Human resources in the economic crisis

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Abstract

This paper is meant to be an extension of our studies published over recent years, which were meant to seek some answers regarding the existing cause-effect relationship between the economic, financial, demograph and food crisis. In the said article we place the human resource, in its sense of labor force and demograph potential as well, in the middle of the economic, financial, demography and even the food crisis. Provided that in the previous case we demonstrated the hypothesis according to which a food crisis can be caused as well as lead to the migration of the active population to other countries (especially from the rural area) and the agglomeration of underprivileged population in certain geographic areas, we are currently resuming to the mutations recorded by the human resource, as part of the active population, under the aspect of social and economic disequilibrium.

Keywords: human resources, total population, active population, usually active population, unemployed persons, public policies, public expenses.

1. Introduction

In 19th century England, the renowned mathematician and demography specialist, Thomas Robert Malthus, made some predictions regarding the intensification of the economic crisis caused by overpopulation. In his paper, "An Essay on the Principle of Population" from 1798, Malthus foresees mankind's collapse through the fact that "the population's force surpasses so much the earth's capacity to insure the resources required for man's sustenance, that, (...) our vices are active and able agents of depopulation¹. If the vices are not sufficient, than diseases, wars or extreme meteorological conditions arise and ultimately lead to hunger, which will put the equality sign between the ever-evolving population and the diminishing resources. Whilst for that matter, we can also find in the previous article entitled "Food Crisis Overlapping the Economic Crisis" that we are presently facing o lack of food supplies due to the excessive consumption imposed by the multitude of economic agents.

The population's law specifies the hypothesis according to which as long as an income improvement exists, as an effect of the economic development, the population tends to increase in a geometrical progression². Simultaneously, the food supplies offer is increasing more slowly, in an arithmetic progression. The consequence is inevitably the incomes' decrease and the domination of generalized poverty. Unfortunately, Malthus' theory has been confirmed by some developing countries which in the post-war have assisted to causing the "demograph explosion" simultaneously with the decrease of incomes per inhabitant. The fact that an increasingly acute lack of specialized labor force emerges in the given circumstances of an increasing population worldwide, in situations of economic recession, is paradoxical.

From the beginning of history humanity required 2 thousand years to reach the number of one billion people. Afterwards, only one hundred years were needed to double the number, thus arriving at two billion people in the year 1920. Following this interval only 50 years were required to double it again and reach four billion, and according to statistics we will be nine billion people in the year 2050.

Year	Population (mil. inhab.)	Annual medium rhythm
		of growth (%)
1750	600-900	0,4
1820	1000	0,5
1927	2000	0,65

Table 1. Demograph growth and growth rate recorded in the 1950-2011 interval and the tendency for 2050

¹ R. Malthus (translation by Victor Vasiloiu and Elena Angelescu), *Essay on the principle of population*, Bucharest, Scientific Publishing House, 1992.

² Economy dictionary, 2nd edition, Economic Publishing House, Bucharest, 2001.

1960	3000	1,4
1974	4000	1,9
1987	5000	1,7
1999	6000	1,3
2011	7000	1,2
Estimation: 2050	9500	0,51

Source: The World Factbook, July, 2011, Central Intelligence Agency,

*** World Demograph Estimated and Projections, United Nations, New York, 2011

The population's growth in a geometrical progression between the years 1900 and 2000 has also drawn the same rhythm for the increase of some indicators such as: carbon dioxide emissions, forests' destruction rate, extinction of some species of plants and animals, consumption of water and paper, fishing and ozone layer's destruction. The indicators are, on one hand, in correlation with the population's growth but with the development of technical progress as well and, on the other hand, with the growing number of motorized vehicles, enhancement of foreign investments or increases on a macroeconomic level.

This period of economic growth was anticipated by researchers to last until 2005, hypothesis confirmed as a matter of fact when it reached a peak in 2006-2007 and that followed in 2008. In the economic growth phase effects are being produced at the level of combining production factors, production structure but also consumption, changes which are concretized in an economic leap. Through the profit expectations generated by the economic growth, investments are increasing, fabrication structures along with professional qualification and management are being modified, simultaneously with the development of the old ones. All these transformations are produced until a saturation point that marks a structural crisis.

2. Theoretical background

Humanity's evolution has a certain rhythm and constancy: people generate consumption, consumption indicates production, production attracts financial funds and these funds are used for consumption, investments and speculations. Ultimately the speculations inevitably lead to unjustified earnings or massive losses. Translated on a global level, the equation determines that certain countries will win for a short term while others will lose. That is to say the rich will be richer and the poor will have something more than the liberty to die of hunger, as economists Paul and Ronald Wonnacott³ figuratively estimated. In this context, the emergence of an economic crisis becomes almost predictable, as the Russian economist Nikolai Kondratieff appreciated, but are the people ready to face them? Here is a question for which the answer can be found in our opinion by studying the human resource. We are presently in an era full of knowledge, in which technology, innovations and the complex structure of production factors impose the rethinking of the human resource's place and role, of its behavior and actions.

In time the human resource is physically and especially morally eroded. The moral usage appears due to the faster development of technique and technology in rapport with the evolution of labor resources. If man requires 15, 20 years of continuous study in order to specialize, in the moment when he is ready to work in the field for which he has prepared he will notice he has insufficient knowledge for the job's maximum exploitation. Perhaps this explains the fact that the European Union is currently facing an acute lack of specialists in the information technology. Although it is one of the most required specializations among young people, the domain imposes a highly advanced level of knowledge and abilities, which makes it more useful for those who wish to work from home. Unfortunately, the specialists in the information technology are not the only specialists who are not willing to respect the strict laws of a working place.

This is why the analyses presented in the rapport entitled "An agenda for a Growing Europe" and presented in 2003 by a group of specialists from the European Commission, which was coordinated by Professor André Sapir (European Center Ad.Research in Economics and Statistics) are undoubtedly real. According to the theories presented in 2003 "a system built around the assimilation of existing technologies, the mass production that generates large economies and an industrial structure dominated by large and very large firms with stable markets and long term employment of personnel schemes, is no longer efficient in today's world characterized

³ Paul Wonnacott, Ronald Wonnacott, Economics, 3rd edition, McGraw – Hill Book Co., 1986, pages 67-68

through economic globalization and powerful external competition. Nowadays we require more opportunities for the market noobs (2), more mobility inside the firm and between firms for employees, more requalification, a stronger dependency on financial markets and more investments in research development as well as in education. All these ask for an urgent and massive change in Europe's economic politics."

The Sapir Rapport was published in 2003 and the authors came back in 2005 with "Globalization and the reform of European Social Models (ECOFIN Informal Meeting in Manchester)⁴. In 2005 the unemployment rate at the European Union's level recorded a decreased level and maintained itself in a decreasing trend, but with a great distribution difference between the four country categories (Anglo-Saxon, continental, Nordic and Mediterranean).

A series of predictions were made regarding the future of the European Union confronting the wave of adhering, trying to somehow delimitate the Union's old members from the new labor force that arrived with another mentality, training, level of culture and civilization.



Continental countries Mediterranean countries Nordic countries Anglo-Saxon countries

Fig. 1. Long-term unemployment level in different categories of European countries Source: Eurostat 2005

In the graph published by the Eurostat in 2005 we can notice that the countries with an Anglo-Saxon origin have a long-term level of unemployment (over 12 months) that is little over 1%, while the European Continental countries have a rate of almost 4.5%. The same source also publishes how the poverty reduction level is distributed (measured as a mass of the people with an available income under 60% of the national average income) in the above mentioned countries.

⁴ André Sapir, Globalisation and the reform of European Social Models, JCMS 2006 Volume 44. Number 2. pp. 369–90



Nordic countries Anglo-Saxon countries Continental countries Mediterranean countries

Fig. 2. Poverty reduction level in different categories of European countries (EU-15) Source: Eurostat 2005

The graph reveals the fact that the richest countries before the beginning of the economic crisis were the Nordic countries, while the poorest were the Mediterranean ones. Otherwise said, between countries such as Sweden or Denmark and Italy or especially Greece, a discrepancy of 50% exists between the available incomes. In addition, studies demonstrate that an indissoluble connection exists between the level of poverty, level of education and mass of expenditures with social protection.

In 2007 the unemployment rate recorded the lowest level, furthermore being a year of economic boom as we have shown. As it can be observed in figure 4, in 2008 the crisis and unemployment suddenly grow.



Fig. 3. Unemployment level in the EU by categories of people Source: "EU Employment and Social Situation, Quarterly Review", March 2013

The graph shows a distribution of the unemployment on the following categories: working population (between 15 and 74 years old), young people (between 15 and 24), elderly (between 55 and 64), population with a low level of qualification and women. A reduced rate of unemployment can be observed among the elderly and

women, rate that follows the working total population's trend. On the other hand the rate of unemployment is emphasized among young people and the population with a low level of qualification.

If the unemployment rate has dropped between 2003 and 2008 with more than two percentage points, we can observe that after the outbreak of the economic crisis the unemployment begins to rapidly grow. Therefore, in five years, from the middle of the year 2008 up to the second trimester of the year 2013, the unemployment rate is growing from 7,1% to 10,9%. The unemployment's further evolutions along the crisis period have been more or less similar for different categories of people in the labor force market, with a couple of exceptions. First of all, unemployment among young people is much more receptive to the business cycle in general. Furthermore, unemployment among men is higher in the sectors of activities which are dominated by them, as a matter of fact between 2008 and 2009 unemployment rises almost insignificantly among women, remaining under the general level.

As far as structural differences are concerned, young people and workers with a medium level of training have the highest risen rate due to the similarities regarding the specialization degree. At 24 years old a young person finishes the complete studies (bachelor's and master's degree) which only imply a theoretical qualification and very few practical skills.

Unemployment stops from rising at the middle of the year 2013 and somewhat remains constant at the beginning of 2014, reaching a number of nearly 27 million people in the European Union. Interesting in this sense is also the distribution of unemployment on different countries members of the union. In comparison to 2012 the unemployment rate has very much increased in Greece, Cyprus, Italy and Holland and has recorded a regression in Ireland and Hungary. These variations are also caused by the GDP's recorded level in that period. Per ensemble, long term unemployment continues to grow on account of the long duration of economic crisis. At the end of the previous year long term unemployment reached the record of 12.5 million which represents 5% of the active population in the European Union.

If we relate to the year 2008 long term unemployment almost doubled, with the exception of Germany where unemployment rate drops from 4% to 2.5% between 2008 and 2012 and Luxembourg where it maintains relatively constant around 1.5%.

Unemployment presents great divergences especially between countries members of the euro zone⁵ as well. From the economic crisis' debut we can notice a massive rise of unemployment in the countries situated in the south and periphery of the euro zone as opposed to the rest of the member countries. Thus, the variations are between approximately 5% in Austria, Germany and Luxembourg and over 25% in Greece and Spain. Also, the unemployment with rates of over 16% recorded in Portugal, Cyprus and newly joined Croatia, is considered to be above average. As a matter of fact, Cyprus has the largest accession recorded from one year to another (September 2012, September 2013) of over 4.4 percentage points.

Unemployment among young people remains very high, of 23.5% at the EU level but with surprising variations between states, from 7 or 8% in Germany and Austria to 56 or 57% in Spain and Greece.

In spite of the economic crisis we can detect an improvement of the activity rates in several member states. These improvements were possible on account of the increased activity rates among the population with ages between 55 and 64 years old but also of women, which led to a general growth of the activity rates on a European level from 70.7% to 71.9%. There have obviously existed here as well high variations between member states. The highest growth rate recorded the Czech Republic, Malta and Latvia, and at the opposite pole the lowest rate was recorded in Denmark (but from a very high level), Ireland and Croatia. Although women's rate of employment has continuously improved, a large gap still exists in opposition to the masculine population. The difference is the working schedule, women preferring a part-time schedule (Holland 77,3% or Germany and Austria with over 45%) as opposed to men who normally wish for a full norm. As far as financial wins or loses are concerned, no great differences have existed between the genders. Big differences appear in the labor force's distribution on branches and sectors of activity. The highest losses are in the constructions domain (-4,5%), agriculture (-1,5%) and processing industry (-1.2%). The highest increases of the occupied population are in the information's technology domain (+2.5%) but here also without a permanent contract. In this domain the temporary or non-renewable jobs had a priority. As we showed, although attractive from a financial point of

⁵ Quarterly Report on the Euro Area, European Commission, Volume 12, No. 3, 2013

view, working places in the IT domain are appreciated by young people and women that have other activities in parallel.

Still on the European Union's level, per ensemble, the vacant working places' rate has not recorded great modifications although, as we showed, unemployment has increased pretty much, in different regions and states. This fact can also be explained by the lack of interest that either the vacant jobs present, or their remuneration, either the employing firm's perspectives. Here is why a highlighted increase of qualification and professional training can also mean a lack of attractiveness of the opportunities in the labor force market, and this fact associated with the manifestations prolonged by the economic crisis can induce a state of depression among the available active population. This fact can be countered through serious investments in the human capital.

The economic crisis has produced significant mutations on the population's migration fluxes as well. Thus three levels are differentiated:

- 1. migration from the third countries to the EU is reduced with 3.7% between 2010 2011;
- 2. migration from the EU to the third countries is increased by 14% in the same interval. Here we can notice that the majority of those who wish to leave from inside the union come from Spain, England, France, Ireland, Portugal and the Czech Republic;
- **3.** migration of those returning home.

We are thus assisting, in consequence of the economic crisis' effects, to the change of models regarding migration in the European Union. The economic crisis triggers a lack of trust in the opportunities that the EU has left to offer. Numerous individuals categorized as currently active population either choose to return to their country of origin or leave from inside the Union to other countries. Those who wish to leave also originate from countries such as England and France, where the perspectives of overcoming the crisis' effects seem to be farfetched. Unfortunately, recent⁶ studies show that in the European Union there is a lack of competitiveness regarding the currently active population's abilities. Truthfully the human resource is increasingly more literate, possesses a large amount of knowledge, but with a deficit of practical experience. Therefore approximately 20 percentages of the population that is able to work do not possess the abilities required to occupy a working place. Unfortunately this percentage is higher in Italy and Spain, as opposed to countries that insist upon learning practical skills such as the Nordic countries. Nonetheless, not even countries such as Finland, Holland or Norway can rise to the level of countries from outside of Europe, such as Japan and Australia. Unfortunately, the dates confirm the fact that Europe was unable of efficiently investing in education and professional competences. It is dramatic that this state of fact continues to worsen through the fact that no less than 10 European states have reduced the expenditures for education in absolute terms (Denmark, Ireland, Greece, Spain, Italy, Cyprus, Hungary, Portugal, Czechoslovakia and the UK) and 20 other members are reducing the mass of education expenditures from the gross domestic product.

⁶ DRAFT JOINT EMPLOYMENT REPORT accompanying the Communication from the Commission on Annual Growth Survey 2014



Fig. 4. Countries in the euro zone and education investments Source: EUROSTAT

A great difference can be observed between Germany, which has reduced expenditures for education between 2001 and 2007 and raised them between 2008 and 2012, on one hand and countries such as Luxembourg, Slovenia and Estonia, whose expenditures have and continue to increase.

Reducing expenditures for education is overlapping in the European Union with the early school leaving phenomenon (ESL), which was of 12.7% in 2012. In this context it is not surprising that average costs and earnings are reduced but the prices for finished products are rising due to the increased indirect taxes and administrative prices. Reducing labor's unit costs as opposed to the sustained growth of prices leads in time to increased profit margins which unfortunately are not accompanied by a rise of investments. At the same time the fiscal burden remains elevated in many member states and implicitly causes the population with low incomes to reach the sustainance limit, in the context in which income taxes have been reduced in the two years following the crisis outbreak.

The economic crisis has substantially modified the inequality between the states members of the European Union. These inequalities are reflected in the slow development of the union's southern countries – Spain, Greece, Italy and Cyprus but also in the discrepancy of distributing the human resources' incomes in countries such as Bulgaria, Latvia and Romania. Furthermore, the access to medical assistance is more difficult to gain in countries with reduced incomes, due to the decreased expenditures for health.

3. Conclusions

As we have already estimated, a system built around the assimilation of existing technologies is no longer efficient in a world dominated by a powerful external competition. Presently, the globalization phenomenon leads to the economy being managed by large and very large firms, with traditional and stable market outlets and with human resources that are both prepared and loyal to the company. Nowadays we require more opportunities for the investors and initiative entrepreneurs, a higher mobility inside the firm and between firms for employees (based on the model of switching the favored personnel especially by French companies). But on top of everything we require more requalification through branch operational programs and more investments in research development and education as well. All these require an urgent and massive change in Europe's economic politics and especially in Romania.

The low income countries inside the European Union will feel the economic crisis' effects more strongly. The population's growth in these countries will determine a powerful unemployment increase on a European level.

Very large companies such as Microsoft, Webhelp, Evoline, Google, TeamNet etc. create thousands of working places in countries marked by an almost record level of unemployment, but then again the number of

qualified people for those certain jobs is insufficient. The disparity between the candidates' preparation and the type of qualification required by the employer is increasingly worse on the economic crisis background and is changing into one of Europe's most important problems. One of the solutions found by companies is to employ qualified personnel from outside the said country.

In this context, people who have lost their jobs as well as young people in search for a starting point in their career are discovering they do not possess the necessary training for the existing working places. Glenda Quintini, economist from the OECD, affirms that "we are assisting to an alarming lack of adequate aptitudes, which means that a significant number of unemployed people are not ready for the new working places." In consequence, the majority of young people need to try, in this case, to reorient from a professional point of view towards other domains.

Paradoxical is the fact that more than 2 million jobs remain unoccupied in the conditions in which Europe is facing unemployment rates that are maintained at over 12%. A study⁷ published in November 2013 by the Eurofound, the EU's research division, indicates that in spite of the recession, approximately 40% of the companies are facing difficulties in finding employees with suitable aptitudes, in comparison to 37% in 2008 and 35% in 2005. The European Commission has recently warned that approximately 900.000 working places in the IT and communications technology domains may remain unoccupied until 2015 in the EU⁸.

The unemployment rate in Romania at the end of last year (2013) was of 5,60%, namely 507607 people, with 0.20 more percentage points in rapport to the same period of the year 2012. As the genre repartition is concerned, the male unemployment rate is of 6.01% and the female unemployment rate has risen from 4.98% to 5.14%. The number of unemployed women at the end of last year was of 219288 people. Represented by age groups, 93639 unemployed people were under 25 years old, 37504 people had the ages between 25 and 30, 109.124 were of ages between 30 and 40 and 133.392 were included in the 40-50 years old category. At the same time, 60.489 unemployed people were of ages between 50 and 55 and 73.459 surpassed 55 years old. From the total of unemployed people recorded in the ANOFM (National Agency of Occupying the Labor Force), those with no studies or only with a primary level of training, grade school and technical school, represented 69.02%, those with a high-school and post high-school education level – 23.75%, and the ones with university studies – 7.23%.

The European Commission has already allocated Romania funds of approximately 100 million Euros through the Youth Employment Initiative program with the purpose of combating unemployment especially among young people. At the same time, our country needs to allocate the European Social Fund at least 30.8%, which implies 4.77 billion Euros from the cohesion funds, in the 2014-2020 budgetary practice. The money from the European Social Fund is allocated for programs dedicated to increasing the occupation degree in the member states.

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⁷ Quality of employment conditions and employment relations in Europe.

⁸ http://www.eurofound.europa.eu/pubdocs/2013/67/en/1/EF1367EN.pdf