

THE HUMAN RESOURCE ROLE IN THE EUROPEAN COMPETITIVENESS MODELS

Dimian Gina Cristina

ASE București, Facultatea de Cibernetică, Statistică și Informatică Economică, București, Piața Romană, nr. 6, E-mail: ginadimian@gmail.com, Telefon: 021/3191900

Dimian Mihai

ASE București, Facultatea de Management, București, Piața Romană, nr. 6, E-mail: m_dimian@yahoo.co.uk, Telefon: 021/3191900

Profiroiu Alina

ASE București, Facultatea de Management, București, Piața Romană, nr. 6, E-mail: alina_profiroiu@yahoo.com, Telefon: 021/3191900

Abstract: In order to realise the competitiveness objectives, European Union (EU) “can have only one alternative in the global economy, that to form highly trained human resources, who are supposed to act on more flexible labour markets” because “the knowledge based economy involves the human capital improvement” (Mulatero and Riela, 2006).

In this context, the paper aims to identify the main possibilities through the human resource factor influence a nation competitiveness and the place occupied by it in some European states competitiveness models, proposing, according to the realised analyses, a model for assuring the Romanian economy competitiveness.

Key-words: *human resources, models, competitiveness*

Introduction

In order to decrease the productivity gap existing between EU and its main competitors, USA and JAPAN and to fight against the new global market players (CHINA and INDIA), which present the advantages of a cheap and well qualified workforce, but first of all to assure high living standards for its own citizens, EU set as main objective to become the most competitive economy based on knowledge and full occupation until 2010, conceiving in this purpose a group of policies known as Lisbon Strategy.

Its role at EU level, justified by the **insufficient investments** in: high technology, education, research&development, new highly added value products, better and well paid workplaces and the **improperly workforce usage** (Cojanu, 2006), is to sustain a durable economic increase, based on highly educated workforce during entire lifetime, flexible and adaptable, improving the entrepreneurial and innovative spirit, developing the research in areas suitable to obtain high-tech product and services, training knowledge based employees capable to assure the conceiving, assimilating and transmitting technologies to the informational and communications society.

Thus, if until 1980, the economic increase was based on capital accumulation and copying or adapting the innovations realised in different areas (Aghion, 2006), after this moment it has become evident the fact that assuring a competitiveness increase in EU can be realised only on the own innovation process, by concentrating the investments to some factors as: research&development and highly education, in this way the EU being able to overpass the challenges caused by the technological changes and the shifts into the structure of qualifications demand on the labour markets.

From the quantitative point of view, the investments in education that will cause an annual increase of population's medium education level, with age between 25-64 years, can lead, according with the studies realised at the European Commission level, at an increase of factors global productivity with 4% to 6% and to an annual increase of GDP between 0,3% to 0,5%, while the increase with 1,9% to 3% into the research&development investment until 2010 will cause an increase with 1,7% of the GDP, an upturn of the factors global productivity, employment and net incomes of 0,8%, 1,4%, respectively 3%, until 2010 and a GDP level increase of 4,2% in 2015, 7,5% in 2020 and 12,1% in 2030 (EC, 2007).

Thus, in order to realise the competitiveness objectives, the European Union “can have only one alternative in the global economy, that to form highly trained human resources, who are supposed to act on more

flexible labour markets” because “*the knowledge based economy involves the human capital improvement*” (Mulatero and Riela, 2006).

The human capital, defined as “*the knowledge, capacities, competencies and human beings attributes that are used in order to create the self, social and economic welfare*” (OCDE, 2001) became a competitiveness key factor, being decisive in order to create the competitive advantage based on research&development, innovation and entrepreneurship.

The evaluation of national competitiveness

The competitiveness tree model

Because of the importance given to the competitiveness development in the European Union as a whole and in each member state, taken separately, in the last period it can be noticed the institutions and specialists’ increasing interest for establishing the possibilities of obtaining and quantifying the competitiveness through the identification of the determinant factors and conceiving analyse methods.

From this point of view, is relevant the *Competitiveness tree model*, proposed by Ecorys Groups, that identifies the competitiveness determinant factors in the next component: talent, innovation, connectivity and entrepreneurship (the tree’s roots), the industrial structure and productivity (trunk), these being the support for realising the competitiveness and obtaining the results: occupation and income, profit and investments, taxes and contributions (tree’s branches).

In this model, the economic competitiveness has as a main source the human capital (**the talent**), in other words, the human resources improved through intensive knowledge based qualification, educational facilities, access at training and learning institutions, assuring dwelling quality and the adaptability.

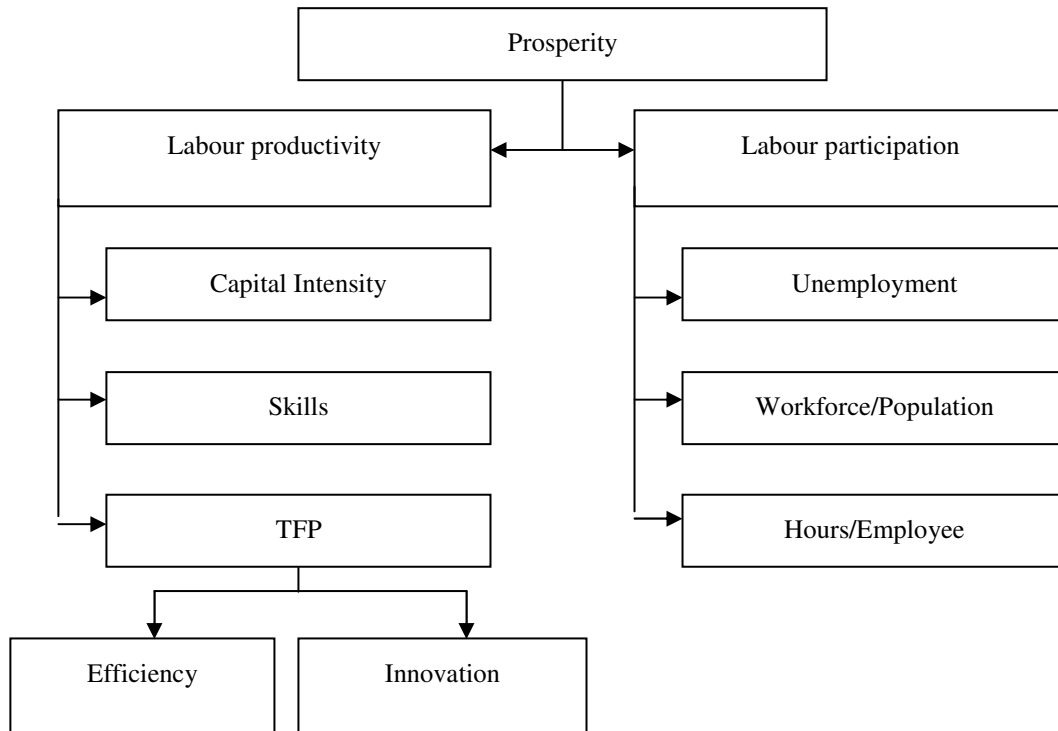
The achieved qualifications and living standards offer for the labour force the necessary comfort in order to promote the creative qualities, making easier the products, services and technologies improving process, through **research** and **innovation**, sustaining the **entrepreneurial spirit**, creating firms and activity clusters. The talent, innovation, connectivity and entrepreneurships are decisive factors for the increase of employment and specialisation in high added value activities, the base for obtaining population and economical agent prosperity from the space where these are integrated.

In the competitiveness tree model, the human resources have double role: main source for obtaining competitiveness and base for the motivation of doing this (improving the living standard).

The business environment competitiveness model

The connexion between prosperity, competitiveness and the main conditions of companies activities can be emphasized through the model which put together an economy prosperity indicators (GDP/inhabitant), employment (employment rate) and productivity (labour productivity), caused by the capital investments, workforce qualification, and global factor productivity (GFP). The increase of GFP on this efficiency and innovation alternative can be assured by improving the business environment conditions: IT&C, the access at financial resources, at human capital, open and functional markets, innovation and knowledge, administrative and regulatory environment, entrepreneurship.

Figure 1: Structure of prosperity



Source: Commission of the European Communities, Benchmarking enterprise policy, results from the 2004 scoreboard, European Commission, Enterprise publications, Competitiveness and benchmarking, Brussels, 2004

The human resources are involved in obtaining prosperity both from quantitative point of view, participating at labour force and from qualitative perspective by increasing the productivity based on highly qualifications.

Regional competitiveness models

The key elements for the regional competitiveness are gathered in models meant to emphasize its peremptory factors and also the results obtained at different levels. Thus, the *Regional competitiveness hat* model, developed by Cambridge Econometrics studies the competitiveness at regional level starting from the decisive factors (base infrastructure and accessibility, human resources and productive environment), their combination results (sectoral structure, specialisation, firms distribution, property), transforming the outputs (regional productivity at labour unitary costs, profitability, market shares) in results (GDP/employee and the number of employees). In this model, the human resources are positioned in the centre of regional competitiveness sources.

Studying the competitiveness of Great Britain regions has been realised according to the *tri-factorial Model* (Huggins, 2003), that presents, into an integrated form, the components that describes the regional competitiveness for the regions from this country, as it follows:

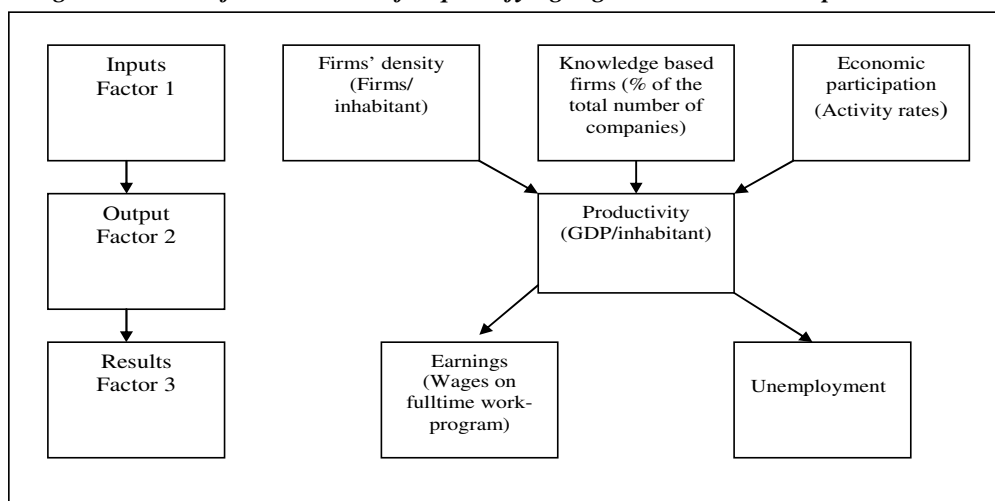
1. Input factors: firms density (companies/inhabitant), companies based on knowledge (the share of the firms based on knowledge from the total number of a regions' companies) and economic participation (activities ratios);
2. Output factors: the productivity (GDP/inhabitant);
3. Results: the earnings average (salaries on fulltime work-program) and unemployment.

Thus, the input factors as firms density, the share of the companies based on knowledge and activity rates are considered the most important indicators for the economic sustainable development potential, based on

the new entrepreneurships and their companies, on innovative activities and new technologies that assure not only the competitiveness for the company, but also the global one, at national, regional or local level and, not at the last, by the area human potential.

All three input factors contribute at obtaining the output, more precisely the productivity, having as a main indicator the GDP/inhabitant, which quantifies the considered area competitiveness potential. The average earnings and the unemployed workers proportion represent the tangible results for input and output factors and reflect, first of all, the workforce recompense as part of production obtaining process and, on the other side, the labour market performances/weaknesses.

Figure 2: The tri-factorial model for quantifying regional and local competitiveness



Source: Huggins, R., *Creating UK Competitiveness Index: Regional and Local Benchmarking*, Regional Studies, Vol.37.1, pg 89-96, 2003

Proposal for the Romanian competitiveness economy model

Evaluating the Romanian economy competitiveness according to the coordinates fixed at the European level by the Lisbon Strategy, the European Institute of Romania study: *Romanian economy competitiveness – necessary adjustment for achieving the Lisbon Agenda objectives*, indicates that Romania has overpass the stage of the competitiveness based on intensive exploitation of production factors (unqualified or low qualified labour force) being in the situation in which has to focus on improving the efficiency (higher education and continuous training, the capacity to obtain benefits from the existing technologies) and assuring, in the same time, the premises for going to the next stage – innovation based competitiveness (Cojanu, 2006).

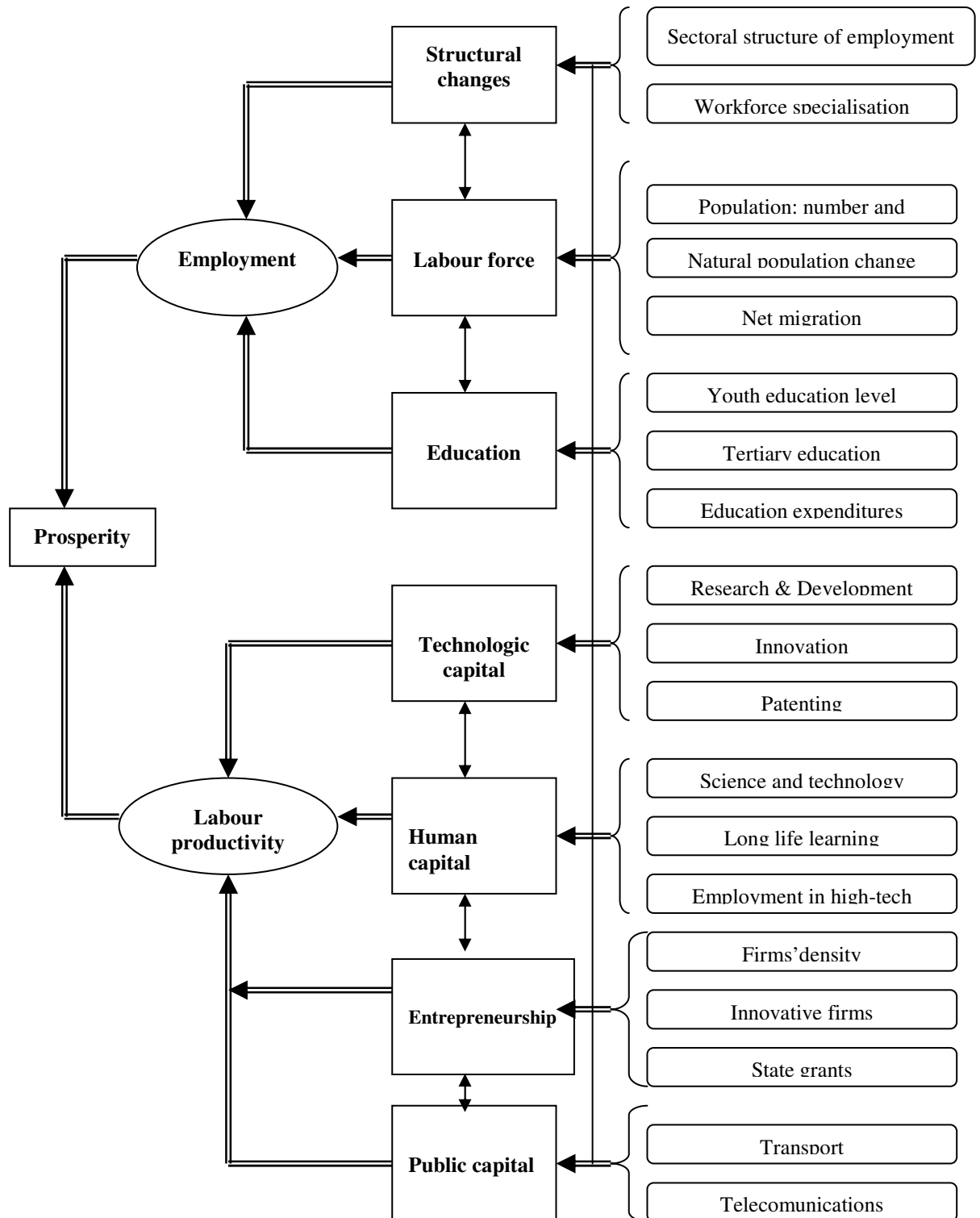
In this purpose, we propose for Romania and its eight development regions an adaptation of the local possibilities in order to obtain competitive performances according to the action directions established by the Lisbon Strategy by approaching the competitiveness concept starting from an original, but European integrated model.

Thus, into the centre of the preoccupations should be the increase of population living standard by raising labour productivity and the employment, paying attention to the workforce quality improvement in order to enforce the human and technological capital and also to the entrepreneurship spirit (Figure 3).

In this context, a key factor proposed for obtaining a significant competitive increase is human capital, more precisely: knowledge, human abilities and skills enforced by continuous education, which assure the adaptability and flexibility needed into a globalised economy and based on intensive usage of knowledge.

Romania overcome the level of economical increase based on using intensively the natural resources, it has started to focus on the factors that contribute to the increase of efficiency: investments in education, research and innovation for assuring the necessary conditions in order to obtain and use the advanced technologies. Realising these objectives is imposed inclusive at regional level, fact possible by an efficient use of European funds.

Figure 3: Romanian competitiveness economy model



Source: Authors compilations based on technical literature

Also, the negative demographic evolutions obliges our country to act for employment increase by making longer the active life, to increase labour productivity, to sustain more actively the education, especially that

facilitates the adaptability by re-qualifying the employees and develops entrepreneurial spirit, reforming insertion and social protection systems.

Conclusions

Obtaining competitiveness has become, once with Lisbon Strategy, one of the main objectives of European Union and of each member state of it, these building their own models in order to achieve the desired performances. In this purpose the European Union has developed the benchmarking method, encouraging the member states to present their own results compared to the competition, which represent a favourable moment to learn the successful models.

Thus, according to the World Economic Forum, obtaining competitiveness can be realised differently, according to the development level of each country: by *exploiting the production factors* (low qualified or unqualified workforce and natural resources), using *the factors that increase the efficiency* (high education, continuous learning and efficient usage of existing technologies) or by *sustaining the innovation* (complex products obtained by innovation).

Related to it, the models conceived at national and regional level reflect both their evolution stage and the future tendencies. The developed countries are guiding on competitiveness models that sustain achieving prosperity using factors as: talent, innovation, entrepreneurship and knowledge based firms, while countries as Romania should value the local potential by solving problems related to ageing, financing the education, lifetime learning, adapting the labour force to the workplaces characteristics and vice versa, also stimulating the entrepreneurship culture.

References:

1. Aghion, P., Howitt, P., A model of growth through creative destruction, *Econometrica*, 1992, 60 (2), pg 323-351.
2. ***Annual Competitiveness Report 2006, Volume 1: Benchmarking Ireland's Performance, National Competitiveness Council
3. *** Cambridge Econometrics, A Study on the Factors of Regional Competitiveness, A final report for The European Commission Directorate-General Regional Policy, University of Cambridge, 2003
4. Cojanu, V., (coord.), The Romanian competitiveness: necessary adjustments in order to achieve the Lisbon Strategy objectives, IER, 2006)
5. ***Commission of the European Communities, Raising productivity growth: key messages from the European Competitiveness Report 2007, Commission staff working document, accompanying document to the Communication from the Commission, Brussels, 2007
6. ***Commission of the European Community, Benchmarking enterprise policy, results from the 2004 scoreboard, European Commission, Enterprise publications, Competitiveness and benchmarking, Brussels, 2004
7. Huggins, R., Creating UK Competitiveness Index: Regional and Local Benchmarking, *Regional Studies*, Vol.37.1, pg 89-96, 2003
8. Maarten de Vet, J., Grasping Regional Competitiveness, Competitiveness Seminar Series, Brussels, 30 November 2004, Ecorys, Research and Consulting
9. Mulatero, F., Riela, S., Human Capital for the Competitiveness of the EU: the role of the National Reform Programmes, Milano, July 2006
10. ***OCDE Knowledge and Skills for Life: First Results from PISA (Executive Summary), 2001, OCDE, Paris
11. (<http://www.gcr.weforum.org/>: Explore the Report)