

## THE ROLE OF EDUCATION IN ENSURING SKILLED HUMAN CAPITAL FOR COMPANIES

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### Abstract

Education plays an important role in the adaptation of human resources to the dynamic requirements of labour market, providing a certain mobility in choosing a better job. The quality of human capital is an important aspect targeted by the companies. Therefore, the level of education for managers and the continuous professional formation of the personnel should be important objectives for companies. In Romania, most of the managers opening a new company in 2001-2016 have secondary and tertiary education, most of them having companies located in Bucureşti-Ifov region. On the other hand, excepting 2005, most of the companies in Romania do not offer continuous professional formation for their employees. Therefore, new policies are required to support companies in ensuring a permanent formation of their employees for better adapting to competition and market requirements.

**Keywords:** education, human capital, company, professional formation

### 1. INTRODUCTION

The OECD Guide has boosted SMEs in shaping human capital through actions to support the development and consolidation of local competences. SMEs have also been encouraged to develop innovative capabilities in science and technology, engaging employees in scientific and technological research.

SMEs should be stimulated financially to support training and development of human capital. Developing countries rely on policies to improve national skills and human resource development, thus contributing to the growth of human capital with visible effects in attracting FDI (Miyamoto 2003).

This paper focuses on an empirical analysis of the education of the employees of the Romanian companies, by studying the level of education of the managers in newly created companies and the continuous formation of employees.

## 2. LITERATURE REVIEW

SMEs have invested in formal education by supporting education at all levels through promoting an effective curriculum, adequate educational equipment and materials, developing technology, offering scholarships, participating in joint research projects and activities. An example of an active SME in the field of education is Intel, which has participated in and supported educational programs and research projects for technology and productivity development (Collewaert, & Manigart 2016) in countries like China, Costa Rica, Indonesia.

One of these centers is the Penang Competence Development Center, which has been a real success in this country. In their turn, multinationals contribute to the internationalization of higher education, in the direction of education management. CMNs support and carry out synergy activities with local companies, thus encouraging alliances between states and supporting local managers in training in the international business sphere. In this case, training in international management programs is funded by CMN with the involvement of Western business schools (Pisano et al. 2017).

A specific feature of CMNs is that of providing training for their own employees. The volume and type of this training are dependent on the specificity of the business sector, but also on the input, size, investment horizon, type of operations and local conditions. Also, the higher the level of general and cognitive skills of employees in the host country, in other words, the more employees benefit from the higher education, the lower the cost of training and the higher the benefits. Properly oriented national or international competition can be considered as a stimulant for companies that take the role of investing in training programs. Costs in training programs for companies investing in competitive actions at national or international level are much lower (Vomberg et al., 2015).

SMEs, through their dynamism and adaptability, by providing a large number of jobs, as well as by their flexibility in assimilating information and technology, working in a beneficial way with multinational companies, bring stability to the national economy, but also support its transformation. They adapt relatively easily to external competitiveness and competition requirements on the labor market, helping to prepare entrepreneurs to achieve competitiveness goals. New information technologies contribute to increasing the productivity of SMEs, but business efficiency is directly related to how they are capable of

managing information. Therefore, business leaders should provide training programs and strategies regarding information and knowledge management by modern means (Grama&Fotache2005/2006).

Regarding SMEs in the Bucharest-Ilfov region, there has been an increase in labor productivity in the services sector, which demonstrates sustainable economic and financial growth in the region. However, in the case of industrial firms, lower productivity is found (Mihăilă, 2014).

In Romania there have been many failures in terms of proposals for reform or improvement of the educational system towards the integration of high technology. Education was supposed to support new initiatives that would have been conducive to the formation and development of human capital, as economic development could be supported by facilitating access to new knowledge and experience gained from acquiring new technologies. Furthermore, the importance of in-depth education increases when it comes to adapting labor resources to labor market requirements, allowing some mobility in the choice of workplace (Miller et al. 2015). A high level of education is also beneficial at the social level, ensuring the stability of the community and accelerating the development of society.

As regards the rate of increase in labor productivity, a series of empirical studies have been carried out, which have shown that these increases are higher for small and medium enterprises. The development of human resources through education and training is an objective of SMEs, supported by research programs and projects. In this sense, training policies were geared towards supporting training, stimulating SMEs in human resource development activities (Miyamoto 2003). An example in this respect is the Toyota ASTRA Foundation, created by the desire to support the development of human resources through education and training.

Sustainability of SMEs at European level is achieved through programs with the main objective to increase their competitiveness through research and innovation and to improve their access to finance. Researchers believe that the fundamental objective of sustainable development and the survival of all businesses in the competitive environment is sustainable improvement and innovation. Continuous innovation activities contribute to business growth and development. Businesses, in turn, have the ability to permanently implement continuous innovation programs to improve their adaptation to the context of dynamic society, and to strengthen their competitive spirit in gaining and increasing profits on the labor market (Chen 2016).

As Porter (1997) notes, business environments have suffered permanent changes that are difficult to manage, which have often endangered their existence in the long run. The process of restructuring and reorganization according to the requirements of the business environment, as well as the

implementation of innovation, are important factors for enterprises seeking to survive and to adapt to the inherent changes that occur permanently both inside and outside them.

The goal of sustainable innovation is to develop and continuously improve the economy and technology. The rapid development of technic and technology has led to a steady increase in customer needs, which has led to an increase in competition through the ability to continuously improve process and products in order to support its own strategy of action and to establish its own innovative capabilities (Chen 2016).

The sustainable innovation of an efficient enterprises influenced by the capabilities that the employees own or develop. These capacities are reflected in the knowledge and skills acquired within the organization, as a result of facilitating their participation in the training and development programs provided by the company, as well as in the decision-making and action process of the firm. Finally, capitalizing on employees' skills must lead to increased economic performance. Strengthening relational behaviors and organizational capacity development can be possible by encouraging, developing and empowering employees' skills such as: learning skills, effective communication skills, creative skills and team-building skills (Soosay, 2005).

The Horizon 2020 program is one of the major programs that aims to create a favorable environment for supporting demand and innovation activities. A defining feature of SMEs is their ability to provide jobs for employees. SMEs mostly operate at the local level, being sources of innovation and entrepreneurship. Among the EU policy objectives for SMEs are also the consideration of the impact of EU policy actions on the needs of these types of businesses. This action helps to ensure a more attractive European space for business creation and economic activity support. On the other hand, the growing dynamics of the knowledge society and the economy of knowledge and the implementation of new contemporary technologies and technologies required a reassessment of investment programs, thus improving the competitiveness of SMEs (Mihăilă, 2014).

Batra (2003) performs a classification of financial models in developing countries, as follows: a tax-scholarship model where personnel taxes are used by those who administer funds to provide scholarships to employees for approved training; the tax-reimbursement model, whereby personnel taxes are then partially settled for approved training; the tax-deduction model, in which personnel taxes are not paid by employees who use a certain percentage of the personnel costs for approved training; the tax-fiscal benefit model, where companies can deduct training expenses from corporate tax.

The tax-scholarship model was taken over by several countries, including Singapore, Taiwan, Argentina and Costa Rica. Although the result of applying these models was similar, there are several differences

in the way funds are managed and implemented. In the countries like Malaysia, Korea, South Africa, Chile and Zimbabwe, the tax-reimbursement model was initiated. In the case of Malaysia, following the adoption of the tax-reimbursement model, the result was significant in terms of contributing to the formation of human capital, especially among medium-sized firms (Tan 2001). In Chile, the above-mentioned model has also helped to increase employee and unemployed participation in training programs, particularly employees in small companies and female employees and the unemployed. Tax-reimbursement models have been applied in countries such as France, Turkey, Botswana and Morocco, and the tax-fiscal benefit model was developed and implemented in Malaysia and the Netherlands. In Malaysia, following a set of assessments, the inefficiency of the implemented model for small domestic firms was found. A benefit of applying such models was only observed in export-oriented companies (World Bank 1997). This is the case for SMEs, who initially proposed to abandon the adoption of the tax-fiscal benefit model, focusing on tax-scholarship models.

Financial constraints are a reason for poor investment in training and development. Also in this case, World Bank (2003) studies in East Asia and the LAC region have found that these financial constraints limit firms' availability to provide additional training to employees.

The training scholarships requested from the government by companies with financial constraints were not considered a beneficial choice due to tax constraints. Fiscal stimulation may be an option for companies experiencing financial constraints, as there is no possibility to increase debt on personnel costs. The Government can develop and implement policies to support multinational companies in paying for staff training costs.

Since there are insufficient evaluation studies to compare the different options for financing human capital formation, the effectiveness of training policies cannot be assessed, but it may be noted that it is preferable to increase the use of personnel taxes / payroll taxes at the expense of training scholarships, as funding sources are more stable. Promoting an aggressive information campaign could be effective (Miyamoto 2003).

### **3. CONTINUOUS PROFESSIONAL TRAINING OF EMPLOYEES IN ROMANIAN COMPANIES**

The purpose of the empirical analysis is to evaluate the Romanian companies from the perspective of the level of education of managers that establish new companies and the continuous professional formation offered to the employees. The data are provided by the National Institute of Statistics in Romania and are limited to a small number of years. The level of education possessed by managers is

quite important in ensuring a good administration of the firm. We expect to have more companies lead by highly-educated managers compared to those led by less-educated people. Moreover, companies should directly focus on the continuous professional formation of their employees that should adapt to new market challenges, to increasing competition and to clients' dynamic expectations.

A manager who runs a company that has reached a very high level of development needs to be approached from a training perspective in three directions: testing knowledge, abilities, behaviors and attitudes, providing consulting, and finally delivering mentoring services.

The fewest newly established companies have primary school graduate managers. Most such companies were in the Bucharest-Ilfov region only in the years 2002 and 2009. Analyzing their distribution by region, it is noticed that in 2016 half of the regions had no new companies led by managers with primary education: Bucharest-Ilfov, North-East, South-West and South-East (Figure 1).

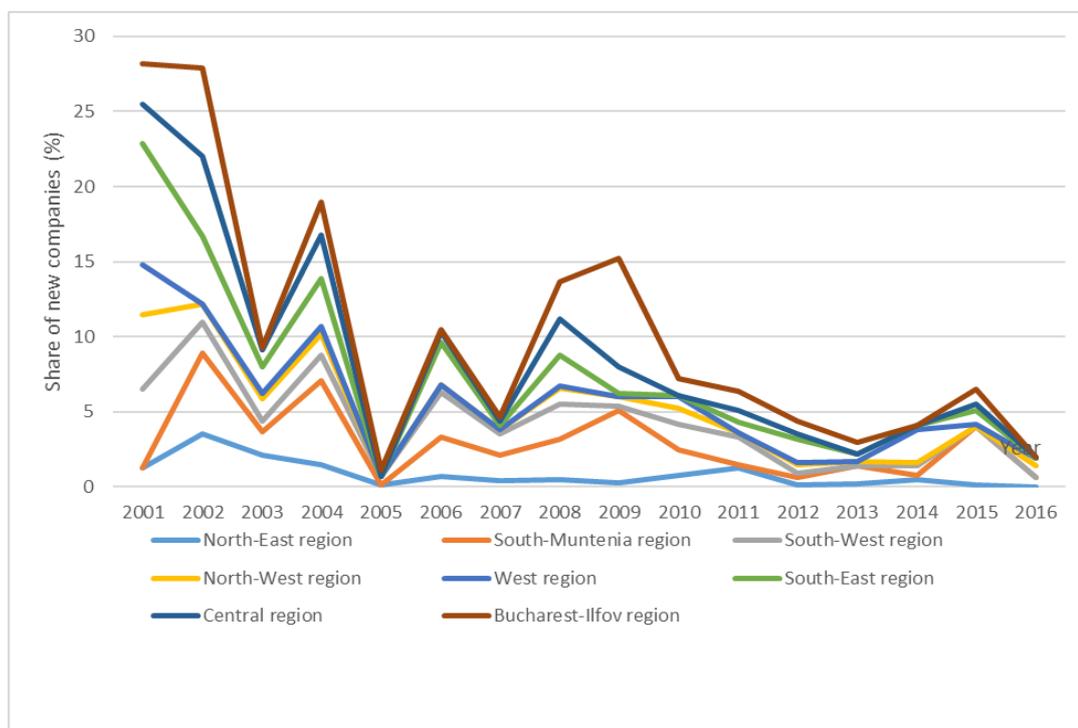


FIGURE 1 - THE DISTRIBUTION OF NEWLY CREATED COMPANIES WITH MANAGERS WITH PRIMARY EDUCATION IN THE ROMANIAN REGIONS (2001-2016)

Source: Authors' chart based on data provided by the National Institute of Statistics

According to Figure 2, most of the new companies with managers having vocational education were located in West region in 2001, 2002, 2003 and 2005, while most of them were placed in North-East region in 2008, 2009, 2010 and 2012. The highest share was registered in the West region in 2005 (64.6%).

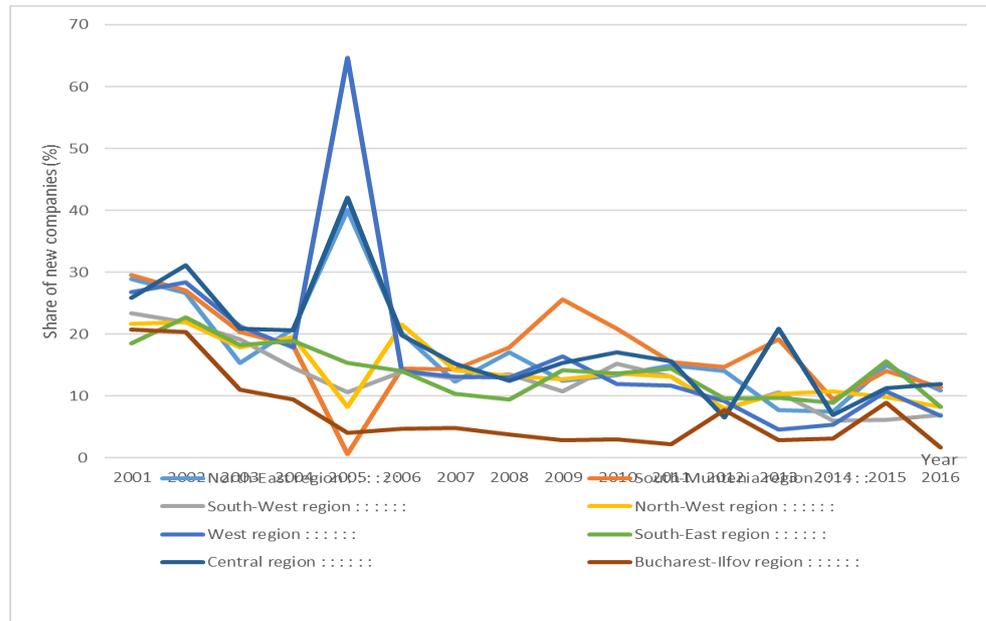


FIGURE 2 - THE DISTRIBUTION OF NEW CREATED COMPANIES WITH MANAGERS HAVING VOCATIONAL EDUCATION IN THE ROMANIAN REGIONS (2001-2016)  
Source: Authors' chart based on data provided by the National Institute of Statistics

According to Figure 3, most of the new companies with managers having gymnasium education were located in South-West region in 2002, 2003, 2004, 2005 and 2006, while most of them were placed in South-East region in 2008, 2009, 2010 and 2012. The highest share was registered in South-West region in 2005 (54.4%).

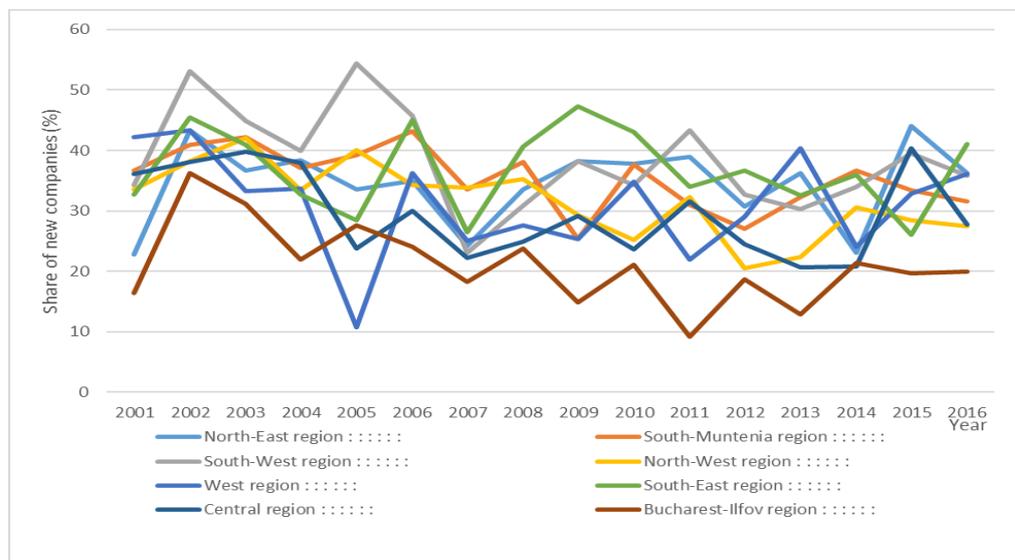


FIGURE 3 - THE DISTRIBUTION OF NEWLY CREATED COMPANIES WITH MANAGERS HAVING GYMNASIUM EDUCATION IN THE ROMANIAN REGIONS (2001-2016)  
Source: Authors' chart based on data provided by the National Institute of Statistics

According to Figure 4, most of the new companies with managers having secondary and tertiary education were located in Bucharest-Ifov region in all the years, excepting 2002, when North-West registered the best performance. The highest share was registered in Bucharest-Ifov region in 2013 (83.5%). These results are according to expectations since most of the jobs requiring secondary and tertiary education are required in big cities like the capital. Moreover, the managers of the companies offering these jobs or less skilled jobs should have a higher level of education. This region is also the most preferred one by the foreign investors that search for highly qualified human resources and highly-skilled managers.

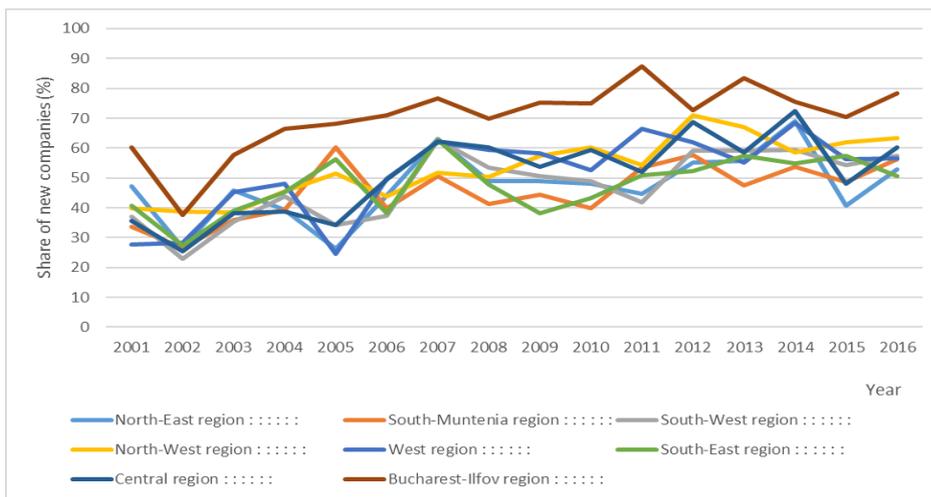


FIGURE 4 - THE DISTRIBUTION OF NEWLY CREATED COMPANIES WITH MANAGERS HAVING SECONDARY AND TERTIARY EDUCATION IN THE ROMANIAN REGIONS (2001-2016)  
Source: Authors' chart based on data provided by the National Institute of Statistics

The companies should actively be involved in programs offering continuous professional formation in order to adapt to employer’s expectations and markets challenges. Few data is provided by the National Institute of Statistics in Romania about the number of companies offering additional formation for their employees (see Figure 5).



FIGURE 5 - THE DISTRIBUTION OF COMPANIES IN ROMANIA ACCORDING TO THE OFFERING OF CONTINUOUS PROFESSIONAL FORMATION (2001-2016)  
Source: Authors' chart based on data provided by the National Institute of Statistics

In 1999, only 11.02% of the Romanian companies offered continuous professional training for their employees, but this percent increased in 2005, arriving to a maximum of 87.58% of the total number of companies. In 2010, only 24.12% of the companies in Romania integrated their employees in programs of training and development, this percent arriving at 26.67% in 2015.

#### 4. CONCLUSIONS

By facilitating access to new knowledge and experience gained from acquiring new technologies, companies can support the country's economic development. Furthermore, the importance of in-depth education increases when it comes to adapting work resources to labor market requirements, allowing for some mobility in terms of job choices. A high level of education is also beneficial at the social level, ensuring the stability of the community and accelerating the development of society.

Managers who run profitable businesses on the local market but do not benefit from a business education will be successful as long as the market allows it's competition intensifies, new businesses will emerge, and the pressure on profitability and market share will grow, they will also refine the business skills needed to drive companies. Therefore, it is necessary to provide good training for managers and employees through continuous training programs. In Romania, most managers who have established new firms since 2001 have secondary and higher education. Except for 2005, most Romanian companies do not offer continuous training programs to their employees, which requires measures to ensure a better training of human capital in companies.

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