

COMPETITIVE VOCATIONAL EDUCATION – THE MAIN INFLUENCING FACTOR FOR THE NATIONAL ECONOMIC DEVELOPMENT

Andra Zencaka, Maija Senfelde
Riga Technical University, Riga, Latvia

Abstract

The competitive human resources are one of the essential factors for the country's economic development. The vocational education, its quality, compliance with the development trends of the national economy and labour market demand has a significant role in formation of these resources. Researches carried out in the world suggest that as a result of technological development, one fifth of the workers in the coming decades will need to develop their knowledge, skills and competences, or to completely change their field of activity. In this situation, vocational education acquires an important role in the context of the development of the national economy and labour market and requires continuous improvement of knowledge which does not necessarily require a long-term training process, but, conversely, it must be fast and qualitative in order to be able to respond effectively to changes in the labour market. The aim of the study is to define the determinants of competitive vocational education, their impact on the labour market and the development of the national economy. In order to achieve the objective of the research the tasks to analyze the vocational education system in Latvia as well as the medium and long-term forecasts of the labour market in the aspect of the national economic development are set. Generally recognized methods of research in economics as document analysis, comparison, classification, and statistical analysis are used. As a result of the research, the authors determine the factors that affect the competitiveness of vocational education and suggest the creation of a flexible vocational education system that is internationally open, widely available, quality and capable of providing demand for relevant qualification professionals in accordance with the needs of the national economy and the trends of the global education market.

Key words: human resources; labour market; economic development; vocational education; economic growth.

JEL: I25.

Introduction

Education as one of the most important sectors of the national economy is an integral part of society's life, which must be closely interrelated with the development of market, science, technology, production and information technologies. The decisive factor for the country's economic development is the competitive human resources, which are essential for vocational education, its quality, compliance with the development trends of the national economy and labour market demand. The Latvian Sustainable Development Strategy until 2030 states that vocational education as a basic means for solving many global problems of the modern world must be of high-quality, knowledge-based and competency based, lifelong and creatively oriented, enabling rapid and effective response to the global competition and demographic challenges. Researches carried out in the world suggest that as a result of technological development, one fifth of the working people in the coming decades will need to improve their knowledge, skills and competences, or to completely change their field of activity. In this situation, vocational education acquires an important role in the context of the development of the national economy and the labour market and requires continuous improvement of knowledge which does not necessarily require a long-term training process, but, on the contrary, it must be fast and qualitative in order to be able to effectively respond

to changes in the labour market. Since vocational education, its quality and competitiveness are a prerequisite for solving a number of contemporary global problems, the aim of the research is to determine the determinants of competitive vocational education, their impact on labour market and development of the national economy. In order to achieve the aim of the research, the tasks are set out: to analyse the vocational education system in Latvia and resources involved therein, as well as medium and long-term forecasts of the labour market in terms of the national economy and the country's economic development. In the study well-recognized methods: document analysis, comparison, classification, and statistical analysis, will be used. The main sources of information: The Latvian Sustainable Development Strategy until 2030, the Guidelines for the Development of Education, the medium and long-term forecasts for the development of labour market, and data collected by the Central Statistical Bureau of Latvia. Upon the increase of the global competition, the authors suggest the creation of a flexible vocational education system that is internationally open, widely available, qualitative and capable of providing demand for professionals of relevant qualifications in accordance with the needs of the national economy and trends of the global education market. As a result of the research, the authors will identify the factors that affect the competitiveness of vocational educa-

tion, as well as develop recommendations to be implemented in order to implement competitive vocational education in Latvia in line with the development trends of sectors of the national economy, to prepare knowledgeable and globally competitive human resources that would promote the economic sectors and long-term economic development of the country.

1. Medium and long-term forecasts for the labour market demand

The Latvian labour market forecasts are based on the scenarios of the development of national economy and demography developed by the Ministry of Economics, based on the medium and long-term growth goals of Latvia. Labour market forecasts are one of the tools that allow anticipating the emergence of labour market consistency or incon-

sistency in the future and allow the provision of a more efficient allocation of labour resources in the national economy. Currently, the labour market is dominated by the demand for employees with vocational education, which points to the high-quality development of the labour market, which is due to sectoral technological development and international competition of companies, reflected in the reduction of demand by lower educational workforce (LR MES, 2014). When analysing, the labour market situation, it is possible to forecast labour market trends and possible risks, taking into account labour market dynamics and demand for new knowledge, competences, skills, and abilities. The main risk factors of the development of the labour market and their mitigation measures in Latvia until 2030 have been summarized by the authors in Table 1.

Table 1. Risk factors of the labour market development and measures of their mitigation in Latvia until 2030

Serial No.	Risk factor of the labour market development	Description of situation	Measure of mitigation
1.	Imbalance between the demand for and supply of labour force	Education and qualification level, acquired knowledge, skills and competencies do not meet the demand and vacancies in the labour market.	By implementing appropriate and effective lifelong learning policies it is possible to affect the structure of labour supply, to ensure, as far as possible, the compliance of the supply of labour force with the demand for labour force.
2.	Different trends of the development of the state regional labour markets	Development of the regional labour markets is associated with the business, social-economic development and opportunities of investment attraction. Latvia has a structure of settlement and economic activities highly oriented to the capital. It does not result in the development of regional labour markets, and economically inefficient regions with insufficient competitiveness establish that negatively affects the country's overall labour market development.	It is necessary to promote business development, investment attraction and job creation in the regions. To strengthen the regional and local capacity and the role of promotion of their territorial development. To implement appropriate and effective vocation education policies in the regions.
3.	Negative demographic trends and an aging labour force	Latvia is characterized by depopulation process. In recent years, the country is gradually improving the demographic support policy, however, the population aging process takes place in Latvia, which is characterized by a systematic decline in the proportion of children and a growth of the number of older population simultaneously.	Inclusion of elderly people in the lifelong learning processes and the labour market shall be promoted, the work environment conditions shall be improved and the healthy years of life should be tried to increase. The social security and health care system shall be improved. An effective system of support for young families should be developed.
4.	Labour migration	The Latvian labour force migration is characterized by external-international migration and internal migration-within the framework of Latvia related to the insufficient number of jobs in certain regions, as well as the low level of wages in certain occupations. In this situation, the population movement to the more developed areas takes place, which further reduces opportunities of growth for the less developed areas by their loss of human resources and decrease in tax revenue that could be invested in the national and regional development.	It is necessary to promote business development, investment attraction and job creation in the regions that could increase the competitiveness of the regions and the effective functioning of the labour market.

Source: created by the author Ministry of Education and Science of the Republic of Latvia.

When assessing the risk factors of the labour market development, the authors raise the disproportion of labour force in Latvia, the people aging and urbanization process of the country as the main problem, as a result of which the regions of the country are becoming less inhabited and economically retarded. In such a situation, the fundamental task of the EU regional development policy that none of the regions of the country should be lagging economically is not being implemented. As the urbanization process interacts with the population aging, a situation arises which requires new solutions. The implementation of the „silver” policy and economy in Latvia and in its regions is become acute. The increment in the number of old people imposes an inevitable challenge for the politicians and strategies in health for the sake of to satisfy its necessities and to offer them the possibility to live its last years with excellent quality of life [2]. An essential objective of the „silver” policy is to make the aging population a resource that could ensure the development of the national economy sectors, job creation, economic development and growth, which is essential at the national, regional, municipal, corporate and household levels, and which

is possible to be ensured by the implementation of effective vocational education in the country.

2. Analysis of the situation of vocational education in Latvia

One of the preconditions for economic development of a country is high-quality human resources, the creation of which is diversified and influenced by various factors. Professional education, as a means for solving many global problems in today’s world, must be of high-quality, competence-based, lifelong and creatively oriented, responding to the challenges of global competition and demography, and is one of the preconditions for the existence of a knowledge-based economy. Vocational education is education that practically and theoretically prepares individuals for activities in a certain profession, for the acquisition and improvement of professional qualifications. Vocational education is acquired in basic, secondary and higher education institutions or outside of them. (LR MES, 2016) In the Table 2, the authors have summarized the types of vocational education that are part of the formal education system.

Table 2. Types of vocational education in Latvia

Serial No.	Type of vocational education	Explanations
1.	Vocational basic education	Basic level vocational education, which gives the opportunity to obtain a first-level vocational qualification
2.	Vocational training	Partial secondary vocational education, which gives the opportunity to obtain a second-level vocational qualification
3.	Vocational secondary education	Medium level vocational education, which gives the opportunity to obtain a third-level vocational qualification
4.	First level vocational higher education	Higher-level vocational education, which gives the opportunity to obtain a fourth-level vocational qualification
5.	Vocational higher education	Higher-level vocational education, which gives the opportunity to obtain a fourth or fifth-level vocational qualification
6.	Vocational continuing education	Special type vocational education for adults with pre-education and professional experience gives the opportunity to obtain a certain-level vocational education
7.	Vocational development	Special type vocational education, which enables individuals, regardless of age and pre-education or vocational qualifications, to acquire systematized professional knowledge and skills meeting labour market requirements

Source: *The National Database on Learning Opportunities, 2017.*

The important role in the implementation of high-quality and competitive vocational education is played by the centres of vocational education competences, implementing the functions of regional methodological centres, continuing education of teachers, cooperation with sectoral associations, continuing education of adults, retraining of the unemployed and evaluating the professional competence acquired outside the formal education system. Vocational education meets the requirements of national economy and becomes competitive if it is implemented in an efficient way and in a short

period of time that allows a quick response to changes in the labour market and eliminates disproportions in education and labour markets. The authors have summarized the main indicators characterizing the vocational education system in Table 3.

According to Table 3, it is seen that both the number of vocational education establishments and the number of students tend to decrease, reflecting the demographic trends in Latvia.

Table 3. The main indicators characterizing the vocational education system in Latvia, 2013–2016

Serial No.	School year	Vocational education establishments	Teachers of vocational subjects	Number of students
1	2013/2014	66	3431	32 086
2	2014/2015	65	3329	31 055
3	2015/2016	63	3515	29 858

Data sources: [www.csb.gov.lv]

The authors believe that this is not only a problem for Latvia but for the whole EU, however, this problem is particularly pronounced in Latvia due to the depopulation or decline in population. Youth unemployment is a significant problem in both Latvia and many other places in Europe: in 2016, it was 25% in Latvia, 23% – average in the EU. One of the reasons is the inability of educated young people in the traditional, theory-based education system to immediately enter the labour market and start working full-time. Employers need to spend extra time and resources on their practical education, and therefore, rationally evaluating investment and benefits, its often advantageous to find other solutions for recruiting the required staff, rather than recruiting a young single student without the necessary skills [12]. Vocational education in Latvia should be as effective as possible in order to ensure that the goals of national economy are achieved with the rational use of resources and the supply of educational programs must be in line with the requirements of the labour market in order to not cause a certain deficit or surplus of specialists of certain professions that hinders the country's economic development. If we look at which European countries are famous due to their industrial activities in various sectors, it must be recognized that besides a relatively large internal economy, affective investment strategy and well-understood, organized business environment, they also have a more systematic, long-term strategy for educating new sectoral specialists. In other words, cooperation at the national level between employers and educational institutions is organized, paying due attention both to promoting the prestige of vocational education among young people and day-to-day cooperation, providing practical, real-work-environment-based education [12]. The authors conclude that in order to solve the youth unemployment problems in Latvia, to not create a shortage or surplus of specialists of certain professions, which hinders the country's economic development, it is necessary to implement effective work-environment-based vocational education.

3. The role of vocational education in the country's economic development

Sustainable development of Latvia is based on raising the productivity of human, economic, social, and natural, including location and space, capital in response to the challenges of global trends. It is important to not reduce the value of the human capital base and to increase its productivity, as the number of people is decreasing and the population is aging [1], on the basis of a competitive, efficiently functioning vocational education system that can meet the demands of national economy and labour market today and in the future. According to a general definition, competitiveness is the ability of a company, industry or government to successfully market its products or services. Applying this definition to vocational education, it is necessary to create a situation in which trained specialists can effectively enter the labour market, which is particularly important as a result of an aging population. According to the authors, as a result of the implementation of competitive vocational education, disproportions in the labour market are eliminated, the state budget and EU funds directed to the education system are used more efficiently, the development of economic sectors and enterprises is stimulated, the economic development and growth of the country are ensured. The factors influencing the implementation of competitive vocational education are reflected in Figure 1.

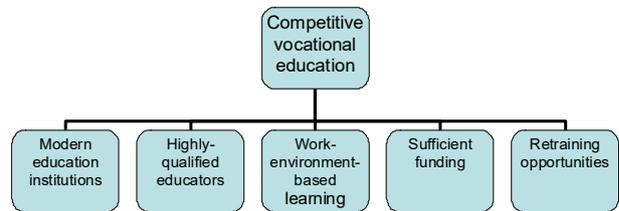


Fig.1. The main factors influencing the implementation of competitive vocational education

Competitive vocational education is essential not only in the preparation of high-quality and knowledgeable human resources, but also at the company and national level as one of the main factors contributing to the country's economic development. The most significant results of the implementation of competitive vocational education are summarized in Table 4.

The most important of the forecasted labour market risk factors until to 2030 are the population aging, the imbalance in labour supply and demand, which inhibits economic growth, that is, an increase in production over a period of time and flow of skilled labour to other countries (LR ME, 2016). The possible relationship between the competitive vocational education and the country's economic development is reflected in Figure 2.

Table 4. Results of the implementation of competitive vocational education

At the level of households	At the level of companies	At the national level
Intellectual investment in the future Competitive salary options Higher mobility and competitiveness in the labour market Higher socioeconomic security level Higher growth opportunities Higher self-assessment Higher quality of life	More efficient staff development and retraining of employees Higher company's productivity and resource efficiency Higher business competitiveness Higher social responsibility Higher values Higher inner culture	The educational sector is an important national economy branch Increased tax revenue in the State budget More effective opportunities for the implementation of employment policies Higher level of the society's culture Safer public environment Higher technological adaptation to labour market requirements Economic development

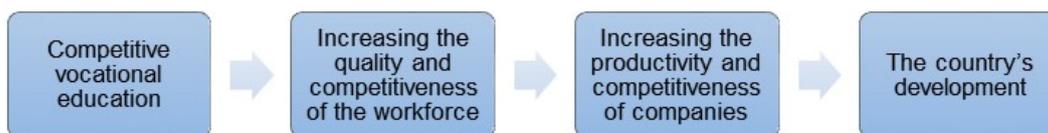


Fig. 2. Relationship between the implementation of competitive vocational education and the country's economic development

As a result of competitive vocational work-environment-based education, high-quality human resources are prepared in the country, which contributes to increasing the productivity and competitiveness of enterprises. The companies get the opportunity to produce higher quality goods and services using more professional human resources and increase the ability to sell goods and services in the local, EU and global markets, achieving the country's economic development, using other level human resources, namely using higher-quality human resources.

Conclusions

1. Latvia is characterized by the disproportion of the labour market and the population aging and urbanization processes, as a result of which the regions of the country are becoming less inhabited and economically underdeveloped.
2. The process of urbanization, interacting with the population aging, creates a situation requiring new solutions. The implementation of the „silver” policy and economy is becoming more and more acute.
3. As a result of effective vocational education, it is essential to achieve that the aging population is a resource for ensuring the development of the national economy sectors, creation of jobs, and economic development.
4. Vocational education develops according to the requirements of the national economy and becomes competitive if it is implemented efficiently and in a short period of time, which allows to quickly respond to changes in the labour market and eliminate disparities between the education and the labour market.

The authors have developed a set of recommended measures to be implemented in order to ensure that the situation in the supply of vocational education programs in the years of 2020–2030 would be in line with the requirements of the labour market and not lead to a deficit or surplus of specialists of certain professions and promote the national economic sectors and the country's economic development:

1. To solve the unemployment problems in Latvia, to have no deficit or surplus of specialists of certain professions, which hinders the country's economic development, it is necessary to implement effective vocational work-environment-based education, based on the example of German dual education, where the objectives have been being successfully achieved by involving students in working environment for many years.
2. Vocational education meets the requirements of national economy and becomes competitive if it is implemented in an efficient way and in a short period of time that allows a quick response to changes in the labour market and eliminates disproportions in education and labour markets.
3. It is necessary to promote the competitiveness, attractiveness and prestige of the profession of teacher in society in order to make the best of the school graduates master the profession of teacher, as it is inherent to Finland, where one of the most effective educational systems in the world has been functioning.
4. The professional competences of teachers and their compliance with the requirements of today's education and labour market

should be improved, in order to be able to teach students to work with technologies that are „one step ahead” in the labour market.

5. The urbanization and population aging should lead to significant changes in the implementation of national key policies, which would contribute to the development of a favourable socio-economic environment that would reduce a flow of skilled labour to other countries and regions.

References

1. Auers, D., Gubins, S. *Latvian Demographic Portrait Today... and Tomorrow*. House CERTUS. Riga. June 2017. [http://certusdomnica.lv/wp-content/uploads/2017/05/Certus_LatvijasDemografiskaisPortrets_2017_LV-1.pdf].
2. Cornet, G. *Europe's 'silver economy': A potential source for economic growth?* International Society for Gerontechnology. Grenoble. 2015.
3. Cruz, R., Ones, D., Pena, M. *Population aging challenge of the science, the technique and society*. Universidadde Ciencias Medicas de La Habana. Cuba. 2015.
4. Klimczuk, A. *Comparative analysis of national and regional models of the silver economy in the European Union*. International Journal of Ageing and Later Life. Warsaw. 10(2). 2016. 3159.
5. Kurek, S., Rachwal, T. *Development of entrepreneurship in ageing populations of The European Union*. Science Direct: Procedia Social and Behavioural Sciences. 2011. pp. 397–405. [www.sciencedirect.com].
6. Ministry of Education and Science of the Republic of Latvia. *The Guidelines for the Development of Education for 2014–2020*. 22 May 2014. [<http://www.lsa.lv/wp-content/uploads/2013/03/Izglitibaattistibaspatmatnostadnes.pdf>].
7. Ministry of Economics of the Republic of Latvia. *Informative report on medium and long-term labour market forecasts*. June, 2016. [https://www.em.gov.lv/lv/nozares_politika/tautsaimniecibas_attistiba/informativais_zinojums_par_darba_tirgus_videja_un_ilgtermina_prognozem/].
8. Ministry of Education and Science of the Republic of Latvia. *Higher Education*. 2014. [<http://www.izm.gov.lv/lv/izglitiba/augstaka-izglitiba>].
9. National Database on Learning Opportunities. *Education System in Latvia*. 2017. [<http://www.niid.lv/files/izglitibas-sistema.png>].
10. Ministry of Education and Science of the Republic of Latvia. *Overview of Latvian Higher Education in 2015*. 2016. [http://www.izm.gov.lv/images/izglitiba_augst/Parskats_2015.pdf].
11. LR Saeima. *Latvian Sustainable Development Strategy for 2030*. 2010. [<http://polsis.mk.gov.lv/documents/3323>].
12. Mengelsoņe, L. *The first puppies have proven to be viable – vocational work-environment-based education is possible in Latvia*. Latvian Employers' Confederation. 2018. [<http://www.iddk.lv/viedoklis/pirmiekuuceni-izglitiba/>].
13. Mikusova, J., Rasticova, M. *Employment policy with focus on ageing population in the Czech Republic as a service of general interest*. University in Brno. Brno. 26th International Business Information Management Association Conference: From Regional Development to Global Growth. IBIMA. 2015.