to 1998 entails a radical change in the value of migratory growth, becoming negative for the first time in the Jiu Valley. Moreover, the minimum value is recorded in 1998-the lowest during the analysed period. After 1998, the migration growth recorded only negative values with the exception of 2002. The fact that in 2002, the number of arrivals in the Jiu Valley is higher than the left can be explained by the fact that some of those who left during 1997-1998 turned back. They migrated, this time from urban to rural areas. Many of them thought that the money received in the same time with the layoff will help them start a new life in rural areas. After receiving the money, they found out that this environment does not provide a standard of living identical to that provided in the urban areas, which makes them come back and try again to find a job in the Jiu Valley settlements.

In the latter part of the analysed period, namely the years 2005 - 2011, it appears that migration growth remained constant at negative values recording thus very small fluctuations.

3. CONCLUSIONS

The social and economic effects of re-structuring the mining field are quite important and require well-elaborated social measures in order to create a favorable milieu demanded by the development of the business environment and of an economic competition background capable to provide a positive perspective to a functional economy and society (Anghel, 2012, p.22).

Successive stages of economic restructuring operate in the Jiu Valley area, the lack of viable investment

alternatives are continuously generated a major negative impact among the population. Economic consequences have been fully reflected on the social increased poverty in the area damaging the quality of life. These negative aspects have induced an accumulated economic and social discomfort to the community, group or individual level (Andrioni, Goian, 2012, p.7).

We conclude that the economic and social transformations in the Jiu Valley have directly influenced the demographic size of the population in the area, size analysis for the period 1990-2011 reflecting a decrease in the number of people in all areas of Jiu Valley, a decrease in birth rates in the Jiu Valley in parallel with increased aging population and an increase in the phenomenon of migration to other geographical areas.

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