

SOCIO-ECONOMIC TRANSFORMATIONS OF HUMAN CAPITAL IN RURAL ROMANIA

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Abstract: *Human capital theory rests on the assumption that formal education is necessary to improve the productive capacity of a population. The education is an investment in human capital, which proponents of the theory have considered as equally or even more worthwhile than that of physical capital.*

The main demo-educational tendencies of the human capital in rural Romania seems to be in contradiction with the goals of the human capital theory. The age structure of the active rural population constantly deteriorated in the last decade, with significant influences on the innovating capacity of the labour recruitment pool. The analysis of the interest in education by rural population's age groups reveals a contradictory evolution in the case of rural young generation. Unfortunately, the young people (under 35 years) are becoming less and less interested in graduating secondary and higher education levels than older generations. In the period 1996 – 2012, the number of rural people aged 25 – 34 years who graduated a low educational level practically doubled, the share of this educational category in total rural population from the above-mentioned age group reaching 42%. In this way, the young population risks to endanger its access opportunities and active involvement in the labour market.

Key words: *human capital, demo-educational trends, rural area, Romania*

INTRODUCTION

In the classic economic theory, the development process was largely dependent on tangible physical assets such as land, factories and equipment. Labor was a necessary component, but increases in the value of the business came from investment in capital equipment. Modern economists seem to concur that education and health care are the key to improving human capital and ultimately increasing the economic outputs of the nation (Becker 1993).

The economic prosperity and functioning of a nation depend on its physical and human capital stock. In the new global economy, hard tangible assets may not be as important as investing in human capital. In general terms, human capital represents the investment people make in themselves that enhance their economic productivity (Almendarez, 2010).

Human capital theory rests on the assumption that formal education is highly instrumental and necessary to improve the productive capacity of a population. Throughout western countries, education has recently been re-theorized under human capital theory as primarily an economic device; it is increasingly seen as a key determinant of economic performance. In the modern economy, the level of education is crucial for the productivity and efficiency of workers. The higher the educational level, the cognitive stock of economically productive human capability increases. All of these are a product of innate abilities and investment in human beings. The provision of formal education is seen as an investment in human capital, which proponents of the theory have considered as equally or even more worthwhile than that of physical capital (Psacharopoulos, Woodhall, 1997).

Fagerlind and Saha (1997) posit that the efforts to promote investment in human capital were seen to result in rapid economic growth for society. For individuals, such investment was seen to provide returns in the form of individual economic success and achievement. Most economists agree that it is human resources of nation, not its capital nor its material resources, which ultimately determine the character and pace of its economic

and social development. Human resources constitute the ultimate basis of the wealth of nations (Almendarez, 2010).

A brief overview of rural Romania phenomena and processes of the past 25 years revealed that the current stage of human capital and rural development are the result of the transition from socialism to capitalism.

In all these years, rural areas and small rural farms represented a social and economic safety net against economic and social effects generated through the process of socialist economy restructuring.

The most important three factors that influenced the rural areas in transition are:

1. reconstitution of the private ownership on the agricultural land (which meant that landowners can operate the agricultural land on their own);
2. the restructuring of the other sectors of national economy (which meant the closure of socialist enterprises and generated high unemployment in the absence of initiatives to develop new capitalist enterprises);
3. lack of non-agricultural occupational opportunities in the rural areas.

As a result, we have witnessed a process of returning to rural areas of the urban populations who lost their jobs from the socialist economy (Figure 1). At the same time, the small rural farms have become one of the main means to meet the subsistence needs of the rural household members (the holdings under 5 ha represent 93% of the total number of holdings). Inflows of population from urban to rural areas resulted in the volume of working age rural population (15-64 years) remaining relatively constant during the last ten years. However, due to the birth rate decline, in rural Romania we can notice an accelerated trend of demographic ageing. Demographic ageing (≥ 65 years / ≤ 15 years) of rural population in the year 2011 reached 1.102/1.000, almost double than in 1990 (NIS, 2014).

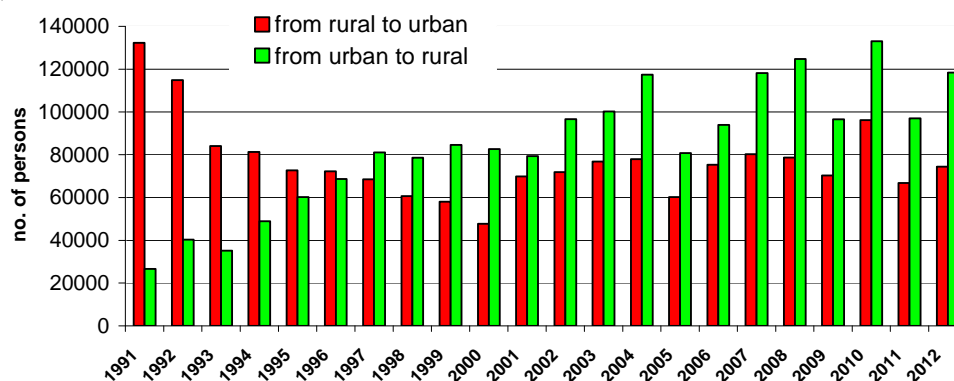


Fig. 1. Internal migration flow in the transition period

The lack of non-agricultural occupational opportunities in the rural areas was perpetuated and maintained the dependence of the rural population on agriculture and on small farms production. Because of this, the concentration in agricultural land use run slowly with negative consequences upon the productivity of the primary sector of the national economy. The analysis of inter-census evolution of Romanian farm size characteristics reveals the perpetuation of a very high concentration of agricultural holdings in the small and very small-sized farm category (under 5 ha utilized agricultural area-UAA). Although the number of small-sized farms decreased by about 15% in the inter-census period (2002-2010), the importance of farms under 5 ha UAA practically remained the same. Thus, while in the year 2002, 93.8% of the agricultural holdings from

Romania operated agricultural land areas under 5 ha, in the year 2010 their share reached 93.1% (NIS 2002, NIS 2010).

As consequences:

- more than 90% of persons representing the regular labour force in Romania's agriculture work on the farms with less than 5 ha;
- almost 80% of holdings have an annual economic size¹ lower than 1,200 € / year and use more than a half of their own farm production for self-consumption.

The question is whether it is only the economic context and the long transition process that maintain the rural area in this low development stage, or there are also other determinants of this situation. On the basis of theories on the human capital, we tried to test to what extent the Romanian rural area, so rich in material resources, has a human capital that can enhance its development opportunities.

MATERIALS AND METHODS

The analytical approach proposed in the present study targets the evaluation of context in which the labour market in rural Romania evolves in the context of structural changes of rural human capital. The human capital characteristics that enable us to evaluate the stage and development dynamics of the active implication on labour market envisage *three main aspects*:

- ***The population's demographic ageing*** reflects the demographic regeneration potential at the rural level and it is expressed by the population ageing index². The values larger than one of this index induce great risks of the decrease in number of the population in the rural area, which is similar to a contraction of the demand on the local markets for goods and services, making the micro regions less attractive for investments.
- ***Labour force renewal index*** - calculated as ratio of the population aged 15-29 years to the population aged 33-44 years. As it compares the young labour force volume, at the very beginning of active life, to the volume of adult labour, this index highlights the trend in the evolution of labour available for the future. A ratio larger than one reveals the growth opportunity of the young labour force available on the rural market, which favours the attraction of investments in alternative economic activities. By contrast, the more the ratio tends to zero, the higher the contraction risk of the available labour at rural level.
- ***The educational structure of the rural labour force*** becomes very important as it reflects the distribution by different educational levels of the rural population and reveals whether the professional training of labour represents an opportunity or a risk for the development of non-agricultural entrepreneurial initiatives. The implementation of economic activities that require a higher training level can be facilitated when the persons with a higher educational level prevail in the rural labour force; on the contrary, it can be constrained when the educational level of available labour is low as the low educational level is associated to the risk of being reluctant to innovation in the occupational behaviour.

¹ The *standard output* of an agricultural product (crop or livestock), abbreviated as **SO**, is the average monetary value of the agricultural output at farm-gate price, in euro per hectare or per livestock head. There is a regional SO coefficient for each product, as an average value over a reference period (5 years). The sum of all the SO per hectare of crop and per head of livestock on a farm is a measure of its overall economic size, expressed in euro.

² The *population ageing index* - calculated as a ratio of the number of persons over 65 to those up to 14 years old

The conclusions of this article are based on the analysis of secondary statistical information (national database statistics) on the quantitative and qualitative demographical characteristics of the rural human capital, in order to capture their influences on the chances to be active on labour market for rural population.

RESEARCH RESULTS

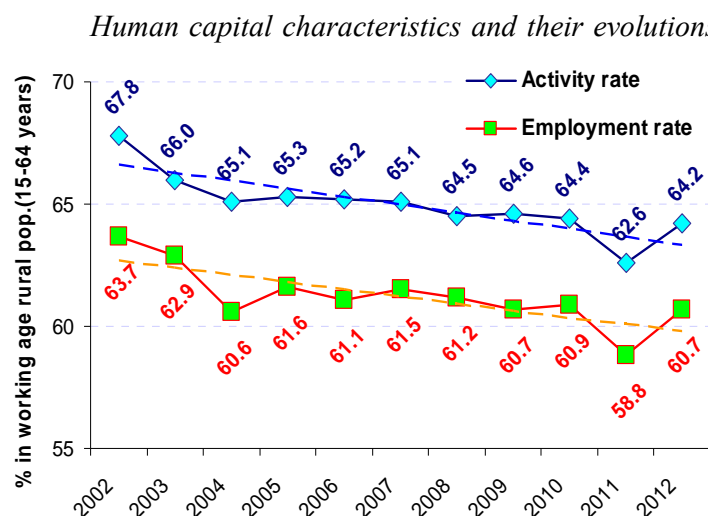


Fig. 2. Evolution of rural activity and employment rates

capacity of the labour recruitment pool. Thus, while the rural active population volume was down by 10% in the period 2002 – 2012, the number of active young persons (15-24 years) decreased by one-third in the same period (Fig. 4a). Thus, we reached the present situation in which one in three active rural persons is more than 50 years old, while this ratio is only one in five people in the urban area.

The labour renewal resources are exhausted in the Romanian rural area; the ratio of the population at the beginning of the active period (age group 15-29 years) to the population in the middle of active life (30-44 years) experienced an accelerated decreasing trend especially after 2000 and it became less than one in the year 2008 (Fig. 3). This evolution will determine an accelerated ageing of labour force itself, as in the age structure of the active population, the young people will have an increasingly lower share, while the share of the mature and old population will increase. Active population ageing has a negative impact upon the population dynamics on the rural labour market. Labour force ageing is accompanied by the decrease of the labour force innovating capacity, occupational mobility and of the capacity to assume the risk of occupational status change. All these represent risks for the implementation of new entrepreneurial initiatives in the rural area.

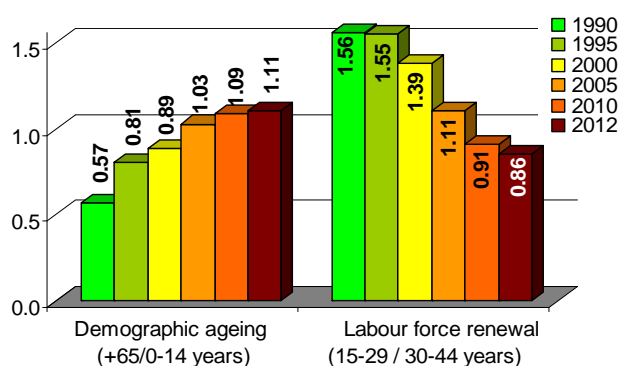


Fig. 3. The evolution of the rural demography

The rural population's occupational structure by age categories followed the active population's trend (Fig. 4b). The statistical data reveal a disparity phenomenon with regard to the access to jobs in the age groups found at the extremes: active young persons in the age group 15-24 years, on one hand and the active elderly people aged over 65 years, on the other hand. Thus, while only 84% of the active young people succeed in getting integrated on the labour market, the employment rate of the active persons over 65 years old is about 99.9%. A significant employment rate is also found in the active rural population 50- 54 years old (98%).

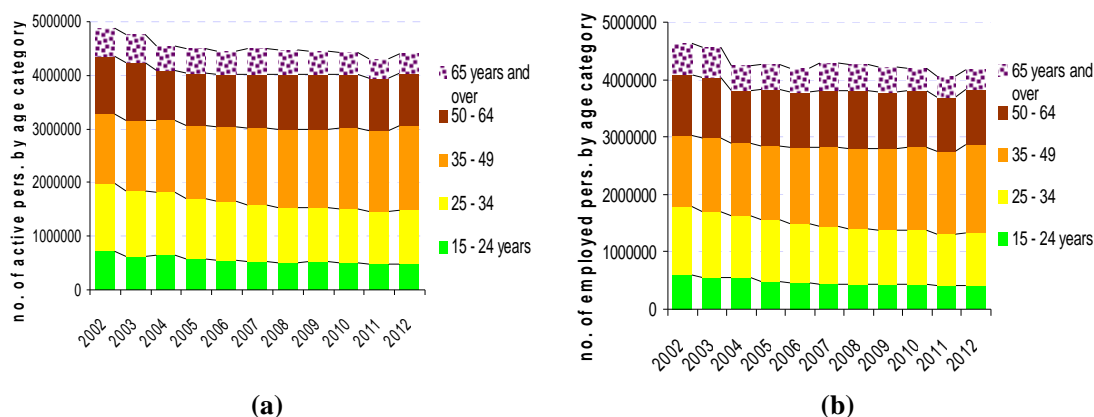


Fig. 4. Evolution of active (a) and employed (b) rural population by age categories in the last ten years

The analysis of the demographic aspects of the access and participation to the rural labour market reveals the fact that there is a positive correlation between the active rural population's age and its opportunity to get a job. Furthermore, in the ten investigated years, there was a general decreasing trend in the access to a job for younger population. In other words, the opportunity to obtain a job for the active young population (aged 15 – 24) years is under permanent decline, while the opportunities to get a job increase instead as the active population's age increases.

The explanations for this situation, according to the human capital theory, can be the professional training level and the compatibility between the labour force skills and the labour market requirements. According to this theory, *the level of education is decisive for the access to the labor market and to a well-paid job*. Between 1996 and 2012, the educational level of the rural population tends to improve slowly. In the structure of rural population aged over 15 years (that represents the labour force recruitment pool), the share of persons with low educational level (who graduated less than 8 schooling years) decreased from 65% in 1996 to 56% in 2012. At the same time, the specific weight of rural population with a high educational level (short and long time higher education, including master's degree and PhD) doubled in relative figures, its share in the rural population over 15 years old increasing from 1.3% to 3.1% in the investigated period (Figure 5).

The analysis of the interest in education by rural population's age groups reveals a contradictory evolution in the case of rural young generation. Unfortunately, the young people (under 35 years) are becoming less and less interested in graduating secondary and higher education levels than older generations. In the period 1996 – 2012, the number of rural people aged 25 – 34 years who graduated a low educational level practically doubled, the share of this educational category in total rural population from the above-mentioned age group reaching 42% (Fig. 5). In this way, the young population risks to endanger its access opportunities and active involvement in the labour market. We shall next test this assumption, on the basis of statistical data.

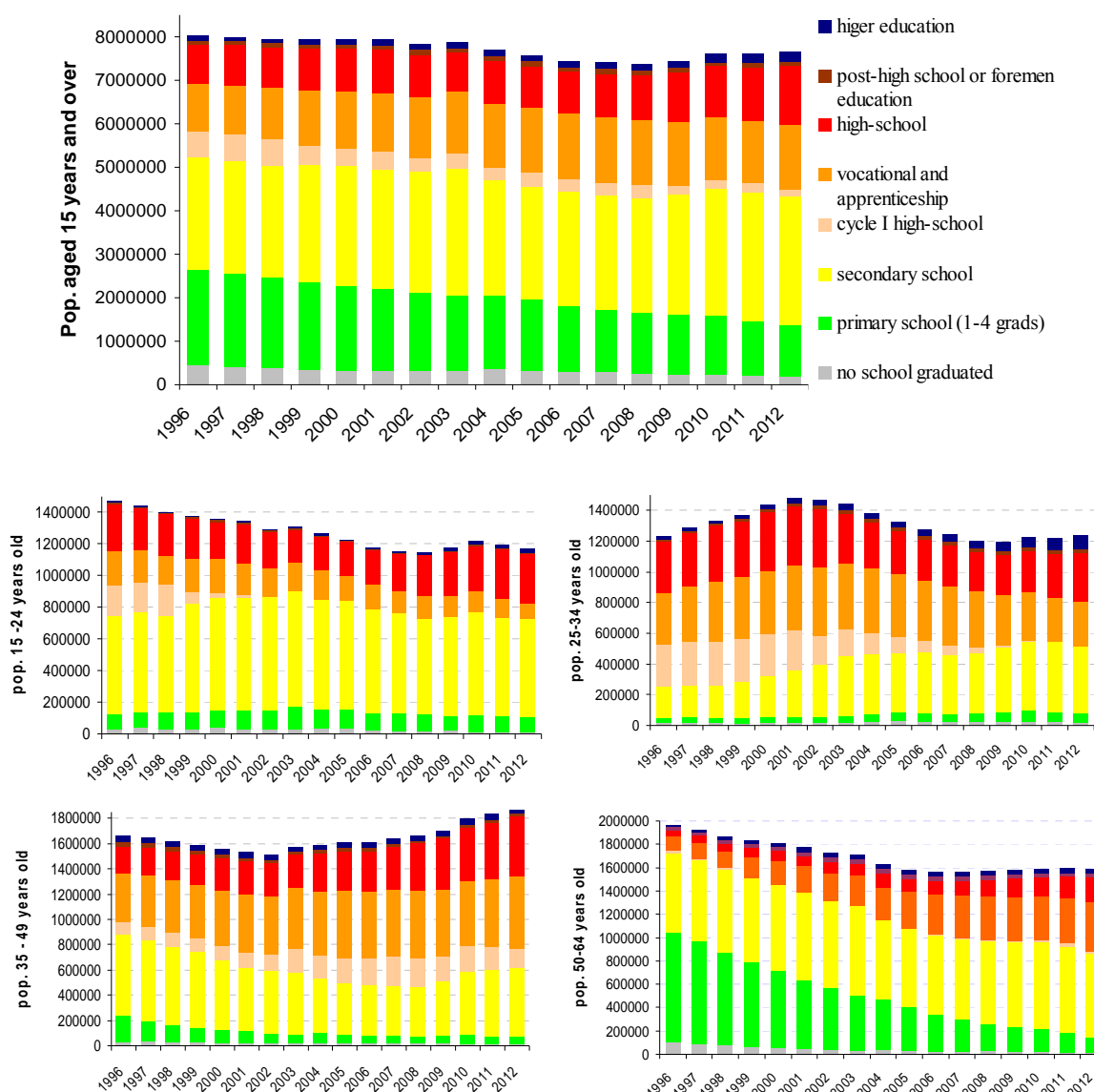


Fig. 5. The education level of rural population 15 years and over, by age category

Labor market involvement of rural population differs by age groups and education level is an important predictor for the labour market participation (Fig. 6):

- young people, between **15 and 24 years**, have the lowest rate of activity and the trend is decreasing. They also have the smallest chances of finding a job, the unemployment rate among them is around 15%;
- most active in the rural labor market are people aged between 25 and 54 years;
- we witnessing a decrease in the activity and employment rates of rural population between **25 and 34 years**. We believe that this can be explained by short-time migration for work abroad of this category of active rural population;
- lower education level of the age group **25-34 years** compared to the older generations also causes higher levels of unemployment for this age group;
- older working active population (**over 55 years**) has easy access to the labour market than younger.

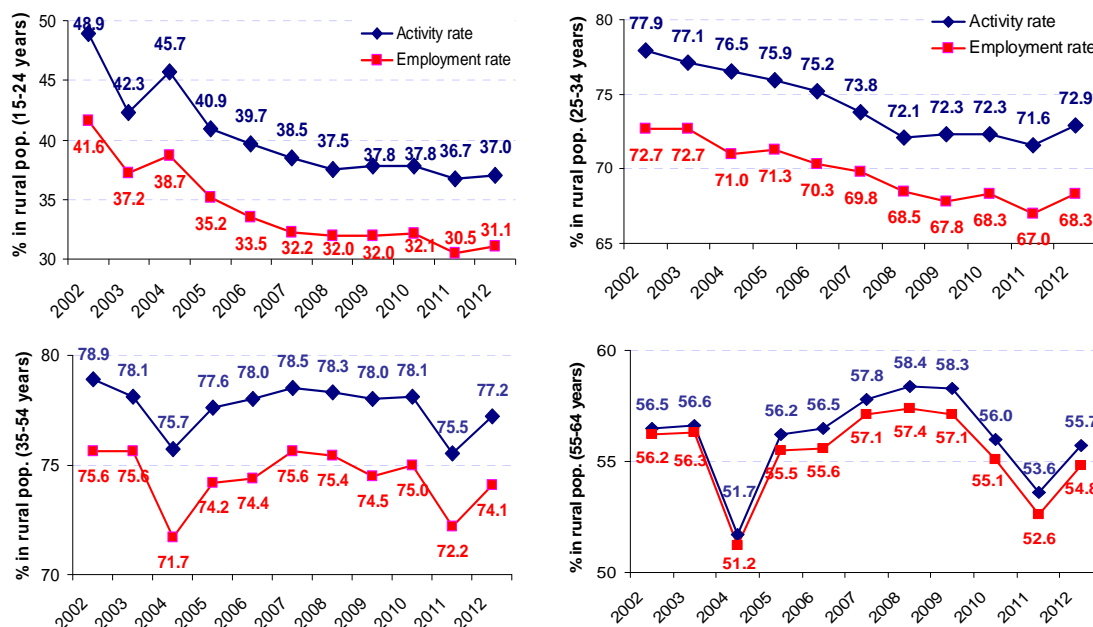


Fig. 6. Evolution of activity and employment rates of rural population by age category in the last ten years

The general tendency to get involved on the labour market also differs with the rural population's age. The activity rates of rural population younger than 34 years had a statistically significant decreasing trend in the last ten years. In the population aged over 35 years, the participation to the rural labour market, expressed as trend of activity and employment rates, features variations linked to the economic cyclicity, yet the general tendency is a stable one.

CONCLUSIONS

As it is expected, a significant positive correlation appears between the population's educational level and the access to work. The statistical data for the last ten years reveal that the opportunity to get a job amounts to 70% in the case of rural population over 15 years old that graduated high school at least. This decreases to about 50% for the rural population that has an educational level inferior to high school. Age is also an important predictor of the access to labour market, the highest employment rate (86-90%) being found in the case of rural population aged 35 – 49 years, who graduated educational levels equivalent to high school of higher. The age group 25 – 34 years comes next, with the same educational characteristics for which the employment rates range from 80 to 86%. At the other extreme, we find the young people aged 15 – 24 years, with an educational level lower than high school, for which the employment rate reached 31.6% in 2012. It is worth mentioning that the employers rather prefer to hire people at the end of their active life (55-64 years), even with lower educational levels, than young people; the employment rate in this age category is 65%.

This structure of the rural human capital and the signaled tendencies of its size degradation, both in quantity and mainly in quality, requires urgent corrective interventions, which should stimulate the young people's school enrollment, adults' returning to school to complete their basic education and support their qualification, acquiring professional skills in conformity with labour market requirements.

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5. *** National Institute of Statistics (NIS) 2014 - TEMPO On-line database, www.insse.ro;
6. *** NIS, General Agricultural Census 2002 and 2010.