

COMPETITIVE EDUCATION AS A SIGNIFICANT FACTOR OF A NATIONAL ECONOMIC GROWTH

Andra Zenčaka

Maija Šenfelde

Riga Technical University, Latvia

Abstract. *In order to ensure sustainable economic growth in the country, a knowledge-based economy must be implemented in the country, in which one of the essential factors is educated human resources, globally competitive and able to quickly respond to changes in the structure of the national economy. Researches carried out in the world suggests that technological developments will require a fifth of the workers to change their job in the coming decades. In this case, acquisition of knowledge, skills and competences will not necessarily require a long-term training process, but on the contrary it will have to be fast and of high-quality in order to respond to changes in the labor market. With the growth of global competition, with the increase in interaction between education and sustainable national growth, it is necessary to ensure the functioning of a competitive education system. As education and its quality are one of the most important conditions for solving global problems in today`s world, the aim of the research is to analyze the features of competitive education, to demonstrate its impact on the growth of national economy branches and to demonstrate how their effective interaction can ensure the country`s sustainable economic growth. The research analyzes the main indicators characterizing the education system in Latvia – the number of education institutions, the number of teachers in the educational institutions, their quality, the number of students and the financing from the state budget for education in the period from 2014 to 2016. Certain features of competitive education and their impact on sustainable economic growth of the country, the main results of the implementation of competitive education are summarized and the possible relationship between competitive education and the country`s economic growth is reflected. In the research, the following methods, generally recognized in the economy, have been used: document analysis, comparison, classification, and statistical analysis methods. As a result of the research, the authors will determine the factors influencing the competitiveness of education, as well as develop recommendations to be introduced in order to implement competitive education in Latvia in line with the development trends of the national economy sectors, to prepare knowledgeable and globally competitive human resources that would promote the long-term national economic growth.*

Keywords: *economic growth; competitive education; competitive human resources; economic development; national economic growth.*

Introduction

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. Economic growth of Latvia depends to a large extent on the ability to produce and market competitive products and services in the national, European Union and global markets, which, in turn, depends on the resources available in the country and on their quality as well as on the country's economic policy. The economic growth strategy and policy needs to be selected by countries based on their factor - the quality and availability of natural resources, human resources, capital, technology and information. In order to ensure a sustainable economic growth in the country, a knowledge-based national economy must be implemented in the country, in which one of the essential factors is educated human resources, globally competitive and able to quickly respond to changes in the structure of the national economy. It results from researches carried out in the world that technological development will require a fifth of the workers to change their work in the coming decades. In this case, acquisition of knowledge, skills and competences will not necessarily require a long-term training process, but on the contrary it will have to be fast and qualitative in order to respond to changes in the labor market. The preparation of such resources requires an effective-functioning and competitive education system that is in close interaction with the processes taking place in the national economy. As education and its quality are one of the most important conditions for solving global problems in today's world, the aim of the research is to analyze the features of competitive education, to demonstrate its impact on the growth of national economy branches and to demonstrate how their effective interaction can ensure the country's sustainable economic growth. 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. 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 (Auers & Gubins, 2017), on the basis of a competitive, efficiently functioning education system that can meet the demands of national economy and labour market today and in the future.

In the research, the following methods, generally recognized in the economy, have been used: document analysis, comparison, classification, and statistical analysis methods.

Analysis of the Main Indicators of the Latvian Education System

To ensure the long-term national economic growth and the implementation of a knowledge-based national economy, an effective functioning and competitive education system that is in close interaction with the processes taking place in the national economy is required. Offering education that is appropriate for interests of the state and the whole society, the pre-school education, basic education, secondary education and higher education are included in the Latvian education system. (Academic Education Center, 2015). In order to promote the transparency and portability of the education system and facilitate transnational mobility of the population, the Latvian education system operates in the European Qualifications Framework, which is a unified eight-level European reference system and covers all the types of education: vocational, general and academic education, as well as all the levels of education: basic, secondary and higher education, as well as continuing education, and all the forms of education: formal, non-formal, and daily education.(National Coordination Point, 2015). Any type of education is essential and its acquisition could have positive or negative manifestation in the future. The higher education and vocational education are of particular importance for the national economic development and ensuring the economic growth. In order to qualitatively acquire a certain profession, the previous knowledge and preparation, which is usually acquired at elementary school or secondary school, plays an important role, thus the whole education system in general plays an important role in the national economic development and growth. With the growth of global competition, with the increasing interaction between education and a sustainable national growth, it is necessary to ensure the functioning of a competitive education system. The main indicators characterising the Latvian education system are summarized in Table 1.

Table 1 The Main Indicators Characterizing the Latvian Education System, 2014-2016
(LR CSB, 2018)

Serial no.	School year	The number of educational institutions	The number of pedagogues at educational institutions	The number of students at educational institutions	Expenditure from the State budget on education, million (EUR)
1	2	3	4	5	6
1	2014/2015	947	31 578	325 422	1403,8
2	2015/2016	923	31 331	325 577	1435,2
3	2016/2017	899	31 420	326 829	2277,2

Table 2 summarizes the number of educational institutions in the period of time from 2014 to 2016.

Table 2 **The Number of Educational Institutions in Latvia, 2014-2016** (LR CSB, 2018)

Serial no.	School year	General-education schools	Vocational education institutions	Higher education institutions and colleges	Total
1	2	3	4	5	6
1	2014/2015	824	63	60	947
2	2015/2016	811	54	58	923
3	2016/2017	790	51	58	899

Analysing data of the Central Statistical Office of Latvia, in the period of time from 2014 to 2016, the largest portion of ~87 % of the Latvian education system is taken by general-education schools, and only 7 % - by vocational education schools and 6 % - by higher education institutions and colleges, which prepare professionals appropriate for the needs of specific national economy branches. It is these professionals who play an important role in the national economy development and in ensuring a sustainable national economy growth. According to the authors, general-education schools have too much of a portion in the education system, which reduces the possibility of efficiently ensuring the demand of the labour market and national economy branches for professionals of certain professions, which, according to the medium and long-term forecasts of the labour market of the Ministry of Economics in the European Union and Latvia until 2030, are expected in fields related to advanced industry, material sciences, electronics, ICT and biotechnology, as well as to various commercial services, trade, and activities of administrative and servicing departments. Table 3 summarizes the number of pedagogues at Latvian educational institutions in the period of time from 2014 to 2016.

Table 3 **The number of pedagogues at educational institutions in Latvia, 2014-2016** (LR CSB, 2018)

Serial no.	School year	General-education schools	Vocational education institutions	Higher education institutions and colleges	Total
1	2	3	4	5	6
1	2014/2015	23 038	2796	4867	25 834
2	2015/2016	22 980	2838	4910	30 728
3	2016/2017	22 754	2751	5206	30 711

The largest number of pedagogues at Latvian educational institutions, in the period of time from 2014 to 2016, ~74 % is at general-education schools, ~16 % - at higher education institutions and colleges, and only ~11 % - at vocational education institutions, who are not only vocational teachers, but also general

education subject teachers and other pedagogical staff – methodologists, psychologists, librarians, etc. Based on the statistics, participating in various seminars and conferences on the education and education system in Latvia, as well as after discussions with the representatives of the Latvian vocational education system, the authors conclude that the vocational education system, which is a prerequisite for the development of the national economy branches and economic growth, is lacking in long term vocational training teachers, and particularly in technical specialties that is a topical issue in the entire vocational education system. Table 4 summarizes the number of students at Latvian educational institutions in period of time from 2014 to 2016.

Table 4 The Number of Students at Educational Institutions in Latvia, 2014-2016
(LR CSB, 2018)

Serial no.	School year	General-education schools	Vocational education institutions	Higher education institutions and colleges	Total
1	2	3	4	5	6
1	2014/2015	209 686	29 855	85 881	325 422
2	2015/2016	213 357	27 938	84 282	325 577
3	2016/2017	214 965	28 950	82 914	326 829

Analyzing the number of students at Latvian educational institutions in the period of time from 2014 to 2016, in all periods, the largest number, i.e., ~ 62 % acquires education at general-education schools, ~ 27 % - at higher-education institutions and colleges, and only ~ 9 % at vocational education institutions. According to the educational policy developed by the Ministry of Education and Science of the Republic of Latvia, one of the goals of the educational policy is to implement competitive vocational education and to promote its attractiveness by increasing the proportion of students who, after the acquisition of basic education, continue their studies in vocational education programs. In the period of time from 2014 to 2016, this goal was not achieved – only a small proportion of students who had acquired general education went to study at vocational and higher education institutions. Table 5 summarizes expenditure from the State budget for financing the education system in the period of time from 2014 to 2016.

Expenditure from the State budget on education in 2016 increased by about 40 %, as in order to increase the efficiency of pedagogues` work and motivation, new rules for teachers` wages are introduced, whose aim is to make the remuneration of teachers more competitive in the country. In 2016, Latvia spends on education 6 % of the GDP, which is above the EU average of 4.9 % of the GDP. The United Nations, as the driving force behind educational development goals, believe that education shall be placed the first in terms of the financial

distribution in the country. Expenditure from Latvia's general budget for 2016 according to government functions are reflected in Figure 1.

Table 5 Expenditure from the State Budget on Education in Latvia, 2014-2016(EUR), (LR FM, 2018)

Serial no.	Year	Total expenditure on education, million EUR	Governmental expenditure on education, % of gross domestic product
1	2	3	4
1	2014	1403.8	5,2
2	2015	1435,2	5,3
3	2016	2277,2	6

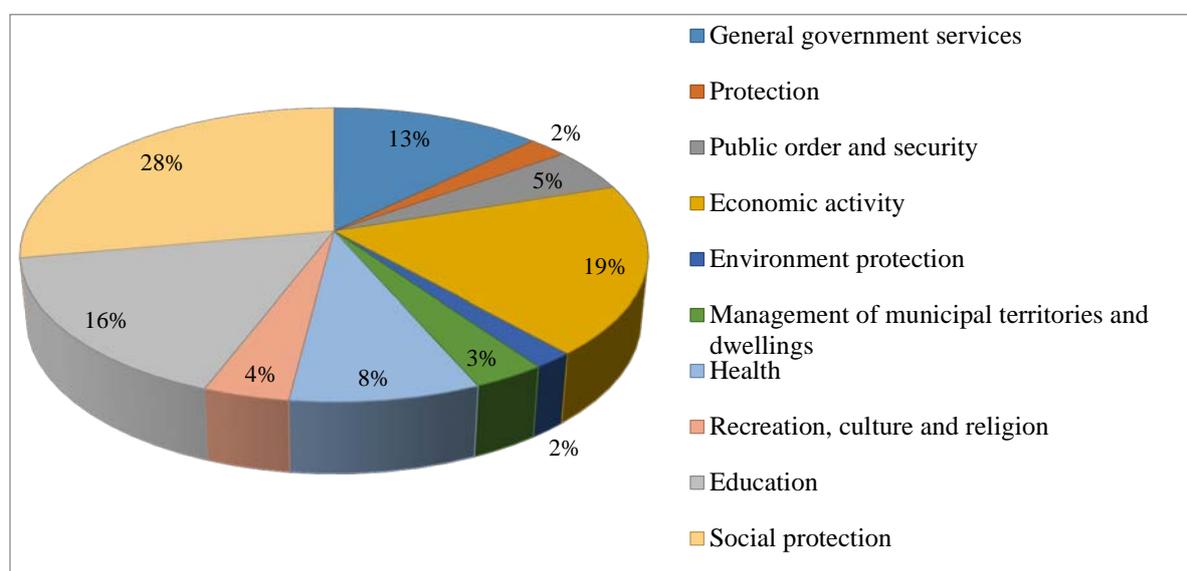


Figure 1. Expenditures from Latvia's general budget, in 2016, % (LR FM, 2018)

When analysing the expenditure according to the government functions, it is evident that the proportion of expenditure from the general budget on education is 16.2 %, which takes the third place behind the expenditure for ensuring social protection and economic activities. Generally, this is a good indicator, and although spending on education is not in the first place, it exceeds the EU average by 10.3 %. Consequently, the issue on the effectiveness of the use of these funds is being raised. The authors conclude that in order to ensure the effective functioning of the education system, it is necessary to have a high-quality education policy, adequate funding, educational institutions appropriately equipped for modern requirements and technologies, professional,

highly-qualified pedagogues, and motivated students with effective retraining opportunities. These are the essential conditions for building and implementing competitive education.

Features and Effects of Competitive Education on a Sustainable Economic Growth

Competitive education is based on an efficiently functioning educational system that can meet the demands of the national economy branches and labour market today and in the future. By a general definition, competitiveness is the ability of a company, industry or government to successfully market their products or services. By applying this definition to education, in the authors` view, the implementation of competitive education leads to the effective integration of trained professionals into the labour market. This means that the implementation of effective educations leads to the elimination of labour market disproportions, more efficient use of governmental and EU funds directed to the education system, stimulates the long-term development of national economy branches, which results in increased production of goods and services, increasing the GDP and ensuring the long-term economic growth. The authors show the key features of competitive education in Figure 2.

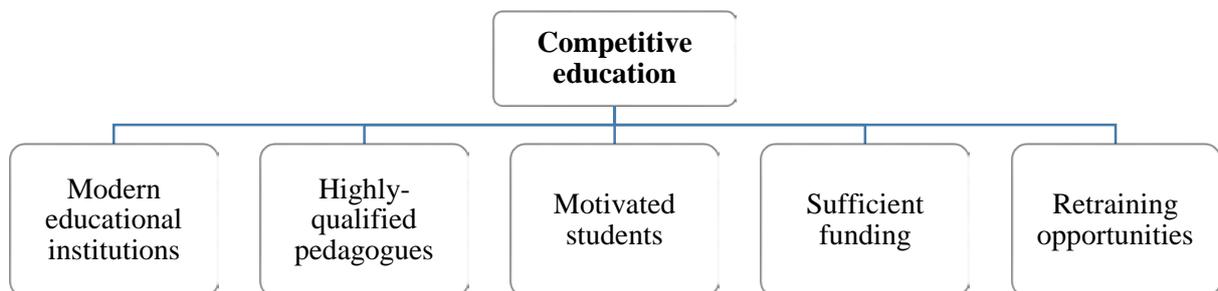


Figure 2. **Key Features of Competitive Education** (made by the authors, 2018)

Competitive education is essential not only in the preparation of high-quality and knowledgeable human resources, but also at company and national level as one of the key factors for ensuring the sustainable national economic growth and competitiveness. Table 6 summarizes the main results of the implementation of competitive education.

Table 6 The Main Results of the Implementation of Competitive Education
(made by the authors, 2018)

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 labor 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 labor market requirements.

The most important of the forecasted labor market development risk factors up to 2030 is the imbalance in labour power supply and demand, which inhibits the economic growth, that is, an increase in production over a certain period of time, and the flow of skilled labour power to other countries (Ministry of Economics of Latvia, 2016) The possible relationship between competitive education and the national economic growth is shown in Figure 3.



Figure 3. The relationship between the implementation of competitive education and the national economic growth (made by the authors, 2018)

As a result of competitive education, in the long-term, adequate, qualitative and competitive human resources are being prepared in the country that contributes to increasing the productivity and competitiveness of companies. As a result, the companies increase the ability to sell goods and services in the local, EU and global markets. GDP increases over a certain period of time and the national economic growth will be achieved.

Discussion

- The acquisition of education, qualification or retraining in line with requirements of the national economy branches should be carried out efficiently and in a short period of time in order to be able to respond quickly to labour market changes that could prevent disproportion in the education and labour market.;
- Particular attention should be paid to the education of adults and employed persons, involving them in the project of the specific support object “To improve the professional competence of the employed people” of the Operational Program 8.4.1 “Growth and Employment” that would enable more effective integration into the labor market;
- The state employment policy, the inclusion of older people in the labour market needs to be improved, which would stimulate the acquisition of education in the fields of labour shortages, and would limit the acquisition of education in specialties where the supply of human resources exceeds the demand;
- The national employment policy should be improved that would stimulate the acquisition of education in specialties where a lack of labour power is observed and limit the acquisition of education in specialties where the supply of human resources exceeds demand;
- Changes in the education system need to be introduced – only those students who intend to enter higher education institutions should study mainly in secondary schools; more students should be directed to vocational education institutions, in which it is possible to simultaneously get the secondary education and profession;
- The competitiveness, attractiveness and prestige of the profession of teacher should be promoted in society. It is necessary to ensure that the profession of teacher is acquired by the best graduates as it is in Finland, where one of the most effective educational system in the world is functioning;
- The development of a favourable socio-economic environment should be promoted and a competitive wage system should be set up in the country, which would reduce skilled labour migration to other countries and regions.

Conclusions

Upon analysing competitive education as a factor determining the national economic growth, the following main conclusions are made:

- The implementation of competitive education requires an effective education policy, adequate funding, educational institutions appropriately equipped according to modern requirements and technologies, highly qualified

- pedagogues, motivated students, and retraining opportunities in a short period of time;
- The education offer must be in line with the national economy needs that would prevent disproportion in the labour market and stimulate the economic growth;
 - General-education schools have a large portion in the education system that reduces the possibility of effectively ensuring the demand of the labour market and national economy branches for professionals of certain professions;
 - In the education sector, especially in engineering, there is insufficient number of pedagogues and, despite the measures taken at national level, no effective solution has yet been found;
 - As a result of the implementation of competitive education, the adequate, qualitative, and competitive human resources are being prepared in the country in long term that contributes to increasing the productivity and competitiveness of companies, as a result of which the GDP increases over a certain period of time and the national economic growth is achieved.

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