
Workers' Free Movement and Competence Management in the European Union: A Case Study

Submitted 28/04/19, 1st revision 15/05/19, 2nd revision 18/06/19, accepted 22/07/19

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Abstract:

Purpose: The article deals with the important topic of recognizing professional competences within the European Union. Although the integration processes and the creation of the European credit transfer system, ECTS/ECVET, accelerated the process of validating learning outcomes, it did not significantly strengthen the knowledge of national education systems and recognition of learning outcomes achieved in individual countries.

Design/Methodology/Approach: The case study method was used to present the issues on the example of a project implemented under the Erasmus plus Program. The assumptions and effects of the project Recognition of Professional Qualifications for Transfer Needs on the European Labour Market were discussed.

Findings: Creating new tools supporting job mobility is of great importance for building a single labour market in the European Union. This applies, in particular, to jobs that are in short supply. We should continue to increase knowledge and recognition of national formal vocational training systems, which will contribute to the implementation of the idea of an open labour market and will allow especially young people, graduates of vocational schools, to undertake work in accordance with their education.

Practical Implications: The presented tools developed under the project may facilitate job mobility within the EU. At the same time, they can be enhanced and expanded in the future to be used for all practical purposes in other professions.

Originality/Value: The importance of job mobility is extremely important in both EU policies and economic development. The search for new tools supporting job mobility is implemented, among others, under EU programs. It is important to promote the developed tools and also provide them with critical evaluation in the context of scientific discussion.

Keywords: Mobility, transfer of competences, competence management, Erasmus+ project.

JEL codes: I25, M50.

Paper Type: Research article.

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1. Introduction

The European Union ensures the free movement of people, capital, goods and services through its legal actions and harmonization. *“The opening of labour markets in the European Union resulted in an increase in employee mobility, but also an increase in problems related to the comparison and recognition of professional qualifications and competences”* as noted in Woźniak and Nowakowski, 2013, p. 86. The EU has taken many measures to facilitate labour mobility, which include:

- 1) Reforming the system for the recognition of professional qualifications completed in other EU Member States in order to harmonize and facilitate the procedure. This includes the instant recognition of many professions in the healthcare and architecture sectors (Directive 2013/55 / EU amending Directive 2005/36 / EC 2.1.6).
- 2) Issuing of a European Professional Card in 2016 to test the electronic recognition procedure for selected regulated professions.
- 3) Coordination of social security systems, including the portability of social protection, thanks to Regulation (EC) No 883/2004 and implementing Regulation (EC) No 987/2009, currently under review.
- 4) The European Health Insurance Card (2004) as a proof of insurance in accordance with Regulation No. 883/2004 and the Directive on cross-border healthcare (Directive 2011/24 / EU).
- 5) Improvements in the acquisition and preservation of additional pension rights (Directive 2014/50 / EU).
- 6) Obligation to provide judicial procedures to offer redress for discriminated workers and to designate bodies to promote and monitor equal treatment (Directive 2014/54 / EU) (Kraatz, 2019, p. 4).

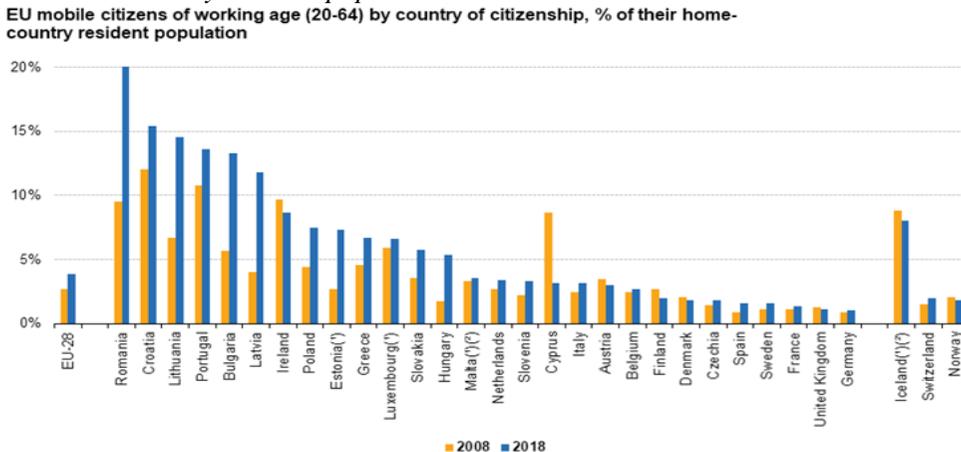
The EU, under the ESF managed by the Commission and the Member States, provides measures to facilitate employee mobility. One of the goals is to increase the geographical and professional mobility of employees in the European Union. In the 2014-2020 programming period, 86.4 billion euro was allocated to these activities, of which approximately 27.5 billion euro was allocated to the thematic objective *“Promoting sustainable and high-quality employment and supporting labour mobility”* under which Member States can provide measures to promote labour mobility (Special Report No. 06, 2018, p. 16).

2. Mobility in the EU and its Motives

One of the indicators illustrating the importance of mobility are statistics on the number of mobile EU citizens of working age (20-64 years) by country of citizenship as % of population living in the country of origin published by Eurostat. Data from the statistical review *“EU citizens living in another Member State”*

published by Eurostat indicates an increase in the number of mobile citizens in 2018 compared to 2008. The largest percentage of Romanian citizens, as much as 21%, live in the EU outside their home country. It is the largest national group among mobile EU citizens. The lowest percentage of mobile citizens was recorded in Germany and Great Britain 1% and 1.1% respectively (Figure 1).

Figure 1. EU mobile citizens of working age (20-64) by country of citizenship, % of their home-country resident population



In descending order of % in 2018
 (*) Figure of low reliability for 2008
 (**) Figure of low reliability for 2018

Source: Eurostat (online data code: ifst_lmipcita and demo_pjangroup)



Source: EU citizens living in another Member State - statistical overview 2019
<https://ec.europa.eu/eurostat/statistics-explained/pdfscache/68490.pdf> access 30/07/2019

According to the European Commission Report, the largest countries of residence of people moving in the EU-28, aged 20 to 64, include Germany, Great Britain, Spain, Italy, Switzerland and France (Table 1). As reported in the Annual Report on intra-EU Labour Mobility, 74% of mobile citizens are concentrated from 5 EU countries, i.e. Germany, Great Britain, Spain, Italy, France. An important destination country for mobility is also Switzerland with about a million people living there.

Table 1: Top six countries of residence of EU-28 movers of working age (20-64) in total numbers, 2017, foreign population by broad groups of citizenship (totals in thousands and row%)

	EU 28		EFTA		TCNs		Total foreign population
DE	3.047	(45%)	33	(0%)	3.694	(55%)	6.775
UK	2.645	(58%)	16	(0%)	1.870	(41%)	4.531
ES	1.393	(44%)	16	(1%)	1.791	(56%)	3.201

IT	1.187	(32%)	6	(0%)	2.530	(68%)	3.723
CH	997	(66%)	3	(0%)	504	(34%)	1.505
FR	985	(33%)	28	(1%)	1.986	(66%)	2.999
EU-28	12.446	(44%)	171	(1%)	15.353	(55%)	27.970
EFTA	1.289	(66%)	10	(1%)	649	(33%)	1.949

Note: Member states with the highest number of EU-28 movers in 2017, expressed in Thousands. The mobile population is broken down by broad national groups of EU-28 and EFTA citizens and TCNS. The percentages indicate the share of each group from the total foreign population.

Source: Eurostat data on population by citizenship and age group 'Migr_Pop1ctz' (extracted on 27 March 2018), Milieu Calculations. For 2018 annual report on intra-EU labor mobility, final report December 2018, European Commission, p. 25.

Barwińska-Małajowicz and Tęcza (2018, p. 259) state that labour migration in times of globalization has become an obvious phenomenon, the causes of which are both of an economic and non-economic nature. Geographical employee mobility includes both transnational migrations as well as cross-border commuting (Paas and Kaska, 2014). As Botterill (2011) states, mobility in the EU is economically justifiable for young people of working age. However, the implementation of mobility is usually dictated by a motif determining the change of residence and work. In the geographic mobility in the European Union report “*Optimizing its Economic and Social Benefits*” (IZA Research Report No. 19, p. 8) key mobility determinants include:

- employment-related factors (higher income, better working conditions);
- factors related to the family;
- housing conditions and local environment;
- access to social benefits or better public services.

However, the authors of the report indicate that the motivation related to work and income is particularly strong in the new EU Member States (this is indicated by almost 60% of people while this factor is indicated by about 40% of people from the so-called old EU countries). This report showed that four out of five respondents in the new Member States said that work and income factors could encourage them to move in the future. However, only one in two EU-15 citizens had the same opinion.

Employment of people who received qualifications in their home country is difficult or impossible due to the different formal vocational training systems in the Member States. “*Graduates of vocational schools, employees or job seekers have doubts as to whether their current professional skills are sufficient to undertake work on the European labour market*” (Kacak and Całun-Swat, 2017, p. 47). Moreover, employers who can employ qualified workers are not able to assess the professional competences of a potential employee educated in another country.

Several researchers show that the surveyed entrepreneurs have a low level of knowledge of European initiatives related to competences, their quality and development, including the European Credit System for Vocational Education and Training (ECVET) (Kupczyk and Stor, 2017, p. 120). Introduction of instruments such as Europass, the European Qualifications Framework, the European Quality Assurance Framework, the European Credit Transfer System - ECTS / ECVET - has accelerated the process of validating learning outcomes (formal and informal) (Sava, Borca and Danciu, 2014, p. 177) but it did not produce the effect of recognizing the results of vocational training and national education systems in EU countries.

As indicated by Bjørnåvold and Mouillour (2009) unsolved problems and challenges for the ECVET system related to the coordination and management of education and training systems, e.g., cooperation between interested parties, lack of transparency, fragmentation and segmentation come to the force. The usefulness of the ECVET system and other tools supporting mobility, as well as the need to develop and promote them in the EU, was demonstrated in the recommendations of the research carried out as part of the ECVET goes Business project (ECVET goes Business O1 - Research Study, 2016).

The consequence of this situation is undertaking work not related to the acquired profession, usually lower paid, seasonal, or with low competence requirements. This is confirmed by the research of Olaizoly and Szczepanik (2017), where it was indicated that one of the barriers to mobility was the difficulty in recognizing foreign qualifications, which results in part-time employment or employment in positions for which people are over-qualified.

3. Methodological Assumptions

The possibility of developing universal solutions aimed at eradicating the problems identified above is provided by the European Union Program Erasmus plus Action 2 strategic partnerships.

The article uses the case study method to illustrate the project carried out by the Lider partnership consisting of the University of Economics and Social Sciences in Ostrołęka, the Regional Development Agency LLC in Ostrołęka, the Institute of Technology and Exploitation, the National Research Institute in Radom, the Handwerkskammer (Chamber of Crafts) Erfurt (Germany) and the Intercultural Association Mobility Friends (Portugal), which took the challenge of developing an innovative solution allowing the assessment and comparison of the effects of formal vocational training for selected professions in partner countries, i.e., an electrician and a car mechanic. The project also covered a survey of entrepreneurs from these countries in the field of professional competence expected by graduates of the above-mentioned fields of study. The project was carried out in the period from 01/09/2015 to 01/05/2018.

The aim of the article is to present the effects of project implementation and their importance for facilitating the flow of young people (graduates of vocational schools) on the European labour market. The aim of the project was to improve the recognition of professional qualifications on the labour market in Germany, Poland and Portugal on the example of the professions of an electrician and a car mechanic facilitating their transfer on the European labour market.

The main result of the project is an open ICT tool supporting the needs of young people and employers on the EU open labour market in the transfer of professional qualifications. Electricians and car mechanics belong to exceptionally stable professions, therefore, they will be key on the labour market in times of continuous technical progress and the use of increasingly modern technology. Putting the results of the project into practice should strengthen the cooperation between the education and training environment and the labour market, as well as make it easier for young people to get a job outside their country and make it easier for employers to understand and learn about the professional qualifications of vocational school graduates from outside their own country. The following project elements are discussed in the article:

1. The assumptions of the project *Recognition of professional qualifications for the needs of transfer on the European labour market* and a comparative study of the assumed effects of formal education in the professions of an electrician and a car mechanic⁵.
2. A model of recognition of professional qualifications in the professions of an electrician and a car mechanic.
3. An IT tool for comparing competency requirements for electricians and car mechanics.

The project results facilitate the international mobility of employees in these professions on the Polish, German and Portuguese markets and as a universal solution it can be extended to other professions and labour markets.

4. Assumptions of the Project

The idea of the *Recognition of professional qualifications for the needs of transfer on the European labour market* project was to ensure easier recognition of professional qualifications and skills on the labour market in Poland, Germany and Portugal on the example of the professions of electricians and car mechanics, facilitating their transfer to the European labour market. The effect of work under the Project is to present not only the differences in the results of vocational training

⁵ *Recognition of professional qualifications for the needs of transfer on the European labour market Project number: 2015-1-PL01-KA202-016632, project financed under the program Erasmus plus.*

in selected countries, but also to renew these results to the expectations of employers in these countries. The project adopted a methodology for testing national formal education systems, vocational training systems, the process of obtaining qualifications and professional competences in the above-mentioned occupations, standardized for all partner countries. The aim of vocational education is to prepare learners to live in the conditions of the modern world, and to work and function actively in the changing labour market.

In the process of vocational education, it is important to integrate and correlate general and vocational education, including the improvement of key competences acquired in the general education process. In the process of vocational training there are measures taken to assist the development of each learner, according to their needs and capabilities, with a particular emphasis on the individual paths of education and career opportunities for raising the level of education and professional qualifications, and preventing early school leaving.

An important element of work under the project, *Recognition of professional qualifications for the needs of transfer on the European labour market* was conducting a research among employers in partner countries (Poland, Germany, Portugal) and determining the professional competences required by them in the following professions: electricians and car mechanics in Poland; electricians and mechanics of passenger cars in Portugal and electronics - specialization: energy and construction technologies and automotive mechatronics - specialization: an automotive technician in Germany. In the German classification of occupations and specialties for the needs of the labour market, there is an electronics profession - specialty: energy and construction technologies. The equivalent of the German profession included in the Polish and Portuguese classification of vocational education professions is an electrician. The profession of a car mechanic in Poland corresponds to the profession of a car mechanic in Portugal and the profession of a car mechatronics specialist in the field of passenger cars in Germany. Analyses of training effects in these countries for the profession of an electrician led to the conclusion that with different locations of these professions in the National Qualification Framework in individual countries, they have a lot of common learning outcomes.

Graduates of schools and educational institutions after completing vocational training and passing the exam confirming vocational qualifications in the profession of an electrician will also meet the expectations of employers in these three countries, but in each of them there is a varied pressure of employers on individual elements, namely, knowledge and skills as professional competences, personal and social competences and key competences (Comparative study of professional competences required for typical professions of electrician and automotive technician based on examples of Germany, Poland and Portugal).

The subject of research and comparative analysis were typical jobs, activities performed in them and the professional competences expected by employers (knowledge, skills, social competences). The survey covered 60 entrepreneurs from Poland, Germany and Portugal. The basic research tool was a questionnaire and in-depth interview with entrepreneurs. The basic research techniques included a telephone interview or a face-to-face interview, combined with the analysis of documentation and working meetings.

The starting point for the formulation of recommendations for the development of a model for recognizing professional qualifications for the needs of transfer on the European labour market in Germany, Poland and Portugal in relation to the analysed professions was the assessment of the scope of compliance of the expectations of employees working in these professions with the professional competences obtained by graduates in formal education systems. Principally, this model should indicate the areas of competence in which the level of knowledge, skills, personal and social competences, as well as key competences, generally deviate from the expectations of employers in a given country, which should be strengthened through lifelong learning to equalize the opportunities of graduates on the European labour market.

The diversity of vocational training systems in EU countries means that professional competences obtained as a result of formal education in one country are not explicitly recognized in other EU countries. Entrepreneurs from EU countries looking for employees are not able to assess what professional qualifications accompany formal documents confirming qualifications in a given profession.

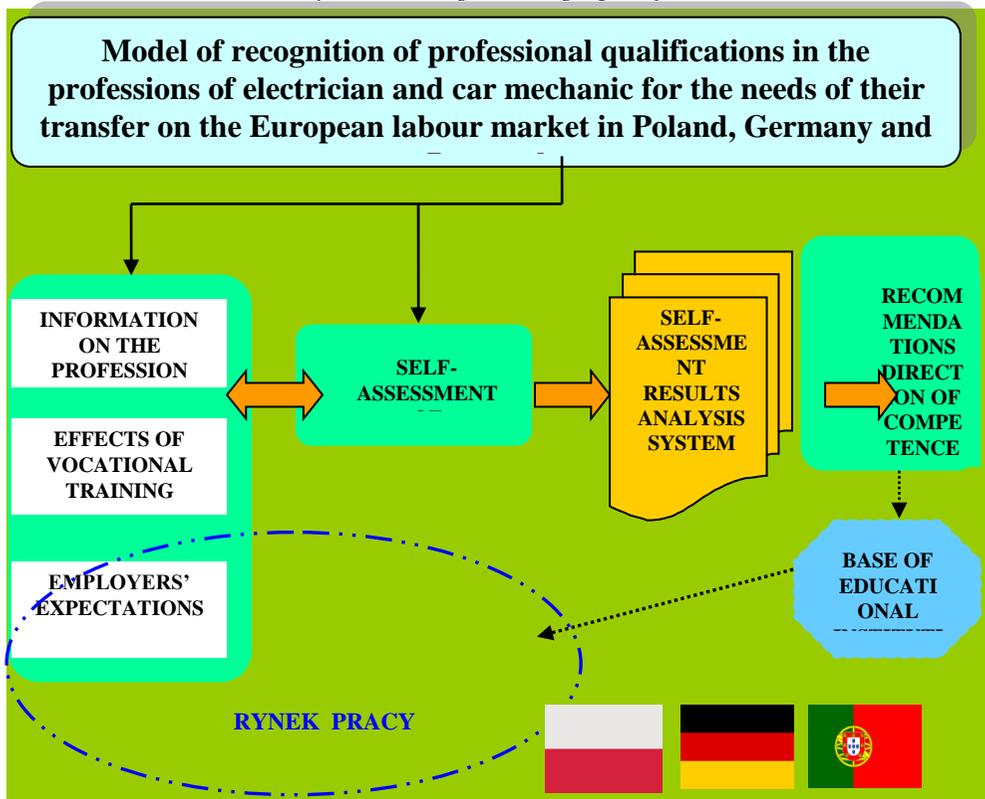
The IT tool for recognizing and validating professional qualifications developed under the project is to facilitate the transfer of professional qualifications on the European labour market and enable the extension of cooperation between educational institutions and employers. The effect of the research work carried out under the project by institutions from Poland, Germany and Portugal is a platform supporting the development of human resources and the processes of creating and updating descriptions of professional competences in two professions, namely, an electrician and a car mechanic.

Information on compliance or discrepancy of professional competences in the aforementioned professions, in relation to the expectations of employers and recommendations on further career development, can be obtained after self-assessment of professional competences. The available database of search engines of educational institutions enables the proper selection of the subject of professional development, according to the place of residence or performing professional work.

5. The Proposed Model for the Recognition of Professional Qualifications

The Model of Recognition of Professional Qualifications for the needs of their transfer on the European labour market has been developed in order to provide easier recognition of professional qualifications expected on the labour market in Germany, Poland and Portugal, for the professions of an electrician and a car mechanic. It is primarily addressed to graduates of formal education in these professions, employers, representatives of educational institutions and representatives of labour market institutions.

Figure 2. Model of recognition of professional qualifications in the professions of electrician and car mechanic for the needs of their transfer on the European labour market in Poland, Germany and Portugal, in a graphic form.



Source: Report, 'Model of Recognition of Professional Qualifications in the professions of electrician and car mechanics for the needs of their transfer on the European labour market in Poland, Germany, Portugal - Final Version' P. 4, [Http://Wses.Edu.Pl/8b.Pdf](http://Wses.Edu.Pl/8b.Pdf)

The Model proposes a set of tools for comparing and transferring professional qualifications in the professions of an electrician and a car mechanic on the European labour market in Germany, Poland and Portugal. This Model allows indicating areas of competence in which the level of knowledge, skills, both personal and social competences, as well as key competences generally deviate from the expectations of employers in a given country, which should be strengthened

through lifelong learning to equalize the opportunities of graduates on the European labour market. To this end, the Model makes it possible to compare the expectations of employers hiring workers in typical positions in the following professions: an electrician and a car mechanic with the self-assessment of the graduate's competence (self-assessment survey).

An important element of the Model is also an analysis of the method of obtaining vocational education qualifications in individual countries (description of the path enabling obtaining a profession) and documents confirming obtaining a profession. The developed Model is available in the language versions of the partners participating in the project; it is friendly to the people using it, and its substantive content will certainly ensure that the intended goals for potential users are achieved. The development of the ICT tool using the Professional Qualifications Recognition Model described above for the needs of their transfer on the European labour market is the result of research work carried out under the project. The ICT tool has been prepared in four language versions: English, Polish, German and Portuguese. The results of comparative studies of formal vocational education systems (conducted by schools, crafts or other educational institutions) in partner countries in the professions of an electrician and a car mechanic showed similarities and differences in the achieved learning outcomes in Poland, Germany and Portugal.

6. An IT Tool for Comparing Competency Requirements

The overall goal was to develop an IT platform supporting the management and development of human resources, including supporting the processes of creating, updating and evaluating descriptions of professional competences in terms of building and improving the quality of the program offer in the professions of electricians and car mechanics in Germany, Poland and Portugal. The reference point for the construction of ICT Tools were the results of research work developed under the project *“Recognition of professional qualifications for the needs of transfer on the European labour market”*, and especially the results of the developed *“Model of recognition of professional qualifications for the needs of their transfer on the European labour market in Germany, Poland and Portugal.”*

After conducting the analyses of the IT solutions available on the market, conceptual assumptions were formulated and an IT tool project was developed to compare the competency requirements for the electrician and car mechanic professions. The purpose of the designed IT system is to provide a database on the professions of electricians and car mechanics in Poland, Germany and Portugal and to enable the comparison of the expectations of employers in these countries with the level of professional skills of employees of these professions, after self-assessment of professional skills.

It was assumed that the IT system would consist of two parts including a knowledge base on the professions of an electrician and a car mechanic and a system for comparing competency requirements in these professions, which were developed using the scientific and research achievements and effects of the project, “*Recognition of professional qualifications for the needs of transfer on the European labour market.*” The effect of research work carried out under this project by institutions from Poland, Germany and Portugal is the ‘*transVETjob.eu*’ IT Platform.

If one wants to receive the answer to the question “*Are professional competences sufficient to take up a job abroad as an electrician or a car mechanic?*”, it is required to visit the IT platform. After the self-assessment of professional competences, you can obtain information on compliance or discrepancy of professional competences in relation to the expectations of Polish, German and Portuguese employers, as well as recommendations on further career development. The available database of search engines of educational institutions facilitates the proper selection of the subject of professional development, in accordance with the place of residence or performing professional work, in which new skills can be acquired or assessed by relevant institutions certifying their competences and to obtain a document confirming these qualifications.

The purpose of the ICT Technical Handbook is to provide users of the *transVETjob.eu* portal with information on how to use the knowledge base on the professions of an electrician and a car mechanic and the system for comparing competency requirements in these professions effectively. The coordinator and the main contractor of the ICT tool is the project partner - Institute for Sustainable Technologies - National Research Institute in Radom. The knowledge base about the occupations of an electrician and a car mechanic includes (separately for each profession) information about the profession, description of the effects of vocational education, information about educational institutions where you can improve or increase professional competences identified in the survey of the expectations of Polish, German and Portuguese employers. The ICT tool gives the opportunity to compare the expectations of employers in these countries with the level of professional skills of the user after self-assessment of professional skills. Every internet user interested in the topic has an unlimited access to the content of the website *www.transvetjob.eu*.

The IT platform *www.transvetjob.eu* is available in 4 language versions including Polish, German, Portuguese and English. The choice of language versions is enabled by clicking each partner country flag icon. The following information can be accessed from the main menu at the top of the page and the additional menu in the page footer regarding the project, the IT platform, the partners, the contact, the dictionary of terms and the IT platform user's manual.

The tool for self-assessment of professional competences, separately for the profession of an electrician and a car mechanic, allows obtaining information on the

compliance or discrepancy of professional competences in relation to the expectations of Polish, German and Portuguese employers.

The IT tool for comparing competency requirements for the electrician and car mechanic professions is used to transfer professional competences in the mentioned occupations to the European labour market in Germany, Poland and Portugal. The methodology of recognizing professional qualifications developed for the purposes of transfer on the European labour market, developed under the project, can be used for the needs of other professions and other labour markets than those adopted in the project. It is universal and its further application will allow to diminish the restrictions and eliminate the barriers related to the free movement and employment of especially young people in their profession on the European labour market. The future use of the Model in relation to other professions and other markets requires a consideration of changes in the formal and legal environment related to national vocational training systems.

Based on the example of national vocational training systems in Poland, Germany and Portugal, it should be stated that they are very different. Employers in these countries are not able to assess the level of professional competences obtained by graduates of vocational schools, and, thus, their usefulness as potential employees educated in other countries.

The effects developed under the project are important in eradicating the barriers in occupational and spatial mobility, especially for young people on the European labour market. The obtained project results should be developed so that they will contribute to future harmonization of national vocational training systems within the European Union.

7. Conclusions

Facilitating the flow of human capital within the European Union is still an urgent and significant issue. Separate education systems mean that the qualifications obtained in one country are not recognised by employers in another country. The presented project is one of many projects implemented under the Erasmus plus program, the effects of which allow to bring employers and graduates of vocational schools from EU countries closer by understanding employers' formal vocational training systems as well as understanding employers' expectations from vocational school graduates.

The development of such tools is of great importance for building a single labour market in the European Union. This applies, in particular, to jobs that are in short supply. Work to increase knowledge and recognition of national formal vocational training systems should be continued, which will contribute to the implementation of the idea of an open labour market and will allow especially young people, graduates of vocational schools, to undertake work in accordance with their education.

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