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CONTINUING TRAINING IN ROMANIA: REASONS AND BENEFITS FROM THE PERSPECTIVE OF THE KNOWLEDGE ECONOMY

ABSTRACT. In the wider perspective of lifelong learning, the continuing education and training play a significant role in the up-skilling of individuals. Rapid transformations due to the technological development and globalisation generated a continuous need for competence and skills improvement. The paper begins with the exploration of the needed competences and qualifications in the current context of globalisation and attempts to emphasize the future competences, skills and qualifications required by the knowledge economy. A study is conducted on the Romanian continuing training market to identify changes in the demand for particular qualifications and competences. Research findings reveal efforts for upskilling from the workforce in Romania. Training courses for transversal competences enjoyed much popularity, together with qualification courses for white-collar, highly skills occupations. Nonetheless, training courses for several agricultural occupations had a significant demand over the investigated period of 2007-2011, due to the large agricultural potential of Romania in the context of European integration.

JEL Classification: M12, M53, M51

Keywords: continuing training, competence, qualification, training provider, Romania

Introduction

There is a general consensus in the literature that continuing education and training represent the solution to the problems from the labour market. Whether the graduates of the initial education system do not possess the required skills and competences, or the adults find themselves in the need to update or upgrade their competences and qualifications, the continuing education and training system is there to fix the problem. Nevertheless, there is a large debate in the literature about what type of competences the workforce now needs. The debate becomes even more wide-ranging when it comes to the agreement on the future competences the workforce will need in the knowledge economy.

As skills demands in the labour market for a range of occupations have been changing with increasing pace, the present paper aims to investigate current and future competences and qualifications requirements, from the perspective of knowledge economy emergence. The originality of the research comes from the empirical investigation and analysis of the demand for continuing training in 13 counties of Romania over the period 2007-2011. Continuing education and training is more strongly enforced in Romania since the country's integration into the European Union. The general research objectives were the investigation of the qualifications and specialisations required by Romanian individuals from selected counties of Romania over the period 2007-2011, and the capture of potential changes in the structure of the demand for continuing training courses over the analysed period.

Findings reveal major transformations in the demand for continuing education and training over the investigated period, reflected by the changes in the skills required on the labour market. Although some findings could be anticipated – like the increase in the demand for information and communication technologies (IT&C), and in the demand for foreign languages and soft skills, other may surprise the reader – like the increased demand for agricultural qualifications. This last finding reminds us about the huge agricultural potential Romania has. In the emergence of the knowledge economy, people from Romania still seek to acquire competences in the agricultural field. By analysing the real number of graduates of continuing training courses, this study provides valuable understanding of the real demand for qualifications on the Romanian market, and insights for building continuing training programs adapted to the needs of both the labour market and the requirements of the knowledge economy, like for instance courses on technologies in agriculture.

International Perspectives on Qualification and Competency Requirements in the Knowledge Economy

The global economy has gradually become more skilled intensive due to the rapid technological developments. Concepts like "qualifications", "key competences" and "key skills" are often found in the discourse on competitiveness of nations and regions. At the European Union level and in Member States key skills and competences are central figures in the educational policy which adopted the lifelong learning approach. The lifelong learning policy of the European Commission emphasized the need for a continuing upgrade and update of competences, skills and aptitudes in a knowledge intensive economy.

Qualifications are defined through the competences the individual must have to perform specific work activities. Competences are defined here as "the ability to apply learning outcomes adequately in a defined context (education, work, personal or professional development)" (CEDEFOP, 2004). Key competences are "the sum of skills (basic and new basic skills) needed to live in contemporary knowledge society" (CEDEFOP, 2004). At the European Union level, key competences are viewed from the wider perspective of lifelong learning and its benefits. As such, key competences are "those which all individuals need for personal fulfilment and development, active citizenship, social inclusion and employment" (EC – DGEC, 2007). Hence, in the European Union key competences are seen as comprehensive, spanning learning throughout the lifetime of the individual, contributing to the employability of the individual and providing the basis for active citizenship.

Placed in the wider framework of lifelong learning, the European Union's perspective on emerging skills needs recognizes that learning occurs in formal, non-formal and informal contexts. Among the most important policy measures in this domain was the formulation of The European Reference Framework (EC-DGEC, 2007) following the recommendation of the European Parliament. The European Reference Framework set out eight key competences that can contribute to a successful life in a knowledge intensive economy (*Figure 1*). Competences in language, literacy, numeracy and in information and communication technologies represent the foundation of all learning activities. In addition, social and civic competences, the sense of

initiative and entrepreneurship and the cultural awareness and expression are seen as vital in the knowledge society. They represent the fundamental basic skills European employees need to possess at present, and the basis for the future competences and skills. Several transversal competences are applied throughout the eight basic competences, as shown by *Figure 1*.

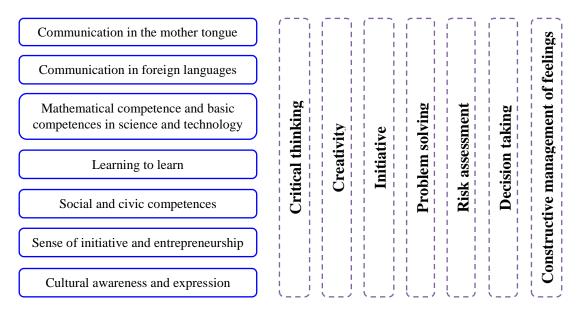


Figure 1. European Key Competences Reference Framework

Source: EC-DGEC (2007)

The key competences formulated at the EU level are a combination of skills, attitudes and knowledge perceived by policy-makers as mandatory in a knowledge intensive economy. They have had a considerable impact on the educational policies of the Member States, even the reformation of the educational system to meet the requirements of the lifelong learning approach. It is the case of Romania, country in which the educational system underwent major changes to cope with the challenges of the lifelong learning policy of the European Union.

At EU level the skills, competences and knowledge provide the main reference level descriptors for The European Qualification Framework (EQF). The EQF is a tool based on learning outcomes developed to address the needs for equal standards for qualifications across Member States, for the recognition of competences within the systems of education, and for the configurations of transitions from one level of qualification to another and from one subject-specific or vocational domain to another (Grollmann, 2008). The concept the framework is based on prescribes that educational results should be attained from the lowest qualification towards the highest qualification level. The EQF comprises of eight qualification levels, each described by a set of descriptors indicating the relevant learning outcomes:

- Level 1: basic general knowledge.
- Level 2: basic factual knowledge of a field of work or study.
- Level 3: knowledge of facts, principles, processes and general concepts, in a field of work or study.
- Level 4: factual and theoretical knowledge in broad contexts within a field of work or study.
- Level 5: comprehensive, specialised, factual and theoretical knowledge within a field of work or study and an awareness of the boundaries of that knowledge.
- Level 6: advanced knowledge of a field of work or study, involving a critical understanding of theories and principles.

Level 7: highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research; critical awareness of knowledge issues in a field and at the interface between different fields. Level 8: knowledge at the most advanced frontier of a field of work or study and at the interface between fields (EC-DGEC, 2008, p.12).

Given the current frameworks for key competences and qualifications, the challenges are raised by the forecast of future competences and needed qualifications. Researches tapped into this matter revealing several concerns. Previous research for forecasting future qualification requirements identified the issue of how far into the future researchers should look. On one hand, the shorter the period of time at the end of which qualifications are assessed, the greater the chance that they are similar to the present ones. On the other hand, the longer the period of time, the lower the accuracy of the research results. Hence, some authors that attempted to forecast future qualifications and competences considered a future time horizons of a minimum of five years (Gow and McDonald, 2000). Most of the studies have avoided the specification of a precise time horizon for forecasting qualifications or competences, suggesting the examination of the "twenty-first century requirements" (Plonka et al., 1994; Association for Graduate Recruiters, 1995). Other researchers did not express the time horizon for forecasting qualifications, mentioning as objective of their research the investigation of "future" qualifications or competences (Rifkin et al., 1999; Danish Technological Institute, 2008). As a consequence, efforts to identify how an appropriate future time horizon can be selected following the careful consideration of a given industry were made by Robinson et al. (2007).

Models for forecasting future competency requirements according to the needed future qualifications have been proposed in the literature. The first category of models implied the investigation of several structures of the same organisation or other organisations that are considered to be at the cutting edge of progress, and thus presenting an image of how the organisation would look in the future. A sort of future competency requirements can be obtained through the investigation of the key competences of the employees from such structures (Robinson *et al.*, 2007). The second category of models to predict future competences involved the use of experts to forecast future changes that are likely to occur within organisations. It embraces two forms: business scenarios and the Delphi technique. The latter method is the most popular and has been widely used to forecast future trends across a range of disciplines (Robinson *et al.*, 2007; Neimeyer and Diamond, 2001; Norcross *et al.*, 2002).

Forecasting and anticipation of skills needs have become an important instrument of the educational policy in the European Union. Initiatives in this respect can be traced back in 1990 in the Report of the Industrial Research and Development Advisory Committee of the Commission of the European Communities (IRDAC). The report argued that "the information revolution...is rendering much of the previous education and training obsolete or simply irrelevant. It is salutary to note that even if useful knowledge has a half-life as long as ten years, intellectual capital is then depreciating at 7% / year (which is a much higher rate than the recruitment of new graduates), with a corresponding reduction in the effectiveness of the workforce" (IRDAC, 1990, pp. 2). Major concerns about the changing skills demands were raised early in several Member States. In the UK, the National Skills Task Force was created in the Department for Education and Employment to formulate the National Skills Agenda. The first report stated: "We live in an age of global competition and constant change. We must seek to achieve a high skill, high value added economy as the recipe for national competitiveness. For a truly dynamic economy, we must keep the skills of our people ahead of the curve" (National Skills Task Force, 1998, p. 5).

The knowledge-based economy brings about changes in the competences and skills formation patterns. Firstly, changes are so rapid in the context of the knowledge economy that individuals cannot rely only on the competences and skills they obtained during initial education. But individuals are not the only ones involved in the skills formation. New key stakeholders emerge in the process of skills formation. Synthesizing the literature, Schwalje (2011) makes a sketch of the system of competences and skills formation, attributing formation roles to four actors: the education and training system, the government, the business community and the individuals. Secondly, lifelong learning skills formation is expected, through all learning contexts: formal, informal and non-formal.

As key actors in the skills formation system in the knowledge-based economy, employers' opinions on the future qualification and skills provide a valuable input in the formulation of educational policies, both in the EU and the USA. Many leading employers invest in the development of their employees to educate and train them to the present and future requirements of the business environment. Employers have key roles in the skills formation system through workforce investment and workforce development. Continuous on-the-job training and knowledge transfer is usually accompanied by external training under various forms, including training courses.

Studies were conducted in the EU among the representatives of multinational companies and experts in order to identify the skills and competences that are likely to be in high demand in the future. Results showed that: adaptability, professional skills, international skills (multicultural and foreign languages skills), basic skills (reading, writing, math), innovation and entrepreneurship skills, organisational skills (ICT, communication / presentation and teamwork), will provide the basis for employability in the future (Danish Technological Institute, 2011).

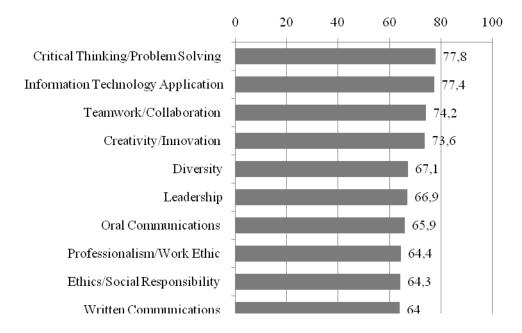


Figure 2. Ranking of competences needed according to increasing demands (USA) *Source:* Conference Board of Employers, 2006

In the USA, studies have identified the competences considered as critical by American employers to be similar to the type of competences defined as key competences in the EU. Greatest importance was attributed to transversal competences from the EU Reference Framework. Critical thinking / problem solving was considered to be the most

required in the knowledge intensive economy, followed by IT skills, teamwork /collaboration and creativity/ innovation. They ranked better than oral and written communication skills, professionalism, ethics and social responsibility (*Figure 2*).

The knowledge-based economy requires the up-skilling of the workforce, both in terms of educational attainment and the type of jobs they are performing. The 'knowledge worker' is defined as a white collar, highly skilled worker, performing knowledge-rich jobs. There is no general consensus on the competences required by the knowledge-based economy. Carnevale *et al.* (1990) suggested that basic competences like reading, writing and math are the starting point for acquiring competences needed in the knowledge economy; they are not enough. More emphasis will be placed on workplace competences like critical thinking / problem solving, teamwork / collaboration, creativity / innovation, and IT skills (Conference Board of Employers, 2006). Consensus is attained when it comes to the IT skills. In a report authors remark: "the ability to produce and use information effectively is thus a vital source of skills for many individuals" (OECD, 2001, p. 100). Multicultural and international key competences are driven by the impact of globalisation on business activities. Therefore, a multidimensional vision of competences in the knowledge-based economy is embraced in the literature, but the importance of each category of competences differs from an author to another.

Methodology

The present research aims to identify and study the changes in the demand for qualifications acquired through continuing training (CT) courses in Romania over the period 2007 – 2011. The integration of Romania in the European Union has determined major changes on the labour market and in various industries. The internationalisation of different economic sectors accentuated, impacting upon the skills requirements for the workforce. An increased adoption of information technologies took place in most industries to different degrees. These changes have had a significant impact on the structure of qualifications required.

More precise, the general research objectives were: the investigation of the qualifications and specialisations required by Romanian individuals from selected counties of Romania over the period 2007-2011, and the capture of potential changes in the structure of the demand for continuing training courses over the analysed period.

The demand for continuing training was investigated using the number of graduates of CPT programs. Data were collected from the Committees for Adult Professional Training, for 13 counties with different economic development: Alba, Arad, Argeş, Bistriţa Năsăud, Braşov, Galaţi, Gorj, Hunedoara, Ialomiţa, Prahova, Satu Mare, Suceava, Vâlcea. These counties were selected according to the geographical distribution of the industrial activity in Romania. Results presented in this working paper refer only to these counties (*Figure 3*).

To the knowledge of the author, researches using the variable considered in this study (the number of graduates of CPT courses) were not conducted at national level.



Figure 3. Sample structure and geographical distribution

Findings and Discussion

The European Union Lisbon Strategy initiated a process envisaging the harmonisation of qualifications across Member States. National qualifications frameworks were developed to comply with the European Qualification Framework. Apparently straightforward, the harmonisation process raised many efforts, especially due to the important national differences in the ways in which skills and competences are formed in different countries. In Romania, The National Qualification Framework was established in 2011, to comply with the requirements of the Bologna Process and the Bergen (2005) and Leuven (2009) ministerial conferences.

Continuing education and training of individuals is managed by the National Qualifications Authority (NQA), institution that took over recently the responsibilities of the former Council for Adult Professional Training. The National Qualifications Authority oversees together with the Ministry of Labour the continuing training of individuals in Romania. The need for skilled employees has determined the training providers, NGOs, and public institutions to offer a wide range of continuing training programs to cover the needs of Romanian employees.

Continuing training courses are grouped into five categories according to the level of educational attainment: for initiation, for qualification, for re-qualification, for specialisation, and for improvement. The initiation represents the acquisition of minimum knowledge, skills and abilities to perform an activity. The qualification represents the set of professional competences that allow an individual to perform activities particular to a job or profession. The improvement consists of the development of professional competences within a qualification. The specialisation is a particular form of continuing training that aim the acquisition of knowledge and skills in a narrow area of a profession. The re-qualification consists of the acquisition of specific competences of a different profession than the initial profession (ANC, 2012).

The European integration determined major changes on the Romanian labour market. The requirements for specialised skills have generated a sudden increase of the demand for CPT courses in 2008, as compared to the previous year (*Figure 4*). Significant growth rates were registered for specialisation and improvement courses that provide high and advanced skills to the workforce. In 2009, the demand for continuing training decreased dramatically under the auspices of the economic and financial crisis. A modest increase in the number of CPT courses graduates was registered in 2010 for all types of courses, followed by a

significant decrease of the indicator in 2011. Initiation courses represented the only category that registered an increase in 2011, demonstrating that after two years of crisis individuals sought a professional reconversion. Although there is a specific type of course for professional reconversion – that of requalification, the reduced offer of requalification courses determined individuals to graduate an initiation course instead. For instance, throughout the period 2007-2011, a single requalification program was organised by Automobile Dacia SA in 2008. In this case, over two hundred own workers were re-qualified to perform specific jobs at the Dacia factory.

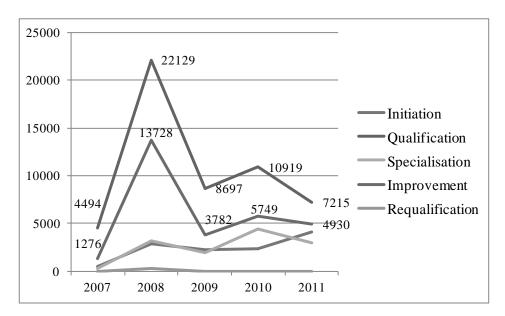


Figure 4. Evolution of the number of graduates of CPT courses per type of course *Source*: author's calculation based on NQA data

The supply of training programmes is organised as temporary training programmes more formally organised at institutions or training providers. Private training providers dominate the Romanian market for professional training. Their share increased from 70% in 2007 to 84% in 2011 (*Figure 5*). In general, private providers are small but flexible companies that prove able to adapt rapidly to the changing needs of the Romanian labour market. Their capacity of fast adaptation is demonstrated by their ability to offer qualifications that are in demand, and by their orientation toward the rural areas of Romania. Public providers registered a decreasing share in the total number of graduates, from 28 % percent in 2007, to 12% percent in 2011. The third category of providers of lower importance considering the share in the training supplier market is represented by private providers of public interest. In this category, regional trade and industry chambers were included, due to their establishment as NGOs of public interest.

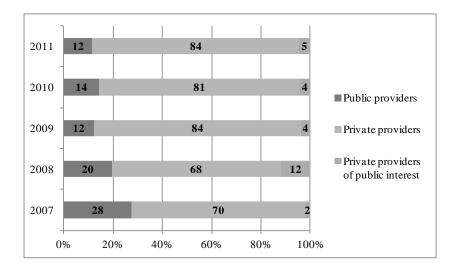


Figure 5. The structure of the supplier training market over 2007-2011 *Source*: author's calculation based on NQA data

The funding of training programmes ranges from government funded programs for the civil servants professional development to the business enterprises' or individual's own responsibility. The most important financial sources are the structural operational program for the development of human resources (SOP-DHR) and the Lifelong Learning Programme. The demand for continuing training had been influenced by the availability of funds for human resources development from the European structural funds (Popescu and Popescu, 2011). The SOP-DHR ensures the partial or entire funding of CPT courses. The SOP-DHR Programme is financed by the European Social Fund and is implemented in Romania through 7 Priority Axes in a total number of 21 key areas of intervention (KAI). Under the 1st Priority Axis "Education and training in support for growth and development of knowledge based society" most continuing training courses were financed.

In what follows, a number of qualifications and competences grouped in four categories were selected and the evolution of the number of graduates of each of them is presented and discussed over the period 2007-2012. The categories are: agricultural qualifications, trade and services qualifications, basic IT and communication in foreign languages competences, and white-collar qualifications.

Over the entire history of Romania, agriculture was the main source of income. At present, agriculture still plays a major role in Romania's economy, role that can be easily demonstrated by the share of the employment in agriculture of 29.1% in 2010 (INS, 2011). Qualifications in agriculture were requested over the entire analysed period. Romania's integration in the European Union made available European funds for agricultural activities under the EU Agricultural Policy. As a consequence, in 2008 over 2300 individuals graduated a training course that provided them with the qualification of 'farmer' (*Figure 6*). Qualification training programs for apiarist registered the second largest success, but slowly decreasing from 1128 graduates in 2007 to 354 graduates in 2011. Specialisations in horticulture and fruit growing were also requested to a lesser extent. Nevertheless, from the agricultural qualifications analyses, the qualification for horticulturist was the most requested in 2010 (with 701 graduates).

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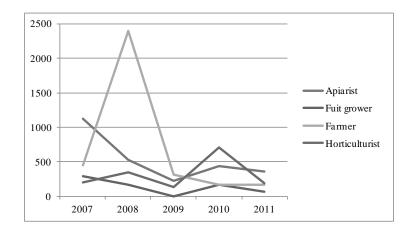


Figure 6. Evolution of the number of graduates per selected agricultural qualifications *Source*: author's calculation based on NQA data

The qualifications for occupations in the trade and service sector represent another category analysed here. This sector employs a quarter of the Romanian labour force; 25.7% of the active population is employed in services, without considering the constructions sector (INS, 2011). The demand for qualifications in trade and services occupations was generally low, with the exception of a strong demand for qualifications as trade worker in 2008 when 2397 individuals graduated trade worker training courses in the investigated counties. The European system for the recognition of professional qualifications establishes a system for the recognition of professional qualifications based on mutual recognition. This has implications on the migration of the Romanian labour forces to the Western European Member States, since qualifications in the services sector obtained in Romania are the most likely qualifications to be exercised in other Member States. According to the Directive 2005/36/EC "Any EU national who is legally established in a Member State may provide services on a temporary and occasional basis in another Member State under his/her original professional title without having to apply for recognition of his/her qualifications. However, if the profession in question is not regulated in that Member State, the service provider must provide evidence of two years' professional experience".

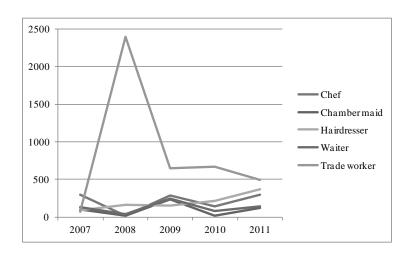


Figure 7. Evolution of the number of graduates per selected trade and services qualifications *Source*: author's calculation based on NQA data

The fact that qualified Romanian workers in the services sector are recruited by specialized firms to work in Western European Member States has determined the Ministry of Labour to negotiate with the foreign authorities from the respective countries several agreements on the migration of labour force and on the social security of Romanian workers (Ministry of Labour, 2012).

The third category comprises training courses for basic information technology skills and communication in foreign languages competences. In the knowledge based economy, these represent the core competences upon the other specific competences build upon. These are transversal competences needed irrespective of the occupational qualification. The existence of these competences in the workforce is a necessity in the light of the current internationalisation process. Competences in computer operation and electronic data input, processing and validation are of outmost importance in any field of activity. For instance, a study on the usage of information technologies in agriculture revealed an increased adoption of such technologies in Romanian farms (Moga and Constantin, 2012, p. 104). The findings of the present study show that as of 2008, an explosion of the demand for basic computer skills was registered in the analysed counties, explosion that cooled down in 2011 (*Figure 8*).

Also, competencies in communication in foreign languages ensure the adaptability of the labour force on the European Labour Market. The Council of European Union noted on the importance of foreign language competence: "foreign language skills, as well as helping to foster mutual understanding between peoples, are a prerequisite for a mobile workforce and contribute to the competitiveness of the European Union economy" (Council of the EU, 2011, p. 1). The results show that the interest for foreign languages gradually increased, revealing that competences for communication in English were the most requested by Romanian workers. German emerged as the second foreign language in terms of the number of graduates, after English.

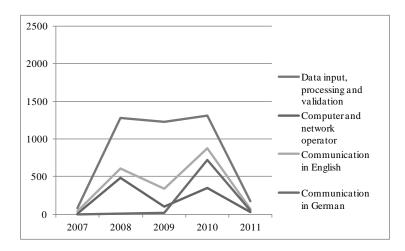


Figure 8. Evolution of the number of graduates per selected competences *Source*: author's calculation based on NQA data

The fourth category of continuing training courses investigated included a selection of "white collar" jobs: trainer, project manager, HR inspector and work security and health inspector. The first two (trainer and project manager) are newly formed qualifications. The management of grants financed from public funds (including here the European structural funds as well) implied the existence of particular certification, like trainer and project manager. *Figure 9* reveals that basically they were inexistent in 2007. The demand for their qualification was strongly influenced by the availability of funds for specific type of grants.

In a knowledge-based economy work is becoming more skilled within individual occupations and across industries. Therefore, it is expected that the number of white-collar high-skilled jobs to increase, due to the technological development. More precisely, "most new jobs created by 2020, projected to be around 8.5 million, will be in knowledge- and skill-intensive occupations, such as high level managerial and technical jobs" (CEDEFOP, 2010).

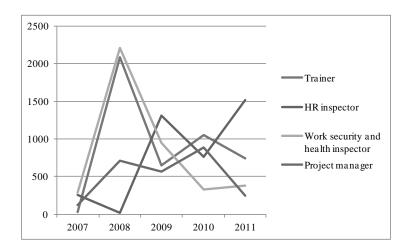


Figure 9. Evolution of the number of graduates per selected white-collar qualifications *Source*: author's calculation based on NQA data

Legislative initiatives that require employees from several occupations to have a certificate has led to an increasing demand for continuing training for the specialisations of HR inspector and work security and health inspector (*Figure 9*). The demand for HR inspector training courses increased gradually over the analysed period with a temporary decrease in 2010, whereas the demand for work security and health inspector had a different evolution: from a peak in 2008, it has gradually decreased till 2011. These two qualifications are needed in every organisation, public or private, and can be acquired by individuals with the secondary education as minimum educational level. Evolutions of the demand for CPT courses included in this category were mainly influenced by the national legislative requirements that came into force over the investigated period.

Conclusions

The emergence and development of the knowledge economy are changing the demands for competences and qualifications. Educational systems do not entirely create the skills needed by employers. Continuing education and training provide the solution for the adaptation and upgrade of skills and competences to the changing demands of the labour market. A major concern at world-level was raised by the issue of forecasting future skills, competences and qualifications, especially in the knowledge economy. Several methods and frameworks were developed at national and international levels. Currently there isn't a general accepted framework or method to analyse national demand for future skills, as particular methods for forecasting are used on different time horizons.

To become successful in the knowledge economy but mostly to keep pace with the current developments on the EU labour market, Romania needs to rethink and reshape the continuing education and training system. Although working in a rather inflexible system, the providers of continuing education and training courses managed to adapt their offer to the requirements of the individuals wishing to acquire or improve qualifications and competences. The interest of Romanian individuals for the continuing training programs

increased gradually. Several factors seem to step aside: Romania's integration into the European Union on the 1st of January 2007, the economic and financial crisis that was felt in Romania since the beginning of 2009, and the rapid adoption of the information technology in industries. A major determinant of the interest paid to continuing training was the financing available for human resources development from EU structural funds. In addition, new legal requirements for several positions were introduced, and led to the boost of the demand for several qualifications and specialisations.

Research findings reveal an up-skilling of the workforce in Romania. The initial and continuing education and training systems need to foster a skilled and knowledgeable workforce. The rapid evolution of technologies and their rapid adoption by companies has determined many employees to seek to develop digital literacy skills, at least at the basic level. Also, the provision of education and training to all age groups within the lifelong learning framework can contribute to an increase of the competitiveness of the Romanian labour force. This raises major concerns for policy makers considering the reduced participation of adults in education and training activities.

A general look at the tendencies identified on the market of continuing education and training reveals several aspects of the motivation of Romanian individuals (either employed or not) to improve their qualifications and competences. Firstly, Romania's integration into the EU provides Romanian individuals with the opportunity to work in other Member States. To do so, they need a certified qualification by a national authority subject to mutual recognition in Member States and competences in foreign languages. Secondly, traditional fields like agriculture can be revitalized under European policies, providing individuals the needed jobs in their own country, jobs that require new qualifications and skills (e.g. IT&C skills, qualifications in economics to manage public funds etc.)

The benefits of the continuing education and training are to be assessed in the wider context of the lifelong learning approach. The concept of lifelong learning for all envisages the up-skilling of individuals of all ages and social statuses, to enhance social cohesion at European level. Immediate social and economic benefits of a high level of competences and qualification derive from better integration on the labour market and in local communities. Increased levels of competences and qualification generate increased labour force participation rates and voluntary community work which may serve as examples of such benefits.

Further research is needed for investigating and understanding the factors of the general tendencies anticipated and for capturing the particularities of the economic activity from each county on the demand for qualifications. This research aims to study the influence of several variables measured at county level (e.g. population, trade openness, unemployment, employee average net monthly income, school enrolment, closeness to border) on the demand for skills and qualifications in Romania.

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