QUALITY OF EMPLOYMENT FROM A GEOGRAPHICAL PERSEPCTIVE. A SHOW CASE OF THE ROMANIAN DANUBE VALLEY

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Key-words: quality of employment, geography, Danube Valley, Romania.

Abstract. The aim of this study is to analyse the territorial changes in terms of quality of employment in the urban and rural administrative units located along the Romanian Danube Valley during the period of transition, post-transition and of crisis. Using and adapting the methodological framework for measuring the quality of employment, the author selected statistical variables appropriate for constructing some statistical indicators and, finally, the index of quality of employment main characteristics. The study highlights some relevant aspects concerning the territorial changes in terms of quality of employment in the Romanian Danube Valley during the last two decades: the inverse correlation between the occupancy in agriculture and the level of quality of employment; very low and low levels of quality of employment widespread in the rural space and in the small Danubian towns, the quality of employment decline in the majority of the Romanian Danube Valley settlements.

1. INTRODUCTION

The European Union's official documents and strategies (e.g. Social Policy Agenda 2005, Europe 2020) promote the quality of employment as a "guiding principle" for raising the standards and ensuring a more equitable sharing of progress (van Bastelaer, 2002). Compared with the objective of the Lisbon Strategy for growth and jobs (2010), the Europe 2020 objective of inclusive growth gives new prominence to social issues, with strong focus on employment and stress on the need for social inclusion and the fight of poverty. Also, the essential elements of Europe's socio-economic model include the need for increasing labour market participation with more and better jobs (*Employment and Social Developments in Europe 2011*).

The labour geography approaches the employment issues, emphasizing its acute awareness of power and inequality, and its Left sensitivity politically speaking (Castree, 2010). In Castree's essay on the labour geography (2007) are mentioned that this sub-discipline of economic geography should be more concerned about the different territorial dimensions of worker existence and strategy; that it should be aimed to examine working peoples' lives holistically and not be a simply background scene for what happens to workers and what workers can do to alter the terms and conditions of their employment. This spatialised perspective leads geographers to argue that market-oriented labour policies produce increasingly divergent geographical concentrations of good and bad jobs/high quality of employment and low quality of employment (Castree, 2010).

The quality of employment is a subject that has not been explored so far in Romanian geography. This paper aims at addressing this issue, through empirical examination of the changes of quality of employment at micro-level in the Romanian Danube Valley over the past two decades. The paper starts with a review of the literature which operates with the term "quality of employment" for highlighting its characteristics from a geographical perspective. This section contributes to the "quality of employment" debate that examines the theoretical and empirical basis for the proliferation of a low and/or high quality of employment during the changes occurred in the Romanian economy and society starting with the historical events at the end of the '80s. In the empirical part of the paper, statistical indicators

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are used to investigate spatial patterns of quality of employment in the Romanian Danube Valley sector. Specifically, the paper examines whether the quality of employment has increased and where it has decreased within the Romanian Danube Valley and whether the low quality of employment is a predominantly rural or urban phenomenon. The statistical data available at LAU 2 (NUTS V) level provided by the TEMPO Online time series, as well as by the results of the Population and Housing Census (1992 and 2011, published by the National Institute of Statistics) are used for this purpose, computing and mapping the index of quality of employment is approached from the perspective of that part of labour force which carried out an economic activity producing goods or services, in other words, the unemployed were not taken into account in the analysis. So, this study is about the quality of employment in the specific case of the employed population.

2. QUALITY OF EMPLOYMENT FROM A GEOGRAPHICAL PERSPECTIVE

Geography, together with other disciplines (e.g. economy, sociology), share the theoretical framework of improving the quality of employment, but there is no geography sub-discipline of the "quality of employment", this topic being rather situated at intersection of the subfields of economic, regional and social geographies (Weller & Campbell, 2014). In other studies, the labour geography is mentioned that a sub-discipline of economic geography (Castree, 2007). Since the late 1990s, the interest of Geography for labour, labour market and employment issues has grown. Geographically speaking, the labour market has an intrinsically local or spatially constituted level of operation and regulation. The creation and destruction of jobs, the process of employment, unemployment and wage setting, and the institutional and social regulation of these processes are, to some extent at least, geographically constituted (Peck, 1996, 2003; Martin, 2000; Martin & Morisson, 2003). Three distinct approaches have emerged from the ever greater concern for labour and the labour market, each of them marking a difference in the theoretical, methodological and ontological orientation: the "geographies of labour", the "labour geographies" and the "ecologies of employment" (Weller & Campbell, 2014). In 1997, Andrew Herod coined the term "labour geography", distinguishing between this term and the "geography of labour". The two terms readily overlap with cognate disciplines such as the sociology of work, institutional economics, labour history and industrial relations, leading to an interesting dialogue on the potential for interdisciplinary collaboration (Herod, 1997; Herod et al., 2001; Ward, 2007). Unlike "the geography of labour", which has emerged from the traditions of economic, industrial and regional geographies, whose object of study is employment relations in private or public enterprises, for "labour geography" it was "an effort to see the making of the economic geography of capitalism through the eyes of labour" (Herod, 1997, p. 3, quoted by Castree, 2010). The third term, the "ecologies of employment", is more closely aligned with applied urban and regional economics, producing typologies of jobs or employment opportunities, sometimes in relation to housing or journey to work commuting distances (Weller & Campbell, 2014).

The concept of quality of employment is extended beyond the intrinsic qualities of work tasks and includes issues of skills development, employment security, flexibility, etc. (Gallie, 2007; Burchell *et al.*, 2012, quoted by Weller & Campbell, 2014). In completing the socio-economic approach, geographers offer a different perspective, namely, the spatial dimensions. From this perspective, geographers view the quality of employment as an outcome of the multiple and inherently specialised structures and processes at work in labour markets (Castree *et al.*, 2004), as a result of a complex and dynamic relation of labour. The quality of employment, as part of the processes of labour market formation and evolution, is the result of political, legislative, economic and demographic contexts (Walker, 1985), being influenced by technological changes (that alter the nature of the demand for labour with particular skills and qualities), by the strategies employers use in workplaces to divide up

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and arrange work tasks, by the aspirations and circumstances of working people, by the vagaries of the business cycle (Gough, 2003).

What distinguishes geography's approach is its insistence that all labour market processes are inherently spatial and unavoidably "placed" (Weller, 2008; Weller & Campbell, 2014).

3. QUALITY OF EMPLOYMENT. STATISTICAL MEASUREMENT

The statistical measurement of quality of employment helps us to repersent on maps the territorial differences and disparities between different levels of quality of employment. In developing statistical indicators for measuring the quality of employment, some principles of their logical structure have been followed: the need for these indicators to cover as many elements and dimensions of the labour market as possible; their technical feasibility, or applicability for the National Statistical Institutions; their relevance (each aspect of quality of employment should be sufficiently problematic in a country to justify measurement).

Three approaches to measuring the qualitative aspects of employment are in use: 1. the International Labour Organization's (ILO) measurement of "decent work" (1999); 2. the European Commission Quality of Work Indicators and Eurostat (EU statistics on labour force survey (EU-LFS) as core data source); and 3. the Quality of Job and Employment framework used by the European Foundation for the Improvement of Living and Working Conditions (Eurofound) in their European Working Conditions Survey (*Measuring Quality of Employment*, UNECE, 2010).

The International Labour Organization (ILO) has developed several indices and systems of indicators of "decent work" as follows: Ghai (2003); Bonnet *et al.* (2003), Anker *et al.* (2003); Bescond *et al.* (2003). Concerning the second approach to measuring the qualitative aspects of employment, within the framework of the European Employment Strategy, the European Union has defined a set of indicators to monitor quality of employment (indicators endorsed at the Laeken European Council in December 2001, (*Employment in Europe 2008*). The "Laeken indicators" include 26 indicators which should be supplemented by additional measures in case of a comparative analysis across the member states (Davoine *et al.*, 2008) and which should be adapted according to the database, or to the specific country's socio-economic background (Ciutacu & Chivu, 2007; Tal, 2015). The European Foundation for the Improvement of Living and Working Conditions has identified three approaches to the quality of work and employment: societal, corporate and individual. The proposed quality of employment and its 62 indicators are primarily designed to measure quality of employment from the perspective of the individual or worker (e.g. safety and ethics of employment, income and benefits from employment, working hours and balancing work and nonworking life, security of employment and social protection) (*Eurofound Yearbook 2012*).

4. CASE-STUDY: QUALITY OF EMPLOYMENT IN THE ROMANIAN DANUBE VALLEY

The evolution trend of the main employment indicators in Romania, the Danubian counties included, in the periods of transition, post-transition or during the crisis had not been positive either in the period of transition, in the post-transition period or during the crisis (*Documentation analysis results. Employment Sector*, 2013). Once Romania joined the EU (2007) and once the financial and economic crisis set on (2008), our country, together with Poland, Hungary, Bulgaria, Slovakia, the Czech Republic, Latvia, Lithuania and Estonia was included, in terms of the EU quality of employment system, into a "New Member States' cluster". This cluster cummulates low socio-economic security, rather unfavourable working conditions (e.g. high health risks), which are partly offset by the relatively low work intensity (*Employment in Europe 2008*). In the post-crisis period, despite the recent economic recovery, improvements in labour-market conditions remain modest in

Romania (*Country Report: Romania 2015. Including an In-Depth Review on the prevention and correction of macroeconomic imbalances*). The Priority Research Project of the Romanian Academy, *The Geographical Study of the Romanian Danube Valley*, shows that the local labour market is unbalanced because of the disequilibrium between the quantitative and structural characteristics of the labour-force: low and very low values of the activity rate and of the occupancy rate; also, the share of youth in total labour-force and the labour-force substitution index register low values; high and very high values are specific to the unemployment rate, the occupancy rate in agriculture, the economic dependency rate and the inactivity rate. The study highlights the incapacity of almost all of the Danube Valley area to maintain its demographic and productive force because of the whole population ageing, external, but also internal, migration (both entailing the young and the adult manpower) (IGAR, 2014).

The Romanian Danube Valley is an integrated part of the Danube Region. The sustainable framework of policy integration and coherent development of the territory is provided by the *EU Strategy for the Danube Region* (EUSRD), which setts out priority actions to make the Danube Region a competitive EU region for the 21st century (*http://www.danube-region.eu*). One of the 11 priority areas of the EUSDR, priority area 9 (PA9) "*Investing in People and Skills*". *Education and Training, Labour Market and Marginalised Communities*), refers to a topic of great importance not only for the Danube Region, but also for Europe 2020. The policy fields of PA9 have a very direct impact on employment, education and poverty/social exclusion (*PA9*, EUSDR, 2014).

In Romania, four development regions and twelve counties (with 235 rural local-administrative units and 28 urban local-administrative units-LAU2) are situated along the Danube (1,075 km long). The Danube Valley, spatially delimited by eight terraces (*Geografia României*, V, 2005), is one of the oldest Romanian territories steadily inhabited and laboured by a sedentary population (1,7 million in 2011) ever since the Palaeolithic Times (*Romania. Historical-Geographical Atlas*, 2007). Romanian geographers have studied the "geographical complex of the Romanian Danube Valley" (*Geografia Văii Dunării Românești*, 1969, p. 9) and their interest has increased over time, also widening the range of problems tackled. Despite this interest and given the political-ideological context before 1989, nothing is said about the complex offer-and-demand relations, about the quality of employment. Also, the topic of quality of employment from geographical perspective is absent even after the historic moments of December 1989 and after Romania's EU accession.

The methodological aspects concerning the indicators and indexes used for the assessment of the quality of employment reveal the fact that they are constructed from statistical data measured at macro-scale (national level). So, the indicators and indexes are defined at macro-level and they are based on some very long and comprehensive lists of statistical indicators measuring the quality of employment (e.g. Anker et al., 2003; Ghai, 2003; Bonnet et al., 2003; Bescond et al., 2003; Davoine et al., 2008; Quality of life indicators – measuring quality of life, 2015). The indicators and indexes are not available at local administrative territorial units (LAU2) and this is why, the present study follows the papers of Sehnbruch (2004), Tal (2015) and Ciutacu & Chivu (2007) and selected some statistical indicators relevant for the quality of employment in the Romanian Danube Valley and available at LAU2 level. The availability of the statistical data at LAU2 level is a very important aspect for representing these indicators on the maps. Another criterion for selecting the indicators is represented by the temporal dimension, which allowed the comparative analysis between different moment of time and the identification of main trend of the quality of employment. Relying on the statistical data available at LAU2 level provided by the TEMPO Online time series, as well as by the results of the Population and Housing Census (1992 and 2011), the following indicators meet the three criteria simultaneously mentioned above and they have been selected in this study: general rate of employment (EMPLOY), rate of employment in agriculture (EMPLOYAGR), rate of employment in non-agricultural activities (divided into manufacturing sector - EMPLOYMANUF and tertiary sector -EMPLOYTERT) and the share per employees of total employed population (EMPLOYEES). These indicators are used in the Schnbruch (2004), Tal (2015) and Ciutacu & Chivu approaches as components of some complex indexes used for the assessment of the quality of employment. In this

light, the general rate of employment provides information on the extent to which an economy generates jobs, the empirical evidence suggesting that it has a higher correlation with economic development, measured by GHD per capita than with the labour force participation rate (Akyeampong, 1996; Anker et al., 2003). The rate of employment in agriculture is relevant for the Romanian Danube Valley, because the rural labour force is occupied mainly in the agricultural activity and the increase of employed population in agriculture was due not to the needs of agriculture, but especially to workforce redundancies from the other sectors of the urban economies (Mateoc-Sârb *et al.*, 2014). In those sectors, affected by the restraints of productive activities, the level of the general rate of employment shows some negative quality of employment aspects (e.g. decreasing income and benefits from employment, insecure or unstable job and unprotected informal economy). The rate of employment in non-agricultural activities is suggested as an indicator of employment opportunities, because it conveys considerable information about the nature of employment opportunities. The observed prevalence of a high quality of employment in a territory (e.g. country) is determined in part by the structure of its economy: the manufacturing and especially the tertiary sectors are safer and provide higher than average compensation (Anker et al., 2003). In this respect, the indicators selected to represent the broad outlines of a country's economic structure (particulary in the transition economy, Cazes & Nesporova, 2001) and implicitly, the levels of the quality of employment, are the shares of employment in agriculture, industry, and services (Ciutacu & Chivu, 2007; Tal, 2015). At the same time, the economic structure of employment is linked with urbanization and the rapid rural-urban migration (in the case of developing countries, Anker et al., 2002) and with the inverse process of migration from urban-to-rural, in the transition economies (Ianoş, 1998).

The synthetic approach of the attributes of the quality of employment was made by means of a complex index built on the basis of the indicators previously selected for this study, the so-called "index of quality of employment main characteristics" – QE (adapted from Sehnbruch (2004), calculated as Hull score, average 50, and standard deviation 14 (*Disparități regionale în România 1990–1994*, 1996, *Carta Verde. Politici de dezvoltare regională în România*, 1997). The value variations of 0–100 are important "in determining this index either by assessing the direct or inverse ratio of each partial (secondary) indicator through measuring development" (Ianoş, 1997). Therefore, in the determination process of this index, direct influence indicators were considered to be positive; those with inverse influence were taken to be negative. In view of the above, the formula of the index of quality of employment main characteristics is: QE = 50+14(EMPLOY + EMPLOYMANUF + EMPLOYTERT + EMPLOYEES - EMPLOYAGR)/5

5. RESULTS AND DISCUSSION

The number of settlements with higher general employment rate values decreased over the last two decades studied. So, in 1992, the category of high-value (over 85%) settlements was very well represented in the territory, and only two compact areas (the Danube Delta and the Balta Ialomiţei) had lower-value (70–86%) settlements. On the contrary, the 2011 census showed that settlements with a low-value employment rate gained ground in the Danube Valley, a very worrying situation, as previously mentioned, because low values fell even lower (the minimum value was 70% in 1992 and only 22% two decades later).

Against the historical course of economic and social development in the transition, posttransition and EU access periods, the lack of employment opportunities in the manufacturing sector (which started being restructured) and the insufficient level of development in the tertiary sector created good conditions (but with negative socio-economic implications) for increasing the importance of agricultural activities (Ciutacu & Chivu, 2007). The importance that employment in agriculture holds in total employment is the more relevant as over 90% of existing Danubian farms have an average size of less than 5 hectares, they practicing subsistence agriculture, the results of work being designed largely for the self-consumption household (Bălteanu *et al.*, 2012). Both in 1992 and 2011, some sectors of the Valley registered a concordance between the high values of general employment rate and the elevated values specific to the rate of employment in agriculture. It is the case of the Balta Bräilei settlements (correlation coefficient 0.7288) and of those from several rural areas of Mehedinți, Olt and Giurgiu counties. In 2011, the correspondence between the two above mentioned indicators was greater due to large areas in the Oltenia Plain (correlation coefficient 0.8361) the latter joining the former area with a higher correlation coefficient than that in 1992 (0.7624).

As regards the structure of the total employed population by the main sectors of the economy, Romania occupied the last position in the EU in terms of the place held by the tertiary sector in the national economy, because of the high share of population employed in agriculture and of employed persons in the manufacturing sector which was close to the European average (Albu et al., 2012). In the Romanian Danube Valley, the structure of the total employed population by the main sectors of the economy registered important changes between 1992 and 2011:

- the share of employed population in agriculture per total employed labour force increased (29.8% in 1992 and 36.8% two decades later) in both rural and urban settlements;

- the share of employed workforce in the manufacturing sector dropped (35% in 1992 and the value fell by half in 2011) especially in urban centres (a decrease by 24 percentage points, compared to the value of 10 percentage points specific to rural areas);

- the tertiary sector registered a growth (from 27.6% in 1992 to 39% in 2011) in rural settlements (by 2 percentage points), but especially in urban residential environment (by 16 percentage points during the last two decades).

These are the general trends registered by each component of the structure of total employed population by the main economic sectors. The micro-scale level reveals some aspects which explain the difference between the two residential environments and offers the opportunity to carry out a detailed analysis of the structure of total employed population by the main economic sectors (Fig. 1).



Fig. 1 – Structure of total employed workforce from Romanian Danube Valley.

(Source: processed statistical data from the Population and Housing Census 1992 and 2011, National Institute of Statistics).

The higher share of employed population in agriculture per total employed workforce in the mentioned context (small farms, subsistence agriculture) means that the Danubian agricultural activity relies increasingly on the traditional household (peasant's or agricultural) and on the contributing family worker (more so in the western part of the Valley and less in the eastern sector – Balta Ialomitei and Balta Brăilei, Bălteanu *et al.*, 2012). The contributing family worker's labour does not involve costs for wages, this accounting for the low prices maintained for agricultural products. This situation also accounts for the low level of quality of life in the Danubian peasant's households, in

fact, in many cases, only the survival of the farm and its members (assimilated with the poor working category, Ciutacu & Chivu, 2007). Moreover, giving the definition used by the National Institute of Statistics¹, the categories "contributing family worker" and "self-employment" are not covered by any forms of social protection and are not eligible for unemployment benefits and support allowance (Ciutacu & Chivu, 2007).

The positive trend of the tertiary sector is based on trade (especially the increase of wholesale and retail by 6.4 percentage points) and financial intermediation and insurance (0.5 percentage points). This general dynamic hides the reductions registered by other types of tertiary activities (e.g. transport and storage being reduced by 3 percentage points between 1992 and 2011). Against the background the Danube waterway, the decrease of transport and storage activities in the Valley area shows that many of the harbours lost their economic basis and population, becoming peripheral towns (Hardi *et al.*, 2013), some of them with a low level of socio-economic development (employment included, Vîrdol, 2008, Vîrdol, 2009). The decrease of education, health and social assistance also could have a negative connotation for the health and educational status of the present and future workforce.

The structure of the total employed population by the main economic sectors was changed by the increase of the tertiary sector in almost 80% of all the Danubian LAU2, but speaking in terms of absolute values, is obvious that the county-seats Galați, Brăila, Drobeta-Turnu Severin, Giurgiu, Tulcea and Călărași cumulated most of the total increment of the tertiary sector employed population (47,159 persons out of a total of 62,554 persons). Generally, the creation of tertiary activities is on the increase, compensating for industrial involutions (Popescu, 2000). The increase of the tertiary sector did not necessarily imply the same trend for employees, because it is category of employers which represent an important status of employment in the tertiary sector (Albu *et al.*, 2012).

The fall in the manufacturing sector of the Romanian Danube Valley is reflected in the decrease of the average share of employed population in this sector: 40.4% in 1992 and 24.7% in 2011. These mean values hid territorial differences between the rural and the urban residential environments and between the various types of local economies. The great majority of the Danubian territorial administrative units (70.7% out of all 267 LAU2) lost persons employed in the manufacturing sector. The most important loss was recorded by the big Danubian urban centres (Galaşi, Brăila, Drobeta-Turnu Severin and Giurgiu cummulating over 55% of the total loss in the Danube Valley). The opposite is represented by the rural settlements which had no employment in manufacturing activities in 1992, but they did register productive activities in some small industrial units in 2011: food (e.g. bakeries, factories of canned fruits and vegetables), clothing industry units, etc. This increase is expressed in percentage, a positive trend almost cancelled, because in absolute values, the growth was characteristic only of 35 rural LAU2 (11% of all the Danubian territorial administrative units) and cumulates only 1,550 employed persons (by comparison, total loss was of 180,900 employed persons).

The downward trend of employed population in the manufacturing sector is due mainly to the reduction in the number of employees, who represent the majority workforce in manufacturing activities. The share of employees in the total employed population dropped from 73% in 1992 to 41% two decades later; in absolute values that means a loss of 335,450 employees (scattered unequally in 87% of all the Danubian territorial-administrative units, including all urban settlements). Almost half of the total loss was concentrated in the four most important cities of the Romanian Danube Valley: Galați, Brăila, Giurgiu and Drobeta-Turnu Severin. The rural territorial units, which registered a positive trend of employees, are those situated in the tourist areas of the Romanian Danube Valley (Danube Delta, The Iron Gate Gorge).

¹ Beginning with 2011, the contributing family worker is considered as employed persons if he is the owner of the agricultural production obtained and meets one of the following conditions: a) the agricultural production is intended, even partially, to sale or to barter agreements and b) the agricultural production is exclusively intended to self-consumption if it accounts for a significant part of the household's total consumption (*http://statistici.insse.ro*, 2015). The self-employment category falls into a similar definition, being often understood as the simplest form of entrepreneurial activity and remaining an important way of living for many people (Drobnič, 2014).

The synthetic profile of the attributes of the quality of employment in the Romanian Danube Valley was made by computing and mapping the index of quality of employment main characteristics (QE). In the light of the index of quality of employment main characteristics values, the Romanian Danube Valley settlements fell into three and four classes of quality of employment (in 1992 and 2011, respectively). Most representative in the Valley is the "quality of employment low level" class, still decreasing between 1992 and 2011, because in 2011 the "very low level" class occurs in the classification. It is very important from the viewpoint of the topic discussed that the "average level" and "high level" classes registered a significant decrease in the number of LAU2 component in favour of the first two classes with a low and very low quality of employment level (Figs. 2, 3).



Fig. 2 – Levels of quality of employment in the Romanian Danube Valley (QE 1992) (Source: processed and mapped statistical data from the Population and Housing Census 1992, National Institute of Statistics).



Fig. 3 – Levels of quality of employment in the Romanian Danube Valley (QE 2011) (Source: processed and mapped statistical data from the Population and Housing Census 2011, National Institute of Statistics).

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As regards the dynamic of index of quality of employment main characteristics (Fig. 4), the ten rural settlements (3.5% per total Danubian LAU2) in Constanța, Brăila and Tulcea counties represent an exception to the widespread decrease. In their cases, the growth is reduces and it is due to low increases registered by the share of employees, of employed population in manufactured and tertiary sectors of total employed population.



Fig. 4 - Dynamic of quality of employment in the Romanian Danube Valley (QE 2011 - QE 1992).

Mentioning that almost 8% of total current Danubian LAU2 does not record statistical data in 1992 (because they were in the administrative limits of others LAU2) and they are not included in the analysis of dynamic of the quality of employment, it is outstanding the decline registered in terms of quality of employment: 60% of total Danubian LAU2 form the class with a reduced decline and 28.5% of total Danubian LAU2 from the class with accentuated decline.

6. CONCLUSIONS

The rate of employment in agriculture is responsible for the values and the spatial distribution of both the general rate of employment and the index of quality of employment main characteristics. If the correlation between the general rate of employment and the rate of employment in agriculture is obvious in some sectors of the Romanian Danube Valley (e.g. Balta Brăilei, Oltenia Plain), the correlation between the rate of employment in agriculture and the index of quality of employment main characteristics is registered everywhere along the Romanian Danube Valley (correlation coefficient 0.805 in 1992 and 0.711 in 2011, with very high values even in the Danubian urban settlements e.g. 0.866 in 2011). It is very important to recall that the rate of employment in agriculture is the statistical indicator with inverse influence on the quality of employment and it is taken to be negative; so, the correlation seems to show that where the values of occupancy in agriculture are high and very high, the level of quality of employment is low and very low. This means a negative, or inverse correlation between the two statistical indicators mentioned. This reality is in line with other studies which show that the population employed in agriculture, despite the official statistical status = "employed", is in fact sub-employed, with a weak quality of employment and a low level of quality of life (Albu *et al.*, 2012; Mărginean & Precupețu, 2011; Mateoc-Sârb *et al.*, 2014).

In terms of quality of employment, the changes registered in the structure of the employed population of the Romanian Danube Valley between 1992 and 2011 highlighted the following aspects:

- the increase of the share of employed population in agriculture is linked with the importance of the traditional household and, implicitly with a higher share of the contributing family worker and of the self-employment category of total employed population in agricultural activities. The social features of these two categories (e.g. not wage-payment, not covered by any forms of social protection, not eligible for unemployment benefits) allow us to assimilate them in the Romanian Danube with the poor working persons (according to Stănculescu, 2003, 2008; Citacu & Chivu, 2007). This means that their quality of employment level is low and very low. Also, the reduced quality of employment level is the effect of the difficult working conditions (e.g. exposure to climatic factors and the use of rudimentary equipment, Citacu & Chivu, 2007).

- the fall in the share of employed workforce in the manufacturing sector is related to the decline in the number and share of employees per total employed population. The trends of these two indicators suggest a deep deterioration of the quality of employment. More precisely, this means job loss for a variable period of time (unemployment) and besides, the decrease of the total money income (wage) of households, reduced real purchasing power of wages and a decline in the quality of life (Ciutacu & Chivu, 2007; Vasile *et al.*, 2010; Mărginean *et al.*, 2011).

- the growth registered by the tertiary sector is based on wholesale and retail activities. This reality may hide the fact that those employed in this type of tertiary activities could be exposed to the risk of being working poor, because the informal economy characterised a large part of wholesale and retail activities (together with agriculture, constructions and tourism, according to Stănculescu, 2003, 2008). The positive general trend of the tertiary sector hides the decrease of employment in the education and health sectors. Considering that a high educational level increases labour market insertion, income (Moretti, 2004, quoted by Aceleanu, 2012) and employment (Eurostat, 2012), we find it otherwise in the Romanian Danube Valley is. This situation is caused by major deficiencies in the educational system even after two decades of transition and after Romania's EU access (Vasile *et al.*, 2010). Health care resources are limited in the Danubian counties and they are poor in rural areas and in some small towns (Dumitrache, 2004). Wthin this context, the chances for the Danubian workforce to have good health conditions, a high level of education and a correct correlation between training and labour market requirements are weak.

The general decline of the quality of employment in the majority of Romanian Danube Valley settlements represents the cumulative effect of the changes registered by the rate of employment, rate of employment in agriculture, rate of employment in non-agricultural activities and the share per employees of total employed population. The obvious decrease in terms of quality of employment is revealed by the widespread negative values recorded by the index of quality of employment main characteristics.

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