

AMURCON 2021
AmurCon 2021: International Scientific Conference**EXPORT OF EDUCATIONAL SERVICES IN A CHANGING
REALITY**

Tatyana Boyko (a), Natalya Frolova (b)*

*Corresponding author

(a) Khabarovsk State University of Economics and Law, 134, Tihookeanskaya St., Khabarovsk, Russia,
tanbo60@mail.ru(b) Khabarovsk State University of Economics and Law, 134, Tihookeanskaya St., Khabarovsk, Russia,
frolova.nc@rambler.ru**Abstract**

The authors showed in the presented article that the development of the world economy, globalization, and internationalization contributed to the export of educational services. The role of this sector is undoubtedly significant, since, on the one hand, the development of a modern economy is based on knowledge and requires the training of highly qualified personnel and, on the other hand, the export of educational services is a profitable sector of many states. New conditions, and above all, the global pandemic and competition, the development of industry 4.0, and several others, have significantly affected education. Thus, it is of scientific interest to consider the impact of the current situation on the export of educational services. The authors analyzed the problems, which some countries providing educational services and receiving them, have encountered. The question is how to provide educational services and complete the learning process in conditions of people's complete isolation. The authors conclude that a global network, and the young people's generation who quickly adapt to remote learning, solve these problems. People had the opportunity to receive educational services while isolated in their own or another country and receive additional education online.

2357-1330 © 2022 Published by European Publisher.

Keywords: Integral assessment, logistics systems (LS), levels of the rationality of LS, mining industry, scoring method

1. Introduction

Global trends in economic development, expressed in the globalization processes and internationalization of educational services of national economies, have led to the effectiveness of the most promising form of providing these services – their export. In modern realities, the vector of strategic development and approaches to the place and role of the higher education system are radically changing. The redistribution of educational resources is becoming increasingly widespread in the world. Developed and developing countries faced the question of the importance of supplying educational services to foreign countries, attracting overseas students, and the degree of investment in national universities.

The export of educational services has faced global problems caused by a worldwide pandemic in modern conditions. The new reality caused by international competition and the predicted crisis in the context of a pandemic changes the systemic and institutional approaches to higher education, the requirements of the modern global labour market, and it leads to changes in the export market of educational services.

Because the contemporary economy is characterized increasingly as an economy based on knowledge and innovation, some scientists emphasize the increasing importance of education. However, nowadays, the export of educational services has faced global problems caused by a worldwide pandemic. It is of scientific interest to consider the prospects of changing reality in the export of educational services related to the current situation.

2. Problem Statement

Currently, several economic and political prerequisites have formed the global economy of the world economy, the structures of which have become increasingly interconnected. Professional, financial, and academic factors and incentives have emerged in the world community for the increased interest of overseas students in prestigious universities abroad. Today, modern and ambitious youth should possess such significant qualities that will open doors to them in the promising future. Thus, it encourages them to study in international programs at foreign universities with a high rating and receive scientific degrees with rapidly developing and advanced technologies at the world level. It is crucial to consider the issue of exporting educational services. The works of foreign and domestic authors consider theoretical aspects of the export of educational services. So, Polak M. studies models of export activity, in which he distinguishes three stages of the internationalization process: centralized, development stage, and decentralization stage (as cited in Makhotaeva et al., 2019). Foreign literature covers the international students' mobility factors (Chadee & Naidoo, 2009).

The economic theory defines the higher education market as an intellectually designed space where institutions of higher education ("sellers") offering admission meet students' needs and needs of their parents ("buyers") in higher education. Shinkovsky, M.Yu., Petrov M.B., Kuchits I.O., Morozova T.V., Kozyreva G.V. and the like (as cited in Yermakova & Nikulina, 2019) consider the export of educational services in the context of the development of border regions. As for the research of the impact of epidemics on the economy, it is possible to study foreign and domestic authors' works.

In Russia, the authors consider a model for assessing the socio-economic consequences of epidemics on the socio-economic development of Russia. Foreign researchers (Suhrcke et al., 2008) have estimated the impact of non-communicable diseases on the economy and developed an epidemic preparedness index (EPIindex) (Geon, 2020). The studies of world organizations WorldBank, the World Health Organization, and several others highlighted the issues of the impact of pandemics.

3. Research Questions

Issues to be investigated:

1. What are the current trends in the export of educational services?
2. How to allocate the educational services market in the world? Which countries are dominant?
3. What is the role of the market of educational services belonging to the Asia-Pacific region, the Russian Federation?
4. What factors have influenced changes in the export of educational services?
5. What are the problems of educational services that developed in the global economy and individual countries in nowadays conditions?
6. What are the prospects for the export of educational services?

4. Purpose of the Study

The purpose of the study is to analyze the trends of the educational services export. The authors also aim at identifying the problems and prospects of their development.

5. Research Methods

The authors applied such general logical research methods in this article as analysis and synthesis and separate elements of the statistical procedure in the data on the export of educational services analysis.

The authors identified semantic units such as "the export of educational services" and "global pandemic" during a content analysis of Internet resources. Further, the researchers examined the material collections in the specified areas and investigated the frequency of their use. They revealed that the problem of the pandemic impact on the export of educational services has not yet been examined thoroughly at this period.

The analysis of the literature sources of the scientometric database of Web of Sciences, their assessment and interpretation made it possible to assess the current situation in the world economy. The leading approaches in the study were to study new materials of the scientometric database to analyze trends in the export of educational services and the consequences of the global pandemic impact on the export of educational services.

6. Findings

Currently, the export of educational services is undergoing significant changes. It is a vital component of the transition to an innovative path of development of any economic system with the intellectual potential of the population to be crucial. This fact determines the accelerated growth and the demand for educational services at the international level.

Domestic and foreign authors defined the notion of the export of educational services. In a general sense, the export of services includes the export of intangible products of the service sector, including commercial, professional, and consumer services: banks services, financial and insurance companies services provided to foreign clients, freight services, sale abroad of patent licenses, copyrights, know-how, software, engineering and consulting services, artists' performances abroad, teachers' lectures, reception of foreign tourists and students, copyright services, and the like (Faminsky et al., 2000).

It is significant to note that the export of education is considered a "global business", on the one hand, aimed at providing educational services to students and trainees from other countries, expanding cultural and economic ties. On the other hand, it aims at making a profit to contribute to export diversification (del Rosal, 2018).

By the end of the 20th century, overseas students mainly came from Europe, the USA, Australia, Canada, New Zealand, and some Oceania countries through short-term student exchange programs abroad.

The international market of educational services was gaining strength and becoming more competitive. The economic feasibility and the idea of overseas students' mobility for these states and their national and institutional structures, together with educational centres, consisted in stimulating and promoting the state policy. It was aimed at identifying strategies for the higher education system development. All these increased its prestige and promoted the curricula development under the demand and requirements of the modern labour market, and it also influenced universities' financing (Belvavina & Bhandari, 2012). According to UNESCO forecasts, the number of international students may exceed 7 million people by 2025. And as far as the volume of the global market of educational services is concerned, it will amount to billions of dollars.

Due to the growing globalization of the educational service market of higher education, overseas students today get more opportunities to study at foreign rating universities due to the increased motivation of students themselves and the high quality of services provided. Over the past decades, new ideas and trends in the educational services market have diversified its image. This market is increasingly becoming exclusive, consisting of plenty of competencies and meeting the requirements and conditions of the global labor market.

The central principles for the export of educational services development are the high profitability of this industrial sector and significant financial resources from the sale of educational services. Thus, the latest NAFSA analysis shows that international students studying at colleges and universities in the United States contributed \$41 billion and supported 458,290 jobs in the U.S. economy during the 2018-2019 academic years. Another reason is connected with the spread of the "soft power" of foreign states through the opening of branches of educational institutions, the allocation of grants for training. There are

issues connected with attracting highly talented students from the country and abroad. A Polish student who studied at the University of Arizona created a documentary nominated for the Rocky Mountain Emmy Award in 2015.

The share of overseas students in the total number of students is an indicator of the university's effectiveness. The export of educational services is an important area of public policy in the United States, Great Britain, Canada, Europe, and the Asia-Pacific countries. According to the Agency for Cooperation of Countries and Their Development (OECD) and UNESCO statistics, more than 50 % of foreigners from the total number of students at universities study in the USA, Australia, France, Germany, Great Britain, New Zealand. The largest %ages of such students at universities in these countries are from Japan, South Korea, Turkey, China, and India. So, in the USA in 2019, the total number of international students was 1,095,299, which is 0.05 % more than last year. International students make up 5.5 % of the total U.S. population with higher education. China remained the largest source of international students in the United States in 2018-2019 when 369,548 students enrolled in Bachelor's and Master's degree programs and optional practical training programs, an increase of 1.7 % compared to 2017-2018. The results are the following worldwide: India (202,014, + 2.9 %), South Korea (52,250, -4.2 %), Saudi Arabia (37,080, -16.5 %) and Canada (26,122, +0.8 %) round out the top five. Emerging market countries showed some of the highest growth rates for the year, especially Bangladesh (+ 10.0 %), Brazil (+9.8 %), Nigeria (+5.8 %), and Pakistan (+5.6 %).

The main prerequisites for this process are to increase the requirements for the educational services quality, which, on the one hand, constitute one of the most profitable export fields. On the other hand, they contribute to the geopolitical and economic interests of the country. Governments and private investors of the leading countries exporting educational services provide targeted and profound support to national universities while attracting overseas students. The export of universities' educational services in foreign countries is realized through Bachelor's and Master's degree programs and doctoral studies, together with qualification courses at the university (Bontis, 1998). Among the main specialities chosen by foreigners for study are MBA programs - 21%, technical and engineering sciences - 18.4 %, humanities - 8.9 %, mathematical sciences, and programming - 8.8 %.

As mentioned above, along with the developed countries that are leaders in the export of educational services of universities, universities of the Asia-Pacific countries have recently been gaining momentum in this area. The Asian integration of the higher education system is rapidly growing. A large flow of overseas students is increasing every year at the leading universities of the Asia-Pacific countries, providing potentially significant social ties between these states. The most attractive universities in the Asia-Pacific region, where the mobility of overseas students is increasing, are universities in China, South Korea, and Hong Kong. Cross-border education is also actively developing in countries today, taking the form of franchising, distance education, and a branch network.

The market of educational services of Chinese universities is particularly interesting for analysts of the Asia-Pacific region. China is the principal supplier of students to study at foreign universities in the world. Since 2013, more than 400 thousand students have left China for foreign universities (more often in the USA), annually increasing by 20% in 2007-2011. By 2014 this figure was forecast to have increased to 550 thousand people, and by 2020 - to 650 thousand people.

Over the past two years, 620 thousand Chinese have chosen to study overseas, giving preference to studying in the USA, Great Britain, and Canada. China has become one of the largest suppliers of international students to Western universities, and this category of students is considered a new source of income by universities. According to "GrokChina," they bring annually \$2.5 billion in revenue to Canada, the UK, the USA, and Australia.

More than 1.6 million Chinese citizens have studied at foreign universities in 2013 during the past decades. The same year 353.5 people returned to the country after receiving higher education abroad.

However, China is also an active provider of educational services of national universities to overseas students from other countries. Recently, hundreds of Chinese universities have been fighting for international student mobility with the support of the Ministry of Education of China. China planned to expand the number of foreigners in its universities to 500 thousand people by 2020.

By the present, China has concluded agreements on mutual recognition of educational qualifications and academic degrees with 41 countries and regions of the world. Students and postgraduates from 200 countries study in China.

The export of education for Russia is of strategic importance, since through the training of foreign students, Russia, using "soft power," is gradually being integrated into the international space.

Russia attracts 6 % of the global number of international students. It is the eighth place after such countries as the USA, Great Britain, Australia, China, Canada, Germany, and France. At the same time, our country exports more education than it imports as more students from abroad study in Russia than our compatriots abroad. The share of overseas students has increased by 5.7 % over the past year and by 10 % over ten years.

Thus, three dominant educational services markets have been formed (Table 1.) at present.

Table 1. The dominant suppliers of international students to the global higher education market

Market	Supplier
US market	China, India, Malaysia, Japan
Australia, New Zealand, Japan	Singapore, Middle East, Africa
European market	EU member states, including Russia

Considering the problems that arise in the export of educational services, we should note that one of the issues is the high level of competition for attracting students. The world's leading universities (Melikyan, 2018) from the United States of America, Germany, and Great Britain, with a concentration of more than 80% of all students, offer various topical programs, for example, programs related to business organization, they focus training on the practical component. However, in actual practice, after completing their studies, students from other countries cannot find a job in this country, and after paying significant amounts for tuition, they return to their homeland (Fedotova et al., 2019; Nefedova, 2017).

The problem of exporting educational services lies in the difference in targets and career preferences: if, for example, Russian students prefer such Russian companies as Gazprom, Gazprom Neft, Rosneft, Rosatom, Lukoil, Transneft, then, for instance, in the United States, these are high-tech companies such as SpaceX, TeslaInk, Google, Boeing, NASA (Kasatkin et al., 2019). Other problems

include lack of experience and knowledge in marketing, insufficient motivation and commitment, and lack of coordination in the education export (Lönnqvist et al., 2018).

The problem also lies in the fact that universities do not have programs for integrating overseas students into a new environment. There are no so-called acculturation or separation strategies, which generally makes it difficult to understand and be receptive to mastering the educational program. So, for example, the problems of international students in Russia are as follows: difficulties in organizing everyday life, free time, and domestic difficulties. There are problems associated with the personality transformation in the conditions of initial adaptation and "entry" into a new environment.

There are problems associated with differences in educational programs, differences in the organization of the educational process, the lack of adapted methodological materials, and the like.

A new problem has arisen in providing educational services in connection with the current situation on COVID - 19. Thus, foreign universities refused to pay insurance to overseas students, which made it impossible to continue further studies. Its consequence was the problem of threats to life and students' safety. They faced a difficult life situation in the absence of parental support.

The COVID-19 outbreak is having a devastating impact on global education. According to the latest data published by UNESCO, as of March 23, 2020, about 1.3 billion students worldwide could not attend school or university. In this regard, it would be advisable to transfer students to remote training, but at the same time, another problem arises. The fact that universities began to shift students to online learning, but many do not have the necessary equipment is pointed out. There is no place where a student could study in isolation. There is a problem of the time difference, while distance learning reduces the quality of services provided compared to traditional training in direct contact with a teacher.

7. Conclusion

Despite some problems, the prospects for the export development of educational services are associated with an increase of overseas students. It is due to globalization, integration, alongside the high profitability of this sector of the economy.

The COVID-19 pandemic has led to changes in the interaction between universities and students. Educational institutions worldwide will use available technological tools to create distance learning content for students in all sectors. Educators around the globe are experiencing new opportunities to act differently and with greater flexibility, which leads to the potential benefits of accessibility of education for students around the world. These are new ways of learning that were previously largely untapped.

UNESCO is developing several global projects, which provide education and access opportunities for young people around the globe. Thus, the "Global Educational Coalition Covid-19" project unites more than 80 public and private partners. The project is a multisectoral partnership to ensure proper distance learning for all students. It should provide opportunities for inclusive education for children and young people during this period of sudden and unprecedented disruption of education. Investments in distance learning should mitigate the immediate disruption caused by COVID-19 and develop approaches to develop more open and flexible education systems in the future.

The "CodeTheCurve Hackathon" project aims to support young innovators, scientists, and designers worldwide in developing digital solutions to combat the COVID-19 pandemic. The project

development is based on UNESCO's experience in digital technology skills and professional development for young people, where young women-software developers and designers are at the centre of attention.

Shortly, universities should move from an educational and research institution to a source of innovation and innovative businesses, become a so-called university of entrepreneurship and a centre of scientific production. In other words, the university should be one of the components of the technology platform as "a tool for combining the efforts of various parties - the state, business, science - in identifying innovative challenges, developing a strategic research program and determining ways to implement it." The main objectives of such platforms are considered to support the development and implementation of technologies. They are a key to solving the most crucial economic and social problems. The formation of a shared vision and strategic plans for the development and application of these technologies, as well as a significant increase in business investment in research (due to a closer approximation of the research sphere of the university (intellectual capital) to industry, production, and business) and improvement of market conditions for innovative products, are in focus (Sauvé, 2002).

Recently, the higher education system has acquired the features of an educational product with its consumer value. It is sold and bought in domestic and foreign markets, and market methods and mechanisms regulate it.

Nowadays, the financing of universities depends on the degree of involvement and participation of their intellectual resources in research activities, the preparation of graduates for a professional career, the evaluation factor of their employment in the university ranking as a whole, the number of publications with a citation index, the availability of scientific schools at the university, the material and financial conditions for training, the level of laboratories and technical equipment, the university competitiveness, the effectiveness of the implementation of international activities of the university for the provision of educational services, other factors (Aleksankov, 2003).

References

- Aleksankov, A. M. (2003). *Metodika razrabotki innovatsionnoy programmy vuza po eksportu obrazovatel'nykh uslug* [Methodology for developing an innovative university program for the export of educational services]. Saint Petersburg.: St. Petersburg State Polytechnic University Publishing House.
- Belvavina, R., & Bhandari, R. U. S. (2012). *Students in Overseas Degree Programs: Key Destinations and Fields of Study*. Institute of International Education.
- Bontis, N (1998) Intellectual capital: an exploratory study that develops measures and models. *Management Decision*, 36(2), 63-76.
- Chadee, D., & Naidoo, V. (2009). Higher educational services exports: sources of growth of Asian students in US and UK. *Service Business*, 3(2), 173-187.
- del Rosal, I. (2018). Export diversification and export performance by Destination Country. *Bulletin of Economic Research*, 71(1), 58–74. <https://doi.org/10.1111/boer.12181>
- Faminsky, I. P., Bulatov, A. S., Vylegzhanin, A. N., & Zav'yalov, P. S. (2000). *Vneshneekonomicheskiy tolkovyy slovar'* [Foreign Economic Explanatory Dictionary]. Infra-M.
- Fedotova, O., Platonova, E., Tregubenko, E., & Avanesyan, G. (2019). Development of the export potential of Russian education in the modern strategic discourse. *SHS Web of Conferences*, 70, 02005. <https://doi.org/10.1051/shsconf/20197002005>

- Geon, H. B. (2020). Coronavirus Disease, School Closures, and Children's Mental Health. *Journal of the Korean Academy of Child and Adolescent Psychiatry*, 31(2), 74-79. <https://doi.org/10.5765/jkacap.200010>
- Kasatkin, P. I., Koval'chuk, YU. A., & Stepnov, I. M. (2019). Rol' sovremennykh universitetov v formirovaniy tsifrovoy povyshatel'noy volny dlinnykh tsiklov Kondrat'yeva [The role of modern universities in the formation of the digital upward wave of long Kondratiev cycles]. *Voprosy ekonomiki*, (12), 123-140.
- Lönnqvist, A., Laihonon, H., Cai, Y., & Hasanen, K. (2018). Re-framing education export from the perspective of Intellectual Capital Transfer. *Journal of Studies in International Education*, 22(4), 353–368. <https://doi.org/10.1177/1028315318773141>
- Makhotaeva, M. Yu., Bakumenko, O. A., & Varlamov, G. V. (2019). *Eksport obrazovatel'nykh uslug vs internatsionalizatsiya universiteta [Export of educational services vs internationalization of the university]*. Publishing House of the St. Petersburg University of Management Technologies and Economics.
- Melikyan, A. (2018). Vnutrenniye faktory rezul'tativnosti eksporta obrazovaniya v rossiyskikh vuzakh [Internal factors of the effectiveness of the export of education in Russian universities.]. *Voprosy obrazovaniya. Pedagogicheskiye issledovaniya*, (3), 146-179.
- Nefedova, A (2017). The Scope, Structure and Purpose of the Export of Russian Higher Education. *Mir Rossii-Universe of Russia*, 26(2), 154-174.
- Sauvé, P. (2002). *Trade, Education and the GATS: What's In, What's Out, What's All the Fuss About? OECD/US Forum on Trade in Educational Services*. USA, Washington.
- Suhrcke, M., Rocco, L., McKee, M., Mazzuco, S., Urban, D., & Steinherr, A. (2008). Ekonomicheskiye posledstviya neinfektsionnykh zabolevaniy i travm v Rossiyskoy Federatsii [Economic consequences of noncommunicable diseases and injuries in the Russian Federation]. *World Health Organization, on behalf of the European Observatory on Health Systems and Policies*. <https://apps.who.int/iris/bitstream/handle/10665/276982/9789289042925-rus.pdf?sequence=4&isAllowed=y>
- Yermakova, Zh. A., & Nikulina, Yu. N. (2019). Eksport obrazovatel'nykh uslug iz prigranichnogo regiona [Export of educational services from the border region]. *Economy of Region*, 15, 191-204.