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**MASTER'S LEVEL QUALIFICATION PAPER**

on the topic "THE INFLUENCE OF EDUCATION  
ON INTERNATIONAL LABOUR MIGRATION"

Specialty 292 "International Economic Relations"

Student 6<sup>th</sup> Course  
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Master's level degree qualification paper contains the results of own research. The use of the ideas, results and texts of other authors has a link to the corresponding source

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## SUMMARY

of Master's level degree qualification paper on the theme  
“THE INFLUENCE OF EDUCATION  
ON INTERNATIONAL LABOUR MIGRATION”

student Olha Yeremenko  
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The main content of the master's level degree qualification paper is set out on 55 pages, including a list of used sources of 144 titles (10 pages). The work contains 1 table, 9 figures, as well as 12 applications (10 pages).

**KEYWORDS:** HIGHER EDUCATION, INTERNATIONAL LABOUR MIGRATION, STUDENT MOBILITY, SOCIO-ECONOMIC DEVELOPMENT, HAPPY PLANET INDEX, GLOBALISATION.

The purposes of the master's level degree qualification paper are to (a) explore how socio-economic migration movements can be projected in terms of higher education, public satisfaction with the scale of educational migrants and (b) compare the potential of the high- and low-income countries' higher education complex.

The object of the study is the economic, educational and social state mechanisms of the OECD and Third World countries, which affect themselves and the effectiveness of future human progress.

The subject of the study is indicators of international educational rankings and standards for higher education, societal well-being scores on the Happy Planet Index and the current state of international student mobility.

To achieve this goal and objectives there were used following scientific methods of research: statistical (for analysis of statistical data presented in official documents), system analysis (for theoretical and methodological substantiation of current trends in quality control of higher education and factors of educational migration), comparative analysis, correlation and regression analyses (to assess the dynamics of higher education quality and student migration), graphic analysis, forecasting method (for forecasting problems and prospects of quality assurance in tertiary student migration processes and abroad for the coming years).

The information base of the master's level degree qualification paper is the research used scientific articles by domestic and foreign authors, textbooks and manuals on selected topics, analytical reports of domestic and international, including international organizations such as the OECD, EU, CEDOS, World Bank, government statistics, website publications, conference and research papers.

The main scientific results of the work are as follows:

- 1) author's definition of control of higher education through international public and private organisations;
- 2) creation a block concept of grouping countries of the world "teachers-students";
- 3) identification correlations between student mobility and host population satisfaction;
- 4) revealing the regression relationship between the value of mobility flows and spending per student;
- 5) examination the trend of educational migration among students;
- 6) formation the author's approach to describing the main problems of improving the quality of global higher education and socio-political ways of solving them.

The obtained results can be used by national ministries of education and social policy together with international organisations in developing socio-economic strategic plans to improve the competitive advantage of countries from which most migration to external labour markets takes place, as well as in defining strategies for developing higher education and expanding it to all sectors of global society.

The results of the approbation of the main provisions of the master's level degree qualification paper were considered at:

- 1) II International Scientific and Practical Conference "International Economic Relations and Sustainable Development";
- 2) International Scientific and Practical Conference of Students and Young Scientists named after Professor Balatsky of "Economic Problems of Sustainable Development";
- 3) International Scientific and Practical Online-Conference "Socio-Economic Challenges".

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TASKS FOR MASTER'S LEVEL DEGREE QUALIFICATION PAPER

(specialty 292 "International Economic Relations")

student 6<sup>th</sup> course, group ME.M-11aH  
(course number) (group's code)

Olha Yeremenko  
(student's full name)

1. The theme of the paper is *The Influence of Education on International Labour Migration*  
approved by the order of the university from « 27. » October 2022 № 0969-VI
2. The term of completed paper submission by the student is «11.» December 2022
3. The purposes of the qualification paper are to (a) explore how socio-economic migration movements can be projected in terms of higher education, public satisfaction with the scale of educational migrants and (b) compare the potential of the high- and low-income countries' higher education complex.
4. The object of the research is the economic, educational and social state mechanisms of the OECD and Third World countries, which affect themselves and the effectiveness of future human progress.
5. The subject of research is the indicators of international educational rankings and standards for higher education, societal well-being scores on the Happy Planet Index and the current state of international student mobility.
6. The qualification paper is carried out on materials of domestic and foreign authors, textbooks and manuals on selected topics, analytical reports of domestic and international, including international organizations such as the OECD, EU, CEDOS, World Bank, government statistics, website publications, conference and research papers.

7. Approximate master's level degree qualification paper plan, terms for submitting chapters to the research advisor and the content of tasks for the accomplished purpose is as follows:

Chapter 1 The theoretical basis of research: main approaches to the management of educational quality and labour migration

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(title, the deadline for submission)

Chapter 1 deals with the review the general state of the international higher education complex; the exam of the external legitimate factors for quality assurance and control in higher education in the global community; the identification of the tools for the implementation of modern innovative educational programmes.

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(the content of concrete tasks to the section to be performed by the student)

Chapter 2 An investigation of the major trends in labour migration development through higher education systems

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(title, the deadline for submission)

Chapter 2 deals with the clarifying the expected outcomes of the relationship between international labour migration and the national level of higher education; the assess the peculiarities of social responses to the development of student migration flows; the identification of the impact of funding factors on student mobility; the assess of the educational potential parity of the developed world's block of countries with the third world block of countries.

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(the content of concrete tasks to the chapter to be performed by the student)

Chapter 3 Towards improving educational development mechanisms based on the outcomes of student international labour migration

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(title, the deadline for submission)

Chapter 3 deals with the analysis of the current status of international student labour migration; the outline current trends, strategies and foreign experience in the development of the international higher education market; the identification of the main difficulties in education and migration personal and societal decisions and specific features of overcoming them.

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(the content of concrete tasks to the chapter to be performed by the student)

8. Supervision on work:

Chapter	Full name and position of the Advisor	Date	
		task issued by	task accepted by
1	Yuriy Petrushenko, Doctor of Economics, Professor	02.11.2022	18.11.2022
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3	Yuriy Petrushenko, Doctor of Economics, Professor	20.11.2022	11.12.2022

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## INTRODUCTION

Relevance of the topic. The 21<sup>st</sup> century is the century of globalization. Students are more mobile than ever before, and the globalization of the workforce is becoming the new norm. The role of students in international labour migration is a highly contested topic. On one hand, there are those who argue that students should be able to freely migrate in order to access the best education and career opportunities. On the other hand, there are those who argue that international labour migration puts an undue burden on host countries and that students should be encouraged to stay in their home countries to contribute to their development. There is no easy answer to this question. For this reason, the topic of this paper remains highly relevant in the context of global politics.

The degree of the studied problem. In higher education, there is still a debate about the objectivity of student and labour migration, with an attitude of special value to foreign degrees and the higher level of society (Abbott and Silles; Hayes and Springerlink; Mishchuk et al.; etc.). Some scholars argue that the potential of Middle Eastern and African educational systems is not as useful as American and European degrees, and therefore developed countries are less likely to recruit and support migrant graduates (Arar). However, there are also a number of studies that show that graduates of foreign education systems are just as likely to be hired and succeed in their careers as graduates of domestic ones (Haussen and Uebelmesser). And the debate over how to distribute high-quality, fairly valued higher education is likely to continue for some time.

The purposes of the master's level degree qualification paper are to (a) explore how socio-economic migration movements can be projected in terms of higher education, public satisfaction with the scale of educational migrants, and (b) compare the potential of the high- and low-income countries' higher education complex.

To achieve these purposes, the paper solved the following main tasks:

- to review the general state of the international higher education complex;
- to examine the external legitimate factors for quality assurance and control in higher education in the global community;
- to clarify the expected outcomes of the relationship between international labour migration and the national level of higher education;
- to assess the peculiarities of social responses to the development of student migration flows
- to identify the tools for the implementation of modern innovative educational programmes;
- to identify the impact of funding factors on student mobility;
- to outline current trends, strategies and foreign experience in the development of the international higher education market;
- to analyse the current status of international student labour migration;
- to assess the educational potential parity of the developed world's block of countries with the third world block of countries;
- to identify main difficulties in education and migration personal and societal decisions and specific features of overcoming them.

The object of the study is the economic, educational, and social state mechanisms of the OECD and Third World countries, which affect themselves and the effectiveness of future human progress.

The subject of the study is the indicators of international educational rankings and standards for higher education, societal well-being scores on the Happy Planet Index, and the current state of international student mobility.

Information base of researches. The research used scientific articles by domestic and foreign authors, textbooks and manuals on selected topics, analytical reports of domestic and international organisations, including the OECD, EU, CEDOS, and World Bank, government statistics, website publications, conference proceedings, and research papers.

Research methods. The paper uses statistical (for analysis of statistical data presented in official documents), system analysis (for theoretical and



methodological substantiation of current trends in quality control of higher education and factors of educational migration), comparative analysis, correlation and regression analyses (to assess the dynamics of higher education quality and student migration), graphic analysis, forecasting method (for forecasting problems and prospects of quality assurance in tertiary student migration processes and abroad for the coming years).

Elements of scientific novelty of the work are the definition of control of higher education through international public and private organisations; creating a block concept of grouping countries of the world "teachers-students"; identifying correlations between student mobility and host population satisfaction; revealing the regression relationship between the value of mobility flows and spending per student; examining the trend of educational migration among students; forming the author's approach to describing the main problems of improving the quality of global higher education and socio-political ways of solving them.

Approbation of research results. According to the results of the research, theses were published in the materials of the scientific conference Vorontsova A.S., Yeremenko O.O. Lifelong learning concept development as a guarantee of socio-economic stability: materials of the International Scientific and Practical Online-Conference "Socio-Economic Challenges". Sumy, 2022. and Petrushenko Y.M., Yeremenko O.O. The issue of educational migration among students of higher educational institutions of Ukraine. International economic relations and sustainable development. Proceedings of the II Intern. S&P Conf. Sumy. 2021; and implemented within the R&D "Reforming the lifelong learning system in Ukraine to prevent labour migration: a cooperative model of institutional partnership" (state registration number 0120U102001) and "Convergence of economic and educational transformations in the digital society: modelling the impact on regional and national security" (state registration number: 0121U109553).

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## **CHAPTER 1 THE THEORETICAL BASIS OF RESEARCH: MAIN APPROACHES TO THE MANAGEMENT OF EDUCATIONAL QUALITY AND LABOUR MIGRATION**

### 1.1 The international higher education complex as a tool to influence labour migration flows

Education is the cornerstone for the development of future generations of humanity. On the one hand, it gives freedom to know, accept, and realise oneself in the existing world, and on the other, it forms a control over the depth of acceptable knowledge, its orientation, and its truthfulness. Higher education provides equal opportunities for students to move to the next stratification level of society, which is justified both economically and socially. Meanwhile, many people value the mere fact of having a degree rather than its essence. This higher education bubble is caused by the fact that the demand for its consumption exceeds the supply provided by limited educational resources (such as universities, high schools, colleges, and so on), resulting in a large number of inefficient or ineffective degrees, which in turn causes a general crisis of qualified professionals and professionals.

Because people with higher education are more empowered and have more opportunities, they are respected, listened to, promote progressive ideas, and constitute a social and intellectual "elite". During the fourth industrial revolution, it is important to instil the idea that, within a framework of multiple intelligences, everyone should strive to be a successful and useful person. Also, social trends should aim to change the relationship between individuals personally, organizations, and society as a whole, to precisely renew the public connotation of intelligence and push the boundaries of meritocracy among the public masses. However, the question remains: when does the nominal quality of higher education translate into real quality? Below, we consider the main elements in the development of a culture of international education and its quality.

Although the term "quality" is widely used by a variety of practitioners and academics in a wide range of fields, there is still no universally accepted definition, as different formulations of the term are appropriate in different situations. Fortunately, however, we are able to consider some of them.

Ensuring and, even more so, managing the quality of the educational process is not a simple task; it requires a clear understanding of the terminology and basic categories. The earliest references to the term "quality" are considered to be in the writings of Aristotle. He held the view that quality can be viewed from four perspectives: as established or transient properties, innate properties or lack thereof, existing properties or states, and outline or appearance (Ammonius et al.). The main idea was that it was a permanent, but not intrinsic, feature of an object, indicating the dialectical nature of the concept of quality. With the development of different philosophical currents, the concept of quality has evolved, resulting in a lack of a unified approach to the term in modern times (Aristotle and Press).

In the European Association for Quality Assurance in Higher Education's review, all participants felt that quality was at the core of their work, and this was even evident in the names of the agencies they represented (Crozier et al.). But because of its very nature, according to the participants, it is incredibly difficult to define it in any language. The relative definition of quality, which involves assessing against a predetermined norm, is different from the absolute definition of quality, which allows the results to be assessed against a scale. It was often unclear whether this distinction was recognised between languages, much less within languages.

In addition, in terms of quality management, the ISO 9000 quality definition was proposed in 2005 as a universal definition introduced by the world's largest developer and publisher of international standards, with a continuous analysis of the definition of customer requirements and taking into account that the appropriate word to be used in the definition of quality is stakeholder.

Given the previous discussion, the literature review did not provide a clear and reliable definition of quality. As a result, the present study proposes a new definition of quality based mainly on a synthesis of all the above-mentioned options.

In light of the above, quality can be defined as follows: it is a generality of criteria over and above the positive impact of the outcome.

The ISO 9000 standards previously mentioned relating to quality management in organisations have been widely implemented in education, for example in the British system since 1990 and in the Chinese system in the late 1990s (Cunningham-Wood and Wood). Currently, the top performing countries in quality assurance in higher education in 2022 include Australia, Canada, Germany, the USA, Switzerland, the UK, and others, as can be seen in Figure 1.1 (Educations Media Group).

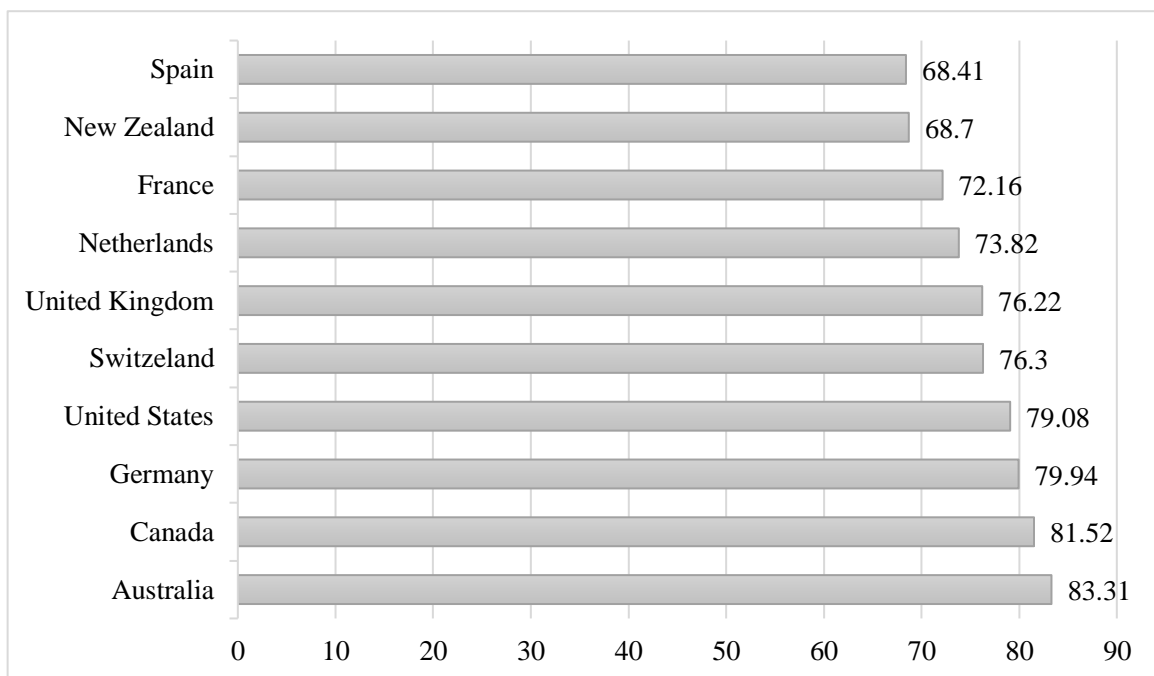


Figure 1.1 – Leading countries for overall education quality indicators in 2022 by Educations Media Group

The quality of education plays an important role in preparing students for success in today's national economies in these countries. Employers are more willing to hire graduates from the best universities and are more likely to offer them higher salaries and benefits. This, in turn, leads to more and more students enrolling in these universities.

One way of ensuring the quality of education is through international accreditation. Accreditation is a process whereby an institution is assessed against a set of standards to ensure that it meets or exceeds the required quality of education. Many employers and universities consider accreditation an important factor in determining whether an institution is reputable.

International accreditation is a valuable process that helps to ensure the quality of education for students around the world. Some scholars use the term "accreditation" directly as an indicator of quality (Kumar et al.). Based on various reviews of the literature, we can define accreditation as a procedure in which a higher education institution or programme goes through a process of assessment for compliance with pre-defined standards or criteria that have been identified, reviewed, and critically evaluated by experts.

According to the National Accreditation Board of India, accreditation is a process of quality control and improvement whereby an educational institution or programme is assessed against certain standards. The purpose of such accreditation is to promote and recognise excellence in higher education (NBA).

To sum up, we can conclude some of the benefits of international accreditation, including

- recognition of the quality of the institution by other accredited institutions;
- access to international students;
- access to international funding;
- the possibility of recruiting highly qualified teachers and staff.

Thus, obtaining international accreditation for an institution has its own undeniable advantages. By ensuring that the university meets the highest standards, the society will be able to give its students the best possible education and prepare them for success in their future careers.

## 1.2 Features of international higher education rankings and standards as an advanced educational concept of labour migration

No matter how many different descriptions there are for understanding the quality of an education system in terms of the practise of care and education, the core of measuring this integrative characteristic lies in the realisation of educational goals of a particular type and period of learning. Different regions and countries, different environments, and different consumers have their own understanding of quality and requirements for its standards. Therefore, we believe that the most important focus in this aspect is the degree to which the needs of the main participants in the educational process are met, rather than the sum of all the characteristics under study. As a consequence, the individual needs of specific groups of learners must be fully taken into account. The time has passed when learning was important and basic, because now the ultimate goal is all-round development, which is very much reflected in the notion of quality of education, the formation of a list of the best educational institutions, and the development of appropriate standards.

The international assessment and ranking of universities provide a common and supranational perspective for comparison worldwide. Higher education institutions can receive more financial support from countries, businesses, and third parties and attract more students, professors, and academics from around the world. In addition, universities can be used as a benchmark to assess and analyse the quality of their own educational level, from which they can analyse the progress, structure, and quality characteristics of their educational process, as well as address existing shortcomings, gaps, and problems. Since it is obvious that first places in world rankings have already become a guarantee of additional public resources and socio-political effects.

The most predictable division of the various rankings devoted to grading international universities according to their quality would be by territorial coverage. Thus, we have a global and a national level for grading.

To begin with, consider the global, i.e., world, university rankings. There are about 20 of these around the world. They often use 500 to 1,500 institutions around the world for comparison. Since each ranking uses different and unique methodologies, not all universities have the same position. For example, the same university might be among the leaders in one ranking based on student feedback but rank low in another due to a lack of published research. Below we will look at the most important of these, focusing on the quality of education.

The Academic Ranking of World Universities by Shanghai Ranking, or ARWU for short, selects the equivalent number of Nobel Prize and Fields Medal graduates, professors of the same name, and the highest number of citations in each subject area for evaluation (Appendix A.1). Also important are the number of active scientists, the equilibrium number of articles published in Nature and Science (denoted as N&S), the number of indexed articles, the Science Citation Index (SCIE) and the Social Science Citation Index (SSCI), and the per capita average score for the above five indicators. These standards measure the academic performance of global universities in the application of the Academic Ranking (Shanghai Ranking).

The Times Higher Education World University Rankings are a ranking of global universities published by Times Higher Education; a weekly magazine published by a private institution. It is considered one of the most influential university rankings in the world and advocates "credibility, transparency, and accuracy" (Times Higher Education). Appendix A.2 shows the criteria for ranking universities according to the World University Rankings.

The QS Rankings are an annual world ranking of universities published by Quacquarelli Symonds. It is largely compiled through a questionnaire and uses a range of academic indicators to measure the impact of global universities. The assessment list is telling in that it covers global general education and academic disciplines, and the ranking has different criteria for five specific regions: Asia,

Developing Europe and Central Asia, Latin America, the Arab region, and the BRICS countries (Quacquarelli Symonds). Similarly, it is considered one of the most popular university rankings in the world due to its open and transparent survey, although there is some criticism of the objectivity of the reputation categories.

The Webometrics Rankings of World Universities (WRWU for short) are conducted by the Higher Academic Research Council of the Spanish Ministry of Education and are one of many comprehensive assessments of university education in the world (Cybermetrics Lab). Its aim is unique in that it seeks to encourage "universities and research centres around the world to demonstrate their academic responsibility to internationalise electronic journals, research outputs, and research activities," with an explicit focus on the integration of global university databases with the platforms of Google, Google Scholar, Yahoo, Live Search, Exalead, Alexa, and others.

The U.S. News & World Report Best Global University Ranking is compiled on the basis of ten indicators, such as the academic level of the university and its international reputation, to provide an academic sample of ideal universities for students around the world (U.S. News & World Report; Morse and Vega-Rodriguez). However, it is worth stressing that the US News ranking ignores indicators of educational outcomes and further employment conditions.

It can be seen that each ranking has its own unique set of indices, but there are also disadvantages, which means that no current ranking can fully meet the needs of all. As a result, we cannot achieve the necessary comprehensive coverage of the quality level of higher education on a global scale.

However, it is still crucial for educational institutions to adhere to international standards in order for students to get a high-quality education.

It should be emphasised that there is no single answer to the question of what constitutes quality in higher education. This is because quality is subjective, and what one person may consider high quality may not be considered as such by another. However, some of the international standards that are used to measure the



quality of higher education institutions offer an opportunity to significantly improve the situation. We propose to consider the key ones.

One of the international standards is the Bologna Process. The Bologna Process is a set of quality standards for higher education that was created in 1999. These standards are used in 48 European countries and are designed to promote the credibility and comparability of higher education degrees in different countries (Adam).

These standards have had a profound impact on European higher education, and their effects are being felt around the world today. The process has led to a more standardised approach to education, with a greater emphasis on cooperation and collaboration between institutions.

Despite the difficulties related mainly to the balancing of the credit system, the Bologna Process has generally succeeded in its task of creating a more unified and efficient approach to higher education in Europe (Klemenčič).

Another international standard is the International Standard Classification of Education (ISCED). ISCED is the system used by UNESCO to classify educational institutions and programs. Its purpose is to collect and report data on education around the world. ISCED was first developed in the 1970s and is currently used by over 100 countries.

This classification system is important because it allows comparisons to be made between different educational systems. It also helps to identify gaps in education and direct resources to where they are most needed because it consists of seven levels, where the first level is the most basic (preschool) and the seventh is the most advanced (tertiary) (UNESCO).

Meanwhile, it is important to mention the many international organisations that set standards for quality in higher education around the world. These organisations include the International Association of Universities (IAU), the International Baccalaureate (IB), and the Association of Commonwealth Universities (ACU). For a brief description, we suggest taking a look at Table 1.1.

Table 1.1 – Main aspects of the existence of international organisations for quality standards in higher education

Title	Year of foundation	The geographical extent of the impact	Activities
Association of Commonwealth Universities (ACU)	1913	50 countries	Promotes cooperation and interaction between member educational institutions and provides a number of opportunities for students and teachers in scientific and professional fields
International Association of Universities (IAU)	1950	more than 130 countries	Facilitates cooperation and dialogue among member institutions and provides a platform for the exchange of ideas and best practices
International Baccalaureate (IB)	1968	152 countries	Develops international standards for curriculum and assessments and offers professional development opportunities for teachers and school administrators

ACU is the world's first and oldest international university network for the Commonwealth of Nations. Their prescribed purpose is to promote and support Commonwealth higher education through scholarship, research, and knowledge exchange; to advocate for the sector globally; and to work towards a thriving Commonwealth of Universities that are connected to each other and to the world and produce graduates prepared to meet the challenges of the 21<sup>st</sup> century (International Association of Universities and General).

The IAU is a global network of more than 800 universities and higher education institutions in more than 160 countries. Its mission is to promote international cooperation in higher education and research and to facilitate the recognition and mobility of students, scholars, and staff worldwide.

The IAU also aims to improve understanding of the role of higher education in society and to contribute to the development of knowledge about university operations, leadership, and governance (Association of Commonwealth Universities).

The IB is an internationally recognised educational organisation that offers a wide range of programmes and services to schools all over the world. It is divided into three different levels: the Primary Years Programme (PYP), the Middle Years Programme (MYP), and the Diploma Programme (DP). Each level of the IB programme is designed to challenge students intellectually, personally, and emotionally (International Baccalaureate Office).

In recent years, there has been a marked increase in pressure on sovereign countries to raise standards of educational quality to compete in the global economy. As a result, many have adopted international standards such as the PISA (Programme for International Student Assessment) test to measure and compare their educational outcomes.

PISA results are often used to compare the quality of different education systems. For example, a country with a higher PISA score is usually considered to have a better education system than a country with a lower PISA score. In addition, PISA results are often used to inform education policy decisions. For example, a country may use PISA results to decide where to allocate resources or set educational standards (Volante).

Through such pressure, some of the shortcomings of current international education quality standards are exposed. While they may indeed be useful, they also have the property of generalising the uniqueness and local identity of universities in particular. For example, they may encourage a "one-size-fits-all" approach to education that may not be suitable for all groups of students. They can also create pressure and stress for students and teachers alike, which, in the long run, strongly affects the quality of learning outcomes, performance, and enthusiasm.

To summarise Chapter 1, it is worth noting that there is no single and streamlined definition of "quality of education," but most global education policy standards aim to measure key factors such as students' academic performance, university conditions, and access to material and technical resources. In addition, international education quality standards can help inform and shape education policy at both the national and local levels, as well as at the global universal level.

As a result, obtaining a quality higher education is not just about studying abroad or obtaining an honours degree from a prestigious higher education institution. It is about changing the form, content, and method of evaluating society and cultivating an independent way of thinking and a critical model of vision. In this sense, any advanced educational concepts, international quality standards, and effective educational practises that are adopted and imposed on large numbers of students in different countries are social pillars worthy of our scrutiny.

It is more important than ever for students to receive a quality education so that they can succeed in their chosen careers. A good higher education can provide students with the skills and knowledge they need to be successful in the workplace.

It can also help them develop important life skills, such as critical thinking and solving pressing problems, both personal and global. After all, in the future, more and more people who receive a real quality education will look at the development of their home countries from a global perspective, taking into account the healthy promotion of diversity of cultures and opinions, and contribute to their development.

## **CHAPTER 2 AN INVESTIGATION OF THE MAJOR TRENDS IN LABOUR MIGRATION DEVELOPMENT THROUGH HIGHER EDUCATION SYSTEMS**

### **2.1 Exploring the Regression Between International Student Migration and Public Satisfaction Through the International Happiness Index**

The impact of globalisation on higher education is undeniable. People are becoming increasingly mobile, both domestically and between countries, in search of education, a professional start, and better living conditions. This trend is particularly evident in the migration of international students, who numbered around 7.5 million in 2021, compared to 5.6 million in 2018, according to the T.I.M.E. Association (Guillerme).

Higher education abroad has become popular among young people around the world. In many cases, people migrate to study in foreign countries in the hope of achieving a better future. Hence, the aim of this section is to investigate the relationship between quantitative indicators in the form of international students and public funding of higher education and qualitative indicators through the international citizen happiness index and quality levels of higher education. First, we collected data from various sources, such as UNESCO, the World Bank, the OECD, and the World Happiness Report. The relationships were then analysed and illustrated using correlation and regression analyses and visualisation. The findings of this study can have economic, social, and political implications for host countries that want to maintain high levels of societal satisfaction regardless of the level of national development.

Humanity has long divided our planet into groups of countries according to their level of development. There are first-world countries, sometimes known as the "golden billion" countries; second-world countries, many of which were once socialist countries during the Cold War; and third-world countries, often referred to as "developing countries" (Deegan). More recently, scholars have also begun to

identify a fourth world, which consists of the world's poorest countries. These countries cannot be classified as developing because they are not even close to development; rather, they are constantly deteriorating. The grouping situation in higher education remains unchanged.

In higher education, there has been a centuries-long international bipolar divide between the traditional West and East. However, only in recent years has it become excessively pronounced as the gap between rich and poor countries has widened greatly (Keeley). There are many factors contributing to this gap, including different levels of resources and investment in education between the two regions. As a result, the gap between the quality of education in the West and the Third World continues to widen (Orr et al.).

This gap has serious implications for the future of global education. Poor nations are at a disadvantage when it comes to attracting and retaining the best students and scholars. This, in turn, affects the quality of education and research conducted in these regions, as well as the development of the economic and social environment.

The international bipolar division of higher education dates back to the post-World War II era, when the United States and the Soviet Union vied for influence in the world. In order to win the "hearts and minds" of people in developing countries, both superpowers established extensive networks of colleges and universities in their respective spheres of influence. These educational institutions served as soft power tools, promoting the ideologies of their respective governments (Cardozier; Stone Higgins).

In the post-Cold War era, the international higher education complex took on a new role. With the collapse of the Soviet Union, the United States and countries with similar political views are now the dominant force in the creation of intellectual human potential, forming a block of "teachers". The results of various international rankings and regular reviews of the quality of universities and higher education systems confirm this.

According to the rankings of the best countries to study, which were discussed in Section 1, we have identified leaders by region. The following charts, 2.1 and 2.2, as well as Appendix B, provide a visual representation and data table.



Figure 2.1 – Countries ranked by educational attainment, PISA report 2018

In Figure 2.1, we see a literal division of the world into two blocks: the "teacher" countries, with high educational attainment, where students from all over the world go, and the "student" countries, with low or no attainment, where the demographic flow comes from. Figure 2.2 complements the previous judgement by opening up the "teachers" block more fully.

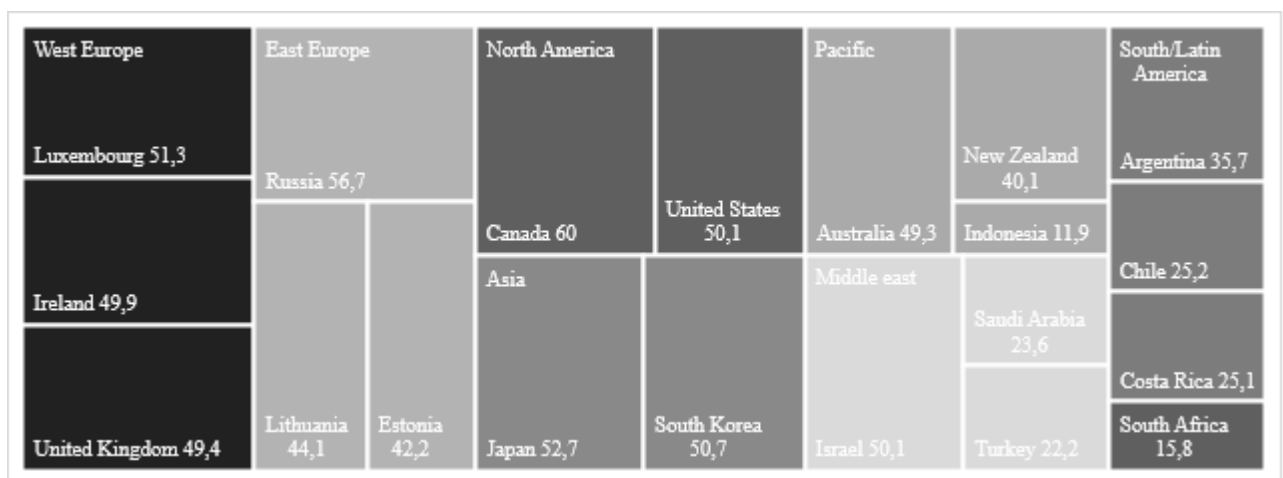


Figure 2.2 – Diagram Tree of countries with the highest share of population with tertiary education by region, %, 2022

The division of the world into reversible poles has its strengths and weaknesses. Contrary to this, in the context of scientific and educational development, such a division is not only harmful but also unacceptable. In a globalised world, it is more important than ever that all people have a global perspective. By studying abroad, international students acquire the skills and knowledge necessary to communicate and work effectively with people from other cultures. This is an important contribution to the global community, and it is one of the many reasons why international students are valuable members of the global community because they gain a global perspective and develop the skills needed to contribute to a more cohesive and cooperative world.

It is widely acknowledged that student migration has a positive impact on the quality of higher education. By definition, it means the movement of students from one country to another in order to continue their studies. This phenomenon is not new and has been occurring for centuries. However, in recent years, there has been a noticeable surge in the number of students choosing to study abroad.

There are certainly many reasons why students choose to migrate for their education. One of the most common is the desire for a world-class education that will provide the skills and knowledge needed to succeed in today's global economy. In addition, many students believe that studying in another country will give them a better chance of finding a job after graduation. And a stable and well-paid job is the key to a happy life in the modern world.

Despite this, while many people in first-world countries take higher education for granted, the same cannot be said for those in third-world countries. The reality is that higher education is a luxury for many in third-world countries, and this has a significant impact on their role in the global future (Mogaji et al.).

Without access to higher education, people in low-income countries are at a severe disadvantage when it comes to competing for jobs and economic opportunities. This limits their opportunities to improve their standard of living and escape poverty. Furthermore, without higher education, people in third-world countries are more likely to remain exposed to violence and instability.



There is now a growing body of research that examines the impact of migration on society, both in terms of the economic contribution of migrants and the changes in society that result from increased social diversity. However, few of them focus on the relationship between migration and societal satisfaction. The International Happiness Index is a valuable tool for measuring this relationship, as it reflects not only the economic outcome but also factors such as social cohesion and the quality of the environment, including the student environment.

The International Happiness Index (also known as the Happy Planet Index, HPI) is a measure of a country's well-being that takes into account factors such as life expectancy, environmental impact, and access to resources (Brulé). Therefore, one of the aims of this study is to test the hypothesis that countries with higher levels of student migration tend to have higher Happy Planet Index scores.

Correlation analysis is a statistical estimation technique used to examine the strength and direction of relationships between two or more variables (Baker). The variables can be anything that can be measured, such as prices, quantities, valuations, etc. This method is used in various fields, including finance, economics, sociological research, etc. It can be used to study relationships between financial variables, social interactions, or simply to identify patterns in data.

The correlation coefficient is a number that reflects the strength of the relationship between variables. A positive correlation means the variables are moving in the same direction; a negative correlation means they are not moving in the same direction (Wherry).

In this master's qualification paper, we decided to first find out the correlation between the country's international student mobility and the ladder of life from HPI (average subjective life satisfaction).

HPI, or the Happiness Potential Index, is a measure of subjective life satisfaction. The ladder of life is a series of measures, each representing a different level of life satisfaction. The higher up countries are on the ladder, the more satisfied their societies are with the life (Arslan).

We found a connection between student mobility and the national Ladder of Life Indexes (Figure 2.3; Appendix D). The findings suggest that country-directed student migration has a weak but significant impact on the quality of higher education and the well-being of the country. According to the Happy Planet Index, countries with intense student mobility tend to have higher levels of happiness. This is probably because they also have higher levels of economic and social development. This, in turn, leads to higher levels of happiness.

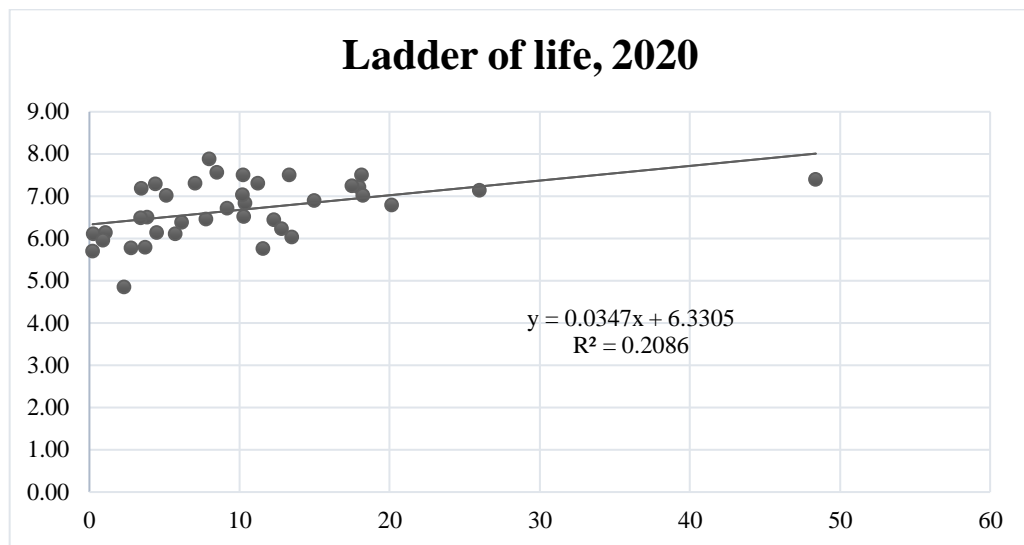


Figure 2.3 – Visual Results of Regression between student mobility and the national Ladder of Life Indexes

Source: OECD; Happy Planet Index

The study also showed that international students have a positive impact on the well-being of the host population. They help revitalise campuses and add diversity to social life. They also help to compensate for the brain drain that often occurs when the best and brightest students are sent abroad for education. This phenomenon can be defined by the balance between international mobility and higher education inclusion.

When international students choose to study in a certain country, they are not only investing in their future but also in that country's future. This is especially true

when students come from places with high-quality education. We propose to designate this through the term "intellectual human potential".

In our view, "intellectual human potential" is an idea of how many people with higher education a country is capable of producing and qualitatively providing. Going back to the geographically determined blocks of higher education, the United States has been able to produce more intellectual human capacity than any other country, making it the dominant force in this field today.

Conversely, the lack of tertiary education in the Third World is a serious problem that needs to be addressed unselfishly and responsibly. Providing access to higher education can help improve the lives of people in underdeveloped areas and contribute to positive change not only locally but also on a global scale.

It is difficult to give a single answer to the question of what makes a migrant a decent or famous person. This is because there are many different criteria that can be used to assess a person's worthiness or prominence. Such migrants from third countries, for example, make a significant contribution to society.

Some examples of worthy and famous migrants include John James Audubon, Dikembe Mutombo, Ahmed Zewail, and so on (Appendix E). Famous migrants often make significant contributions to society, and their stories can inspire students to do the same.

There are a number of reasons why higher education can lead to a drain on human capital. One of the most important factors is the quality of education. If a country's higher education system is inadequate, it is likely that the best and brightest students will leave for other countries for a better life.

Furthermore, as the number of international students grows, it is critical to investigate the relationship between current migration patterns and political-economic support for national quality higher education.

## 2.2 Correlation analysis of quality variables and the financial feasibility of higher education globally

Higher education is directly linked to the quality of labour which is an important component of the economy. Accordingly, there are several economic objectives it can help achieve, such as reducing income inequality, increasing social mobility, and stimulating economic growth. A natural solution to this is to strive to increase the potential of human capital and to attract it.

Today, students have a strong propensity to stay in their host countries even after completing their education. According to a study by Ruiz and Budiman, between 2008 and 2016, the number of international students who graduated from the federal Optional Practical Training (OPT) programme and found employment in STEM fields alone increased by 400%. When highly educated workers leave their home country, it can have a negative impact on a country's development because the home country loses the benefits that come from having a highly educated workforce.

There are a number of other factors that contribute to this trend. First, the global economy has made it easier for people to relocate and find work in other countries. Second, the cost of living and studying in developed countries has increased, making it more difficult for students to return home after graduation. Thirdly, the experience of living in another country and experiencing another culture can be very appealing to many students.

Thus, the growth of human capital flight in the context of higher education is particularly telling today. The term "human capital flight" is used to describe a situation where highly skilled workers leave their country to work elsewhere. This usually occurs when workers feel that they can get better opportunities and earn more money in another country. This trend is evident in the STEM fields, where talented students leave their home countries to pursue education and careers in countries with more developed economies.

And since higher education is one of the most important drivers of human capital development, the aim of this sub-section is to present an analysis of the quality and financial viability of higher education around the world. To do so, we first look at data on quality indicators collected by the Organisation for Economic Co-operation and Development (OECD). We will then assess the financial viability of higher education institutions by examining data on public expenditure per student and student mobility. Finally, we conclude by discussing our findings and their implications around the world to better understand the current state of the industry.

Higher education is a cost of living in a prosperous economy. Every year, countries invest in the future of their young people in the form of dollars per student. They want to give their students access to high-quality postsecondary education without worrying about bills. This upward trend in tertiary education is the result of a growing global economy. GDP growth stimulates demand for educational services, so countries can afford to send their students abroad to study.

International labour migration is a complex and multi-faceted phenomenon. While the media often portrays migrant workers as victims of exploitation, the reality is much more nuanced. migrant workers are often motivated by a desire to improve their skills and increase their earnings (Fredrik Rye and O'Reilly).

In many cases, students play an important role in international labour migration. They often have the opportunity to gain work experience in their field of study, which can be beneficial for their career prospects. Additionally, their skills and qualifications can make them attractive to employers in destination countries.

In the absence of the new necessary data, we are unable to obtain accurate and truthful analyses of the impact of higher education factors on student labour migration. But, on the other hand, we can analyse the works of other researchers.

For the period 2000-2011, Haussen and Uebelmesser examined how student movement influences governmental decisions about the private funding share of higher education in 22 OECD countries. They discover a substantial positive connection using fixed effects calculations. This finding is resistant to specification changes, including estimations for nation groups and an enlarged lag structure. The

application of an instrumental variable approach lends support to a causal interpretation.

The findings of Abbott and Silles confirm that geographical distance and the presence of a shared language are important in determining bilateral student flows. Their most intriguing discovery is that time zone changes have a statistically significant and economically significant effect on foreign student flows.

Burmann et al. discovered that, in addition to increasing demand for qualified personnel as a result of demographic difficulties and expanding innovation pressures, many EU countries are experiencing skill shortages. Labour migration can help to alleviate skill shortages in the domestic workforce in nations where there is a high demand for skilled employees. As a result, acquiring highly qualified labour has become a top priority for many European Union member states. Because recent graduates are prospective future employees, many nations supplement EU policy with national legislation.

We can claim while there are some risks associated with international labour migration, it can be a positive experience for many students. They often have the skills and qualifications that employers are looking for, and they are often willing to work for lower wages than other workers. This makes them an attractive option for employers, and as a result, they are often able to find work more easily than other workers. With careful planning and preparation, students can make the most of the opportunities that international labour migration offers.

However, there are some downsides to this trend. One of them is that it can lead to a brain drain of qualified workers from developing countries. This is because when students from these countries migrate to developed countries for work, they often do not return.

One of our objectives was to check how public funding affects student migration flows. To do this, we used the method of linear correlation (Figure 2.4; Appendix D). Assuming a high result, we were surprised to find a weak correlation between the two indicators.

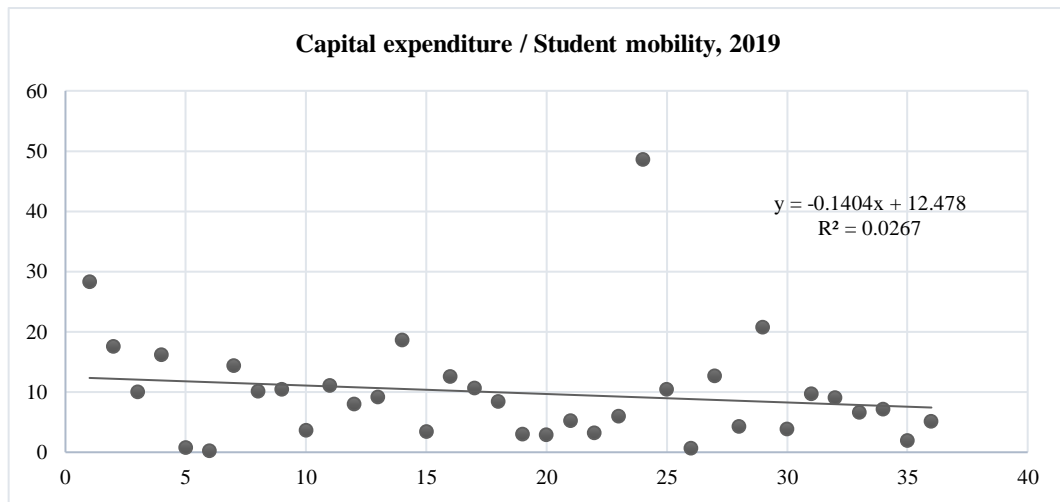


Figure 2.4 – Correlation between Public capital expenditure and international student mobility in OECD countries, 2019

Source: OECD

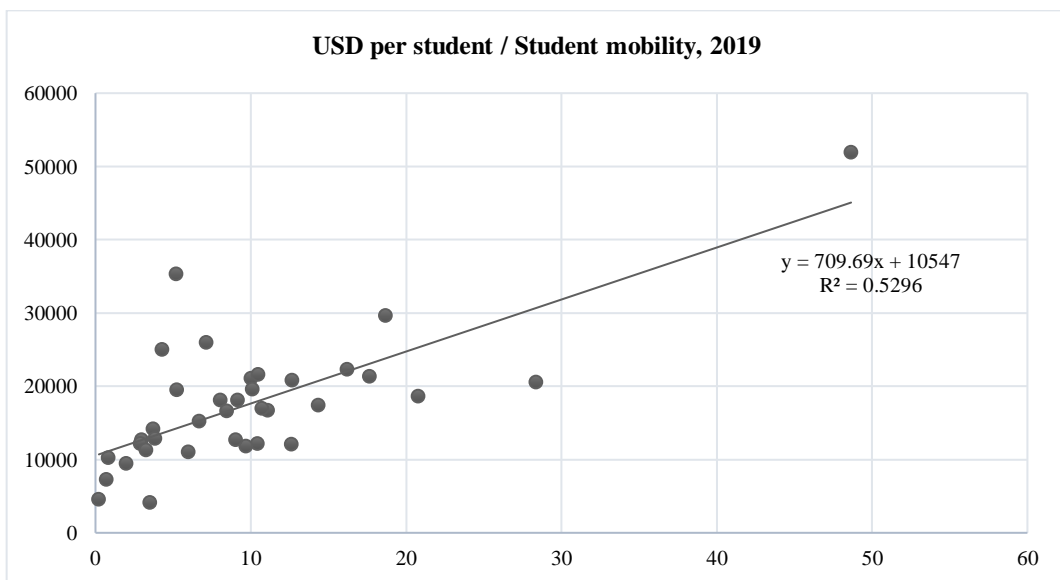


Figure 2.5 – Correlation between average national expenditure per student and international student mobility in OECD countries, 2019

Source: OECD

To further understand the situation, we next analysed academic mobility through the average university expenditure per student. In this case, the outcome was high co-dependency (Figure 2.5). In the case of global educational competition, this means that when one university increases its spending per student, there is a

significant likelihood that other universities will also increase their spending per student.

Overall, through regression and correlation analyses, we found that most countries of OECD have high educational systems that are financially viable. However, at the same time, there are some problem areas that should be considered in order to improve access to quality education for all students, such as attracting international organisations for additional funding, organising educational grants and scholarships, and offering student loans. In addition, opportunities to secure real employment for international students should be seriously pursued.

The employment rate and the quality of the results achieved have a direct or indirect impact on the quality of education (Fomunyam). The employability rate is the percentage of students who are able to find a job after graduation. It is an important indicator because it shows how well an institution prepares its students for working life. In addition, the quality of the outcomes that students achieve also affects the quality of education. If students cannot find a good job or achieve good results, this reflects poorly on the quality of the education they receive and, of course, on the happiness index.

Overall, the impact of international student migration on the economy is complex. Because of this, there are certainly positives, but there are also negatives.

One of the biggest problems is that foreign students often take jobs away from locals. This is because they are willing to work for lower wages, and they can often be found in jobs that require lower qualifications. This can lead to lower wages and fewer opportunities for locals.

Another negative effect is that foreign students often send their money back to their home countries. This is money that could circulate in the local economy, but instead leaves the country. This can lead to a "brain drain", with the best and most talented students leaving in search of opportunities in other countries.

Since 2014, the number of Ukrainian students studying in Poland has increased tenfold. In 2019 alone, around 80,000 Ukrainians entered Polish



universities. Such mass student migration is caused by the desire to avoid political upheaval and economic instability in their country (Khrushch).

Frankly speaking, Poland has become a popular destination for Ukrainian students for several reasons. Firstly, the cost of studying and living in Poland is much lower than in other developed countries. Secondly, Polish universities offer high-quality education that is comparable to Western standards. Finally, the process of obtaining a visa for Ukrainian students is relatively simple and straightforward.

The influx of Ukrainian students has a positive impact on the Polish economy. Not only do they contribute to the country's GDP, but they also help compensate for the brain drain that has plagued Poland for years. With so many young people, the Polish state is confidently developing in the economic, demographic, and spiritual spheres of society. The same cannot be said about Ukraine.

If we go back to what was said in Chapter 1 about the impact of the quality of higher education on social advancement across the economic spectrum, many authors have paid attention to this issue. According to Celia Whitchurch and Lee Harvey, the fundamental task of higher education as part of culture is not to promote economic development through advanced knowledge production but to seek truth and teach people responsibility for promoting economic and social development (Whitchurch and Harvey).

The benefits of international students are well documented. They contribute to the diversity of the student population, bring in much-needed income, and often remain in the country to work after graduation. However, the influx of international students also comes with problems. For example, some international students may not have the English language skills necessary to be successful in an English-speaking country. In addition, the presence of international students can put pressure on the already limited resources of some institutions.

To conclude this section, higher education should be perceived as a natural global marketplace. Competition between institutions to attract international students has become fierce, and the quality of education has become an important factor in students' decision-making processes. As a result, institutions must be

prepared to offer a high-quality education that meets the needs of today's global student population.

The results of the regression show that for every increase in the mobility of students, there is a corresponding increase in the national Ladder of Life Indexes. This relationship is not so strong but statistically significant and suggests that increasing student mobility can lead to improvements in the overall quality of life for a nation.

There is growing evidence that human capital flight is playing an increasingly important role in the international student mobility landscape. This trend is likely to continue as the global economy becomes increasingly interconnected. Students who are able to study abroad will have a distinct advantage in the job market, as they will be better equipped to meet the demands of a global workforce.

Those who are unable to study abroad will be at a significant disadvantage, as they will be competing against candidates who have a broader skill set. This could lead to increased unemployment and further inequality within society.

There are a number of reasons why universities are becoming increasingly attractive to international students. One of the most important factors is the financial attractiveness of universities. In recent years, due to inflation and global economic instability, tuition fees have been rising globally, making access to higher education increasingly difficult for students from low-income backgrounds. However, many universities in OECD countries offer reduced tuition fees or scholarships for international students, making their studies more affordable.

## **CHAPTER 3 TOWARDS IMPROVING EDUCATIONAL DEVELOPMENT MECHANISMS BASED ON THE OUTCOMES OF STUDENT INTERNATIONAL LABOUR MIGRATION**

### 3.1 Main challenges of international student migration and recommendations for overcoming them

The higher education landscape is changing rapidly. Demographic change, technological advances, and economic globalisation are influencing what we expect from higher education and migration. The 21<sup>st</sup> century is characterised by increasing globalisation and internationalization, and higher education plays a central role in this trend. The future of higher education is therefore closely linked to the future of international student migration. And in order to keep up with the times, it is important to understand the current weaknesses and trends that are shaping the future of university education.

In this section, we will look at some of the key challenges shaping the future of higher education and offer recommendations for overcoming them. We will also outline the main trends shaping the future of global higher education and international student migration and discuss the implications of these trends for institutions, students, and society as a whole. Indeed, there is a growing consensus that quality education is a fundamental human right and a necessary condition for sustainable development, which cuts across all sectors of society. Nonetheless, many states continue to face serious challenges in providing a high-quality education to all of their citizens.

Millions of international students are studying away from home. This has various implications for the global economy, including an increase in "brain drain" in some countries, which is a dramatically toxic aspect of their statehood. In fact, and for the students themselves, overnight.

People who study abroad face a variety of positive and negative experiences. Some students overcome these problems easily, some struggle, and some, with a

certain degree of probability, cannot overcome them (Oseloka Ezepeue and Metu). The following are some of the problems that students abroad may encounter:

- homesickness and social isolation;
- difficulties in adapting to a new environment;
- language barriers;
- financial difficulties.

Personal and demographic characteristics of students and the economic, cultural, religious, and geographical conditions of their home and host countries play a role in this process of adaptation, facilitating or aggravating it. In any case, there is a general conclusion or opinion that students will come to during their time in the host country. For a clearer nomenclature of potential problems in the student's path during the migration process, we suggest looking at figure 3.1.

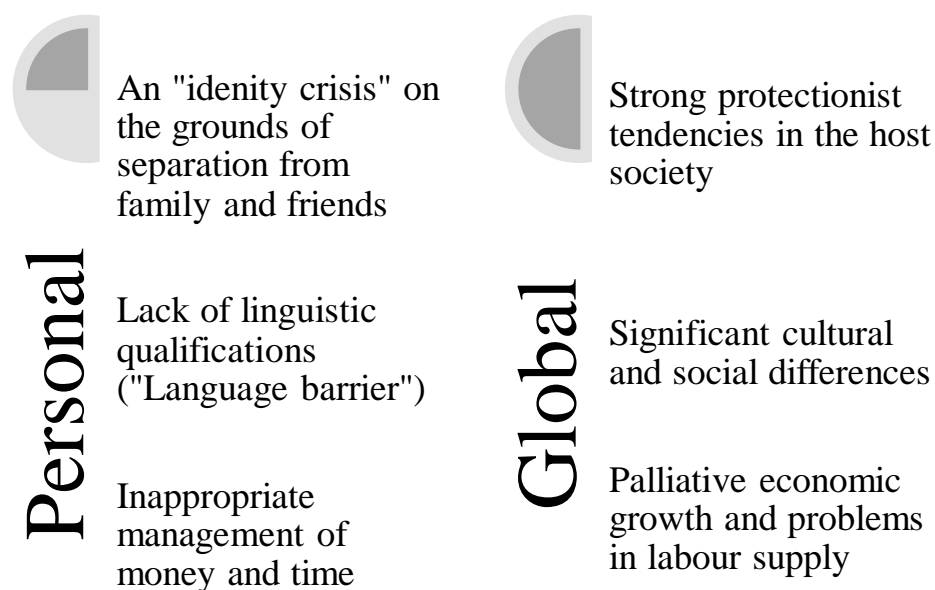


Figure 3.1 – Main problems of student migration from personal and societal perspectives

Studies from different parts of the world show that migration or long-term academic mobility is a complex process that affects students in different ways (Waters and Brooks). It is most often associated with stressful events, barriers, and difficulties, due to which psycho-social problems and health and safety issues are

more prevalent among foreigners compared to local students. In response to this, a number of studies have attempted to develop some approaches and propose prevention, stimulation, and recreational strategies. In addition, the particular involvement of governments, organizations, and individuals in many efforts at local, national, and international levels has been highlighted (Hari et al.).

Initially, students enjoy experiencing a new way of life free from familiar socio-cultural constraints. Over time, they find that their new countries of residence are less tolerant of outsiders, which is explained by Stefanenko's theory of culture shock. It is important to remember that culture shock is normal and that it will pass with time. The best way to overcome culture shock is to immerse yourself in the local culture (Hong et al.).

However, before making friends with locals once they arrive, students should become familiar with the language and culture of their new country beforehand. In this way, they can quickly and painlessly adapt to their new way of life without having to worry too much about blending into the culture of the community.

It should be considered that such distress translates into negative mental health consequences or other forms of ill-health due to the long-term feeling of insecurity and inaccessibility of members of their community (Nirmala et al.). Research has also shown that local and international efforts to address these problems are inadequate and insufficient. There is a huge need to make health services accessible and affordable for international students, who are also potential workers. There is a need to make such services more inclusive: culturally specific and, at the same time, culturally free. A wise and visionary move, in our opinion, would be to provide the necessary training to the staff of higher education institutions through the involvement of cultural experts and trained interpreters at all levels of student work.

Additionally, there is a large area that has to be explored in order to develop better intervention strategies, understand the structural makeup of mental health issues, prevent emotional lability, and improve the psychosocial wellbeing of educational migrants.

After all, migration is a contemporary, complicated issue where the main motivation is to better one's life or flee from hardship. Consequently, it does not have to be stressful all the time, but when there is a lack of adequate training and social support and complexities, barriers, and differences are present, it will certainly lead to stress, whether it is international or internal migration.

Another of the major problems with higher education today is that it is too focused on individual achievement. This has led to a race to the bottom, with students under immense pressure to succeed. This pressure has led to an increase in cheating as well as bullying and shaming (Yang and Lee). This situation complicates the already precarious situation of students abroad and cannot be ignored.

For most migrant students, moving to a foreign country is a truly challenging undertaking, as they have to make significant social and cultural adjustments at different points in their lives. But most problems can indeed be avoided if you prepare for them in advance.

A number of important considerations need to be taken into account when deciding to migrate. These considerations include the field of study, financial situation, foreign language skills, and employment prospects after graduation.

Firstly, choosing a major in a new country can be a challenge for international students. With so many options available, it can be difficult to know where to start. And once you have made your decision, you may have to face additional challenges, such as professional and cultural differences.

One problem for students moving to study in another country is the cost of living. This can be a serious problem, as many students may not have a large initial capital or substantial income to begin with. In addition, the cost of living and unforeseen additional expenses in some countries can be quite high, especially if one is used to living in a less expensive country. This can make it difficult to adjust to a new environment or even make you miss out on some aspects of student life.

There are several ways to offset the costs of living in a new country. Firstly, you can try to find scholarships or financial aid. This can be a great help, as it will reduce the amount you need to pay for your education. Secondly, you can look for

part-time work or an apprenticeship. This will help you earn extra money to cover the cost of your education.

The next task for someone considering educational migration should be to be aware of how the language barrier affects interaction with residents and choose a suitable area not too far from their educational institution to begin with. As a result, migrant students can make friends more quickly after settling in a new country and create long-lasting bonds that will be beneficial to both parties in the future, as well as to the whole society.

The unemployment rate of migrant students is an important and complex issue. There are many reasons for this problem, including lack of skills, racism, and discrimination (Lindemann and Gangl; Salamońska and Czeranowska). The particular difficulty of getting a job after graduation becomes an important factor when deciding whether or not to come to study in another country. Also, apart from the students themselves, it also affects their families, who often invest a lot of money in their children's education.

There are some special programmes and initiatives that try to help migrant students find employment, but the results are often not very successful. The lack of data on this population makes it difficult to develop effective programmes. In addition, the rapid pace of change in the labour market makes it difficult for these programmes to keep up. Because of this, students become uncertain and fearful of making important decisions; in addition, it is difficult to cope without wise coaching (Capps et al.).

From an individual point of view, it is still recommended by many experts to consult an experienced migration agent or the academic mobility department of the home university. These structures will help to assess immediate skills and qualifications and give personal recommendations on the best way to achieve migration goals. They can also help with the preparatory part, i.e., with the paperwork, finding an accompanying mentor, and making sure that the student meets all the requirements to study in the chosen country.

From the perspective of society, there are many different ways in which it can support international students. Some of the most important things we can see in Figure 3.2.

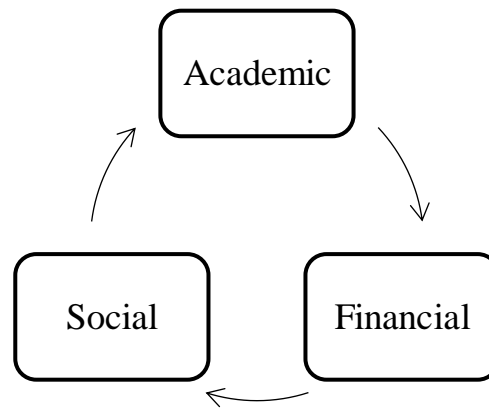


Figure 3.2 – The crucial areas of social support for international students

There are many things that society can do to support international students. One is to make sure that there are adequate support systems in place to help students transition into their new environment. This can include things like providing housing and financial aid, as well as offering programmes that help students learn about the culture and customs of their new country.

Another way that society can support international students is by promoting intercultural understanding and interaction. This can be done through initiatives such as hosting international events and celebrations or by giving students the opportunity to interact with their peers from different cultures.

Society can also support international students by promoting diversity and inclusion. This can be done through public awareness campaigns, educational resources, and institutional policies. By supporting international students, society can make sure that everyone has the opportunity to succeed.

Some of the ways in which international education policies can improve education include:

- providing funding for educational initiatives through grants and academic loans to cover tuition and living costs;



- supporting teacher training and professional development in mentoring and accompaniment projects, public events, and language courses at the national level;
- assistance in the development and implementation of curriculum standards;
- promoting independent university monitoring through global quality rankings;
- encouraging exchange programmes and cultural understanding, international research, and academic consultations.

It is possible to recommend the suggested approaches for improving education globally. By taking these steps, national and global societies can help make the experience of international students much more positive and successful. They can work together to create a more equitable and accessible education system for all people, both in developed and developing countries.

As the world economy continues to globalise, the flow of international students will become increasingly important. Understanding the trends and drivers of international student migration is essential for policymakers, educators, and employers who want socially sustainable development in all spheres of life.

Still, it is important to remember that an international education policy is not a silver bullet and will not automatically solve all of the world's education problems. Making the decision to study abroad is an important step, but it should not be insurmountable. International education policy can, however, be a potent weapon for raising educational standards all around the world if it is well thought out and carried out.

## 3.2 Defining the future of global higher education and international student migration

Recently, in the midst of various global upheavals, there has been growing evidence that the current model of higher education is unsustainable. A growing body of research shows that the traditional model of higher education is no longer fit for purpose in the 21<sup>st</sup> century. This has led to calls for a radical rethinking of how we provide higher education.

We are used to an increasingly globalised international higher education system. However, there are now signs that this trend is beginning to change. An increasing number of countries are introducing policies and regulations that restrict the influx of foreign students and academics. This is leading to a fragmentation of the global higher education system.

The number of international students in the US has increased by 300% since 2000. There are now more than 1 million international students studying there. This has resulted in government agencies increasingly introducing policies and regulations that restrict the influx of international students (Batalova and Feldblum).

In 2018, Canada announced new visa application rules for prospective international students. They also introduced stricter border control measures to prevent any potential terrorist threats from entering the country (Study in Canada Organization).

India has also introduced new policies and regulations to limit the influx of foreign students into its universities and colleges. The main reasons for this are to ensure that there are enough places for Indian citizens to study without having to compete with other countries for places and to provide more qualified teachers (Nanda and Mishra).

There are many refugees who have fled their countries because of conflict or persecution. Some have been able to find safety in other countries, but few have succeeded. Most of the young people who are refugees come from Arab countries

or Africa. In 2021, refugees aged 18–24 accounted for 13% of all refugees, with the majority coming from Syria, Albania, Afghanistan, Iran, Iraq, and South Sudan (UNICEF).

Many young refugees have been forced to leave their homes due to conflict or persecution. As a result, they may feel isolated and lost, with no sense of belonging. These young people may also have difficulty accessing education and employment opportunities.

Many of them find it difficult to access higher education as they may not have the necessary qualifications or financial means to do so (Streitwieser et al.). Refugees also face difficulties in adapting to life in a new country and the uncertain policies of multiculturalism, which may make it difficult for them to focus on their studies and complete them on time (Khomutenko and Yeremenko). Despite all this, educational migration can give them the skills and knowledge they need to rebuild their lives and make a positive impact in their new communities.

The events of winter 2022 triggered a new flow of refugees from Ukraine. By November 22, some 15.59 million border crossings from Ukraine to other countries had been recorded since February 24, 2022. Most migrants fled to Poland, Russia, Hungary, and Romania (Statista Research Department). This is due to geographical proximity and air danger. Germany, the Czech Republic, Italy, and Spain are most often chosen as the next migration destinations (United Nations). Nevertheless, the actual number of students in this migration is still unknown.

Ukrainian students are, however, already benefiting from scholarships and other forms of support through the establishment of tailor-made programmes in foreign universities, institutions, and individuals eager to help refugees from all over the world pursue their educational goals. However, there are a number of problems faced by our students abroad, including language barriers, a higher workload than at home, a lack of specialised teaching aids, academic discrepancies, etc. (Zheriobkina and Kohut).

Having analysed the overall migration dynamics of OECD students, we projected its estimated future processes through an exponential smoothing model

(Figure 3.3). Unfortunately, no OECD or UN databases have available information on student migration for the years 2021–2022, so the mathematical assumption was based on figures from 2013–2020.

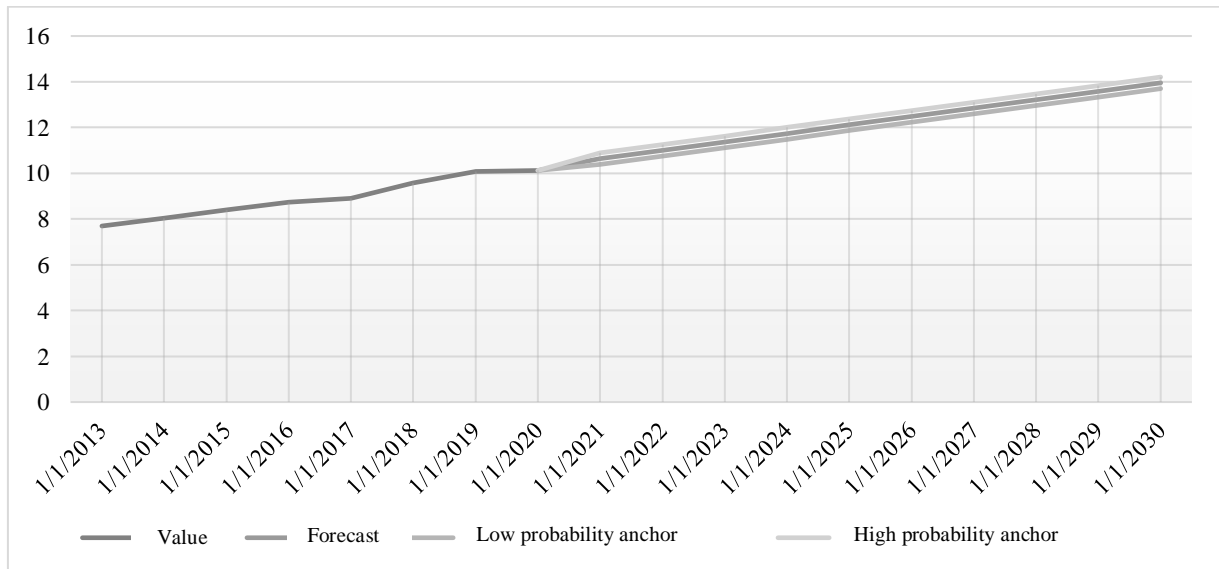


Figure 3.3 – Projection sheet for overall migration dynamics of OECD students

Source: OECD

Since the most common class of algorithms for smoothing discrete time series to predict the near future is undoubtedly exponential smoothing, we chose it for our calculations. This popularity is due to its ease of use, computational efficiency, adaptability to changes in the predicted process, and sufficient accuracy (Montgomery et al.).

In order to estimate future values of a variable of interest, exponential smoothing involves smearing the original series in the same way a moving average does. However, by exponentially smoothing the series, we want to give recent values a stronger predictive power than distant observations (Ostertagova and Ostertag).

In Figure 3.1, we see the results of our forecast until 2030. From it, we expect that the number of international students will continue to grow over the next decade, presumably by 2-3% each year, excluding extraneous factors. We end up with a total migration growth of 28% in 2030 compared to 2020.

According to our forecast, the trend of international students studying abroad is likely to continue to grow in the coming years, albeit at a waning pace (Appendix D). This growth is driven by a number of factors, including the growing global popularity of online education, expanding economic opportunities in developing countries, and increasing numbers of refugees and displaced people.

This growth presents both opportunities and challenges for countries and educators alike. However, with the right policies in place to ensure access to quality education for all students, regardless of their background or circumstances, this trend can have a positive impact on the global economy and the future of higher education.

As a result, we see that the future of global higher education and international student migration is uncertain. There are many factors that contribute to the uncertainty of this future, which could change the usual trend extremely dramatically. The most prominent factor is the significant increase in xenophobia and nationalism, as well as political and security instability in many regions.

The state of the global social economy is affected by several variables, including:

- the continuing shift of economic and migration power to North America and Asia;
- the emergence of strong new political players such as Brazil, Russia, and India;
- the rapid transition to digital economies in many countries
- the increasing demand for STEM (science, technology, engineering, and mathematics) skills;
- a general change in attitude from protectionist to more open globalisation policies.

To sum up, the 21<sup>st</sup> century is characterised by increasing globalisation and internationalisation, and higher education plays a central role in this trend. The future of higher education is therefore closely linked to the future of international student migration. Because the forces of globalisation have led to increased competition between countries for the best students and academics, countries are forced to offer

high-quality education that is affordable and accessible to all in order to remain competitive.

One way to counter the effects of globalisation is to change the way we view higher education. Instead of seeing it as a commodity to be traded, we should see it as a public good that should be available to everyone. This will necessitate radical changes in the way the government funds and manages higher education, but it will be worthwhile in the long run.

## CONCLUSIONS

The way we view higher education is changing. In a globalised world, the traditional view of education as a localised activity is no longer valid. Increasingly, students are looking to study abroad in order to get the best education possible.

This trend has a number of effects on higher education. For one, it makes universities more competitive. They are now competing not just with other local institutions but with institutions from all over the world. This is leading to a rise in standards as universities strive to attract the best students.

Secondly, globalisation is changing the nature of the curriculum. With students coming from all corners of the world, universities are being forced to offer more international perspectives in their courses. This is giving rise to a more globalised view of higher education.

Finally, globalisation has an impact on higher education itself.

In this way, the results obtained in the course of work give the chance to formulate the following conclusions:

1. It is worth noting that there is no single and streamlined definition of "quality of education," but most global education policy standards aim to measure key factors such as students' academic performance, university conditions, and access to material and technical resources. In addition, international education quality standards can help inform and shape education policy at both the national and local levels, as well as at the global universal level.

2. Obtaining a quality higher education is not just about studying abroad or obtaining an honours degree from a prestigious higher education institution. It is about changing the form, content, and method of evaluating society and cultivating an independent way of thinking and a critical model of vision. In this sense, any advanced educational concepts, international quality standards, and effective educational practises that are adopted and imposed on large numbers of students in different countries are social pillars worthy of our scrutiny.

3. Competition between institutions to attract international students has become fierce, and the quality of education has become an important factor in students' decision-making processes. As a result, institutions must be prepared to offer a high-quality education that meets the needs of today's global student population.

4. The results of the regression show that for every increase in the mobility of students, there is a corresponding increase in the national Ladder of Life Indexes. This relationship is not so strong but statistically significant and suggests that increasing student mobility can lead to improvements in the overall quality of life for a nation.

5. One of our objectives was to check how public funding affects student migration flows. To do this, we used the method of linear correlation. Assuming a high result, we were surprised to find a weak correlation between the two indicators. To further understand the situation, we next analysed academic mobility through the average university expenditure per student. In this case, the outcome was high co-dependency. In the case of global educational competition, this means that when one university increases its spending per student, there is a significant likelihood that other universities will also increase their spending per student.

6. Overall, through regression and correlation analyses, we found that most countries have high educational systems that are financially viable. However, at the same time, there are some problem areas that should be considered in order to improve access to quality education for all students, such as attracting international organisations for additional funding, organising educational grants and scholarships, and offering student loans. In addition, opportunities to secure real employment for international students should be seriously pursued.

7. It is possible to recommend the suggested approaches for improving education globally. By taking these steps, national and global societies can help make the experience of international students much more positive and successful. They can work together to create a more equitable and accessible education system for all people, both in developed and developing countries.



8. There is growing evidence that human capital flight is playing an increasingly important role in the international student mobility landscape. This trend is likely to continue as the global economy becomes increasingly interconnected. Students who are able to study abroad will have a distinct advantage in the job market, as they will be better equipped to meet the demands of a global workforce.

9. There are a number of reasons why universities are becoming increasingly attractive to international students. One of the most important factors is the financial attractiveness of universities. In recent years, due to inflation and global economic instability, tuition fees have been rising globally, making access to higher education increasingly difficult for students from low-income backgrounds.

As our work suggests, migration, including labour one, is a process of social change in which a person moves from one cultural environment to another in order to settle either permanently or for a long period of time. Such relocation can be for any number of reasons, usually economic, political, or educational. This developmental path inevitably causes personal and societal stress, which in turn can lead to critical consequences of varying severity.

Based on the above, abandoning the current model of higher education is essential if we are to solve the heap of problems of the current century. The traditional model is no longer fit for purpose, and it is time for a radical rethink. And with the right policies, we can ensure that everyone has access to the quality education they need to thrive in the 21<sup>st</sup> century.

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## APPENDICES

### Appendix A

#### ANNOTATION

**Yeremenko O.O.** The Influence of Education on International Labour Migration. – Masters-level Qualification Thesis. Sumy State University, Sumy, 2022.

This master's thesis the essence of the definition of the international educational system of higher education, its standards and evaluation in the context of the priorities of higher education quality is investigated. The influence of socio-economic factors affecting the quality of higher education is analysed and the future trend of migration is predicted. The main purpose of this study is to provide recommendations for improving the social responsibility of the higher education system.

*Keywords: higher education, international labour migration, student mobility, socio-economic development, Happy Planet Index, globalisation.*

**Єременко О.О.** Вплив освіти на міжнародну трудову міграцію. – Кваліфікаційна магістерська робота. Сумський державний університет, Суми, 2022.

У магістерській роботі досліджено сутність визначення міжнародної освітньої системи вищої освіти, її стандартів та оцінювання в контексті пріоритетів якості вищої освіти. Проаналізовано вплив соціально-економічних факторів, що впливають на якість вищої освіти та прогнозовано майбутню тенденцію міграції. Основною метою даного дослідження є надання рекомендацій щодо підвищення соціальної відповідальності системи вищої освіти.

*Ключові слова: вища освіта, міжнародна трудова міграція, мобільність студентів, соціально-економічний розвиток, Індекс щасливої планети, глобалізація.*

## Appendix B

Table B.1 – Categories and university assessment indices according to ARWU

Category	Index	Code	Proportion
Quality of education	Nobel Prize and Fields Medal graduates	Alumni	10%
Faculty quality	Staff of a Nobel Prize and Fields Medal-winning institution	Award	20%
	Highly cited researchers	HiCi	20%
Research results	Articles published in Nature and Science	N&S	20%
	Articles indexed in SCIE and SSCI	PUB	20%
Achievement per capita	Institutional attainment per capita	PCP	10%

Table B.2 – Categories and university assessment indices according to World University Rankings

Category	Index	Proportion
Economic activity and innovation	Research income	2.5%
Degree of internationalisation	Internationalisation of teaching staff	3%
	Internationalisation of students	2%
	Quality of teaching research	15%
	Number of doctoral degrees awarded	6%
Teaching and students	Student-faculty ratio	4.5%
	Annual research funding	2.25%
	Ratio of undergraduate to postgraduate students	2.25%
	International reputation for research	19.5%
Research performance	Annual research income	5.25%
	Published academic articles	4.5%
	Ratio of public research income to total research income	0.75%
Impact of academic articles	Citation of articles (academic impact)	32.5%

Table B.3 – Categories and university assessment indices according to QS Rankings

<b>Category</b>	<b>Index</b>	<b>Proportion</b>
Academic reputation	Results of a global survey of academics	40%
Employer reputation	Results of the global survey of graduate employers	10%
Faculty to student ratio	Staff commitment to training	20%
Faculty citations	Citation of articles and impact of research	20%
Ratio of international students	Measuring the international diversity of the student body	5%
Ratio of international staff	Measuring the international diversity of academic faculty	5%

Table B.4 – Categories and university assessment indices according to Webometrics Rankings

<b>Category</b>	<b>Index</b>	<b>Proportion</b>
The impact of web content	Number of external networks (subnets) linking to the institution's web pages (normalized, then the maximum value is selected)	50%
Top Cited Researchers	Number of citations of the top 210 authors (excluding the top 20 authors)	10%
Top cited papers	Number of articles among the top 10% of the most cited in each of the 27 disciplines of the full database	40%

Table B.5 – Categories and university assessment indices according to U.S. News & World Report Best Global University Ranking

<b>Category</b>	<b>Index</b>	<b>Proportion</b>
Reputation indicators	Global research reputation	12.5%
	Regional research reputation	12.5%
	Publications	10%
	Books	2.5%
	Conferences	2.5%
	Normalised citation impact	10%
Bibliometric indicators	Total number of citations	7.5%
	Number of publications in the top 10% of most cited publications	12.5%
	Percentage of the total number of publications in the top 10% of citations	10%
	International cooperation – relative to the country	5%
	International cooperation	5%
	Number of highly cited articles in the top 1% of most cited articles in the relevant field	5%
Science Excellence Indicators	Percentage of total publications in the top 1% of most cited articles	5%



## Appendix C

Table C.1 – Ranking of educational attainment by OECD country, based on the OECD Better Life Index, latest PISA 2018 results (by code and by rank)

Country Code	People, aged 25-64, with at least upper-secondary degree, %	Rank	Country Code	People, aged 25-64, with at least upper-secondary degree, %	Rank
AUS	84	19	JPN	95	1
AUT	86	15	LTU	94	2
BEL	80	27	CZE	94	3
BRA	57	35	POL	93	4
CAN	92	5	SVK	92	5
CHE	89	11	USA	92	6
CHL	67	31	CAN	92	7
COL	59	34	EST	91	8
CZE	94	2	FIN	91	9
DEU	86	15	SVN	90	10
DNK	82	21	LVA	89	11
ESP	63	32	CHE	89	12
EST	91	8	KOR	89	13
FIN	91	8	ISR	88	14
FRA	81	24	AUT	86	15
GBR	82	21	DEU	86	16
GRC	76	28	HUN	86	17
HUN	86	15	IRL	85	18
IRL	85	18	SWE	84	19
ISL	76	28	AUS	84	20
ISR	88	14	NOR	82	21
ITA	63	32	DNK	82	22
JPN	95	1	GBR	82	23
KOR	89	11	NZL	81	24
LTU	94	2	NLD	81	25
LUX	74	30	FRA	81	26
LVA	89	11	BEL	80	27
MEX	42	37	GRC	76	28
NLD	81	24	ISL	76	29
NOR	82	21	LUX	74	30
NZL	81	24	CHL	67	31
POL	93	4	ITA	63	32
PRT	55	36	ESP	63	33
SVK	92	5	COL	59	34
SVN	90	10	BRA	57	35
SWE	84	19	PRT	55	36
TUR	42	37	TUR	42	37
USA	92	5	MEX	42	38

Source: (OECD, "OECD Better Life Index")

Table C.2 – Most educated countries by CNBC and OECD rankings, 2022

Region	Country	Tertiary education, % of popularity
North America	Canada	60,0
	United States	50,1
East Europe	Russia	56,7
	Lithuania	44,1
	Estonia	42,2
Asia	Japan	52,7
	South Korea	50,7
West Europe	Luxembourg	51,3
	Ireland	49,9
	United Kingdom	49,4
Middle east	Israel	50,1
	Saudi Arabia	23,6
	Turkey	22,2
Pacific	Australia	49,3
	New Zealand	40,1
	Indonesia	11,9
South/Latin America	Argentina	35,7
	Chile	25,2
	Costa Rica	25,1
Africa	South Africa	15,8

Source: (Hess; OECD)

## Appendix D

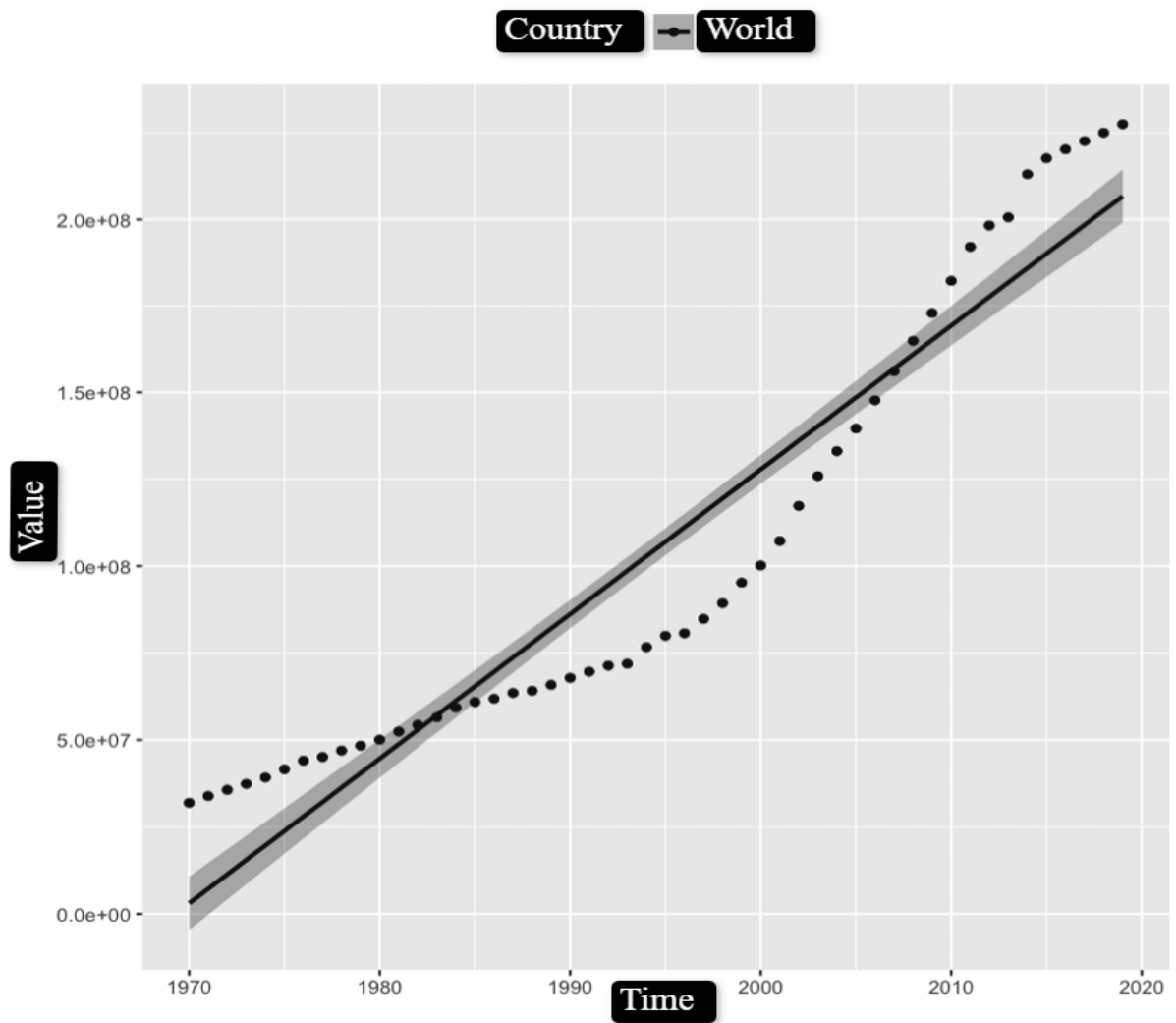


Figure D.1 – Evolution of the world student population (1970-2018)

Source: (Guillermo)

## Appendix E

Table E.1 – Regression statistics (Figure 2.3)

Multiple R	0,446271965
R-square	0,199158667
Normalized R-square	0,176277486
Standard error	0,617068986

## Analysis of variance

	df	SS	MS	F	Significance F
Regression	1	3,314272498	3,314272498	8,704037935	0,005630082
Balance	35	13,32709465	0,380774133		
Total	36	16,64136715			

Table E.2 – Analysis outputs (Figure 2.3)

	<b>HPI, 2020</b>	<b>Ladder of life, 2020</b>	<b>International student mobility, 2020</b>	<b>Educational attainment by country</b>
<b>AUS</b>	44,5	7,14	26,00	84
<b>AUT</b>	49,7	7,21	17,98	86
<b>BEL</b>	48,6	6,84	10,38	80
<b>BRA</b>	51,3	6,11	0,25	57
<b>CAN</b>	42,0	7,02	18,21	92
<b>CHE</b>	62,3	7,51	18,14	89
<b>CHL</b>	47,3	6,15	1,06	67
<b>COL</b>	55,8	5,71	0,22	59
<b>CZE</b>	48,6	6,90	14,99	94
<b>DEU</b>	56,8	7,31	11,24	86
<b>DNK</b>	47,7	7,51	10,23	82
<b>ESP</b>	54,9	6,50	3,84	63
<b>EST</b>	38,9	6,45	12,30	91
<b>FIN</b>	54,6	7,89	7,97	91
<b>FRA</b>	54,4	6,71	9,19	81
<b>GBR</b>	56,1	6,80	20,15	82
<b>GRC</b>	51,5	5,79	2,80	76
<b>HUN</b>	45,7	6,04	13,48	86
<b>IRL</b>	52,1	7,03	10,20	85
<b>ISL</b>	53,7	7,58	8,51	76
<b>ISR</b>	50,1	7,19	3,44	88
<b>ITA</b>	52,6	6,49	..	63
<b>JPN</b>	50,3	6,12	5,73	95
<b>KOR</b>	40,9	5,79	3,73	89
<b>LTU</b>	38,1	6,39	6,16	94
<b>LUX</b>	..	7,40	48,39	74
<b>LVA</b>	36,7	6,23	12,78	89
<b>MEX</b>	52,1	5,96	0,88	42
<b>NLD</b>	56,8	7,50	13,32	81
<b>NOR</b>	51,3	7,29	4,38	82
<b>NZL</b>	60,8	7,26	17,49	81
<b>POL</b>	44,9	6,14	4,47	93
<b>PRT</b>	47,0	5,77	11,57	55
<b>SVK</b>	49,7	6,52	10,30	92
<b>SVN</b>	48,7	6,46	7,79	90
<b>SWE</b>	50,5	7,31	7,04	84
<b>TUR</b>	41,7	4,86	2,32	42
<b>USA</b>	39,7	7,03	5,11	92

Source: OECD

Table E.3 – Analysis outputs (Figures 2.4 and 2.5)

	<b>Student mobility, 2019</b>	<b>Expenditure per student, 2019</b>	<b>HPI, 2019</b>	<b>Capital expenditure, 2019</b>
<b>AUS</b>	28,375	20625,27	43,1	10 309
<b>AUT</b>	17,641	21329,11	46,8	1 454
<b>BEL</b>	10,043	21081,68	42,5	1 592
<b>CAN</b>	16,221	22334,72	40,2	7 765
<b>CHL</b>	0,819	10253,36	45,6	1 962
<b>COL</b>	0,219	4601,476	60,2	4 223
<b>CZE</b>	14,364	17411,19	46,8	2 174
<b>DEU</b>	10,106	19607,97	52,7	16 900
<b>DNK</b>	10,491	21658,02	45,3	1 191
<b>ESP</b>	3,698	14237,32	52,3	4 573
<b>EST</b>	11,087	16751,75	34,4	278
<b>FIN</b>	8,053	18128,5	51,3	1 463
<b>FRA</b>	9,175	18135,93	51,8	14 459
<b>GBR</b>	18,677	29687,85	56,0	10 056
<b>GRC</b>	3,499	4192,427	48,8	1 661
<b>HUN</b>	12,605	12107,35	45,4	1 177
<b>IRL</b>	10,715	16996,59	51,1	..
<b>ISL</b>	8,449	16609,82	48,0	62
<b>ISR</b>	2,985	12682,53	48,2	1 978
<b>ITA</b>	2,881	12177,44	50,7	4 533
<b>JPN</b>	5,238	19503,66	47,1	25 738
<b>KOR</b>	3,256	11287,46	39,8	17 565
<b>LTU</b>	5,992	11039,26	36,9	227
<b>LUX</b>	48,648	51978,27	31,7	255
<b>LVA</b>	10,429	12186,15	34,1	444
<b>MEX</b>	0,707	7341,319	54,3	..
<b>NLD</b>	12,673	20888,6	54,9	5 126
<b>NOR</b>	4,276	25019,07	50,9	2 461
<b>NZL</b>	20,769	18641,36	57,4	..
<b>POL</b>	3,857	12911,71	45,0	4 492
<b>PRT</b>	9,711	11858,04	46,3	865
<b>SVK</b>	9,041	12749,03	46,6	..
<b>SVN</b>	6,673	15266,82	47,9	244
<b>SWE</b>	7,152	26045,98	50,5	1 419
<b>TUR</b>	1,987	9455,204	41,3	12 802
<b>USA</b>	5,189	35346,91	37,4	121 910

Source: OECD

## Appendix F



Figure F.1 – John James Audubon

John James Audubon, Haitian, was notable for his extensive studies documenting all types of American birds and for his detailed illustrations, which depicted the birds in their natural habitats.

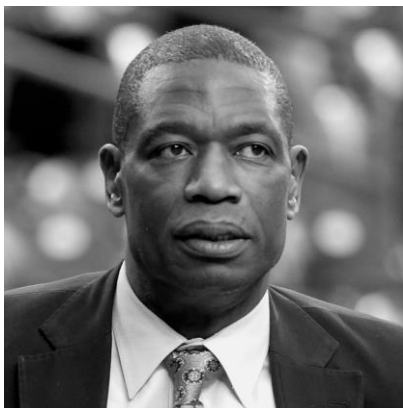


Figure F.2 – Dikembe Mutombo

Dikembe Mutombo, a Congolese immigrant, built his basketball career in the United States and opened the Dikembe Mutombo Foundation, and the Biamba Marie Mutombo Hospital for social and medical assistance to students from low-income families studying at America's top universities.



Figure F.3 – Ahmed Zewail

Egyptian Ahmed Zewail, a talented chemist who won the 1999 Nobel Prize in Chemistry, revolutionised our understanding of chemical interactions.