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MENIN ALON ZVI

DEMAND RESEARCH OF ISRAELI HIGHER EDUCATION STUDENTS FOR INTERNATIONAL ACADEMIC MOBILITY

SPECIALIZATION: 521.02. WORLD ECONOMY; INTERNATIONAL ECONOMIC RELATIONS

Doctoral thesis in Economics

Scientific Advisor: **CROTENCO Iuri**
Habilitated doctor,
University professor

Author: **MENIN Alon Zvi**

CHIȘINĂU, 2019

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ANNOTATION

To the thesis to obtain the scientific degree of Doctor in Economic science.

Demand research of Israeli higher education students for international academic mobility

Menin Alon Zvi, Chisinau, 2019

Specialization: 521.02. World Economy; International Economic Relations

The structure of the thesis: The thesis consists an introduction, four major chapters with conclusions and recommendations. The chapters include 27 tables, 22 graphs, 1 map, and 2 schematic diagrams. Includes a list of 213 bibliographical sources, 21 annexes and 151 pages of main text. On the theme of the thesis had been published 17 academic articles in Europe, Israel, and Asia.

Key words: higher education; brain drain; Bologna Reform; academic mobility; Immigration, academic tourism.

The Fields of research: The research deals with an economic issue concerning the inbound and outbound of academic mobility in higher education in Israel, and the trends of brain drain, immigration and educational tourism.

The purpose of the current research: is to examine the academic mobility of Israeli higher education students, and, at the same time, minimizing the brain drain trend from Israel.

The scientific challenge of this research lies in the fact that it is trying to find a theoretical model based on systematic data analysis for prediction the mobility of students in higher education. In addition, there is a national challenge to the point of minimizing the phenomenon of brain drain.

The scientific novelty of the research is a comprehensive approach that addresses the issue of academic international mobility of students in higher education in Israel. An analysis of the situation in the international academic mobility system of students in higher education in Israel has been made.

Important scientific problem. The author presents data on the growing demand for systematic brain drain from Israel abroad, through an international academic mobility system for students of higher education. In order to overcome the threat of Israel's brain drain abroad, innovation is presented to the proposal of a national mechanism for international academic mobility of foreign students to higher education, and minimizes brain drain. The author seeks to develop and properly implement the program.

Theoretical significance and value of the thesis. Value of the thesis is to obtain theoretical and empirical knowledge about the issue of academic mobility, the brain drain. The research, proposals and conclusions made can be used by some state institutions such as the Ministry of Education, CHE, municipalities, academic institutes, and economic units in the country.

The practical significance of the research lies in the analysis of a theoretical-economic model that enables future forecasting, based on formula values, systematic data analysis, and thus provides a work plan for renewing the mechanism, ideas and arguments by the academic authorities in Israel. The results of this study enable us to identify the trends in a precise set of reasons for their existence for the adoption of beneficial financial decisions.

Implementation of scientific results. The results can reflect in the government ministries which directly involved in academic mobility of students. A few of the professors from one of the biggest universities in Israel, that rated the importance of the contributions of the author's recommendations. In addition, this research will be presented to the education ministry, and Ort college for Implementation.

ADNOTARE

La teza pentru gradul de doctor în științe economice.

Studiul cererii de mobilitate academică internațională a studenților din învățământul superior din Israel,

Menin Alon Zvi, Chișinău, 2019

Specializarea: 521.02 Economia mondială; relațiile economice internaționale

Structura tezei: Lucrarea constă din introducere și patru capitole cu concluzii și recomandări. Teza include 27 de tabele, 22 figuri, 1 hartă și 2 scheme. Conține o listă de 213 de surse bibliografice și 21 de anexe, în total 151 de pagini. La tema tezei au fost publicate 17 articole în Europa, Israel și Asia.

Cuvinte cheie: învățământ superior; exodul de creiere; Procesul de la Bologna; mobilitatea academică; emigrarea; turismul academic.

Domeniul de cercetare: aspectele economice ale importului și exportului de servicii educaționale universitare în Israel, tendințele de exod de creiere, imigrația și turismul educațional.

Obiectul de cercetare: mobilitatea academică în învățământul superior a studenților israelieni și afluxul de studenți străini în învățământul superior din Israel; fenomenul de exod al creierelor din Israel este investigat.

Scopul cercetării: studierea cererii de mobilitate academică internațională a elevilor din învățământul superior din Israel, minimizând simultan tendința de scurgere a creierelor din Israel.

Sarcina tezei constă în încercarea de a găsi un model teoretic bazat pe prelucrarea sistematică a datelor pentru a anticipa mobilitatea studenților în învățământul superior. În plus, sarcina națională este de a minimiza fenomenul de exod al creierelor.

Noutatea științifică a cercetării constă într-o abordare cuprinzătoare orientată spre studiul problemei mobilității academice internaționale a studenților din învățământul superior din Israel. A fost analizată situația din sistemul de mobilitate academică internațională a studenților din învățământul superior din Israel.

Problema științifică importantă soluționată. Autorul prezintă argumente și date despre cererea sistematică de exod al creierelor din Israel în străinătate prin sistemul de mobilitate academică în rândul studenților din învățământul superior. Pentru a depăși pericolul exodului de creiere din Israel, autorul dezvoltă și oferă un mecanism național pentru mobilitatea academică internațională a studenților străini din învățământul superior, ceea ce minimizează scurgerea de creiere. Autorul elaborează și aprobă acest program.

Importanța teoretică a disertației. Importanța lucrării constă în obținerea de cunoștințe teoretice și practice în materie de mobilitate academică, exodul de creiere. Cercetările, sugestiile și concluziile lucrării pot fi utilizate în instituțiile de învățământ, precum Ministerul Educației, Comisia de atestare superioară, municipalitățile, instituțiile academice și economice din țară.

Importanța practică a studiului constă în analizarea modelului teoretic și economic care permite predicția viitorului pe baza formulelor obținute, analiza sistematică a datelor, construind astfel un plan de lucru pentru reînnoirea mecanismului, ideilor și argumentelor instituțiilor de învățământ superior din Israel. Rezultatele acestui studiu ne permit să identificăm tendințele și motivele exacte ale existenței acestor tendințe, în scopul adaptării pentru a lua deciziile financiare corecte.

Implementarea rezultatelor științifice. Rezultatele sunt aplicate în instituțiile de stat implicate direct în mobilitatea academică a studenților. Mai mulți profesori de conducere ai unei universități majore din Israel au remarcat importanța contribuției recomandărilor autorului. În plus, acest studiu va fi transmis Ministerului Educației și a Ort Colegiului pentru implementare.

АННОТАЦИЯ

К диссертационной работе на степень доктора экономических наук

Исследование спроса на интернациональную академическую мобильность студентов высшего образования Израиля

Менин Алон Зви, Кишинэу, 2019

Специальность: 521.02 Мировая экономика; международные экономические отношения

Структура диссертационной работы: Работа состоит из введения и четырех основных глав, заключения и рекомендаций. Главы включают в себя 27 таблиц, 22 графика, 1 карту и 2 схематические диаграммы. Содержит список из 213 библиографических источников и 21 приложение, всего 151 страница. Тема диссертации была апробирована в 17 академических статьях, опубликованных в Европе, Израиле, Азии.

Ключевые слова: высшее образование; утечка мозгов; Болонский Процесс; академическая мобильность; эмиграция; академический туризм.

Область исследования: экономические аспекты мирового и регионального импорта и экспорта академических образовательных услуг в Израиле, тенденция утечки мозгов, иммиграция и образовательный туризм.

Тема диссертации: исследуется академическая мобильность в высшем образовании израильских студентов и приток иностранных студентов для получения высшего образования в Израиле; исследуется явление утечки мозгов из Израиля.

Цель работы: исследование спроса на интернациональную академическую мобильность студентов высшего образования Израиля, попутно минимизируя тенденцию утечки мозгов из Израиля.

Научная задача диссертации лежит в попытке найти теоретическую модель, основанную на систематической обработке данных, для прогноза мобильности студентов в высшем образовании. Кроме того, национальная задача – минимизировать феномен утечки мозгов.

Научная новизна исследования состоит в комплексном целевом подходе к исследованию проблемы интернациональной академической мобильности студентов высшего образования Израиля. Проведен анализ ситуации, сложившейся в системе международной академической мобильности студентов высшего образования Израиля.

Важная научная проблема. Автор представляет данные систематического спроса на утечку мозгов из Израиля за границу через систему академической мобильности среди студентов высшего образования. Чтобы преодолеть опасность утечки мозгов из Израиля, автор разрабатывает и предлагает национальный механизм интернациональной академической мобильности иностранных студентов высшего образования, что минимизирует утечку мозгов. Автор разрабатывает и апробирует эту программу.

Теоретическая значимость диссертации. Важность работы состоит в получении теоретических и практических знаний в вопросах академической мобильности, утечки мозгов. Исследование, предложения и выводы работы могут быть использованы в образовательных учреждениях, таких как Министерство Образования, ВАК, муниципалитеты, академические и экономические учреждения в стране.

Практическая ценность исследования состоит в анализе теоретико-экономической модели, позволяющей предсказывать будущее, на основе значений формул, систематического анализа данных, и, таким образом, обеспечивающей план работы по обновлению механизма, идей и аргументов академических властей в Израиле. Результаты этого исследования позволяют выделить тенденции и точные причины существования этих тенденций с целью адаптации для принятия правильных финансовых решений.

Внедрение научных результатов. Результаты могут быть применены в государственных инстанциях, напрямую занимающихся академической мобильностью студентов. Несколько ведущих профессоров крупного ВУЗа в Израиле отметили важность вклада рекомендаций автора. Кроме того, данное исследование будет представлено Министерству Образования, и в колледже Орт для внедрения.

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LIST OF ACRONYMS

AIEA – Association of International Education Administrators

CBS – Israel's Central Bureau of Statistics

CEEO – Organization for European economic cooperation.

CHE – Council for Higher Education of Israel

CPI – Consumer Price Index

ECB –European Central Bank

ECC – European Cultural Convention

ECTS – European Credit Transfer and Accumulation System

EEA – European Economic Area

EHEA – European Higher Education Area

ERASMUS – European Region Action Scheme for the Mobility of University Students

ESG – European Standards and Guidelines

ESU – The European Students Union

EU – European Union

GDP – Gross domestic product

GNP – Gross national product

IAU – International Association of Universities

ICT – Information and Communications Technology- The reform in Japan

IEPN- Israeli European Policy Network

IIE – Institute of International Education

IMF – International Monetary Foundation

IOM – International organization for migration

LMD – License-Master-Doctorate – From The reform in France.

MOOC – Massive Open Online Course

OECD – Organization for Economic Co-operation and Development

PBC – is a committee of the Council for Higher Education in Israel

TEMPUS – European international Education Program

UNESCO – United Nations Educational, Scientific and Cultural Organization.

WB – The World Bank

WTO – World Trade Organization

INTRODUCTION

The relevance and significance of the current thesis lies in the research of the influence of worldwide macro and globalization processes on the economic and social factors within the worldwide academic world, and their relevance on the academic zone in Israel. The current study shall present a clear picture on the academic zone in Israel. In addition, the study shall present a clear picture as far as the Israeli student movement towards academic studies outside of the State of Israel, and the phenomenon of the brain drain from Israel. The relevance of this thesis derives from the fact that it deals with an issue which currently preoccupies the senior Israeli academic body – The Israeli Council of Higher Education, which attempts to try to get acquainted and to deal with this worldwide phenomenon. The current thesis shall explore in a comprehensive manner the issue of academic mobility, as it exists in the world, whilst examining the academic mobility world which characterizes the Israeli higher education students who choose to study abroad, and not within their homeland. Throughout the various units of the current thesis, the Author of the thesis shall describe first the history which had preceded this vast trend, which had begun in 1999. The year of 1999 was the year in which the Bologna Reform had begun to be implemented in the European countries, whilst affecting the rest of the countries of the world.

Afterwards, the Author of the thesis shall explore concepts such as immigration, educational immigration, academic immigration, academic tourism and demand for academic studies. The academic zone in Israel, as well as in many other countries, has gone through a great deal of changes during the past three decades. These changes derive from worldwide trends, which have begun all over the world. We have been witnessing, for years now, social-demographic, and technological changes, as well as changes in needs and the definitions of nations and cultures. Simultaneously, major perception changes have occurred in the status and purpose of the academic education, as well as in its purpose, manners of studying, the ascent and the descent of academic subjects and of career fields.

The relevance of the current research derives from its theoretical economic model which point to innovation that proposal to establish a national mechanism which shall be responsible for national activities for reduce the brain drain and the outbound of Israeli students, and increasing the demands of foreign higher education students to study in Israel. The proposed mechanism is independent and shall be budgeted by the State, based on the power of the law and early planning. This is necessary in order to deal with the worldwide issues of immigration of higher education students and brain drain.

Furthermore, the additional relevance of the current thesis is in the sense that it provides an innovative outlook on various concepts and provides yet another, updated, variation, which is connected to the existing reality. The author of the thesis explains a new concept of "immigration", "educational immigration" and "academic immigration", which is a relatively new trend. In addition, the thesis provides a wider, more structured reference to the brain drain phenomenon, which is, to some extent, a result of the aforementioned concepts.

The goals of this current research based on depth analyzing of the local and international trend which refer to the academic mobility in the state of Israel. In a variety of economic - social - pedagogical and international aspects. The stated goals are:

1. Analyzing the phenomenon of Israeli higher education students for academic mobility of academic mobility to foreign countries for study and labor migration.
2. Identifying the contributing factors to increase the demand level of foreign students to get study in Israel.
3. Presenting innovative solutions for dealing with the issue of academic mobility of foreign higher education students to Israel.

The following objectives shall be accomplished by:

1. Assessing, reviewing and defining the worldwide trend of mobility and immigration.
2. Reviewing the policies and solutions for minimizing the mobility of Israeli students
3. Assessing the existing Israeli policies and accommodating them to the reality of mobility of higher education students.
4. Mapping the countries which Israeli higher education students immigrate to for academic education (numbers, faculties, financial costs).
5. Present all the variables and observations required for economic model that will recommendations increase the foreign students, reduce the brain drain and the demand of Israeli students for mobility.
6. Providing innovative recommendations to the Israeli Ministry of Education and the political-social-economic establishment in Israel.

The research problem in the current thesis lies to the negative influence of phenomenon worldwide macro and globalization processes on the to the academic area in Israel. The current study shall present a clear systematic and national problem of non-professional management in the academic establishment in Israel, focusing on the academic mobility (Inbound & Outbound). This reality and conduct greatly contributes to the decline of the academic establishment, and for increase the demand of the brain drain. The relevance problem of this thesis derives from the fact that it deals with an issue which currently preoccupies the senior Israeli academic system – The

Israeli Council of Higher Education (CHE), which attempts to try to get acquainted and to deal with this local and worldwide phenomenon. The current thesis shall explore in a comprehensive manner the issue of academic mobility, as it exists in the world, whilst examining the academic mobility world which characterizes the Israeli higher education students who choose to study abroad, and not within their homeland.

The Scientific hypothesis applies to the reduction of academic budgeting and the reduction of academic institutions, which they are the main factors for the academic mobility of Israeli higher education students and the phenomenon of academic brain drain.

The methodological and informational support of the thesis based on the systemic approach of the research object. Scientific work by well-known economists and scholars of education and academia, such as: Green, Fullan, Gibbons, Arnold, Khun, Tregubova, and researches from Israel as: Guri- Rozenblit, Gold & Mohav, Cohen, Ben David, Caplan, Bar Haim, Adler and Maoz. All these researchers are presented as a professional guide for this study. At the same time, national strategies and practices for diagnosing academic mobility in Israel and in various countries around the world that were analyzed. The examples are: International Mobility in Israel - 2030, Atlas Project, USIEF program, Academic Cooperation with China and India, Tel Aviv Global - University of Tel Aviv, BTC (The National Bologna Training Center), Etc. As informational support, the thesis writer used practical government and macro-finance legislation and macroeconomics to present examples of budget and government policies in various government offices in Israel and many other countries such as: US, UK, Germany, Australia, Eastern and Western European countries. Important methodological studies which presented in the thesis were developed by world organizations such: The World Bank (WB), OECD, UNESCO, ERASMUS+, Bologna Reform, the Council of Higher Education in Israel (CHE), the Ministry of Education (MOE), the Ministry of Local Authorities and the Ministry of Economy in Israel (MOF).

The methodology of scientific research. In order to achieve the proposed research objectives, the following methods and tools of scientific research are used: the documentary method, which is based on general and professional bibliographic sources analysis. The sources were taken from scientific articles, economic books, economic news - press, and expert opinion articles. In addition, the synthesis method used to establish the links between the phenomena studied; The systemic method of analysis, through which the main components of strategic management and strategic management were investigated; Quantitative analysis method by statistical tools such as: Data Regression, Pearson Correlation, Regression Model, Optimal Model, National Mechanism. The graphical method of data representation; Comparative tables and

financial analysis of the various offices (including financial reports of universities and academic institutions in Israel).

After the data has been fully utilized and the various demands of the Israeli higher education towards higher education and academic mobility have been analyzed, the researcher reaches conclusions and recommendations which provide the Israeli educational establishment the tools which are necessary in order to deal with this trend. These recommendations could faithfully serve to lay out the relevant policies which are necessary in order to deal with this ever-increasing worldwide trend. In addition, the Author of the thesis will recommend to the ministry of Education how to deal with the demand of the phenomenon of brain drain from Israel.

The scientific sources of the results for the current study

The data and results of the current study are derived from several worldwide databases, which consist mostly of the knowledge and statistical websites of the OECD, WTO, UNESCO, the Bank of Israel, the Erasmus – data programs, and the CIA – Fact Book. These sources of information were chosen as they are considered to be sources of information which crosscheck data and provide researchers with authentic and reliable information. The researcher also uses in **regression model** which include over than 25 Variables. the model based on analyzing Statistical observations, a dependent / independent variable, a systematic-empirical data and create a **theoretical-economic model** that can provide a forecast of academic mobility and brain drain. **The outcomes of the current study** present data which had been compiled from the years 2006 to the years 2017 – 2018.

The relevance of these sources of data provide the researcher with the opportunity to present an updated, essential, and fundamental picture of the current trends and mobility of higher education students to the acquisition of higher education outside of the State of Israel, and the phenomenon of academic brain drain.

The presentation of the details. The numerical data and cross-checking of the data shall be presented in graphs and charts for analyzation of the findings and conclusions. The findings shall be presented after a careful analysis and synthesis of the quantitative data (statistical averages and dynamic and arithmetic series. A regression model was created that created a theoretical-economic model based on statistical observations, a dependent / independent variable, a systematic-empirical analysis, and a forecast of academic mobility and brain drain A questionnaire was not used in the current thesis because the research is being done at an economic-regional worldwide level, and thus, a questionnaire would not have assisted the purposes of the current thesis. The author of the thesis is responsible for the authenticity of the data as well as for their reliability and for method of their presentation.

The novelty of the current thesis products shall provide a professional and reliable basis for a worthwhile coping of the systems of academic education and of the decision makers as per the necessary steps required to deal with this ever-increasing phenomenon of transferal of Israeli higher education students to institutions of higher education outside of the country. This is an urgent, painful issue, and, as shall be presented in the current study, has already occupied the Israeli Council of Higher Education, although no meaningful actions have been taken thus far**.**

The theoretical meaningfulness of the current study derives from its broad and comprehensive picture of the existing worldwide phenomenon of academic mobility of higher education students and staff amongst academic initiatives and projects, institutions, research bodies, and universities. Furthermore, the current study provides examples for dealing with this trend, as far as the institutional and political polices of the countries are concerned, and also with regards to the recognition of the economic, social, cultural, and academic essence are concerned. These examples obligate each and every country to imply clear policies which serve in its best interest. Also, it is important to create a multi raises new theoretical language that recognizes the global trends that enable educational migration from country to country. This educational migration will open additional resources such as employment, academic tourism, economic development and scientific products as one.

The mobility of students and the development of the academic zone serve as one of the identifying marks of the global world which crosses the borders of the countries in this modern day and age. The countries which had successfully acknowledged this trend and joined it as opinion- and direction- leaders had profited from it and are currently enjoying a worldwide recognition for it. Naturally, this credit is manifested in the academic and financial success of these countries' higher education institutions. In the State of Israel, we are also witnessing a differentiation amongst the institutions of higher education, which lead academic enlightenment and progress, openness, and cooperation with other institutions from abroad receive international recognition and inclusion in various programs, scholarships, studies, and wide knowledge bases.

The relevant solutions value of the study is focus and divided into four major fields :

1. **The demand level of academic mobility** amongst Israeli higher education students – The national mechanism will provide solutions the reasons, personal motives and reality which push them to do so. The most practical value of this solutions lies in the recommendation to establish a national mechanism which does not currently exist. The proposed mechanism shall connect the various relevant government offices and academic institutes (see annex 18) enable the leveraging of immigration of foreign higher education students to Israel, on the one hand, and the decreasing of the extent that Israeli students leave the State for academic purposes, on the other hand .

2. **The method of solutions operation of the mechanism** shall allow the relevant Ministries and authorities (Include local authorities) to work in collaboration- a collaboration which does not yet exist. The proposed mechanism shall operate in collaboration with the municipalities to create a circle of actual work. This collaboration shall reinforce even farther by the inclusion of the Ministry of Tourism, an act which shall assist in turning the educational immigration into a tourist project, which shall receive similar treatment to that provided by the Ministry to other tourist projects.

3. **The brain drain phenomenon from the State of Israel** bears with it a practical significance which is no less important than the arrival of foreign higher education students to Israel. This is a trend which is worthy of the attention of the Israeli government and relevant institutions. Significant percentages of higher education students, teachers and academic staff, as well as workers in "free trades" (such as engineers, medical doctors and software engineers) are finding themselves emigrating from the State of Israel. The practical value of the theoretically economic model is to enable a brain drain forecast for students, academics, scientists and doctors if they do not take active steps to prevent them, as establishment of the mechanism that shall be evident in the combined goals designed to minimize this trend via a focused treatment of the situation and the undertaking of the economic and financial establishment in favor of establishing new national sets of priorities.

4. **The Department of International Relations** – The establishment of the proposed mechanism shall be done in collaboration with the Ministry which is in charge of Israel's international relations. This is necessary in order to take advantage of the abilities of this Ministry in favor of increasing the levels of demand and the commerce and trade relations with the countries with which Israel maintains academic relations.

The confirmation of the results of the current study was done by analyzing and synthesizing the data, using statistical averages, dynamic arithmetic series, graphs and tables of comparison. The data was derived from reliable databases, such as those of the OECD, UNESCO, WTO, WB, Erasmus + - Data, the Israeli Council of Higher Education, the Israeli Central Bureau of Statistics which is situated in the office of the Israeli Prime Minister, as well as based on accounting reports of Israeli universities. Personal interviews were not conducted, as they do not serve the purpose of the current research**.**

The summary of the units of the current thesis allows the researcher to provide a general review of this topic. The current thesis consists of three units dealing with the world of academic mobility and with the presentation of the way this trend evolved, beginning with the Bologna Reform in 1999 until present day. The units of the current study deals with the general worldwide

situation, the existing initiation in major countries, and the development of this phenomenon in Israel and its consequences on the State of Israel.

The first Chapter continued with a review of definitions of central concepts such as immigration and its meanings, academic immigration and brain drain. This was followed by a review of the development of the academic education in the world, with a particular emphasis on the various stages which the continent of Europe had undergone (the Bologna Reform, the establishment of the European Union, the UNESCO organization and the Erasmus Program.

In the end of Chapter 1, conclusions are presented as per the review and its findings, whilst providing a preliminary picture of the worldwide changes which have occurred as a result of the development of the academic zone, of the implications of the globalization, of the worldwide demographic changes, and of the macro-economic influences.

The second Chapter includes materials and methods of the research and focuses on the method of processing the statistical data and the method for determination of the conclusions. Chapter 2 ends with a summary of key points of thesis methodology.

The third Chapter is divided into two major sections. The first section provides an updated glance at the effects of the Bologna Reform on the Israeli world of higher education: The influences which had changed the web of needs which characterizes the needs of the Israeli higher education students, their preferences, the way in which they perceive the higher education system, and the future consequences of the immigration and academic mobility to a foreign country. The second section of this unit provides an analysis of statistical data which shows different measures of demand of Israeli higher education students to the academic studies in various countries. This unit examines the different areas of the world as far as the well-known and major centers of higher education are concerned. The unit also presents data concerning the educational mobility rates concerning the educational mobility rates over a period of five years (2013 – 2018). It also deals with the vocational academic preparation and training programs for which Israeli students would like to mobilize academically. The unit also deals with the relatively low demand for non-Israeli students to study in Israel and presents the consequences of this.

The third Chapter ends with a summary of the findings and conclusions of the presented data, whilst emphasizing the main countries which are popular in the perceptions of the Israeli students of higher education.

The fourth Chapter begins with the existing policy and treatment of the State of Israel in the issue of demand of foreign students to study in Israel. The author of the thesis recognizes that there is no current actual organizational treatment of this matter. in this chapter A theoretical-economic model was presented after a systematic analysis of regression data with 4 steps. The

model offers a theoretical forecast of brain drain and presents the most significant factor that can reduce the phenomenon. This requires the establishment of a coordinated and structured mechanism which shall take care of this problem. In addition, the author of the thesis has come to the conclusion that the lack of treatment of this problem has led to an ever-increasing trend of brain drain. In favor of the recommendation to redesign the State's policy on this matter, the author of the thesis provides examples of countries that have successfully dealt with this challenge and have established excellent mechanisms (Germany, Great Britain, the United States, China and Australia). Alongside the continuance of presentation of data in the fourth chapter, especially with regards to the brain drain and its economic and social implications, the chapter also deals with the innovative recommendation to establish a national independent mechanism which shall operate in connection with various government ministries, each of which shall be represented adequately and properly, in order to deal with the need to increase the demand level of foreign students to come to study in Israel. The mechanism shall operate in order to accommodate the Israeli system of higher education to the demands of the Bologna Reform, academic cooperation, and inclusion of the municipalities and creation of an array of tourism services designed for the foreign higher education students (academic tourism). In addition, the author of the thesis suggests that the Ministry of Foreign Relations shall also be collaborated within the proposed mechanism in order to enable it to successfully deal with the possible compensation and values which are potentially available from the economic-commercial-cultural-industrial aspects with those countries to which Israeli higher education go to study and from which foreign higher education students come to study in Israel.

Key Words: Academic Mobility, Higher Education, Migration of Education, Demand of Foreign Student, Immigration, Brain Drain.

1. THEORETICAL ASPECTS OF THE DEMAND FOR ACADEMIC MOBILITY IN ISRAEL

1.1. The Development of Educational Theories within the Modern World

Education, like other Prophecies, based on theory and practice. Educational theory provides the data profession (philosophical, psychological, economic, political and cultural) needed to analyze the reality in which the educational system works, she points to the strengths and weaknesses, and explains their understanding [12, p.127]. Derived from educational practice and educational theory aimed to implement the findings of the theory and incorporate them within the framework of pedagogical practice [40, p.358]. Theories and philosophies of the many and varied world of education chose to present a number of relevant theories that serve the subject matter in question.

Major Trends in Education

Education researchers argue that the two of the ideologies which now dominate education in educational systems around the world are: the traditional and current stream of progressive [38, p.224]. Mullins [104, p.346] based on traditional teaching culture. The traditional teaching takes place for cultural and social who contexts that affect daily life in an educational institution, do not arouse criticism or questions. The traditional teaching not only preserves the existing arrangements in an educational institution, but also the social arrangements outside, which attached to them. According to Giroux [62, p.122], educational institutions who use traditional teaching methods are conservative and used a scale model of social stratification, being a mechanism that preserves the social system itself. These schools based on an instrumental approach, the learning of skills and the expectation of usefulness. Teachers are in the world, and in Israel, are critical of the social processes and interpret them as a reflection of "reality known" to them. This order is the result of a traditional conservative approach, according to which teachers take up the tradition and culture of the school and the university for granted [27, p.97].

The progressive flow reflects a relatively new education arrangement. The theory focuses on the development of teaching and learning methods in innovative and humanist versus coping methods of teaching and learning conservative [56, p.225]. This stream characterized by prudent and judicious use of the results of educational research, in tandem with the implementation of the results of studies in the psychology of learning, particularly with regard to the provision of the students and their needs at the center of education (student centered). The different approaches of progressive education that formulated in light of the social ideas of individuality and the importance of individual fulfillment [12, p.126]. The assumption is responsiveness to the needs of

individuals and appropriate educational response that each student will enable them to reach higher academic achievement, and achieved progress of society as a whole [5, p.22].

Ariav [7] present that the difference between the two streams - both traditional and progressive - education is basic questions, such as:

1. Determine the goals of education.
2. The role and the role of teachers and students in the process of teaching and learning.
3. Characteristics of the curriculum, teaching methods and evaluation, organization of the learning environment and pedagogical beliefs of teaching staff. Attitudes and actions of the teaching staff determines the culture of the educational institution and the current affiliation traditional conservative or progressive-innovative stream.

The Influence of social changes on the development of academic changes. The author of the thesis is witnessing far-reaching changes, although transboundary tensions, and that the world continues to be organized through the configuration of the nation states. Global mobility of people, groups and cultures is growing all the time. The ideas and innovation are moving synchronously from one institute to another. Half the world's population uses mobile phone networks, which are technical conditions early universal society [71, p. 175].

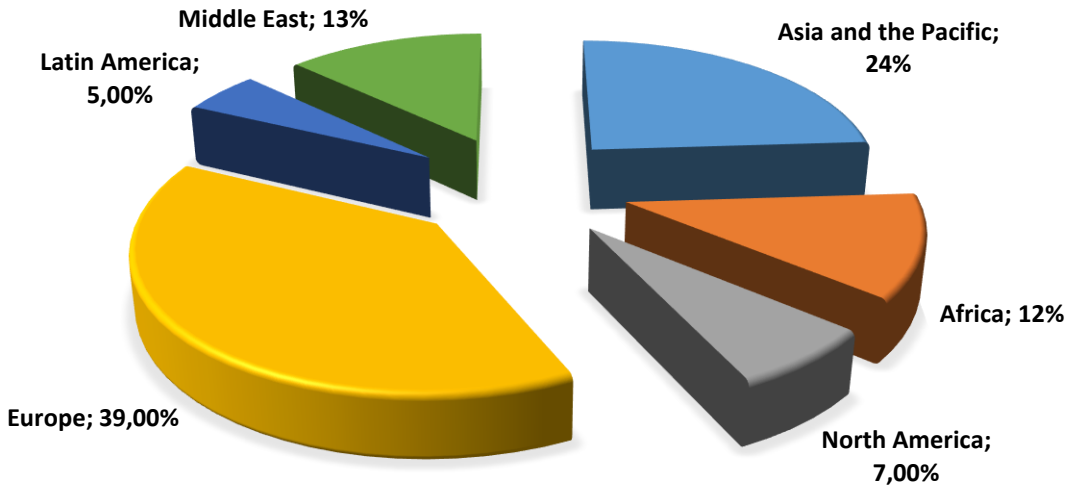
The Evolution of global education

Later, many changes have taken place, partly developed her higher education based on mainly European initiatives. The organization was founded in 1950 World University (In English: International Association of Universities) called initials – **IAU** [196]. The organization represents the work of **UNESCO Association**. As of the 2011 organization has 604 higher education institutions, 27 higher education organizations, 12 partners and observer from 150 countries [186]. The organization exists to promote the duty of universities and institutions of higher education and social institutions, Inspector the academic standard, standardizes uniform coefficient through provision of research and services, promoting the principles of human liberty, justice, respect, human solidarity. Operations are performed through international cooperation and the development and strengthening of higher education [106].

The organization ensures the existence of partnerships with international, regional and various national active in higher education. The organization is located at UNESCO headquarters in Paris.

Depending on the organization IAU, University rankings is increasing, especially university's research emphasis ownership. Until the establishment of the organization, global ratings of each university were small item with Shanghai Jiao Tong University ranked first table of 500 best universities, launched in 2003. The study shows that despite the disadvantages of this

form of cross-border comparison, the ratings have a profound influence on students and their families in decision-making about mobility option to acquire an education in international education [82, p.28].



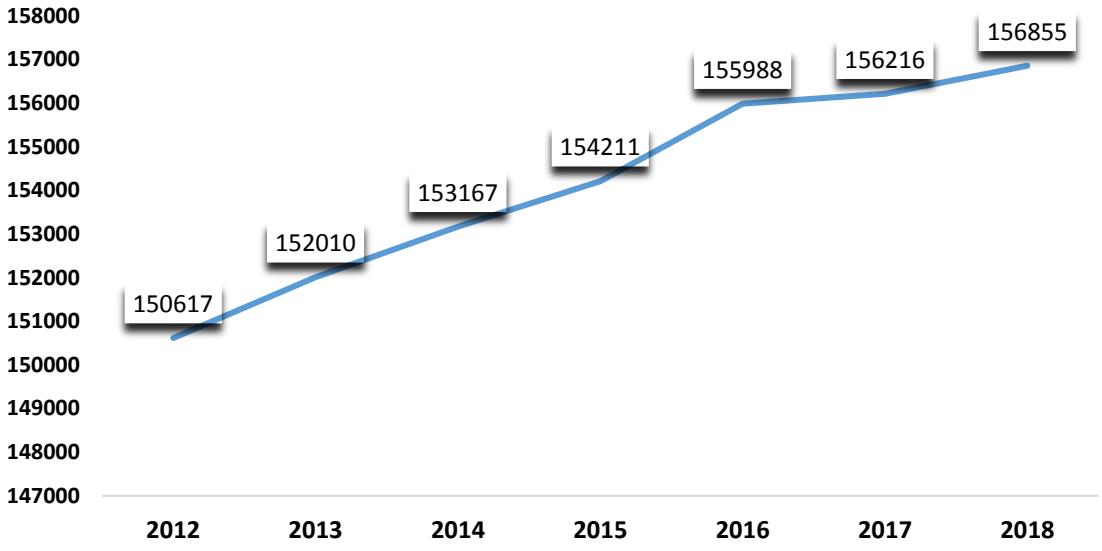
Graph 1.1. IAU member's institutions 2017
Source: [196]

The list of the Members States is in **Annexes No' 1.**

Time of Changes in East Asia

After 1970, Japan added to the list as a major factor - the new zones. The systems East Asia (China, Hong Kong, Taiwan, South Korea and Japan) invested in research and development as is done in Europe and the UK [38, p.230]. Even the output of research institutes and science fields in Korea, Singapore and Taiwan rose quickly. Advanced best universities in all of these systems. These outcomes reflect the investment of five to ten years, and as long as the financing of leading universities continues to increase, the rise of Asian science domain status will continue to rise in the eyes of the world [40, p.357]. The increase of the status of higher education in East Asia, in modern economies dynamic, leading to a world where cultural mixing will be more diverse. Mobility and convergence of knowledge affect universities and their personnel everywhere. All non-English speaking countries perceived the new hegemony of the English language science and American models of systems and universities. They all face the same tensions between globalization and standardization, stress differently stated differently in every nation [60].

All the countries in the region have concluded that lifelong learning helps every citizen to prepare himself passages and many changes in his life. State Japan understood that among the first countries in the Far East and so started investing funds in opening educational opportunities for students coming from outside the country. We see a constant increase in the first signs of which were in 2010, and peaked in 2016 [25, p.42].



Graph 1.2. The total internationally student in Japan 2012 - 2018
Source: [83].

The graph 1.2 presenting the increase in the number of foreign students each year from 2012 to 2018. It is a total demand of almost 11% in 7 years.

Time of Changes in Europe

Today, in the most of the countries there is complete awareness that an effective system of learning is vital to the economy and society. An example of that fact is the last ten years [17, p.82]. The European Commission has played a key role in encouraging EU Member States to place the necessity of lifelong learning as a fundamental principle in education and training. Progress was evident in the provision of education and high-quality vocational training for youth. Education and training are key to the success of Europe's economy and social cohesion. Yet, if we consider the demographic patterns (intensive migration of immigrants) in Europe at this time, you must complete the education provided to children and youth by expanding learning opportunities during adult life. These opportunities for adults provide options to renew their skills and qualifications for life and work, if required to do so [166]. These key advocates rapid growth strategy, ongoing and includes the sale of the central role of lifelong learning and skills development in response to the economic crisis and an essential element in the social and economic strategy of the European

Union. The education as a mechanism for many primary roles in tackling economic and social challenges in the EU, mainly through [85, p. 81]:

- Contribution to growth vigorous, sustained and features that will allow employees to switch jobs in sectors with low employment growth in sectors with high employment growth. However, by developing their knowledge, skills and abilities.
- Develop skills that will be required in the future by investing in human capital - particularly through the acquisition of new skills to about 76 million people of working age (aged 64-25) living in the European Union. Those who have completed a maximum of junior high school. 21.5 million Europeans, all skill levels and ages, were unemployed in 2009. Especially long-term unemployed among them (33.2%) need new training and new skills so they can find a new job and help Europe emerge from recession.

Examples of the student's number which are dropped out from school, and the change from the implementation of the program in that country, we can see in the table attached as **Annex No' 3.**

The global changes in the world

Changes in education - from the perspective of all the companies in all the countries, it is important educational and ethical forced to spend most of the youth school framework. This increases the chances of many to improve their achievements, provides personal and social skills, and reduce the extent of crime [129, p. 141].

Changes in employments labor – In the future, young people will reenter the job market running mechanism is quite complex and sophisticated in estimating the quantity and quality of human capital they bring with them. Market workers who realize, "sooner or later", signals that allow him to rate the details by type of education acquired [118, p.55]. The students know this and this affects the route and location they choose.

Demographic transition - socially - the employment situation of women- one of the most significant phenomena labor markets, in Israel and around the world in recent decades is impressive increase participation of women in the workforce. Since the family is the economic unit makes decisions on the allocation of time between leisure and work indoors and outdoors, it seems that the more appropriate measure for checking the dimensions of the gap is the gap in family income that expresses the family's economic well-being [1, p.12].

Updating the Regulations of the Israeli Council of Higher Education in 2015. The first higher education law enacted in 1958, and has been going through innovations and updates on topics that employ it at any time [9, p.311]. Since the mid of 1990 on updating new legislation transferred the activities of the Council for Higher Education regarding academic openness that came with the "*spirit of globalization*" last academic world [101, p.22]. Inter "Alia"(A few years

which a lot of Jewish people move to Israel from Russia), in the 90's, higher education system has made another leap when Israeli Amendment No. 10 of the Council for Higher Education could be the opening of various academic colleges - general, technological and professional (disciplines) [13, p.6]. Among other things, the change was being expressed in some of these colleges as institutions that are not supported from the public purse, i.e. private colleges, and the fact that institutions funded by the state official or government [9, p.288].

The Council of Higher Education is a government agency, "CHE" is a statutory corporation established in the Council for Higher Education [197]. The Higher Education Council is a state institution for higher education in Israel, which performs its functions under the powers granted by law passed by the "Israeli Knesset". The novelty of this legislative act was that the government and people of Israel were interested in the affairs of a higher education will be delivered solely at the discretion of an independent institute, independent formulates its policy and accept its decisions after discussing professional matters [47, p.25].

Two important elements reflected in the Council:

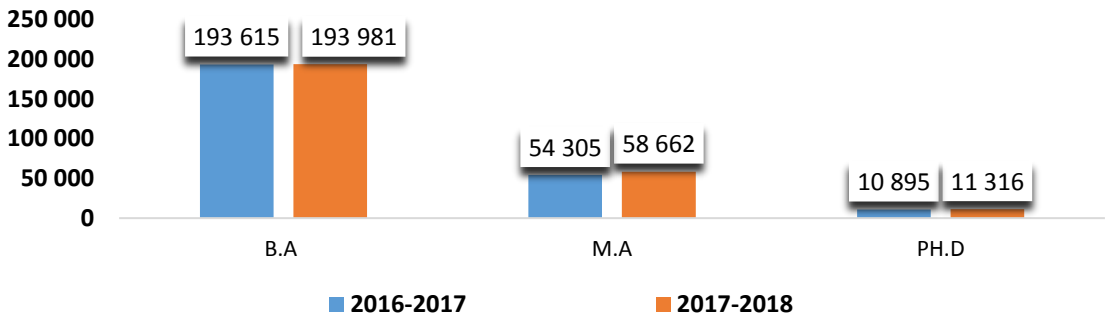
1. To Save independence of institutions of higher education to support their academic and administrative, as part of their budget.
2. The statement that at least two-thirds of the council members will elect because of their personal field of higher education.

Until now operated from the establishment of the Council for Higher Education eleven councils. In March 2015, there was a 12 Council. The Council's working methods include:

a. The criteria for granting a permit to open a higher education institution and maintain it.
b. The rules for institutions of higher education.
c. The rules for recognition of academic degrees.
d. Rules for Accreditation accredited institution to provide an academic degree.
e. Rules for recognition an accredited institution.

The data base of the higher education in Israel shows that:

- In 2018 - there is 64 academic institutions. as follows: 7 research universities, the Open University, 36 academic colleges (21 of which are "funded colleges"), and 20 teacher-training colleges.
- In the school year of 2017-2018 attended by 309,870 students in different Academic qualifications. It was a small increase compared to the 2016-2017 academic year.



Graph 1.3. Numbers of Israeli students according to Academics degree 2015 – 2018.

Source: Made by the Author from source [158, 197]

According to Caplan et-al [28], The Higher Education Council indicates that favorite areas of study by students in Israel (2017-2018 academic year), reflecting the sought-after professions Israeli labor market with a touch of the global labor market – worldwide. They reflect the change in the world of work in Israel, and worldwide effects there of the high demand for various interests raises. Many questions arise regarding academic mobility demand abroad due to the inability of the establishment to contain within it the great demand for certain professions [10, p. 77]. In the next table (1.1), we can see the changes (by Percent) in the mobility of students in the faculties (2015-2018).

Table 1.1. The Mobility of students in the academic faculties 2014 – 2018 (B.A degree)

Academic Year	2015 - 2016	2016- 2017	2017-2018
Total Student's (*Universities*)	193,615	193,981	194,254
Total Percent	100%	100%	100%
Humanities	7.4%	7.1%	6.2%
Education	**14.8%**	**15.5%**	**16.1%**
Art and design professions	**2.8%**	**3%**	**3.1%**
Social science	20.7%	20%	19.2%
Business and Management	11.6%	10.6%	9.9%
Practice law	**8.3%**	**8.2%**	**8.5%**
Medicine	1%	1%	1.1%
Paramedical	**5.4%**	**5.8%**	**6.5%**
Mathematics, Statistics and Computer Science	**6%**	**6.2%**	**6.7%**
Physics	1.3%	1.4%	1.4%
Biology	2.6%	2.6%	2.6%
Agriculture	0.6%	0.6%	0.6%
Engineering and Architecture	**17.7%**	**18%**	**18.1%**

Source: [197].

The UNESCO Policies of Higher Education. United Nations Educational, Scientific and Cultural Organization (UNESCO) is the United Nations Educational, Scientific and Cultural Organization of the United Nations. An organization that serves the body-professional agency for

the United Nations [121, p.33]. The organization founded in 1945 and its main objective is contributing to peace and security in all regions of the world, by promoting international cooperation in the fields of education, science and culture. What drives the organization's perception is striving to instill worldwide a feeling of respect and responsibility towards justice, rule of law, human rights and fundamental freedoms declared in the UN Declaration. Today there is a membership of 195 countries at UNESCO. His base is determined to be in Paris, and has more than 50 field representatives and a number of institutions and offices around the world. In connection with activities of the organization and the subject of the study - academic mobility, and testing quite a demand, we see that there is a great activity programs, monitoring, analysis and the financing of such programs for academic mobility. To know the organization, academic mobility is an excellent catalyst for the transfer of academic spirit, cooperation and knowledge transfer between countries [127, p.29].

The organization analyzes and displays data related to the level of academic mobility that exists in the world and trying to contribute and steer the balance. The 2016 Work - Plan for 2021 shows that the organization is very clear objectives regarding the development of universal global education enterprise. The organization gives its contribution and budgeting variety of topics, including also for the expansion of academic cooperation and expanding access to higher education among all citizens without national identity. The UNESCO's project [188] engaged the support of higher education for 2016-2018 priority three main areas. In their opinion, the development would contribute to the overall goal of the organization:

1. Contributing to the development and expansion of access to higher education in the world - UNESCO provides technical support on regulation through the application of the system of monitoring the academic and ethical conduct in every university now International Association of Universities. UNESCO is considering the development of a global convention on the recognition of higher education titles and will continue to monitor the implementation of the existing regional conventions.
2. The organization will support the funding of technology and takes care of representations from various higher education. The organization took on the budget and fund programs and initiatives that deal with distance learning, and creating mechanisms to promote and implement effective education programs that operate through the Internet.
3. Policy support - to reach finding solutions to current policy challenges facing higher education systems, UNESCO will allow the development of knowledge, sharing and learning on issues related to the contents of equity, quality teaching, diversity of disciplines in higher education, governance and funding.

An example for donations and distributing in the organization's budget, can see in the **Annex No' 4.**

1.2. Academic Mobility

The Academic mobility is a subject on the academic world, which has administrative concept with many different meanings [124, p.11]. Theme developed several decades ago, gained momentum a broad action plan immediately after the Bologna Declaration had focused the bulk of its role and its findings towards the mobility of students, with social transformations - political – economic. Daugeliene [41, p.59] analyzes the concept and interpreted dictionaries concept of academic mobility, and tied reality of the region (Kazakhstan and countries of the Soviet Union). In the context of economic globalization, international trade in goods, services, and information is more important than ever. This global economic integration demands linguistic and cultural knowledge from future partners, which can be acquired as part of an individual's education, whereby a period of study abroad allows students to absorb the cultural and social customs of their host country and thus to act as ambassador for both their host country and their own. At the same time, it is now widely recognized that a highly educated workforce is a prerequisite for sustaining economic growth in modern knowledge-based economies where research and innovation drive economic expansion [22, p.57].

The OECD [107, p.12] organization are very careful about his definition of the **phenomenon of academic mobility.** He made a connection between the educational system and the trends of the immigration. The effects of this is the brain drain which become as part of the academic mobility. He also tied her employment troubleshooting and experts. According to the organization, continued economic growth in most Organization for Economic Cooperation and Development countries and the development of the information economy has dramatically increased migration of skilled people, especially in science and technology [114, p.177]. Some OECD countries relaxed their immigration policies to attract foreign skilled labor shortage facing sectors. In the context of the growing internationalization of education, academic mobility appears as a potential source of qualified workers from 'perspective in host countries, or in the school or through subsequent recruitment. Study abroad can be part of a deliberate strategy for migration from the perspective of students. The meaning is the relationship between academic mobility and migration, and assesses the impact of immigration policy. Indeed, some OECD countries allow foreign students to apply for resident status from within their territory as part of a strategy to raise immigration. The impact on sending countries is also envisaged [105, p.81].

The Organization of American academic mobility - OPEN DOORS [195] does not consider to the phenomenon of academic mobility of students and staff, but only in an "economic eyes". He is not using the term academic mobility. only but uses the term international students.

The organization, which funded by the state, should achieve economic returns by the opening of the academic institutions for students who can study at universities and pay tuition. Just at the University of California campus (UC) Berkeley, the number of freshmen International in 2011 increased by 50% comparing to 2010. It has translated into more 196 international students that in additional revenues expected 18 million dollars over four years (year's degree). We now see increased thinking and action in all regions of the world, all of my act to prevent and needs [63, p.7].

The American Authorities [37, p.30] looks about the rising power of technology in the economic sphere and the imperative need for countries to keep pace with latest technological developments, in particular in key economic sectors, therefore encourage the internationalization of educational courses and student mobility. For sending countries, the underlying rationale is to benefit from technology acquired at minimal cost upon students' return. For their part, host countries may take advantage of the presence of foreign students by allowing some of them access to the labor market in the form of part-time or seasonal work, participation in research and development work (R&D) incorporated in educational programs, or immigration upon completion of their studies.

The Germany government [183] explain the trends as option of given that student mobility has been made easier in recent years by developments in communications, faster information flows, and proactive student recruitment policies in many host countries, a growing internationalization of education systems is currently taking place worldwide. This is displayed in the content of programs as well as the evolution of student populations, which are becoming increasingly cosmopolitan. Indeed, the latest data from the Organization for Economic Co-operation and Development (OECD) show that the percentage of foreign students enrolled in OECD campuses rose by 34.9% on average between 2006 and 2011 and by 50% or more in the Czech Republic (81%), Iceland (70%), Korea (60%), New Zealand (159%), Norway (52%), Spain (47%), and Sweden (67%). In absolute terms, more than 450,000 new individuals crossed borders to study in an OECD country during this comparatively short period, with the number of foreign students enrolled in the OECD increasing from 1,327,000 to 2,503,000 [166].

The meaning of academic mobility

Academic Mobility implies a period of study, teaching and/or research in a country other than a student's or academic staff member's country of residence ('the home country'). This period

is of limited duration, and it is envisaged that the student or staff member return to his or her home country upon completion of the designated period [188]. Mobility trend has certainly created a range of new opportunities in a globalized higher education environment, which of course are not equally accessible and benefit the wealthiest or otherwise socially privileged students [5, p.21], even as far as financed mobility is concerned, as, for instance, the one promoted by ERASMUS [174]. On the other hand, it is possible, if not ethically and fairly managed and monitored, that academic mobility can create more brain drain than brain gain to less economically healthy countries and promote a new pattern of migration: Talent Mobility: mobile students which become a **labor immigration**.

The term **'academic mobility**' is not intended to cover migration from one country to another. Academic mobility may be achieved within exchange programmers set up for this purpose, or individually ('free movers'). Academic mobility also implies virtual mobility. The principle of solidarity and true partnership among higher education institutions worldwide is crucial for education and training in all fields that encourage an understanding of global issues, the role of democratic governance and skilled human resources in their resolution, and the need for living together with different cultures and values.

The Israeli ministry of education [2, p.39] prefer to the Academic mobility is a global trend in which students who are citizens of a particular country go to study in another country. Backed mobility process proper legal approval and legally. The Israeli government is aware of the demand for mobility of Israeli students to study outside Israel. As well, the Israeli education shad, and the Council for Higher Education are working to make academic mobility demand into academic institutions in Israel. Today there are several universities which are attended by foreign students. In the State of Israel, there is a problem with the academic organizations, and therefore operate mainly through programs of academic learning experience through the programs of the Erasmus + organization. According to the UNESCO [141, p. 86], The practice of multilingualism, faculty and student exchange programmers and institutional linkage to promote intellectual scientific co-operation should be an integral part of all higher education systems.

Choudaha [34, p.20] in his article - "Trends in International Student Mobility", comprehensive review examines the changes which has experienced the American and the Australian Academy due to the enormous academic mobility that exists in those countries. Academic mobility has many faces, and diverse starting points. Some see it positively and deny it, rather than principles, but the volume of growing. Choudaha [34, p.22, 27] accent the major financial changes produced outside the United States in mobility, and huge revenues that lead to economic prosperity of the universities that enjoy the same mobility that comes to them. He said

that the international student recruitment becomes an integral part of the financial system, from the many higher education institutions worldwide. In addition, this, is an important means to attract talent and expand the range of offerings on campus, it provides a response to budgetary cuts and increased competition among institutions for local students [58, p.11].

The tough competition is forcing many institutions to make the "recruitment from outside" for clear strategic recruitment efforts of their international. For example, California has experienced severe cuts in state funding public education (funding to local students - American), and thus takes advantage of the revenue stream of recruiting international students towards scholarships for locals [76, p.32].

The increase for academic mobility

It is no secret that students around the world have become more mobile and that higher education is becoming more global. International students now make up a significant portion of the student body at universities and schools around the world. In the US, the Department of Commerce reported that international students accounted for more than $30.5 billion in 2015. In the UK, a Universities UK report found that students from the European Union contributed at least £3.7 billion to the British economy [77, p.40]. And in Australia, the international education now stands as the country third-largest export [71, p.183]. The growth in international education as an economic sector has countries around the world developing strategies to attract foreign students, but why are students becoming more mobile? And what does increase student mobility mean for higher education stakeholders.

A. Jobs - Employment is a huge motivator, and for students, job prospects are one of the most pressing concerns when it comes to education options. According to a recent QS survey of graduate students, employability plays a big part in students' selection of academic opportunities.
B. Cross- Culture Communication Skills - One of the most important skills students learn while studying abroad is cross-cultural communication. The world has become so connected that all industries and sectors need skilled professionals who can work efficiently in a variety of situations and locations.
C. Access - Because international experience holds such high value for employability, the demand for study abroad opportunities has increased exponentially. Higher education institutions recognize that students want study abroad options, and are responding rapidly to this need with improved international student services, increased funding options for overseas students, global curricula, pathway programs, and degree recognition schemes.

International academic mobility of students & researches

Many countries are now encouraging their higher education institutions (HEIs) to internationalize their activities, recognizing the economic, social and political benefits that will flow from it [79, p.113]. More general government policies can also be encouraging of internationalization, especially those which encourage HEIs to be more entrepreneurial. The development of more flexible forms of delivery, combining traditional and less traditional methods, and taking advantage of recent technological developments, also have a key enabling role to play in increasing the options for internationalization. The attempts within the Bologna Process to facilitate the comparability of educational programmers and degrees are testament that mobility in the area of higher education is not only desirable, but also needed in order to make European higher education attractive within a global context [198].

The trends of academic tourism

According to xose [155, p. 158] In recent decades have witnessed a dramatic increase in the mobility of students in higher education. When fulfilling certain conditions, this type of mobility can really be considered a type of tourism activity. Consequently, its main purpose is to identify the main factors affecting the demand of academic tourism in that country. Contrary to what can be observed in other types of tourism, results showed that academic tourism depends mainly non-economic factors certainly; In other words, the relevance of the habits and preferences of students, potential attractiveness, and the significant impact of the Erasmus program. Academic Tourism is integral part of tourism (though still integrated with other types of Tourism) surrounding the mobility of students in higher education institutions, provided mobility that meets certain conditions, in accordance with the recommendations of the World Tourism Organization. According to the Garcia [59, p. 22], the main objective in modern academic tourism is acquiring new knowledge about the culture or history of other countries or cities. This type of academic tourism trend in many regions around the world, especially in Europe. Academic tourism market aimed at learning a foreign language is an outstanding example of this type of tourism. This sector has been growing steadily, especially in these destinations that can offer a language that is widely used around the world. in current revenues language faculties of only 15 million euros, it is estimated that there is a potential market of 375 million people who want to go to learn a language, especially if it is combined with experience in other activities based on the local culture.

Exchange programs of academic students and faculty

Continental Europe (EU) took action with ERASMUS + programs, and became as "address" to the growing problem of unemployment, training in relevant subjects required employment etc. Therefore, the EU issued a plan of action, encompassing countries in the fields

of education, training, youth and sport for the period 2014-2020. Educational programs, vocational training and youth care can make a significant contribution to help tackle socio-economic changes [121, p. 43].

These are the major challenges that Europe will need to meet by the end of the decade, and to support the implementation of "**Strategy 2020**" European growth of its places of employment, social care, equity and creating a healthy economy. Know the EU (according to the findings of the OECD and UNESCO sites) too many young people are forced to leave school early, thus creating a high-risk group course and likely to be unemployed and be part of the social margin. Dealing with rising levels of unemployment, especially among young people, has become one of the most urgent tasks of European governments [85, p. 76].

The idea is to have relations between academic institutions and countries. The program funds scholarships for students, enabling them to learn other academic institutions, outside their country. The same case in which faculty teach in another state employee. The benefit of these programs is academic and combined contribution of experts in various fields.

The international program ERASMUS + in Israel are the overall objective of the **N**ational **E**rasmus+ **O**ffice (NEO) in Israel is to improve the relevance, effectiveness and impact of the Erasmus+ programmer in the country. The following can be listed among the NEO team activities [181]:

1. Information and Promotion Activities - The **N**ational **E**rasmus+ **O**ffice (NEO) provides information on Erasmus+ and promotes the programmer throughout Israel.

2. Assistance to Potential Applicants and Beneficiaries - The NEO advises, informs and assists potential applicants with the preparations for the submission of proposals. In addition, it organizes workshops for potential applicants and assists in the search for national or international partners.

3. Support Ongoing Projects & Field Monitoring - The success and impact of Erasmus+ projects in Israel are extremely important to the staff. NEO staff support ongoing projects and conduct field monitoring visits to ensure and evaluate the progress of projects during their eligibility period.

4. Contact with "Key-Stakeholders" - The NEO is eager to advance collaboration with parties that hold an interest in the programmer.

The EU map present the locations of projects which using EU + ERASMUS at 2017 in **Annex No' 5**.

The global phenomenon of immigration

The global organization of OECD [106] is definition the immigration by the nature of migration varies greatly between countries. In some, such as the United States and France, most of those immigrating legally are doing so for family reasons – they are either going to join close relatives who are already living in these countries or to begin married life. In others, such as Switzerland, most immigrants travel because they have a right to work and live in the country. There are other differences: In the traditional "settlement countries," such as Australia, Canada and the United States, most immigrants are planning to settle permanently. By contrast, in a multi-country free-movement zone like the European Union, migration is more likely to be temporary. Few issues excite controversy like international migration, in part because it touches on so many other questions – economics, demographics, politics, national security, culture, language and even religion. That combination only adds to the complexity of designing policies that maximize the benefits of migration for the countries where migrants settle, those they leave behind and for migrants themselves. The United Nation [208] explains the foreign population consists of people who still have the nationality of their home country. It may include people born in the host country. The difference across countries between the size of the foreign-born population and that of the foreign population depends on the rules governing the acquisition of citizenship in each country. This indicator is measured as a percentage of population.

The Israeli Government [169] refers to the immigration as a brain drain phenomenon because she fell like the phenomenon of immigration is like escape from the country [3, p. 18]. The historical interest in establishing a state for the Jewish people, and remains a discretion in the data analysis. Despite all this, we find varying from 6.5% to 7.5% every year who immigrate to another country. The State of Israel is not concerned about the **number** of residents which leaving, but their quality professional, since it comes of professionals and brilliant masterminded (brain drain). The Israeli government definite the immigration as the Israeli resident abroad is based on the UN definitions. The **International migrant is a person that changes the state routinely used for residential purposes.** The long-term immigrant is a person whose place of his birth is not used routinely to his quarters for a period of one year. Now, what is the problem with this Israeli definition? If the resident come back, every 10-12 month, to Israel, he will not have called as an immigrate, even if his life is most of the time, outside from the county. The operational definition based on this definition applies to all active individuals in the population registry are who died or ceased to be resident [11, p. 37].

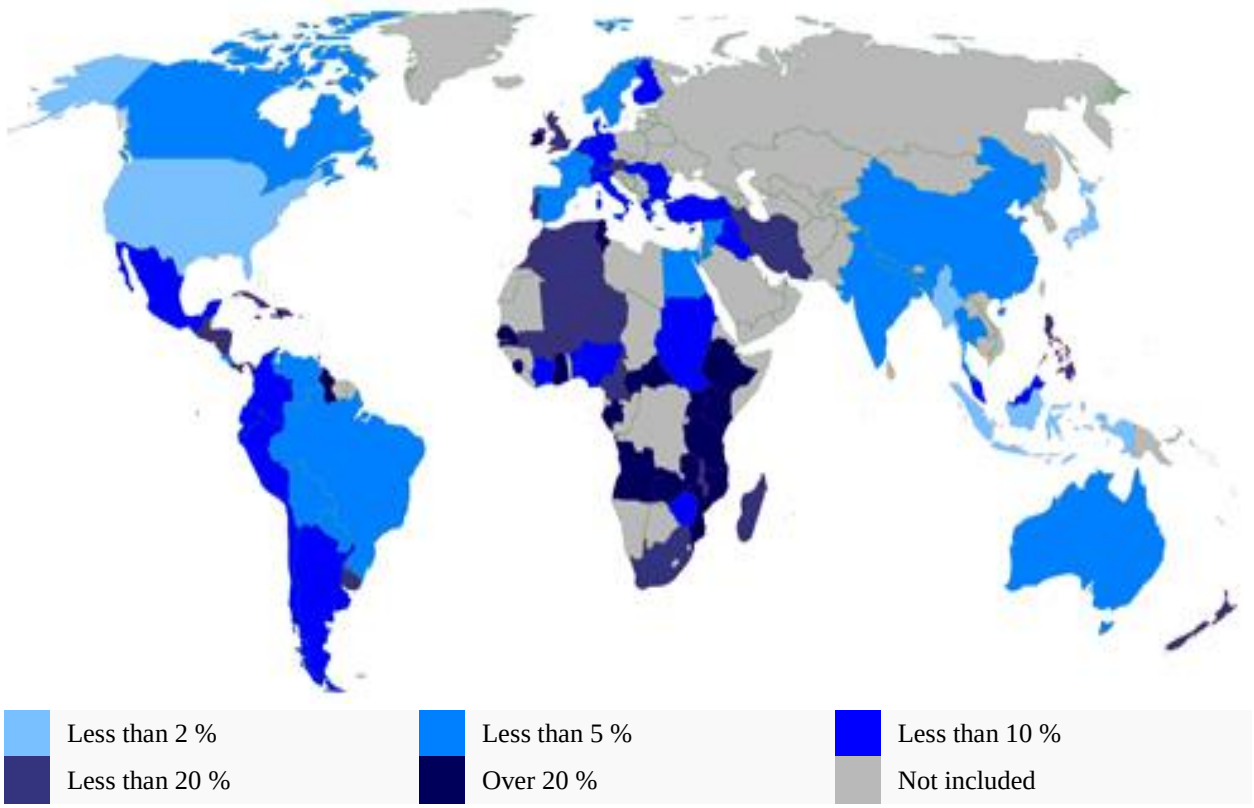
The United Nations [208] present the trends of International migration such as a global phenomenon that is growing in scope, complexity and impact. Migration is both a cause and effect

of broader development processes and an intrinsic feature of our ever-globalizing world. While no substitute for development, migration can be a positive force for development when supported by the right set of policies. The rise in global mobility, the growing complexity of migratory patterns and its impact on countries, migrants, families and communities have all contributed to international migration becoming a priority for the international community.

Educational immigration

The professional literature does not refer to the concept – "Educational immigration", but only in the sense of educating of children. When we talk about "Educational immigration", we mean to academic mobility, the population graduate student. The ministry of education in UK are decided to increase the educational immigration because, in his opinion, the International students bring significant economic, social and cultural benefits to the UK [16, p. 285]. They also contribute significantly to postgraduate courses particularly in science, engineering, technology and math's. Non-EU students contribute £8 billion to the UK economy estimated to rise to £17 billion by 2025 – and enhance the diversity of university campuses. So, what we are understand from this definition? That, the educational immigration is about young student which chose to immigrate to another country from many reasons.

UNESCO [141, p.36] estimates that the number of students seeking to study abroad will increase from around four million in 2010 to seven million by 2020. International staff also make a vital contribution to UK universities. In 2016–17, over 30,110 non-EU staff were employed in UK universities, making a vital contribution to our world-leading research base. The UK universities knows such as world-leading. Another country which increase the educational immigration is Australia. The government of Australia provide the "Colombo plain" [64, p.222]. The New Colombo Plan is a signature initiative of the Australian Government which aims to lift knowledge of the Indo-Pacific in Australia by supporting Australian undergraduates to study and undertake Internships in the region. The Australian Government made an initial commitment of $100 million of funding for the New **Colombo Plan** over five years. Funding for the Program is now ongoing. It involves a prestigious scholarship program for study of up to one year and a flexible mobility grant program for both short- and longer-term study. Both programs priorities opportunities for Internships, Mentorships, practicums, clinical placements and research. The New Colombo Plan is intended to be transformational, deepening Australia's relationships in the region, both at the individual level and through expanding university, business and other stakeholder links. There is map of the **migration of** education nationals with a university degree which living in an (other) OECD country – for the year – 2015 will present in map 1.1.



Map 1.1. Immigration/mobility of academic population in the world (2017)

Source: [186]

The Map 1.1 presents the movement of educational staff & student from countries to educational centers in other countries. This map presents the problem in south Africa, south America and Arabic Area.

Internationalization, international relationship between countries

According to Endres [50, p. 372] the "Internationalization", the growing border-crossing activities between national systems of higher education is losing ground to globalization, increasing border-crossing activities of blurred national systems which is often employed to depict world-wide trends and growing global competition. It points out tensions between increasing diversity in higher education and efforts to facilitate recognition of prior studies on student mobility. There is a growing interest in different parts of world in the process of European integration, not just from an institutional point of view but also in terms of the policies that promote European cohesiveness. First and foremost, among the latter is European regional policy which seeks to ensure that the benefits of the single market in Europe based on the free movement of goods and services, labor and capital, are as widely spread as possible [51].

Today therefore, EU regional policy is an integral part of economic policy, but with the unique feature that it is delivered with the consent and involvement of the grassroots through a

multi-level governance system where each level - European, national, regional and local - has a role to play. The involvement of the grassroots, for example, in devising regional and local strategies and selecting projects creates a sense of ownership of European policy and in that way contributes to territorial integration [52, p. 36]. It is these features that have inspired interest in large countries with major territorial imbalances that are seeking to combine the pursuit of a more even pattern of growth with governance systems that contribute to transparent public policies and that help to further integration through decentralization.

The phenomenon of brain drains

Brain drain can be described as the process in which a country loses its most educated and talented workers to other countries through migration. This trend is considered a problem, because the most highly skilled and competent individuals leave the country, and contribute their expertise to the economy of other countries. The country they leave can suffer economic hardships because those who remain don't have the 'know-how' to make a difference [207].

Brain drain can also be defined as the loss of the academic and technological labor force through the moving of human capital to more favorable geographic, economic, or professional More often than not, the movement occurs from developing countries to developed countries or areas. According to the UK government [142, p. 60] the brain drain phenomenon is According to a definition, 'Brain Drain', academically also known as the "human capital flight" is the large-scale migration of highly educated, skilled and talented people of less economically advanced countries to highly rich and developed countries of the world due to conflicted issues, political instability and lack of opportunities in the developing countries.

Wildasin [148, p. 343] explain that Brain drain is a slang term for a significant emigration of educated or talented individuals. A brain drain can result from turmoil within a nation, from there being better professional opportunities in other countries or from people seeking a better standard of living. In addition to occurring geographically, brain drain may occur at the organizational or industrial levels when workers perceive better pay, benefits or upward mobility within another company or industry.

According to Avveduto [11, p. 33] Brain drains cause countries, industries and organizations to lose valuable professionals. The term often describes the departure of doctors, scientists, engineers or financial professionals. When these people leave, their places of origin are harmed in two ways. First, expertise is lost with each emigrant, diminishing the supply of that profession. In the case of geographic brain drain, the country's economy is harmed as each professional represents surplus spending units. Professionals often earn large salaries, so their departures remove significant consumer spending from the country.

The Israeli government, by the "**Knesset**" [169] explain the trend like the essence of this phenomenon amounts of skilled migrants working which move to places where they are offered a job that matches their skills and training. In other words, it is brains mobility. The two-way flow of expertise between countries of origin and the destination country, and is one of the characteristics of the said contemporary changes in the global economy. In a country where the flow is sharply in one direction, you can talk the brain drain from the net or the recruitment net to - depending on the direction of flow.

The effect of geographic, organizational and industrial of the brain drain

Becker et-al [15] notes that Brain drain, also known as human "capital flight", can occur on several levels. Geographic brain drain occurs when talented professionals flee one country or region within a country in favor of another. Organizational brain drain involves the mass exodus of talented workers from a company, often because they sense instability or lack of opportunity within the company or feel they can realize their career goals more easily at another company. Industrial brain drain happens when skilled workers exit not only a company but an entire industry. Several common causes precipitate brain drain on the geographic level. Political instability, poor quality of life, limited access to health care and a dearth of economic opportunity prompt skilled and talented workers to leave source countries for places that offer better living conditions and greater opportunities. Organizational and industrial brain drain is a byproduct of a rapidly evolving economic landscape in which companies and industries unable to keep up with technological and societal changes lose their best workers to those that can [31, p. 356].

The phenomenon of brain drains in other countries

Bulgaria

Bulgaria is one of the specific cases of science development and '**Brain Drain**'. Comparing with the other Central and Eastern European countries, Bulgaria boasts highest numbers of students per thousand 24, (Estonia-12 per thousand, Slovenia - 20, Poland - 11, the Czech Republic - 11) [23, p.14]. Bulgaria is one of the countries with the largest share of unemployed with higher education - 17% of all unemployed. The unemployment promotes the emigration attitudes among scientist. The data indicates that the Bulgarian science personnel are ageing. Less and less young people work in the research institutions. Special measures are needed in this respect on the part of the government for encouraging young people. Before the reforms Bulgaria used to have a highest standard by the indicator "employed in science per capita" [20, p.76]. Bulgaria comes second after the Czech Republic in loss of scientific staff during the transition. By the end of 1993 the number of scientists had dropped abruptly down to a lowest 5 per thousand within Central and Eastern Europe [52, p. 37].

Romania

Romania is the biggest exporter of human resources in the European Union, with diaspora comprising about 17% of the country's population, according to UN data. According to Marginson [93, p.17], while immigrants and the Western countries that have adopted them have had the most to gain the phenomenon has had disastrous effects for the Eastern European states, reads the IMF report. It has led to demographic decline and it has limited the economy's development outlooks. Immigration is also regarded as one of the causes of perpetuating corruption in politics. The brain drain effects are visible particularly in Romania and Bulgaria, as well as in the Baltic countries, namely Lithuania, Latvia, and Estonia. In the last 25 years about 20 million people left from Eastern Europe to search for a better life in Western countries. The demographic decline has also had an impact on Romania's education system. An average of 170,000 young people graduated from high school each year in the 2015-2016 [103, p.288].

Spain

Spain is among the European countries hardest hit by the so-called 'brain drain' effect with thousands of professionals including nurses and teachers taking steps to leave the country in recent years, new figures from the European Union show [209]. One of the most damaging aspects of Spain's economic crisis has been the departure from the country of university graduates and highly skilled professionals. With jobs hard to come by and research and development funding slashed in many industries, anecdotal evidence suggests many people have decided to make the move elsewhere. Some 84 percent of these applications were accepted, meaning a net gain of 5508 professionals, with Germany and Italy being the two main sources of those professionals.

The causes of brain drain phenomenon

There are various causes of brain drain, but they differ depending on the country that's experiencing it. The main causes include seeking employment or higher paying jobs, political instability, and to seek a better quality of life [90, p.22]. Causes of brain drain can categorized into push factors and pull factors. The push factors are negative characteristics of the home country that forms the impetus for intelligent people migrating from Lesser Developed Countries (LDC). In addition to unemployment and political instability, some other push factors are the absence of research facilities, employment discrimination, economic underdevelopment, lack of freedom, and poor working conditions. Pull factors are the positive characteristics of the developed country from which the migrant would like to benefit. Higher paying jobs and a better quality of life are examples of pull factors. Other pull factors include superior economic outlook, the prestige of foreign training, relatively stable political environment, a modernized educational system to allow for superior training, intellectual freedom, and rich cultures. These lists are not complete; there

may be other factors, some of which can be specific to countries or even to individuals [95, p. 215].

The effects of brain drain on the "Home Country"

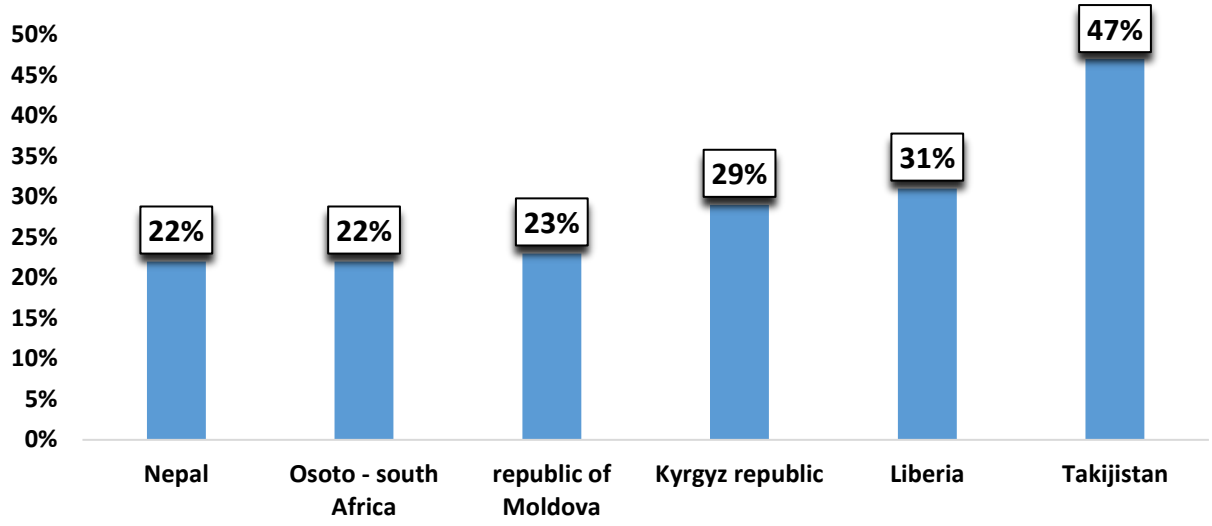
When brain drain is prevalent in a developing country, there may be some negative repercussions that can affect the economy. These effects include but are not limited to:

A. The country will lose a lot of tax revenue.
B. Loss of potential future entrepreneurs.
C. A shortage of important, skilled workers.
D. The exodus may lead to loss of confidence in the economy.
E. Loss of innovative ideas.
F. Loss of the country's investment in education.
G. The loss of critical health and education services.

The Brain drain is usually described as a problem that needs to be solved. However, there are benefits that can be derived from the phenomena. When people move from LDC countries to developed countries, they learn new skills and expertise, which they can utilize to the advantage of the home economy once they return. Another benefit is remittances; the migrants send the money they earn back to the home country, which can help to stimulate the home country's economy [35, p.219]. The Author of the thesis is emphasizing in his article **"the phenomenon of brain drain"** that educational immigration, with the programs of Erasmus or any other enterprise from the countries that try to increase the mobility's of student defiantly can cause to immigration of population. It will not happen every time, but if there will be the conditions, it can make it.

The positive development from the academic mobility and the educational migration of the brain drain

Although developing countries may lose their best workers, it is possible that there are several benefits for allowing migrants to leave and work elsewhere. Workers may gain more experience and knowledge from working in other countries [89, p. 17]. This knowledge can then be used when they return and set up business in their native countries. Migrant workers often send remittances – money back to their families in countries of origin. This can make a substantial contribution to the balance of payments and improving GDP. This is the only point where academic mobility and labor migration can contribute to their home country. The restoration of the students, after acquiring education, accumulating work experience and professional experience other culture, which could positively have affected in the situation [96, p. 11].



Graph 1.4. The migrant of the population and the benefits for the GDP - 2018 (by %).

Source: Made by the Author from source [208]

Mobility and immigration as part of international relations between countries. The academic mobility and the immigration are a process of interaction and integration among the people, companies and governments of different countries and regions. It is a process that was initially thought would be based solely or exclusively commercial and business sector as well as investment in the international arena, which has the support of information technology [79, p.111]. This process has effects on the environment, culture, political systems, development and economic prosperity, as well as on the welfare of human beings that make societies around the world. Policies and technological development of the last decades have resulted in such a large increase in trade, investment and cross-border migration, which many observers believe that the world has entered a new phase, in qualitative terms; they're both economic and social development and culture. Technology has been the catalyst that has propelled another globalization. The progresses made especially in the field of information technology have dramatically transformed economic activity. Information technologies have offered all sorts of individual economic actors-consumers, investors and businesses-valuable new tools to identify and realize economic opportunities, including faster and better documented analysis on trends worldwide, a transfer easier to goods and services and collaboration people from different cultures [74]. The author in his article [98, p. 140] Emphasizing the benefits at the exit of students and academic research experience in other countries. Fertilization advising that young person experiences will contribute to it in perspective and broader than the mother country studies. This is actually the finest hour academic mobility and migration that ends out. Sangren [116, p. 413] indicates that immigration does not have to be part of the reason why academic mobility. Sometimes it is the effect of globalization today people are more open to absorb and learn new cultures, even if it's for a limited period (like academic studies). The society invite the modern life and professional learning experiences in other

countries, and employment issue is not necessarily causal sole cause. It is also important to understand that migration between countries today, are the result of relationships between states - international economic relations. Streitwiser [128, p. 322] notes in his book that when there is a problem of manpower in a particular country, another country may send "professional help", and thus create international relations between countries.

The essentiality of the academic mobility to countries worldwide. Globalization is a process of interaction and integration between people, companies and governments of different countries and regions. This process initially thought to be solely or exclusively commercial and business sector investment based as well as internationally. In practice, a process has effects on the environment, culture, political systems, and development and economic prosperity as well as the welfare of the people [57, p. 62]. In addition, technological development policy for decades led to a rise in activities such as trade, investment, and migration across borders. Some think that the world has entered a new phase, in terms of quality. A combination of demographic changes, movements and changing patterns of immigrants and a nation. In addition, the worldwide globalization embraces areas of economics, trade, technological development, community health; cultural changes the status of populations (women, minorities) pushed world leaders to realize the need for promoting the concept of academic mobility. Some believe that in any case, academic mobility is a natural need was rising, a direct result of the global reality [75, p.25]. According to Ahola and Nurmi [4, p.40], Academic mobility is an expression for the following purposes:

The needs of civil society- <u>educational / political</u>

1. The promotion of vulnerable populations in developing regions suffering from academia and education systems - while migration of populations from failing (part African and Asian countries), developed countries will be promoted academically population group and preparation to return later to the mother.
2. Create academic fraternity between neighboring countries and continents - academic cooperation and solve the overall level of competition in ethical issues, politicization, and promote regional programs.

The needs of civil society – <u>financial ability</u>

1. The economic solution for universities and colleges that low- budget - education centers suffering from the economic flow and financing of their home country will benefit from the financial revenues coming from out of state students.
2. Academic mobility contributes to development in the field of tourism, transport, commerce purchasing power due to the entry of the business cycle.

3. Raising **Gross Domestic Product** (GDP) due to the policy of opening up academic centers for students abroad exceeds the gross domestic product since entering the huge amounts of money donors rise in gross domestic product in agriculture, industry, services.

   Presentation of data due to the increase academic mobility in some countries (Belarus, Canada and Australia) – **Annex No' 6,7,8,9,10,11**.

   The needs of civil society - Public health -care

1. Improving the level of healthcare because of a joint investment of organizations and states in areas where intervention is required. State's growing investment and strategic partnerships for the research and development for the health needs of men and women
2. Raising living standards and a rash of modern ideas related to population groups - promoting the status of women.
3. Establishment of laboratories for Disease combined.

The academic mobility as a factor which advances the higher education. The Academic Mobility System enhances many processes in the state in which it exists. We know that academic mobility results in two main directions [72, p.54]. The entry of students, researchers and faculty into the country and integrate into academic life of the major, on the other hand the mobility of students and academic staff research and collaborative programs, and individually - independent exit academic centers located in other states. This creates a wheel mobility of positive and negative changes in each country, depending on how it is held academic mobility, we can clearly see the elements are reflected in all aspects of life: economic, social, employment, technology, health, commerce and so on. Academic mobility also causes changes in the academic sphere, within the universities themselves [75, p.32].

The changes caused mainly affect several key areas relating directly to academia: Improving economy elements university financial situation. Contribution to the employment situation of those universities which benefit from opening their gates to students from other countries, and contributing to the technological state of the Academic Center in terms of new infrastructure, the development of technological capabilities that did not exist before mobility. First, we look at the list of countries, which attract a large number of students in them [18, p.247].

According to the UNESCO Institute for Statistics [189], the number of students in academic mobility has increased to 3.4 million students per year only in 2009 [166]. Although the number of mobile students in the United States grew at a slower rate of 13% (from 582,996, to 660,581 students). USA remained destination leading in absolute numbers and in fact, every fifth student wants to enter the US study [201]. It improved their elements are:

Economic contribution

1. The intake of university students who come from financially contributing large amounts of money outside the student pays all tuition and education funding infrastructure supporting institutions (printing, sales, administration, cleaning and catering)
2. The introduction of tuition grants the possibility of providing scholarships for local students.
3. Reducing dependency on state funding budget.
4. A large group of foreign students can encourage investment in the home country of joint programs.
5. As a motivating economic system exceeds the gross national product (as presented in Chapter 1.2.1).

Among the positive effects are students and staff participating countries of origin of beneficiaries enriching knowledge and experience. As well, the institutions, they arrive. Individual enrichment workforce benefits the countries [23, p. 7].

Employment contribution – The author of the thesis knows that acquiring an education we can get many advantages. Among other things, it positively affects the individual's chances of finding permanent employment and profitable [74, p.5]. the graph in **Annex No' 11** describes the percentage of employed working-age (15-64) by level of education, in 2010. The employment gap between men and women is decreasing with increasing levels of education, but still all levels of education the employment rate of men exceeds those of women. [93, p. 19]. The improvement on the job:

1. Increased need for employment for all service providers of the academic institution.
2. The more diverse employment opportunities after graduation whether the country attended absorbed or returns to their home country. Advancing human knowledge at all levels.
3. A student who completes his studies, that opens up a world of possibilities of employment in accordance with his or her education.

Technological contribution - Today, technology is a significant driver behind change, and sometimes plays an important role in innovations in educational design and delivery. There are immense possibilities for greater and wider-spread change with the use of present-day technological advancements, as well as with the implementation of innovative educational programs. The challenge is to ensure that innovation plays a constructive role in improving educational opportunities for billions of people who remain under-served in a rapidly developing world [152, p. 137].

The Bologna Reform

The Bologna process started in 1999, when 29 countries of the European Union (EU) decided and declared that they wanted to expand the joint activity of the EU common interface to the academic field [6]. The program based on six key reforms in the areas of academic accreditation and mobility, while maintaining national uniqueness and culture of each country that participates. Today, **47 countries** participate in the process, as well as more European and international organizations.

The process began when six EU countries (and in the early years they were joined by 23 other states). They have initiated a program subsequently reflected in signing a statement that relies on EU economic and industrial cooperation for a declaration that expresses a common desire to promote the academic world. Thus, was born the Bologna process. The name indicates the declaration (Bologna Declaration) signed by the education ministers of 29 European countries on June 19, 1999, in Bologna [100, p.363].

The goals and the objectives of the reform

The main goal of the Bologna process is the construction of Region- geographical space and content, where a broad academic field, a common rather than a uniform, higher education activity. The program based on cooperation between the Member States, and should be a source model of conduct for students and faculty in the world [156, p. 46].

The Rate declaration provided seven major objectives [24, p. 111]:

1. The mounting system comparable to academic qualifications, transparency, and which will encourage competitiveness and employment of academic staff.
2. Creating standardization and compatibility among degrees - Bachelor's degree of at least 3 years (Undergraduate) and graduate degrees (graduate), including master and doctoral training in the European labor market employability.
3. Building a unified academic with qualifications of graduate level credits, which encourage academic mobility and enable studies in various countries and universities. Greater movement between institutions.
4. Create a common wording of accreditation frameworks that are not from institutions of higher education, in order to increase access to education, employment and opening various horizontal.
5. Promotion and regulation of quality assurance and improvement methodology in EU institutions of higher education.
6. Developing curricula relevant European higher education, and in particular employment occupations curriculum futuristic, cooperation institutions, training and research.

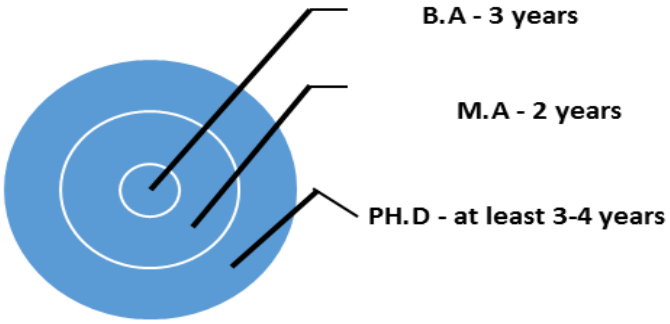
7. Equal opportunities and neutralizing obstacles to social, economic and political as much as possible to make the physical space in Europe "melting pot" of European cultures.

The reforms and key processes

Further definition of the objectives of the program, the Executive Committee has set new reforms in several areas of education:

A. Standardization of training facilities and academic degrees (QF-EHEA)

When the process began in 2005, they gave him a name- QF- EHEA, which mean Overarching framework of qualifications of the EHEA, it meant the creation of a unified system of three levels [36, p. 844]. The Sketch 1.1 presents the Academic degrees in Israel, which are changed according to the "Bologna Reform".



Sketch 1.1. Israeli academic Degree - Bachelor's degree (BA), Master's degree (MA) and Doctorate (PH. D)

Source: made by the Author from source [197].

The purpose of the circuit and the frame is uneven providing knowledge, understanding gradually, expectations, abilities and skills required and expected of students. Uniformity also be focused, results and achievements [20, p.57]. Another training framework that specifically address the process of learning as a way of encouraging reform in life is the European Qualifications Framework for Lifelong Learning (hereinafter EQF). The Frame work take place since 2008, and refers to the EU member states and countries that are in the process of joining the EU and countries in the economic sphere (European Economic Area, hereinafter: EEA) [132, p. 36].

B. A system of similar academic qualifications and common to all countries

Reform in this topic to create a partnership between academic institutions by allowing students to study a significant period of time (at least a semester) during the title with one or more of the EU institutions, and pass / go back to a mother. In this case, the institute will recognize and will be exempt from similar professions in school. Of course, there is shared management and supervision, and thus the admission process and curriculum, and allow full recognition of studies,

assignments and exams where the student was each institution. At the end of the school year, the degrees will recognize by all the institutions in which the student studied and by all Member States [131, p. 12].

C. Academic Mobility

One of the top goals of the Bologna process, perhaps the main objective and meaningful, is to allow faculty, students and graduates enjoy maximum academic mobility in academic Opened for them. The idea is to allow personal growth through cultural experience, educational - academic and professional development of cooperation between countries, academic institutions, developing diverse teaching quality and, of course, and in particular, the development of ties between the people and citizens of different countries [117, p. 57]. We can see demand for mobility of students in many academic worlds, as well as the faculty and researchers. The phenomenon is not new today. The OECD provided a map showing the areas of your mobility, on the other hand the regional mobility of academic mobility which exists. In a First review we can see A mobility of students from complete sample areas of the continent of Africa, Eastern Europe and Asia. On the other hand, there are areas where mobility is less than 5% only – USA, west Europe, North America.

D. Training and recognition of previous studies

The idea recognition of previous studies is a consequence of the desire to give access to the academic programs for those who fear, and those who will be able to meet the requirements, and those who have dropped out and see the learning track academic studies as an object not achievable [66].

The economic changes, which become from the bologna reform

European regional economic integration, political economy, and socio-cultural cohesion are impacted through the implementation of the higher education initiative of the Bologna Process. The Lisbon Treaty's economic growth strategy Europe 2020 is linked to the Bologna Process, a higher education reform initiative of 47 countries in the European region [73, p. 9]. Given the governance leadership of the European Union, which has historically led the world in regional integration, the educational and cultural dimension is a new frontier becoming regionally integrated. Being a voluntary initiative, and there are not penalties imposed for noncompliance to the higher education standards. However, countries may seek to implement policies to gain favor with the European Union, and may use this as one of the several issue areas to demonstrate conditions that are on par with the standards of membership in the European Union [84, p. 22]. This research reveals the policy dynamics among the three levels of governance: supranational, national, and sub- regional. Regional economic integration began with economic and political

cooperation, and has expanded into the space of educational and cultural policy with the formulation of the Bologna Process. The Bologna Process is complementary to the Europe 2020 strategy within its key area of education. Reciprocity of academic degrees, mobility of students, enhanced educational quality, and student achievement correspond to strengthened economic performance of the participant countries and of the European region. Europe 2020 is an example of how strategy in education is connected to outcomes in the economy, and it indicates the aspirations of the EU to compete successfully in the rapidly changing global economy [32, p. 91]. In the next table the Author will present the comparison of the data of the 4 European states. academic students, and the number of students in academic mobility. All while comparing the GDP per capita.

Table 1.2. The budget effect from the academic education on the mobility & GDP (2015-2018)

state	year	Expenditure on education per % of total government source	Number of outbound academic student	Number of inbound academic student	GDP per Capita (US $)
Hungary	2015	4.33	8,861	20,694	24,366
	2016	4.37	9,546	23,208	25,494
	2017	4.37	9,947	25,711	26,446
	2018	4.38	10,416	27,379	26,719
Germany	2015	4.81	119,522	196,619	45,232
	2016	4.94	118,011	210,542	47,058
	2017	4.97	117,863	228,756	47,999
	2018	4.98	116,342	231,549	48,084
Poland	2015	4.94	23,372	27,770	24,423
	2016	4.94	23,956	29,114	25,392
	2017	4.94	23,669	30,991	26,523
	2018	4.94	24,051	33,874	28,119
Ireland	2015	5.34	16,437	12,861	48,273
	2016	5.37	15,367	14,268	51,292
	2017	5.75	15,402	15,815	68,481
	2018	5.76	15,628	17,311	72,112

Source: Made by the Author from sources [189; 208]

Tuition fees in the countries – by the bologna reform

The state of Hungary

Compared to the rest of Western Europe, Hungary presents a very affordable place for study regarding both tuition and living costs. Tuition fees vary depending on school and program. Often medicine and dentistry are among the more expensive options with tuition fees around 20,000 Euro, and for other programs as low as 4,500 Euro. In addition to paying tuition fees, students are also required to pay an application fee, exam fee and registration fee, each between 100 Euro and 150 Euro, for study programs in Hungary. Living costs in Hungary are comparatively

low. Costs are naturally higher in the major cities such as Budapest. Students in Hungary should be able to get by with approximately 750 Euro per month, allowing enough for not only rent, but also for public transport, health insurance, study materials, and a few nights out on the town [192].

The state of Germany

Study Abroad 365 has put together a list of 25 universities in Germany that are tuition free for international students seeking to study in Germany. However, be informed that while studying in Germany, the student will be required to finance his feeding and accommodation expenses. International students should budget roughly 500 Euros for their books, healthcare, food and registration. So, in one year, an international student should expect to spend 7000 Euros on feeding, accommodation and books expenses [200].

The state of Poland

Poland full-time education at state institutions of higher education is free for Polish citizens. It is also free for foreigners who commence studies in at state HEIs on terms applicable to Polish citizens. All other foreigners are required to pay tuition fees of no less than a PLN equivalent of 2000 Euro per year for professional higher study, master's and postgraduate master's courses; around 3000 Euro per year for doctoral, postgraduate and specialist courses and scientific, artistic, specialist and habilitation internships; around 3000 Euro per year for vocational courses and apprenticeships; around 2000 Euro per year for a language course, including a course preparing for study in Polish [55, p. 239].

The state of Ireland

The undergraduate degree courses in Ireland are, usually, free for citizens of Ireland/EU through the Higher Education Authority (HEA). However, in order to apply to the "free fees initiative", the student have to apply for the funding governmental program and prove that you are eligible [92, p. 21]. Below the student will find some of the most important criteria of choice:

- The programmer targets full-time undergraduate degree courses that last for more than two years and is held in some of the institutions listed here.
- The student must apply for a degree course for the first time and must not have repeated any school year. Nationality, immigration status, residence and course requirements are also criteria that can qualify you for a tuition-free university degree.

However, all students have to pay around 2,500 Euro /year for student services, such as examination entries and support for clubs and societies. Non-EU student have to pay fees of 9,000 – 45,000 Euro /year for undergraduate degree courses [194].

Table 1.3. Financial income (Euro) from foreign students - 2018

	Tuition fee (Euro)	No' of foreign student (2018)	Estimated income (Euro)
Hungary	20,000	27,379	547,580,000
Germany	7,000	231,756	1,622,292,000
Poland	3,000	33,784	101,352.000
Ireland	25,000	17,311	432,775,000

Source: Made by the Author from source [192].

The Implementation reform in Japan, Australia, Germany, France and the USA

Applying the principles of the Bologna process in Japan began in the early 2000s. The State Japan does not belong to the EU but it has all reforms to improve the country's Academy [81]. Until that integration in higher education, institutions in Japan was faced with unprecedented challenges:

1. The decline in the size of the age data in most colleges.
2. The rapid transition of teaching methods E-learning academic institutions most. Step leading financial revenues fall.
3. The global competition for students around the world, especially in English-speaking countries, and countries in the Bologna process.
4. The problem of large-scale employment of faculty and staff in academic institutions.

State of Japan

When the Japanese Ministry of Education, called MECT- (Ministry of Education, Culture, Sports, Science and Technology, Japan) [108, p. 40], and it is promoted some of the principles of the Bologna reforms within the country. In order to deal with those difficulties, the Ministry presented a series of actions that involve distinct steps. First, the order been given to all the academic institutions (especially the elect ones) to expand the basis of the number of students by encouraging older students to continue to study for advanced degrees. In addition, construction began encouraging the administration would deal with the recruitment of foreign students [81]. The education Ministry of the Japanese government began to do some steps that will allow ease bureaucratic processes required improvement:

1. The legal status of employment of staff members who are not Japanese citizens.
2. Getting the mapping of the number of foreign students studying within the country.
3. Mapping and monitoring the number of Japanese students studying abroad.
4. Enhancing the role of campuses located in the periphery.
5. Note regarding the status of branches of foreign colleges and universities in Japan.

In the first stage, due to the high cost of hiring professor's foreigners, and the reality that rely on the staff of foreign development of higher education in the country, the government decided to gradually change its policy and began helping in financing sending Japanese students studying at universities abroad [145]. The economic and social consequences have begun to penetrate the establishment calling the shots, and he saw the changes in the academic side - occupational socio - economic and started "extensive marketing" of institutions mainly towards neighboring countries. The results were immediate. **Annex No' 13** presents, by a graph the increasing demand of students from Asia and Europe to japan.

State of Australia

The state of Australia Adopted the principles of the Bologna reform, better managed and better than many parts of the continent and other in Europe. Today, Australia considered one of the world's largest recruitment centers for foreign students. Until 1988, there were 18 universities in Australia, and over 100 colleges and post-secondary institutions. In 1989, after a report of the work of Dawkins Introduced an expanded air of institutions [96, p. 25].

In these years, there are 39 universities in Australia. The whole idea was to open the doors of higher education to all interested parties and open it wider population. In September 1999, established a "group of eight", consisting of eight leading research universities. The idea was to enable them to speak more firmly with the government and obtain more funding for scientific infrastructure [70, p.36]. "Australian Technology Network" is a coalition of five universities, focusing mainly on studies and research applied. The third group is called the "Innovative Research Universities' Innovative) Research Universities), six universities all have in common is that they are relatively new research universities. They believe that through cooperation can provide benefit to all parties concerned. However, the number of foreign students who come to Australia great and is a center of learning for many countries [199].

In Australia learn (as of 2014) over 730,000 students, include 200,000 foreign students. State of Australia recognizes the value of international students, and universities welcoming students and help wherever possible. All Australian higher education institutions: universities, colleges and vocational schools, are under constant supervision and criticism from the Australian government ensure high academic standards at international level [174]. Every university has a department for foreign students, organizing help in finding a job, help in finding housing and support for any problem whatsoever. A large percentage of foreign students in Australian universities make the campus experience and professional experience as universal [189].

A table in **Annex No' 14** present the comparison of data on students demand the Australia - US-Israel.

State of Germany

Although Germany joined the Bologna reform in the early years (full implementation in early of 2005), but the educational system today is built differently than usual. Number of people entering the gates of the higher education system in Germany rose by about -211 percent since World War II [128 p. 317]. However, the proportion of students who purchase college education among the population in Germany still relatively compared to other OECD countries. The main reasons for this are well-developed system of non-university vocational training and unique characteristics of the labor market in the country. For example, many jobs that do not require a college degree [99, p. 22]. It should note that Germany is federative structure, giving the various regions within the country's independence large areas of the face, including higher education. On the other hand, are highly dependent on the Federal Ministry of Education universities, budgets, scholarships, and the institute are dependent on government policy [20, p.41].

Subsidy structure of the higher education system in Germany underwent a number of changes in recent decades. For many years, the government fully subsidized tuition in all institutions of higher education. The right granted to every citizen who meets the receipt was free education. In addition, the state gave each student additional rights, such as financial aid, loans and social benefits. Germany never been easier with the implementation of the Bologna policy consolidates uniform standards of academic training that enables consistency across all academic systems in Europe [26]. The attempt to keep the audience youngest in the continent, without having to come out the borders of mainland Australia or the United States also came to Germany and is required to reform the absorption of students outside, changing the value of education and openness to the ideas of globalization internationally. Foreign students visited the campus in Germany as early as the 20th Century, DAAD organization currently coordinating the activities of international academic establishment in Germany and is targeting action on the institute, recruitment, support and advice pathways, cultural integration, economic - employment and pedagogy to students interested in studying in Germany [185].

State of France

Until the adoption of the Bologna reform, France's higher education system worked according to local regulation reform those similar procedures at the same time. French student actually has already received preliminary diploma at the end of his high school years, and then, at the end of the third year of studies received a "license" to recognize the title. French LMD reform introduced a similar program, which based on the UK's academic training [141]. At the end of undergraduate student receives the "license" and can continue to graduate later. In 2002 -2003

there were strikes in France against the LMD by claiming that the educational system must retain its independence.

Nevertheless, the French government has adopted the principles of the Bologna reforms consisting primarily of European comparisons and parallels, mobility option of French and foreign students in the European space, a better understanding of the training programs and their adaptation to the labor market [147]. The number of students in France is the average of OECD countries with respect. Although their number is growing, but France maintains a place of honor in the center of academic enrichment. Similarly, positive changes emerged in this study on the growth of the number of foreign students; even it reflected growing number of employed university graduates compared to those without education [154]. **Annex No' 15** present the demand of foreign students in France

The State of France has suffered for years from emigration of refugees from North Africa. These changes resulted in a state of cultural and demographic change as one. Immigration has increased to many problems which the government has to face, including problems of unemployment, social inequality and so on. The percentage of unemployed in France, according to the database of OECD [50, p.366]. Stands as of the last quarter of 2017 to 13.92% and is above the average of OECD countries (13.72%). What concerns the French government is the percentage of unemployed growing among those with no university education and professional so big push of Access Academy [152]. Annex No' 13 present the percentage of academically trained unemployed among French citizens.

United States of America

One of the fundamental reasons for the Bologna reform is the fact that the United States has been a factor for attracting students and faculty. Bologna was actually the idea of entrepreneurship as part of a commitment to continental European economic rise, with higher education as an important means to do so. Moreover, the Bologna reform also poses a special challenge American higher education. Europe tried its early years to attract international students who may prefer to study in the United States, United Kingdom, and Australia [21.p;19].

Well, what is so appealing and true in the American educational system, attracting a huge amount of academic mobility? Some say, that, the American academic system structure, with its principles and learning options gives to the average student a different learning experience, and significantly more thorough. There is no doubt that the desire to belong to such this system, and try to fit in, later in the country of unlimited possibilities, gives a desire to reach into the state of the US and studying [37].

The American academic education system known as some qualities, logical structure and accessible to all populations in the country and of course for foreign students. We can find community colleges, regional colleges, research colleges, universities, research universities and specialize in certain disciplines [46]. Initially there was resistance for the principles of the reform. At first, there was resistance for the principles of reform. Over the years, mainly due to the decrease in the number of foreign students, the system itself has changed in part. Disagreements were mainly about the following topics [31,194]:

1. The American system requirements for four years of study for a bachelor's degree BA - American system was built on the fact that most students will learn during four years (two years' junior college / community college and two years of college usual) just had to edit the adjustments in favor of students coming from different ages, different levels of knowledge.
2. The vocational training system - Study of Justice / editing account based on a four-year training program, and now they had to change.

The IIE organization present the academic level institutions in the United States where there is a high percentage of academic mobility (**Annex No' 16**).

1.3. The Worldwide Processes of Social Globalization

In the early part of the 20th century, career choice and career progression were dictated by tradition, socio-economic status, family and gender. For most men, career choice and status within those careers was determined by what their fathers and other male family members had done before them. For women, the career choice options were even more limited by convention and social mores. Career progression and career ladders were almost nonexistent [110, p. 68].

In the immediate post-WW II world, the corporate organization became the driving force in U.S. business. Both employers and employees operated under an implied contract: Employees would be loyal, and in turn, employers would provide employment until retirement.

In the latter part of the 20th century, however, this traditional trajectory of a person's career at one employer became a thing of the past. From the late 1970s onward, the U.S. economy experienced several boom-and-bust cycles, causing many organizations to undergo massive layoffs and restructuring, and to be reticent to re-staff at pre-bust levels even when times were good. Also, during this period, the shift away from a manufacturing to a knowledge economy caused a decline in union membership, further diminishing the once-implied contract of employee loyalty for lifetime employment. The organizational structure became much flatter, reducing or

eliminating middle management layers. To get ahead or to make more money, employees often had to look elsewhere [143, p.175].

The effect of the Academic Mobility on process of career are from the sociological evidence, which choosing a course of study and training of the person tested often its purpose. Different theoretical approaches, such as obtaining access status, access to human capital and critical approaches show how the choice depends on personal resources, background and family status, sex, and previous academic achievements. There is no doubt that family background puts its offspring different types of capital. Economic capital, enabling conditions for learning and access to more expensive study tracks [113, p. 68]; Social capital, including social relationships, adaptability, and knowledge appropriate to pave the way that desired education [22, p.61]. This side also cultural capital, including attitudes, tastes, preferences, orientations, style of speech and useful language, interest in high culture [8, p.231]. The relationship between family capital variables academic achievement, as well as family resources affect the quality of post-primary school and that the achievements of previous studies comprising the entrance filter causes higher education paths.

Thus, a new paradigm emerged in which individuals are in charge of their ladder, where they place it, how long they leave it in place and how high they want to go on it. Traditional career ladders still exist in the 21st century, but they operate in an environment where:

A. The labor force sees continuous, dramatic changes.
B. The way work is organized and performed continuously evolves and changes.
C. Traditional career paths will continue to wane.
D. Jobs are broken down into elements, which are then outsourced.
E. Employees are working alongside a nonemployee workforce that does not have career paths or logical career progressions and may be harder to motivate. Workers value job enrichment, flexibility and career development more than job security and stability.
F. Work is redesigned to accommodate increased demands for flexibility, such as telecommuting hubs, online technologies for connecting with global colleagues and virtual worlds.

Motivation to pursue higher education

What brings students to the university? Why are they going to learn? Studies have different motives for her to study. Some researchers note motives such as career and income, and intrinsic motives, stemming from the very school year (interest, understanding). A grounded theory approach of qualitative methodology was used to analyze and the study's findings indicated several themes arising from multiple levels of support resulting in students' decisions to pursue

higher education, such as the influence of parents and other family members; positive high school environments in which teachers and other staff members encouraged students to go to college; peers similarly engaged in the process of furthering their education; and involvement in organizations promoting academic achievement through, in some instances, mentoring programs [97, p.227].

Wildasin [148, p.363], Mobility researcher, pointed to the career ambitions expressed with high incomes, professional advancement, prestige and security. In addition, for make an interest in science, scientific theories, and insights from the field of study. Examination considerations may explain the differentiation in various disciplines of motivated items, and clustering on the same field of study with different motives [90, p.13].

Now, the Author of the thesis, combine with effects that arise in the face of academic mobility and the phenomenon of globalization [102, p. 188]:

The future trend is change professions - professions that exist today occupational disappear and there will be no need for them. For example, account managers, travel agents, programmers at various levels, selling various professions, clerical, financial advisers. Each student will have a thorough thinking about future employment and would have to find the training course the obvious.

The tuition fees and living costs - students must be run economically while studying and after a period of studies. The cost of the overall study, as presented in the previous chapters is a significant factor in the decision of making process.

The academic success and achievement - Student opts for the best place to succeed academically in order to facilitate then the job search process and settling.

Personal factors - cultural - Each student will belong to a group that interested in cultural gender appropriate to is needs and, how it is going to be in his long life. We find many students exceeding the trajectory of academic tourism and gone to study in more developed countries. We see this trend mainly from India, China, African countries, part of the former Soviet Union, South America.

Pedagogical factors - in some countries, such as the State of Israel, the number of positions available to students is small, and each track hundreds of students competing in demand. Very low chance of accepted, hence the search for possibilities in another country.

Professional institutes - in some countries, occupations careers are developed, and therefore required a student looking for a profession in another country.

The student's personal development is very important to him, and in light of global changes, as presented in this study has a cause for concern regarding the economic future. The Students

prefer to take care about is future now, then to find himself takes care of its present and be drawn when the problem and will need to academic mobility or even immigration.

In order to provide an in-depth examination of the magnitude of this trend, whilst maintaining the focus of the current research, the researcher has chosen to focus on the following **goals:**

1. Analyzing the phenomenon of Israeli higher education students for academic mobility of academic mobility to foreign countries for study and labor migration.
2. Identifying the contributing factors to increase the demand level of foreign students to get study in Israel.
3. Presenting innovative solutions for dealing with the issue of academic mobility of foreign higher education students to Israel.

The above-mentioned goals shall be accomplished by setting the following **objectives:**

1. Assessing, reviewing and defining the worldwide trend of mobility and immigration.
2. Reviewing the policies and solutions for minimizing the mobility of Israeli students
3. Assessing the existing Israeli policies and accommodating them to the reality of mobility of higher education students.
4. Mapping the countries which Israeli higher education students immigrate to for academic education (numbers, faculties, financial costs).
5. Present all the variables and observations required for economic model that will recommendations increase the foreign students, reduce the brain drain and the demand of Israeli students for mobility.
6. Providing innovative recommendations to the Israeli Ministry of Education and the political-social-economic establishment in Israel.

The important scientific problem which is solved in this research consists of a new conceptualization of academic immigration and academic mobility. The efficiency processes of academic mobility that develop a new vision, including the implementation and development of a practical mechanism for academic mobility in Israel (in and out). The independent mechanism will be based on government ministries, education, finance, tourism and the municipality. In this context, an analysis was carried out of the current recommendation systems, which led to the elaboration of new models for increasing the demand for academic mobility to Israel, reducing brain drain, and rational use of the abilities of returning Israeli students. All these will contribute to the development and economic efficiency of the academic establishment, international relations, and the Israeli economy.

1.4. Conclusions of the Chapter 1

1. The level of education and its level of intensity in each country are influenced by the worldwide trends which are based on the economic-social-demographic changes that the world undergoes. Theories and philosophies are changing world orders in all areas, and thus, they affect the various stages of formal education, inclusive of the academic education.
2. The concept "Increase for Academic Mobility" has begun to increase following the initiation of the Bologna Reform in 1999. The academic institutions of 47 countries had opened their gates to the population of higher education students and presented them with uniform standardization of degrees and tracks. The demand for academic mobility had led to the beginning of a formation of a worldwide insight concerning the immigration of communities of learners and researchers between various countries and universities. The Author of the thesis presents the changes which had occurred in Eastern Europe, East Asia and the United States following the academic mobility, as well as the changes which had occurred in each and every country as far as its economic-social-occupational values.
3. The clarification of the term "academic mobility", as it is viewed by several researchers, as well as by OECD and UNESCO, provides a diverse perspective on the meaning of the mobility of the higher education students and academic staffs (researchers and lecturers). The Author of the thesis funds advantages and disadvantages, as well as consequences on the national gross product, all deriving from the arrival of foreign higher education students.

- At its base, the academic mobility is not aimed at immigration, but rather at a temporary mobility whose clear purpose is acquiring higher education for one's personal and professional development, which he/she was unable to acquire in his/her homeland.
- At its base, the academic mobility is supposed to provide a wide, diverse "academic experience", designed to enrich the world of knowledge and professional experience of the higher education students.

4. The Author of the thesis infers that the academic mobility influences the international relations amongst countries as well as on economic and tourist collaborations (academic mobility). The findings of the definition of the various terms lead to the conclusion that the trend of academic mobility, which derives from various global processes, creates worldwide moves of immigration for different reasons – immigrating for higher education and professional progress, immigrating due to employment purposes, temporary immigration and the return to one's homeland.

5. The Author of the thesis analyzes the term "immigration" as consisting of several options of immigration: Immigration for employment purposes (in order to improve one's occupational – economic position), 'temporary" immigration (academic mobility) designed for acquiring a higher education and to undergo personal development through international programs such as Erasmus +, and then returning to one's homeland as an expert in one's field.
6. The Author of the thesis infers, based on the findings listed in the chapter, that in each and every country which suffers from negative immigration of scholars, a connection exists between immigration – academic mobility – a phenomenon of academic brain drains to the economic-social values. The Author of the thesis has found that in some cases, the academic brain drain is a consequence of uncontrolled academic mobility.
7. Based on the literature review concerning the international relations held by the State of Israel, the Author of the thesis infers that the Israeli academic centers aspire, within the economic relations, to advance the research fields which are performed by the teaching staff and the higher education students within these institutions, for example, by signing cooperation agreements with the leading worldwide academic institutions. These agreements anchor the relations of the parties as far as the principles and wishes to conduct joint research, knowledge exchange, exchanges of teaching staff, and participation in conferences are concerned. All of these are intended to promote the ability of research of the researchers in the universities and other academic centers, to promote and encourage major scientific publications and to create friendly relations between the universities. This cooperation focuses on a wide variety of academic subjects, such as engineering, natural sciences and even architecture. Over the past couple of years, such agreements have been signed with 56 academic institutions in Brazil, Turkey, Poland and Germany. These join a respectable list of over 225 academic institutions from all over the world.
8. The hypothesis of the research is that there are main factors, from all motives and reasons (dependent variables) that effect on the brain drain (independent variable). The author must find the explanatory variables that lead to the problem. In the opinion of the author, the reduced investment in academic education, and the lack of reference to important "project" of academic mobility of foreign students to Israel, are the most explanatory variables.
9. The author defines that main goal of the thesis is to find a scientific novelty that will based on analyzed statistic - data, and on up-to-date information, for leading to a theoretical socio-economic model of that comprehensive approach to the issue of academic

international mobility of students in higher education in Israel. In addition, to analysis the situation in the international academic mobility system of students in higher education in Israel has been made. Out of all the conclusions, recommendations will be made for innovative management of academic mobility and a reduction in the trend of the brain drain of higher education students and academics from Israel.

10. The author assumes which there is a highlighted a developing threat in recent years, the brain drains from Israel abroad through an international academic mobility system for higher education students. for overcome the threat of activating Israel's brain drain abroad through an international academic mobility system for higher education students, the author aims to develop and properly implement a regression model translated into an economic model, providing an exit forecast for brain drain, and on the other hand, the motives that can be stopped for minimize the brain drain.
11. The national target program will counter Israel's brain drain threats through an national mechanism for international academic mobility system for higher education students that, in our view, should cover all areas of Israel's higher education system (abroad and in Country for foreign and local students). The program, along with the other components, should include such new elements for Israel.

2. MATERIALS AND METHODS OF RESEARCH

2.1. The Disciplines of the Study

The current study included a wide array of usage of trials and methods. The study was held in the State of Israel, whilst combining original and credible pieces of information from various sources. The study is conducted through ULIM University in Chisinau, Republic of Moldova.

In the course of the current study, various disciplines in economics, with relation to wide topics in macro- and micro-economics. The topics of the economic research which were related to micro-economics were combined as a discipline dealing with phenomena which characterize the market as a whole, with relation to the national and state markets facing the worldwide economic changes. The author of the thesis provides an in-depth reference to the needs and characteristics of the State of Israel in the economic and political aspects [19]. The topic of the thesis, which is the academic mobility of Israeli and international higher education students, it is possible to obtain an in-depth picture of the basic terms related to macro-economics in Israel. The reference is to the national product, the financial abilities of academic institutions, the local and national trade (which the international higher education students require), as well as to the local and international raw product. In addition, a reference is made to the aspects concerning the occupation of various sectors of the population, such as Israeli students and their family members. Furthermore, the macro-economic terms in the thesis mainly research the influences of the world of occupation on the economic professions, as an outcome of the fluctuation in the rates of academic mobility. This fluctuation shall come about in the percentage of unemployment, in the line of the monetary value and its decrease (inflation and deflation). The budgeting policy of the academic institutions, as well as the immigration policies, must undergo a change, if we wish to raise the level of demand to academic studies in Israel on the part of international higher education.

Another approach within the framework of the sub-topic of micro-economics shall explore the trend of brain drain outside of Israel, as far its different shades, reasons, factors and motives [198]. This section shall place a great emphasis on the economic characteristics which are expressed in the brain drain phenomenon and its influences on the local economy. This phenomenon shall be deeply explored as one of the most prominent social symptoms in Israel's social and economic history. It shall present a gloomy picture with which the country is dealing with no great success, and which comes about in record high numbers of higher education Israeli students who go to study abroad. Major fields of occupation, such as medicine, programming, industry, constructions, and electronics, suffer, in their entirety, from accelerated brain drain on

the part of a young generation of scholars who are searching for their professional way of life in other countries (in North America and Western Europe).

Yet, another discipline which shall be significantly studied is the international relations of the State of Israel with regards to the mobility of Israeli higher education students and the various influences which derive from the arrival of international higher education students [188]. The State of Israel was denied the entrance to the Bologna Agreement, and as such, it acts in a policy of "an outside member" of the organization. As a result of its partial membership, it has academic international relations with a large number of countries, mainly through the ERASMUS program [194]. It is no secret that Israel's state of relations with other countries is far from being optimal due to its security and political problems, and thus, Israel is required to invest more resources in the establishment of international relations in order to improve its status in the world, via the academic world. The strengthening of the mobility and internationality is designed to raise the level and competitiveness of the Israeli academy via the absorption of excelling students from abroad and strengthening the international reputation of Israel's academic institutions. Furthermore, the advancement of internationality in higher education has a major significance not only in the academic aspect, but also in the political aspect (diplomatic relations with foreign countries) as well as social and economic aspects and Zionistic aspects of having academic institutions open their gates to Jews from all over the world and turning Israel into an "academic lighthouse".

It is to be emphasized that according to the data provided by the Committee for Planning and Budgeting the Israeli Ministry of Education (with the cooperation of the Israeli Ministry of Finances), the percentage of international higher education students who study in Israel is about 1.4% - a figure which is significantly lower than the average of about 6% in the OECD countries [208]. The Committee for Planning and Budgeting explains that this figure derives, first and foremost, from the language barrier, as most of the academic studies in Israel are held in Hebrew. Furthermore, the special security situation in Israel often dissuades foreign higher education students from coming to Israel [209].

Another discipline, which is very significant in the current research, is the academic education – its sources, its historical development and its positioning nowadays in the process decision-making of the Israeli higher education student. The chapter "Presenting the Different Theories" provides an overview of the academic education, with an emphasis on the teaching approaches, the various methods for transferring the academic knowledge, and the development of the teaching methods in Israel in comparison to their development in universities and colleges worldwide. The current positioning of the Israeli academy has known better days; in recent years,

only a small amount of academic institutions reaches worldwide status and success worldwide, in such extent that they can attract target customers (international students) in light of their academic attractiveness. This existing situation leads to the transferal and rise in demand of Israeli higher education students to study in other countries. This brain drain phenomenon is also caused due to the shortage of teaching positions [207]. The chapter "Analysis of the Existing Problems in the Israeli Academy" provides an in-depth review of various sources which led the Israeli academy to its existing situation, and inclusive of this is the ever-increasing trend of worldwide academic mobility and its various influences on the economy and international relations.

2.2. The method of processing the statistical data

The statistical data was analyzed through comparison graphs, knowledge charts concerning the higher education students, income vs. monetary expenses, comparisons between the budgets and the national investments in education, and specifically in the academic education, an examination of the economic worthiness, and expenses of the cost-of-living in selected countries. The author of the research aimed, in each of these charts, to compare the data to the situation in Israel, due to his interest to learn from successful and experienced countries. In addition, the author of the research analyzed various cultures (in North America, Eastern Europe, Western Europe and the Far East). Naturally, he has also included data retrieved from credible sources such as the Israeli Central Bureau of Statistics, the Israeli Ministry of Economics, the UNESCO, OECD and ERASMUS organizations, as well as worldwide and national organizations of various countries [207, 209, 194].

The second chapter presents the results of statistical tests and usage of elements of data analysis, such as: The regression model, *Spearman* and *Pearson Models*. The linear *regression model* is expressed in research as a mathematical method for the analysis and location of parameters of the relationship between the independent X variable (mobility of higher education students) to the dependent Y factor (the reasons for the mobility of Israeli higher education students). Assuming the relationship between them is linear, meaning $Y = aX + b$.

The model served in order to analyze various statistical samples which took into account different factors and influences, and assisted us in reaching conclusions and recommendations in the end of the research. The *regression equation* computed the calculated the straight line which passed various points until it had reached the expected result. In addition, we used the *Spearman* Index, which measures the intensity of the relationship between two various variables, when these are measured by an ordinal scale (figures 4.9; 4.10). This measure had served to assess the extent to which it would be possible to describe the relationship between the variables using a mathematical function.

2.3. The method for determination of the conclusions

The main methodology for the determination of conclusions was based on qualitative and quantitative formulations and data. On the one hand, the numbers of higher education students, faculties, academic institutions, and the financial revenue to the given institution or country. On the other hand. Qualitative data dealing mostly with social sciences and humanities were analyzed. An analysis was held and a renewed outlook on new concepts, on a new outlook and a new overview of human behavior amongst higher education students and researchers was achieved. In order to fully understand it, opinions of professors were obtained, in order to reach the most successful conclusions towards the recommendations stage. The final part of the research, which summarizes it up, contains a diagram concerning the renewed establishment of a government-based mechanism which is supposed to operate the development program of the academic mobility, and an advanced operation of the issue at hand. This mechanism has four major axes, consisting of four government ministries as well as joint and independent management.

2.4. Conclusions of the chapter 2

1. The methodological support in the thesis includes various methods of analyzing information and drawing conclusions, which consideration the characteristics of research and the international comparisons. The methodological methods included abstraction of economic, socio-educational concepts, models and approaches for increase the academic mobility in different countries, that compared to Israel.
2. A statistical analysis and comparison of data, in the phenomenon of brain drain, and the impact on the local economy. In addition, there was scientific abstraction, classification and comparison of data, analysis and synthesis, data grouping and classification, tables and figures.
3. The goals and tasks that have been formulated for analyzing the academic mobility of Israeli students and international students determine the use of different methods, procedures and instruments of scientific knowledge in economic processes such as scientific abstraction and formulation of new concepts, classification and comparison of global models for managing the national challenge in each country, analysis and synthesis of data from reliable sources Such as the World Bank, the OECD, UNESCO, the Council for Higher Education in Israel, the Ministry of Economy, the Central Bureau of Statistics in Israel.
4. In addition, a grouping and classification of information, induction and deduction, use of national models from other countries, and the evolutionary investigation of the events and phenomena investigated were also conducted. The implementation of these methods,

together with the analysis of other academic studies, the professional opinions of researchers from Israel, the Republic of Moldova and other countries were contributed to the create an economic model which applied in Israel, and the continuation of scientific investigations in this field.

3. AN ANALYSIS OF THE DEMAND FOR ACADEMIC MOBILITY IN ISRAEL

3.1. An Analysis and Mapping of the Data in the State of Israel

The Bologna's reform began to operating in the academic world in Europe at 1999. In 2007, the State of Israel asked for the first time to in join to the reform. Various institutes, both academic and government mobilized review the highlights of the reform and see how adapting and integrating them into the framework of Israeli institutions [30, p.96]. The Bologna process was originally supposed to create a "common academic space" that will be as the new spirit of higher education in continental Europe, and a further stage in the whole world. From the outset, the project received is name - which called the EHEA (European Higher Education Area) [20, p.77]. Today, about 47 Member States work to promote various reforms and effectively create a uniform and transparent level training framework and the structure of academic degrees. In addition, the program also works to create a system of joint degrees, encouraging mobility of students and faculty, training and recognition of prior learning, and encouraging multi-year learning as part of the lifestyle of modern man. We find applications at the institutional level (within the university / college), national and transnational, using all institutes - European and organizations dedicated to the process [22, p.55].

The implementation of the bologna reform in Israel

International interest in the process, reform, and has affected the significance of the State of Israel. The State of Israel has submitted a request to join the company in the years 2007 and 2008 [36, p. 222]. In 2019, The State of Israel is still waiting for a positive decision, and at that time, she receives a negative response. However, the state of Israel promotes diplomatic relations and cooperation in higher education with the EHEA and the European Union [20, p.84]. An examination of the possible points of contention integration reform in Israel, we see that there are major obstacles which facing on the State.

These barriers are no different combination of reforms in each country and focus mainly on language barriers, cultural differences, and lack of uniform standards and academic institutions in Israel, academic freedom and the general management of the institutions [24, p.110]. In addition, there must be fundamental barriers such change, adapting training and qualifications circles similar to circles of reform, sharing, and reflecting the academic experience, and the strengthening of joint initiatives in teaching and research. Although there is still no official decision of the EU to accept the State of Israel as a reform, because the European Union argues that Israel is not a signatory to

the European Cultural Convention (European Cultural Convention), and therefore she cannot be a full partner to the Bologna process [164].

Therefore, Israel can only base on a similar manner to countries other than Europe. However, the State of Israel has revised the trend to adapt to the European system and Bologna program. These changes focused on the principles of reform, as required for a European country that wants to be the Model uniform training framework and structure of academic degrees.

The starting point of the reform is Interactions between the three circles of academic studies, specified in Chapter previous button Bachelor's degree (BA), Master's degree (MA) and PhD (PHD). These three circles are an expression of the principle of uniformity that should manifest itself through reform, in other words, all Member States will grant degrees in accordance with the specified circuit [21, p.30]. A student who wishes to continue his studies in another country, after approval, he will receive from the state, which described earlier, without the hassles and unnecessary restriction. The starting point of the educational system in Israel today based on the three circuits similar to those promoted the training reform today [39, p.16].

According to Aviram [9, p. 277] the Israeli institutes offering an academic program in English for international students Review sites from various institutions and discussions with relevant officials in institutions, increases That Israel today are:

A. 13 undergraduate programs full activity in English, of which 7 in colleges, and 6 at three universities: 2 Technion, Tel Aviv 2 and 2 in Ben-Gurion. In the coming year (2018) is scheduled to open another program in the Technion which opened her already registration within the framework of mediation next five years.

B. 65 active programs in full English graduate; Most master's degree programs of the year and sometimes two years without thesis, and a few Master's. These programs offer all Universities and the IDC.

C. Summer courses and programs - all universities and many colleges offer summer courses or short programs designed for international students (in English and Hebrew). These variables caliber undergraduate or graduate. Even here there is some ambiguity because many institutions invite students to choose to study a variety of courses in English from the institution offering courses in English and Actually build their own personal program.

It should be noted in addition that there are international students enrolled in regular programs of institutions. Some of the foreign student are Jewish, and they now the Hebrew language, not like the Israelis, but understand, and filling well and "at home". Some of them had also families in Israel, so they get "family supporting" in holidays, vacations and testing period [13, p. 1].

3.2. The Academic Mobility within the State of Israel

Although the situation of the higher education in Israel, and despite objective difficulties, there are differences between the characteristics of the higher education system in Israel and those of other countries. To learning from the experience of other countries regarding in academic mobility is important and contributes to the understanding the major of trends in promoting international highest education in the world. For purposes of the objectives internationalism in higher education system, and its fundamental issues, we can point to three main drivers of international procedures in different countries and in particular the mobility policy [44, p.20]. First, raising the quality, competitiveness and ensuring the sustainability of the academic system. Second, the combination of international dimensions, cross-cultural and global into the training provided as part of the Academy, and the last is, Promoting competitiveness and the country's economy. The issue of the increasing demand of foreign students in the Israeli academy has several advantages.

Mobility of academic student and Academic Cooperation

Before the start of the mobility of students, began operating the program and teaching staff mobility of researchers between countries, and among other things, a desire to go to Israel. The reform of academic mobility takes place in partnership with the academic programs have been before 2000 [46]. In recent years, students, faculty and researcher's mobility feature. Students who study in Israel interested in joining the existing partnership programs such as Erasmus Mundus programs and others that run Israel. Not only in Israel but also in many countries around the world. The Author finds Universities combine academic program with a parallel academic institution in another country:

1. Ben Gurion University - operates training and certification programs together with more than 50 countries at three levels of degree, health promotion programs in the community, Faculty of Political Sciences, Business Administration and Global Economics in the world [173].
2. Tel Aviv University - TAU - operates a training and certification programs primarily two degree (MA) in all areas and level (include Prestigious Degree in Medicine) which the university are teaching and collaborates with eight countries [174].
3. The Tecnion institution - Israel-Technology Academic Center, one of the world's leading certification bodies, with lecturers and researchers of Nobel Prize winners. The Technion academic relations manager and joint certification with over 32 countries in the world [175].

International programs in Israel – Erasmus +, Tempus

The new EU program for Education, Training, Youth, and Sport for 2014-2020, Erasmus+, brings together seven existing EU programs (including Tempus) in the fields of Education, Training, and Youth; and for the first time provides support for Sport. As an integrated program, it offers more opportunities for international cooperation across the Education, Training, Youth, and Sport sectors [167]. The Erasmus+ program aims to boost skills and employability, as well as modernizing Education, Training, and Youth work. Erasmus+ supports transnational partnerships among Education, Training, and Youth institutions and organizations to foster cooperation and bridge the worlds of Education and work in order to tackle the skills gaps we are facing. It also supports national efforts to modernize Education, Training, and Youth systems. In the field of Sport, there is support for grassroots projects and cross-border challenges such as combating match-fixing, doping, violence and racism [197]. In the state of Israel, the Author recognizes some projects which offer by the CHI:

1. DARE - is a multi-national project, together with Georgia, coordinated by Haifa University. The project aims at promoting inclusive education and responsive education in Georgia and Israel by widening access to higher education for potential and existing students from three vulnerable groups: women, ethnic minorities and those with disabilities.

   The partners in Israel: Israeli Partners: "Achva" Academic College, Gordon Academic College of education, Sapir Academic College Associated partners: "Nitzan and Rashi" Foundation.

   Other Programmer Country Partners: European Access Network - UK Kauno Technologijos Universitetas, Lithuania Masarykova Univerzita - Czech Republic Universidad de Murcia, Spain Universitatea Alexandru Ioan Cuza Din Iasi - Romania.
2. TEACHEX - is a national project coordinated by IDC Herzliya. The aim of the project is to contribute to the continuous professional development of academic staff by offering adequate support structures (Centers for Teaching Excellence) and innovative, high-quality, flexible programs designed to promote better teaching and therefore enhanced learning as well.

   The partners in Israel: Beit Berl College, Ben-Gurion University, Bezalel Academiy of Arts and Design, Gordon Academic College of Education, Oranim Academic College of Education, National Union of Israeli Students.

   Programmer Country Partners: Rijksuniversiteit Groningen, Netherlands, The Glasgow Caledonian University, UK, Uniwersytet Jagiellonski, Poland, Association Europeenne

D'Institutions De L'Enseignemei, Belgium, EDEX - Educational Excellence Corporation Limited, Cyprus, Associated Partner - The National Unions of Students in Europe, Belgium.

3. CLEVER - is a national project coordinated by "Shenkar" College. The project aspires to be the catalyst of change in HE for creative professions as well as the entire creative economy eco-system. This will be done by ensuring that graduates in creative disciplines are fitted with updated leadership and entrepreneurship capacities and skills the enable them to maintain life-long portfolio careers and to enhance 21st century creative economies.

   Additional Israeli Partners: Bezalel Academy of Arts and Design, College of Management Academic Studies, Hadassah Academic College, Sapir Academic College

4. LAHAV - Israel Federation of Small Business Development, Associated partners: Israel Ministry of Economy and JVP Media Studio.

   Programmers Country Partners: Creative Business Cup, Denmark, Copenhagen Business School, Denmark, University of Brighton, UK, EBS Education OU, Estonia, MTÜ Loov Eesti, Estonia, Iceland Academy of the Arts, Island, THNK Social Enterprise BV, School of Creative Leadership, Netherlands.

   In2It - is a national project coordinated by Ort Braude College. The project aims to develop and implement an innovative technological infrastructure for the purpose of advancing internationalization in higher education, and thereby to expand the practical applications of internationalization in Israeli academic colleges, to strengthen the capacities for teaching, learning, research, and training, and to improve the quality and positioning of Israeli state-funded academic colleges in higher education.

   Additional Israeli Partners: Sapir Academic College, Shenkar College, Al-Qasemi Academy, Beit Berl College, Kaye College, Tel-Hai College, The Academic College of Tel Aviv-Yaffo. Associated Partner: VARAM

   Programmers Country Partners: Kingston University Higher Education Cooperation, UK Padagogische Hochschule Ludwigsburg, Germany, Politechnika Warszawska, Poland Politecnico Di Milano, Italy, Universita Cattolica Del Sacro Cuore, Italy, Universite De Montpellier, france.

5. DOCMEN is a multi-national project, together with Armenia and Kazakhstan. The project is coordinated by Cracow University of Technology. The aim of the project is to support the modernization of higher education in microelectronics in the targeted universities

through innovation of two cycles curricula in line with the new development in the area, the labour market demand and according to the Bologna Process and best practices.

Israeli Partners: Bar Ilan University, Holon Institute of Technology, Sami-Shamoon College of Engineering, Tel-Aviv University, Associated Partner: Ray Technologies Ltd.

Programmers Country Partners: ECM Space Technologies GMBH, Denmark, Politecnico Do Torino, Italy, Technical University of Sofia, Bulgaria, Technische Universitaet Berlin, Germany.

To understand the international students who are coming to Israel today, what their motives and their goal, the Author noticed by their primary target arrival to Israel [197]:

A. "Academic Experience" - students for short periods, Study Abroad, summer courses, Erasmus + and student exchanges and other short programs.

B. Study abroad in full program - full undergraduate students, both full without preparing a thesis or an academic.

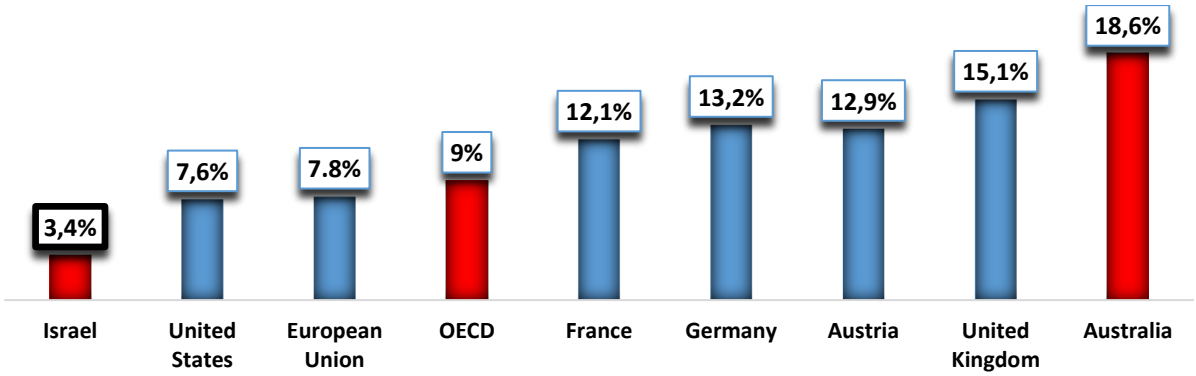
C. Academic research - students with a master thesis, doctoral and post-doctoral. Doctoral students or postdoctoral arriving in favor of academic research in areas where there is cooperation in areas such as energy, healthcare and medicine, high-tech, water sources and exploring the desert.

Table 3.1. The number of foreign by the International program in Israel (Academic year 2017- 2018)

The program study	The number of foreign Student		% from all foreign student – 2017-2018
"Academic Experience" (Erasmus + / Tempus)	4,622		44.4%
Study abroad in full program	3,139	B.A – 1,922 students M.A (no thesis) - 1,051 students M.A (with thesis) - 166 students	30%
Academic research	2,684		25.6%
Total	10,445		100%

Source: Made by the Author from source [91]

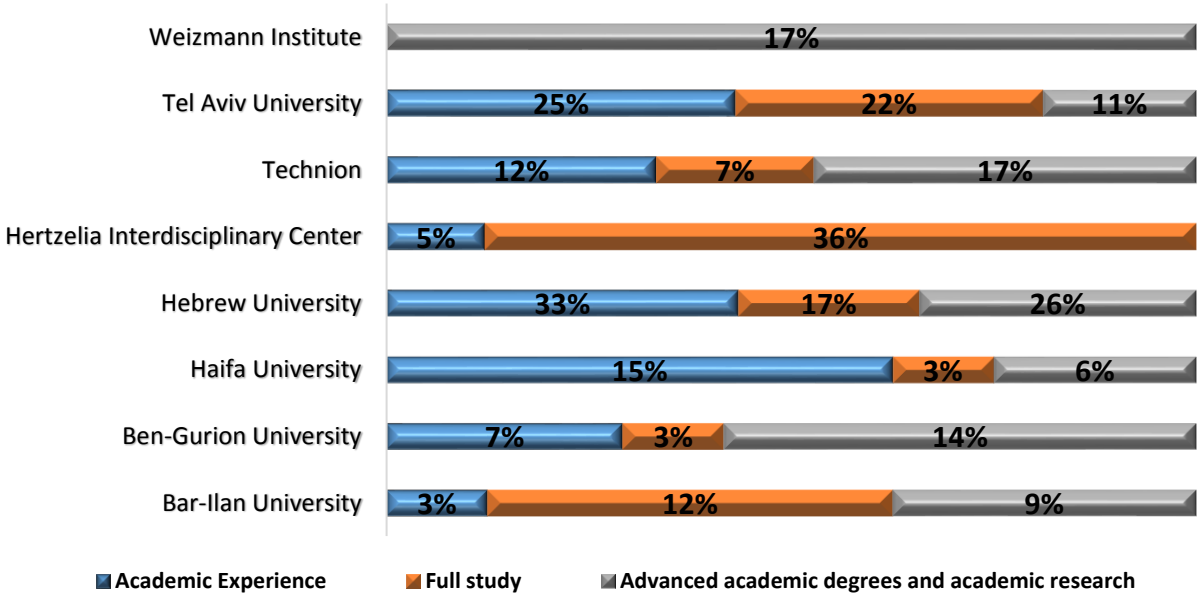
If the Author of the thesis compared to countries such as Australia, Britain, Austria and Belarus, which promote the issue of the idea and bringing many foreign students to their countries and universities, the State of Israel cannot surpass the number of significant percentages. Graph No 3.1 present the comparison of the numbers of foreign students as a percentage of all students in general, and understand that a very small percentage. **That total percentage is only 5.5 %.**



Graph 3.1. The percent (%) of the foreign students from the total number of local students -2018

Source: [19, 187].

To analyze the information about the demand for academic studies in Israel, we have to see which countries and regions in the world come from students, (depending on the academic program is requested).

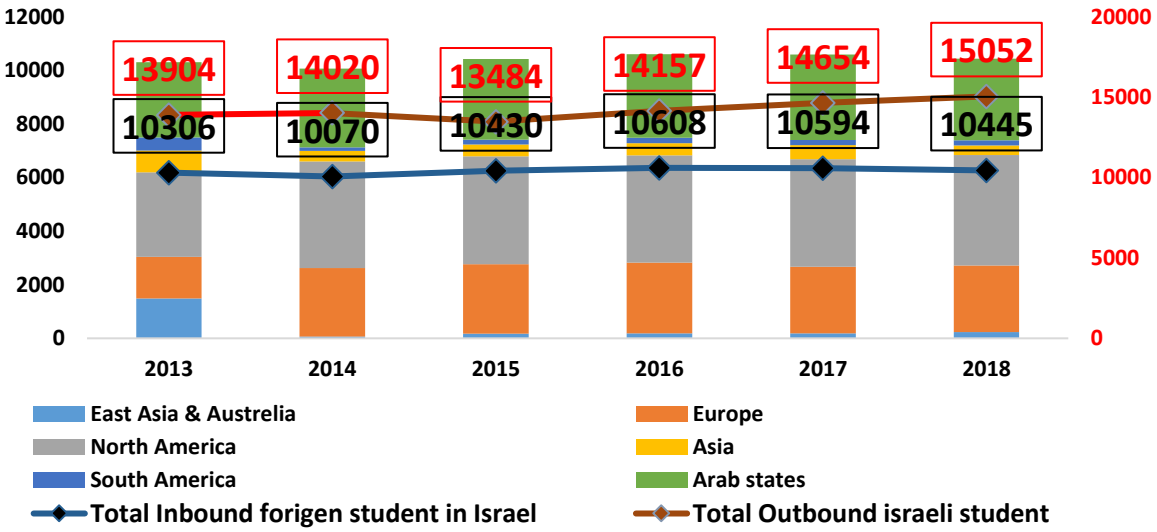


Graph 3.2. Foreign student in Israeli academic institutes – 2017-2018

Source: Made by the Author from source [91]

Analyzes the Graph:

1. The **Hebrew University** is the popular for the Erasmus + program (Academic Experience)
2. The **Hertzeliya Center** has the largest percentage of full study.
3. All the foreign students in **Weizmann Institute** are researches (the institute has an international success and 3 Nobel prizes in Chemistry, Biotechnology and Science.
4. The **University of Tel Aviv** has a large percentage in full study and Academic Experience. The university have popular M.B.A program with American Universities.



Graph 3.3. Total demand for academic mobility in Israel 2013-2018

Source: Made by the Author from sources [197, 189]

Analyzes of the graph:

1. The Year 2013- 10,306 Students

   The Year 2014- 10,070 students (**decrease** of 236 students from 2013)

   The Year 2015- 10,430 students (an increase of 360 students from 2014)

   The Year 2016- 10,608 students (an increase of 250 students from 2015)

   The Year 2017- 10,594 students (**decrease** of 14 students from 2016)

   The Year 2018 – 10,445 students (**decrease** of 149 students from 2017)

2. There is an increased demand of students from North America (Canada + USA), and an increase in demand of students from Europe.
3. By the mobility of outstanding students from India and China for the benefit of doctoral studies in international relations and development gives the growing demand from students who come from East Asia and the world.
4. There is also rising demand of students, their country of origin is unknown - possibly for political reasons. It is also possible that the students come from the African continent, and to track their arrival.

Tuition fees for higher academic studies in Israel

The international students are currently enrolled in higher education institutions or in programs funded. The CHE does not differentiate between actual and subsidizes Israeli students, and look at them as part of the budgeting model. The CHE restrictions on charging tuition fees were set back in 1996 by the Commission "Malz" which dealt with determining the amount of tuition and student assistance establishments of higher education institutions. The committee has

defined that "foreign citizens Students pay high tuition fees at 25% of the foregoing"[91, p. 23]. The determination of tuition did not look at overall objectives in this subject and in any case are not necessarily relevant to today's market prices (2017). The actual tuition charged in these programs by institutions is usually close to the ceiling in the limit. In the second case of off-budget programs do not of course the series, and there is much difference in the amount of wages Among institutions that study international programs.

Table 3.2. Tuition & fees income from foreign students – 2017- 2018 (USD)

University / academic institute	"Academic Experience"	Study abroad in full program	Academic research	Additional costs
Ben Gurion University	2,300$ - semester 4,250$ – full year	11,200$	7,200$	Academic Experience - 975$ Full study – 4,900$
Tel Aviv University	No Data	All Faculties 18,070$ - B.A 40,900$ - M.A	No Data	975$ for a year
Bar Ilan University	7100$	12,500$ per year	No Data	3,000$
Haifa University	No Data	12,250$ per year	No Data	
Tecnion institute	No Data	19,500$ per year	No Data	3,100$
Weismann institute	No Data	20,000$ per year	No Data	

Source: Made by the Author from source [173, 174, 202,]

International Relations and Academic – Economic Cooperation

Only in the academic year 2012-2013, the Higher Education Council (HEC) in coordination with the Ministry of Finance, start the implementation of a comprehensive three-year plan for the development of academic relations with China and India [Table 3.2], and strengthening the academic status of Israel in the world. The program was established as part of government efforts to tighten bilateral ties between China and India and Israel. This program seeks to strengthen international academic cooperation in general and strengthening academic ties with China and India in particular. Now, with the ending of the three years of successful operations, the Higher Education Council and the Ministry of Finance in the evaluation of the program in order to determine the nature of its continuation next three years [91, p.22].

The program is currently promoting two parallel courses of action [197]:

1. Joint research grants: fostering collaborative research between scientists from China, India and Israel by Division of joint research grants from the **I**srael **S**cience **F**oundation (ISF) and the Foundation Equivalent in China and India and the corresponding fund.
2. Programs to promote the absorption of students and post-pick-up sticks outstanding:

A. Scholarships for post-doctoral students from China and India for outstanding Israeli universities. A three-year scholarship to post-doctoral students excel in China and India were divided between 2013-2015.

B. Plan to receive outstanding students from China to study BA and MA: 40 scholarships Undergraduate and 60 graduate scholarships to Chinese students were divided between the years 2013-2014. The Indian students will start in 2015.

C. Plan to receive outstanding students from China and India to study the state of summer courses. Israel: Between 2013-2015 scholarships were awarded to 250 students annually in Chinese and Indians participating in summer courses of one to two months in the country in a variety of fields. This year (2017). The number will increase to 500.

According to yemini [153, p.7] In terms of academic institutions outstanding advantages are:

- raising academic quality due to the global market accessibility for students (and therefore also of the faculty).
- Creating and strengthening the international reputation
- Possibility unique conservation areas / with low demand by "importing" students
- diversifying sources of income and a source of profit possible
- Academic boycotts reduction tool

The main benefits for mobility to other country:

- A social and cultural diversity - skills needed in today's world ("global citizens" including improving Academic English).
- Raising the Academic Quality and in terms of the state of Israel as a whole can also appoint a number of potential benefits
- Contribution to political and diplomatic
- Exports of expertise
- Raising quality and attractiveness of the country's institutions
- Support the creation of a multicultural society
- Strengthen the relationship with Diaspora Jewry (When it comes to Jewish students)
- Ability to maintain high-quality human resources then the economy (Brain Circulation)

However, the advance has been saying that this list of potential benefits, but the realization of each depends on the policy. For example, "raising the academic quality" really depends on the students that reach a high level. Ability to source Income from such a policy depends on the collection of tuition for those students and the level of services provided by them. The Israeli students benefit depends on the level of exposure to have international students [65].

Table 3.3. The number of Indian & Chinese student - PH. D – 2017-2018 (from all International student in the University)

University	Number of Indian & Chinese student	All Foreign student
Tel Aviv University	47	113
Tecnion institute	104	183
Hebrew University	130	268
Weizmann institute	113	253
Bar Ilan University	20	48
Ben Gurion University	83	130
Haifa University	14	48
Open University	4	6
Total Number	815 – 47%	1019 – 100%

Source: made by the Author from source [91].

There are other factors, which has national and regional plan to advancement of bringing an international student to Israel:

1. The Ministry of International Relations, which works to promote international academic ties, initiates bringing delegations Israel academies, awards scholarships for international students who come to Israel and helpful Institutions issues of branding and marketing [84, p. 39].

2. The "journey" company - a company which is a joint initiative between the Israeli government and the Jewish Agency, Long Program Coordinator in Israel, semester and year, young Diaspora Jews, and provides Scholarships and grants, according to the country of origin and economic status participating in the program. Some of the programs are Academic. Works to bring Jewish students to Israel.

3. Tel Aviv Global initiative of the Municipality of Tel Aviv aimed at promoting the above context Positioning of the Tel Aviv metropolitan area as a center for international students and global attraction. Show to help institutions in the metropolitan area and operates a website where information studyintelaviv.com. The curriculum offered in the metropolitan area and living there [117].

4. Study in Israel- Jerusalem Municipality's initiative in collaboration with the Ministry of Heritage and Jerusalem and PA Jerusalem Development to promote the arrival of international students to study in Jerusalem. The project Maintains a Web site studyinjerusalem.org with relevant information on the subject.

5. The Israel Asia Center - a nonprofit devoted to building a common future for Israel and Asia through Asian student leadership programs excel in Israel

6. BTC (The National **B**ologna **T**raining **C**enter) - an institute which aims to promote the Exposing Israeli institutions of higher education in the Bologna process by disseminating knowledge and encouraging dialogue the issue of Israeli academic arena. BTC is under the

auspices of the Studies Division European Politics and Society at Ben Gurion University. In this university the Tempus program are exist [197, 91].

The Economic relations and academic cooperation leading to economic prosperity for the State of Israel. The main reasons for Israel's policy to increase the demand for foreign students is the arrival of international students to the walls of Israeli academic institutions may be many advantages - Institutions themselves, the Israeli students and the State of Israel as a whole. This policy led to the calculation of the financial revenues from tuition fees of foreign students.

Table 3.4. The increase in the income ($) and the expected income for – 2025

The University	Tuition income 2016 – 2017 (in thousands USD)	Tuition income 2017 – 2018 (in thousands USD)	Expected financial income in 2025 (in thousands USD)
Hebrew University	17,388	17,525	22,783 Increase of 30%
Tel Aviv University	American Medical Program – 29,816	American Medical Program – 31,936	40,000 Increase of 28%
	Foreign students – 16,486	Foreign students – 17,921	23,400 Increase of 30%
Ben Gurion University	18,741	18,427	22,000 Increase of 22%
Haifa University	16,613	16,799	20,000 Increase of 28%
Bar Ilan University	12,157	13,644	17,500 Increase of 30%

Source: Made by the Author from sources [126 ,125 ,81 ,80]

From presentation of income tuition and fees from the foreign students in academic institutions, the Author notice that there are differences between the universities. Tel Aviv University, which has a big demand, and distribution of two major programs (medicine, and full study) leads to a very high income. Every academic institution has a desire to increase the demand by tens of percent within 10 years, and to provide a tuition income for growth of 30%, through adapted to programs for foreign students. Ben Gurion university has the center of international academic relationship studies in Israel. He was the first academic institute which start the process of international program and international academic relationship with other country (mainly U.S), even before the bologna reform [89, p.22].

The university of Bar Elan cooperate with Jewish academic institute all over the world because this university is a center of the religion community academic. A lot of the researches & the staff are religion people, and the university are attracting a religion student. Most of the foreign student are coming from Jewish communities in United State, Canada, and other countries from Europe.

The academic mobility of Israeli higher education students. According to the Higher Education Council in cooperation with the Central Bureau of Statistics, and cross- checking data against UNESCO tables, the number of Israeli students which studying abroad is about - 13,976 students per year (2016) [174]. This is a very high percentage for comparison against the total number of students enrolled. According to Adler [3, p. 19], the main reasons for the academic mobility are:

1. To provide an opportunity for you to experience a different perspective on their academic subjects in overseas - In an era of globalization, it is widely acknowledged that some overseas exposure as part of a degree program can academically and socially enrich a student's university experience, broaden the student's perspectives and enhance his or her employment prospects.
2. To enhance personal and intellectual maturity – through inculcating flexibility, resilience, cross-cultural communication skills, the ability to adapt to new circumstances, and to deal constructively with differences.
3. To broaden your experience by living and studying abroad for a period of time.
4. To widen academic horizons and thereby lead you to reappraise your goals to include postgraduate study.

Cohen- Goldner [36] describe the reasons of the Israeli student for academic mobility as an experience for the student as three similar content categories were identified in the three groups analyzed. These were called: **Personal motivations, Academic motivations, Professional motivations**. Cohen [35] found, however, that the elements varied in importance among the different groups surveyed. These references seem to be related to social, demographic, cultural and stage of formation characteristics of the respondents. Personal motivation also involves the desire for pleasure and fun. As some students emphasized, because they still do not have professional or marital commitments this is a time in life that is very conducive to experiencing this desire. We perceive, therefore, that the students' age (21 years old on average), marital status (all single) and stage in their education (start of first degree) are all relevant factors driving this motivation. Academic motivation is also very strong and was indicated by the majority of the students studied as being the second main motivation and by some as the main motivation. The desire to learn or improve another language and to enhance the résumé are the main elements identified in this category. Among other academic motivations we also find the desire to specialize in a particular area of interest. professional motivations appear less strongly among the students for BA degree. The desire to have an international career and the expectation of learning other ways of doing business were elements pointed to by some graduate students, especially those from

the administration area. But the expectation that the mobility experience would open professional doors and bring professional recognition were motivations indicated only by post-graduate students, who seem to have a clearer picture in their minds when it comes to career planning.

There are some advantages to the demand of students for academic mobility outside of Israel. Wolinsky [150, p.79] describe in his article, the advantages for the Israeli student:

1. Admission requirements - Study outside from Israel, allow them to acquire an education in Israeli acceptance threshold is particularly high. For examples, we can include faculties such as medicine, veterinary medicine, dentistry, computers and psychology.
2. The fields of study - study outside of Israel allow to meet another culture. The country in areas not taught, or taught in a small country, due to lack of demand or due to lack of practice. With these courses, include studies in art, game design and Veterinary.
3. Location institutions of learning - learning centers near the center of events, actions, knowledge and the world's leading activity constitute an advantage. Examples are studying fashion design in Milan, Italy, studying cooking in France or acting classes in California, USA.
4. Improving the professional career - Study Abroad allows students to improve their professional status immeasurably, in particular if they are graduates of one of the most prestigious universities abroad.
5. The level of studies - some institutions of higher education in the world boast high quality education most. Revolutions knowledge and culture, and global politics have grown addicted to our foundation, for example, the world's largest education centers - such as the Sorbonne University in France, Oxford, Harvard and others.
6. New language and experience - study abroad give students another language. That it is clear that even when they were learning the language would not have the level of knowledge of the language as a whole do a degree in a foreign language. In addition, we can see that the study abroad experience allow one-time experience and knowledge of different cultures, language learning, development, independence and study at the same time.
7. Employment opportunities and the expansion of knowledge - study in a foreign country allow access to and knowledge of the local labor market and the region. If the student chooses not to return to Israel if he could under certain conditions, to continue an education and work in the destination country.

The disadvantages of study in other countries are:

1. The loss of study grants for graduates of military service / civilian service - from 2012 can be any final Israeli civilian service enabling the state to study in 16 academic institutions of learning, free of the first year, and enabling tens of scholarships / grants / loans while attending college.
2. The Tuition fee costs – the cost of can be very expensive. However, in recent times, we have witnessed a significant easing in the field of economic aid, expressed the expansion of the basket of scholarships and loans offered to foreign students.
3. Costs of living - in addition to funding tuition for students studying abroad are often required to pay the housing costs and living expenses. These costs, in the absence of a sufficiently high income, may constitute a heavy burden and make it difficult living in the foreign country (see the comparison in table No. 2.1)
4. Options to get a job - most of the foreign students are get student visas, and they are without the option to get a job in the country. There is a problem to integrate various jobs for foreign students. This reason stems often due to foreign passport or disorientation, non-conformity to the norms, lack of time, transportation, lack of experience and more. Illegal work can be a harsh response from the Authorities, for the day and even expulsion from that country.

The favorite Universities and faculties

According to CBS [172], the most sought faculties are: medicine, biotechnology, dentistry and business management. Equally popular faculties are studying game film, fashion design and art. Until the 80s only able to study at prestigious universities abroad were members of the upper crust. Today, globalization and the free market have made higher education abroad option available almost every Israeli is interested, especially second-generation Israelis parents from Europe, Australia and North America. According to the data [189], the most desirable countries in the eyes of Israeli students were the United States, Britain, Australia, Spain, Italy, Romania, Hungary, Germany and the Netherlands. In practice, almost no country around the globe that can be found which Israeli students, including exotic countries as Japan, China and South American countries. The CBS also investigated the reasons to study abroad, which are diverse. Starting cosmopolitan atmosphere, the sense of freedom and liberation and refreshments from reserve duty, and believed that teaching standard is higher, especially in professions such as medicine and business administration. Another reason mentioned students are the admission standards at universities country.

Table 3.5. The favorite faculties of the Israeli students (2016 – 2018)

State	The popular Faculties	Admission Requirements	Language of study	Tuitions & fees	Average cost of living
United state	Business administration, Engineering, arts, Sciences, Mathematics	ACT test, Language test, High-school diploma, Recommendations, Writing an essay	English	10,000-50,000 USD Depends on the prestige of the institution	800-1,700 USD for month.
Canada	Business administration, Arts and Design, Sciences, Computers,	High school diploma language test	English French	15,000 USD for a year	1,500-2,500 USD for month
Hungary	Veterinary, medicine, pharmacy	High school diploma medical school entrance exam	English, Hungarian	14,000-16,000 USD for a year	600 – 1,000 EUR for month
Germany	Science, engineering, medicine	High school diploma	German	1,000 EUR per year	1000-2500 EUR for month
Italy	Medicine, design, art, fashion, architecture	High school diploma	Italian, English	1,000 EUR for year	600-1,000 EUR for month

Source: [161].

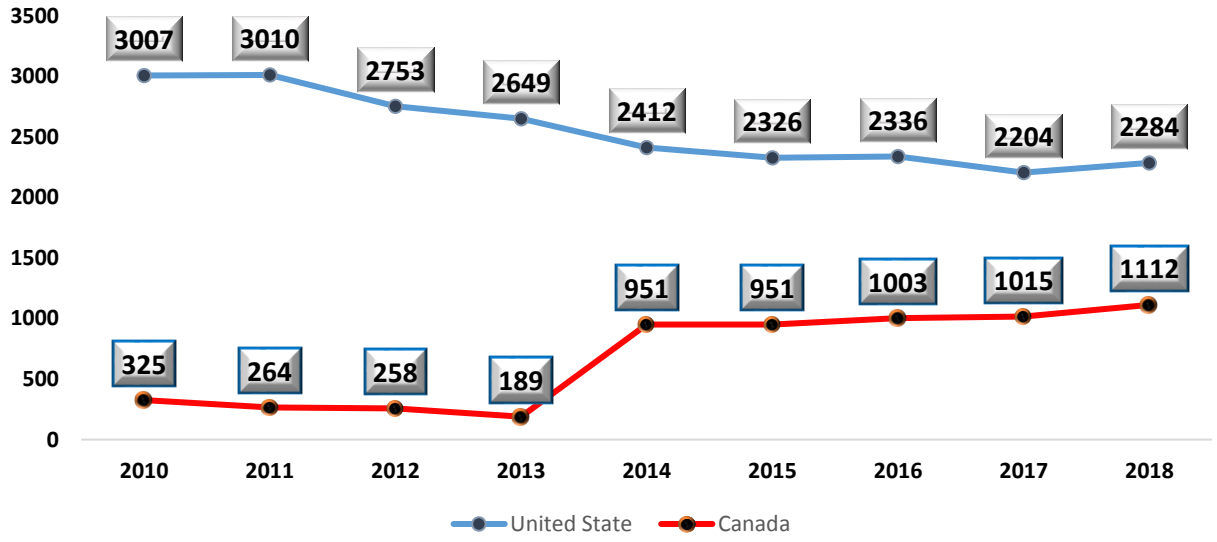
The author identifies a constant search by another Israeli student who is looking for opportunities to acquire medical education (on any subject), as well as a desire to study business administration, design and computer programming. These countries represent the other countries that do not appear in the table. Countries such as Eastern Europe (Czech Republic, Romania, Moldova and Bulgaria) United Kingdom and Western Europe, Australia. The findings of the various graphs show that there is great demand for the design and architecture professions, which are in great demand, and on the other hand, very limited supply and possibilities in Israel. Demand for design professions will be in Italy, France, Canada and France. In these countries there is a demand for fashion, graphic design. According to the Central Bureau of Statistics, the most sought-after professions are medicine, biotechnology, dentistry and business administration. No fewer desirable professions are film studies, fashion design and art. According to the data, the countries which desired by Israeli students are: United States, Britain, Australia, Spain, Italy, Romania, Hungary, Germany and the Netherlands. In practice, there is hardly a country around the globe where Israeli students cannot be found, including exotic countries like Japan, China and countries in South America. The Central Bureau of Statistics has also examined the reasons for studies abroad, ranging from the cosmopolitan atmosphere, the feeling of freedom and freedom and the

resurgence of reserve duty, to the belief that the level of studies is higher, especially in subjects such as medicine and business administration, from Israel.

The demand of Israeli student for Academic Mobility

To present the countries and the numbers of academic mobility of Israeli student. The Author of the thesis based is data on professional sources like: OECD -data, the databases of the Central Bureau of Statistics, the Israeli Center for Higher Education [197], the CIA – fact –book [193], and from the popular statistical database of UNESCO [169]. The data are present the basis of geographic regions and distributed in accordance continents, countries and relevant education clusters. The presentation of demand of Israelis student for academic mobility (by countries and regions in the world between the years 2010 - 2018:

North America – United States and Canada are countries with high demand of academic mobility from Israel (2010 – 2018).



Graph 3.4. The demand of Israeli student for academic studies in North America (2010 -2018)

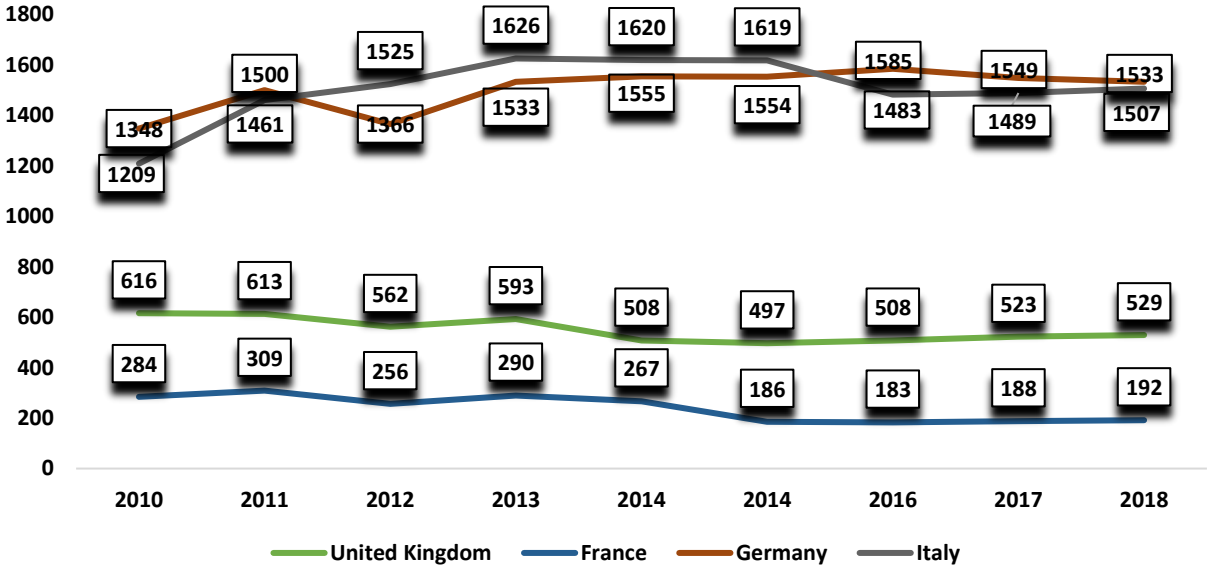
Source: Made by the Author from sources [197, 169]

Analysis of the graph:

1. The Author sees a consistent upward trend in the demand for Canada for over 4 years (2010-2014), then an increase of 2014 to 2018.
2. Overall there was an increase in Canada's, over - 242% of the demand in 2010 (325 students compared to 787 in 2018)
3. In the United States, the Author notices a decrease from 2010 to 2018.
4. We notice a decline in the demand of student's study in the US amounting to approximately 18% (3,010 in 2011 compared to 2,204 in 2018).

5. The main reason for the decline in demand for US academic mobility is high tuition fees and cost of living that come with it. As we know the average tuition for academic studies in united states is about 25,000$ for academic year.

Western Europe – Italy, Germany, France and UK are countries with high demand of academic mobility of students from Israel (2008 – 2016).



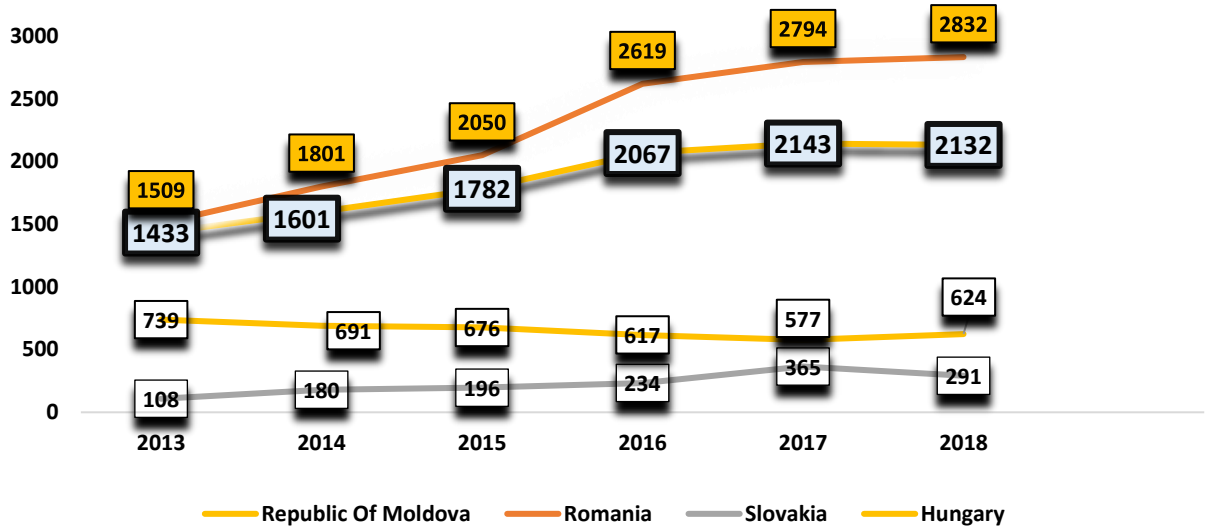
Graph 3.5. The demand of Israeli student to for academic mobility in western of Europe (2010 – 2018)

Source: Made by the Author from sources [197, 169]

Analysis of the graph:

1. In the graph, we see significant differences between the different levels of demand for Israeli students of each country. On the one hand view of the rising demand trends (countries Germany, Italy), on the other hand the decline in demand (France and Britain)
2. There is a rising demand significantly positive quantum state of Germany, where demand increased about 56% percent (1348 students in 2010 compared to 1553 Israeli students in 2018), and the Italian state in which the demand of the number of students in 138%! (Decrease of 616 students in 2010 to 529 Israeli students in 2018).
3. We see a decline in demand in France, - from 284 students in 2010 to 192 in 2018. However, despite this demand for education in the country is not going through major shocks.

Eastern Europe - Republic of Czech, Romania, Slovakia, Republic of Moldova and Hungary are the countries with high demand for academic mobility from Israel (2012 – 2018).



Graph 3.6. The demand of Israeli student to studies in Eastern of Europe (2010 – 2018)

Source: Made by the Author from sources [197, 169]

Analysis of the graph:

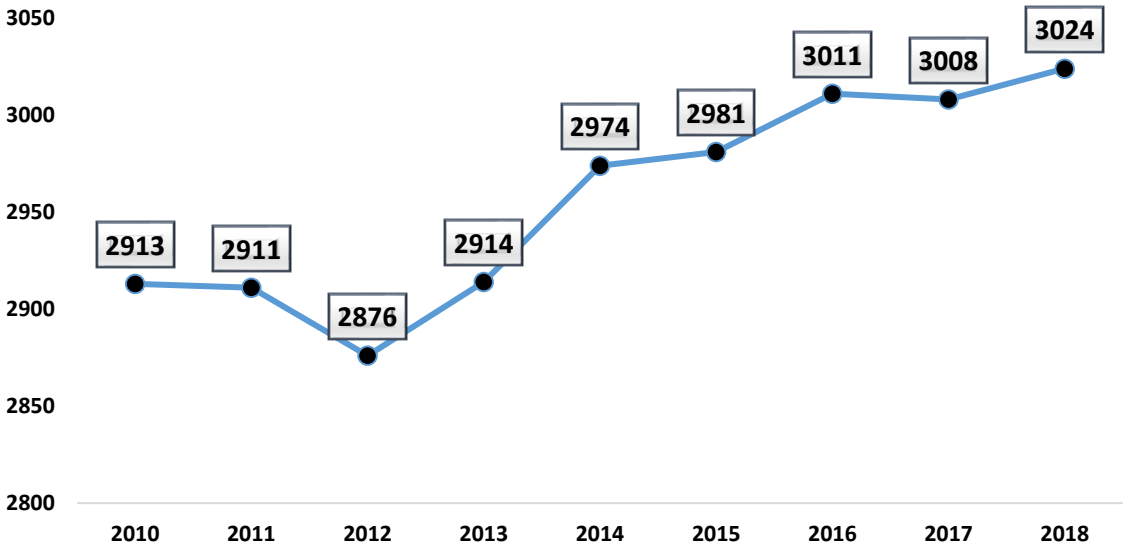
1. Among these countries, we see a general upward trend in demand for students to study in these countries, with the most significant increase in demand for existing in the Republic of Moldova. Starting from 45 students in 2001 to 2,132 students in 2018. This increase in demand of 4500%.
2. We see a gradual increase in both the State of Romania, Hungary and Slovakia.
3. To view the increasing demand of Israeli students to study in the Republic of Moldova, decided the Author of the current research to show the data in the next table (Table 3.6).

Table 3.6. Present by the numerically percent from 2001/2010 - 2018

Year	Number of Students	Increase / decrease in demand (In %)	The increase in demand compared to the year 2001
2001	45	---	
2012	1086	70%	An increase of 1075%
2013	1433	36%	An increase of 1530%
2014	1601	14.5%	An increase of 2320%
2015	1782	9%	An increase of 3095%
2016	2067	18%	An increase of 3057%
2017	2143	3.7%	An increase of 3085%
2018	2132	Decrease of 0.6 %	An increase of 4500%

Source: Made by the Author from sources [169, 197].

The state of Jordan - The neighboring state, with high demand for academic mobility, especially from the Arab students for medicine, engineers and law studies (2010 – 2018).



Graph 3.7. The demand of Israeli student for academic mobility in Jordan 2010 - 2018

Source: Made by the Author from sources [169, 176]

1. There is a trend of steady decrease in demand for school students in the state of Jordan. Please note that courses are learning in Arabic and therefore, it is possible speakers, who are Israeli citizens, who are Muslim students to cross the border and study in the neighboring country.
2. In Jordan there is a preferred university in the capital Amman and known as a university with professional quality. Studies are especially costly, and Licensing Exams success rate of those completing the various health trajectories highest in Israel [188, 161]. Arabic speaking students who do not want to deal with the language of the foreign country (Moldova, Germany) will prefer to study in Jordan. The Summary of the data – the Increases demand trend of study out of Israel is steadily increasing.
3. The tuition fees in Jordan are very high (in Amman University) and will be as 30,000$ for one year.
4. Most of the student become from rich Arab families, and they will study in the faculties of medicine, software engineering, law, dentistry, and nursing.

The other academic mobility will be in a lot of countries with high and low demand for mobility by the Israeli student. The enormous financial loss and the extraction of economic (and human) capital causes many crises (which will be expanded in the chapter on brain drain) on the

economic and social side. Table 3.7 mapping the countries with high and low demand, which systematic cross-examination of data was carried out against the financial expenditure.

Table 3.7. The loss of financial income from the academic mobility of Israeli student

State	Number of Israeli students (2017 – 2018)	Tuition and fees in USD (2017 – 2018)	Total monetary loss (estimated)
United state	2,284	32,000 USD (average)	73 million USD
Canada	1,112	15,200 USD (average)	16.9 million USD
Jordan	3,024	30,000 USD (average)	90.7 million USD
Germany	1,533	9,500 USD (average)	14.5 million USD
Romania	2,832	3,650 USD (average)	10.3 million USD
Republic of Moldova	2,132	3,600 USD (average)	7.7 million USD
Italy	1,507	15,500 USD (average)	22.6 million USD
United Kingdom	529	22,000 USD (average)	11.6 million USD
Australia	351	18,500 USD (average)	6.5 million USD
		Total Loss for **one** year	253.8 million USD

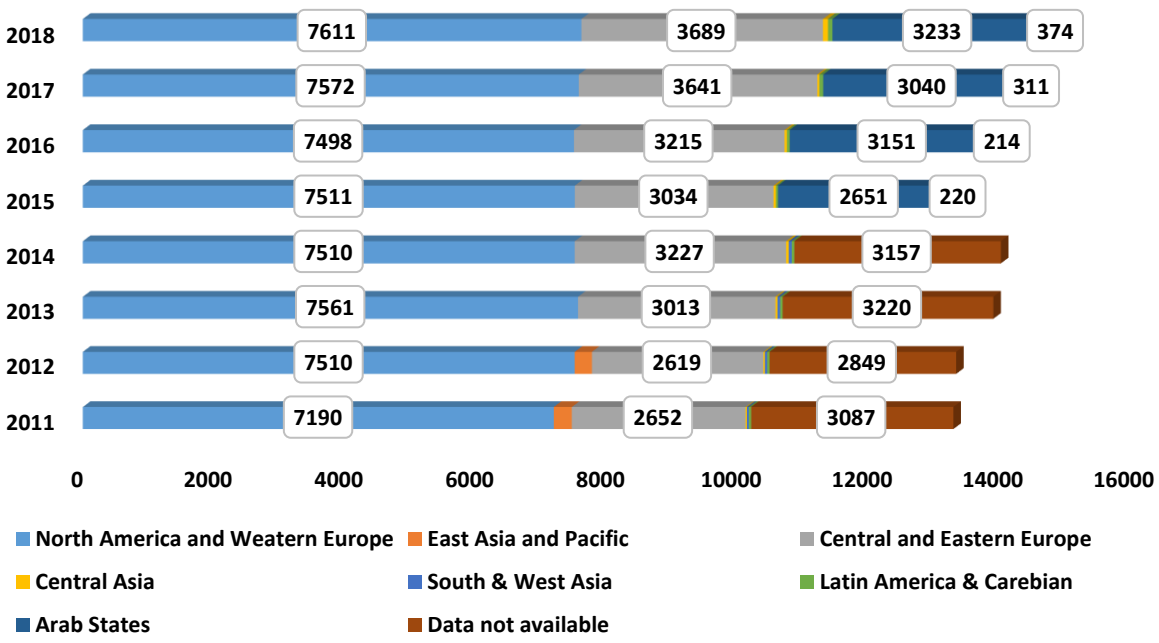
Source: Made by the Author from sources [169, 197, 172, 165, 161]

Before calculating the damage to the local economy, the author will present the summary of the exit of Israeli students. The graph 3.8 will include all departures according to the different regions of the world.

Analysis of the table:

The Author sees that the largest amount of demand focused over the years (2013-2018) between the three major regions: North America, Central and Eastern Europe, and Jordan eve countries.

1. In North America, the United States and Canada, we see a stable trend over the years, with the rise of minor importance. The reasons of the unincreased the number of students in North America, is because the tuition fees and the cost of living (include the flights, students visa, insurance.
2. In Central and Eastern Europe, we identify a year with high demand (in 2017) due to high demand that was the state of Latvia (University of Latvia). After the crisis fell against the university and the number has stabilized due to the increase in the State of Moldova.
3. We recognize that some dry areas are not attractive for Israeli student and therefore hardly appeals to them: East and South Asia, South America.
4. The information as it appears in the Brown color is apparently associated with the state of Jordan eve.



Graph 3.8. The total outbound student for academic mobility by Area 2011 - 2018

Source: Made by the Author from source - [169, 197]

The Data analysis comparing the number of applicants for academic studies outside of Israel. We can see a clear increase in demand for academic studies in academic institutions outside Israel. The prominent figures are the numbers of students and increase the number of countries. Unofficial figures, which cannot be proof of the presence of research, that- it is 18,000 students in the academic year - 2017-2018. No doubt, that these numbers are very large, relative to the young population which leaves the country [180].

But, to be accurate, the Author will conduct the natural increase that number of students in all academic institutions in Israel. After all, this is a natural increase of the population, who created it in larger volumes students because of the population growth the rate naturally. We have to admit that the percentage leaving to study abroad is rising significantly, that is, we do not see a significant increase in demand for study abroad, but numerically increase in demand, tailored for growing number of Israeli students stemming from bull markets of the population. This figure is also suitable data had increased brain drain from Israel during these years. These problems arise in and make the transition and departure of professionals, and a desire to move the family also influenced the decision where academic studies.

Table 3.8. The demand for international academic mobility from all local student

Year	The number of students in Israel	The number of students that choosing to study outside to Israel	Compare to all students (%)
2013	245,719	13,904	5.4%
2014	252,788	14,020	5.5%
2015	257,145	13,484	5.2%
2016	288,352	14,157	4.9%
2017	309,870	14,654	4.7%
2018	310,012	15,052	4.8%

Source: Made by the Author from sources [197, 169, 189]

Analysis of the table:

1. We see an upward trend in the number of students for academic studies in Israel. An increase in demand of 40% between 2013 and 2018.
2. We see a trend of decrease percentages demand for studies out there to Israel. A decrease of 0.9% compared to the overall number of students in Israel.
3. The increase in demand of students to study in foreign countries is stabilizing due to the increase in the number of applicants exists according to general academic studies. The increase was apparently due to reasons of increasing accessibility, natural growth in the population and so on. The relative level of demand is maintained over the years, ranging between 6.5% and 5.5% value, except in 2001 reached 9.1% (probably due to the increase in demand in the State Latvia).

When the Author of the thesis distinguishes the positive and negative issues, advantages and disadvantages, the academic mobility between countries, the contribution and cooperation in international and global with other countries, we have set up a "formula" in the interests of the individual student looking for a way of life in the future [101, p. 24]. Moreover, the country, which should take care of the education of citizens, the economy and social security, economic stability - political, but concerned about the growing phenomenon brain drain as there is a certain portion of each country. The phenomenon of brain drains or be called as brain drain trend is alarming and has many governments in almost all countries of the world.

The academic literature finds a link between the demand for academic mobility, migration, education and brain drain. This phenomenon are many reasons and factors. But there is no doubt that the academic mobility of students and faculty have a significant weight in terms of immigration educational and professional minds escape of any country [99, p. 25].

3.3. The Brain Drain Phenomenon Outside of Israeli Borders

Brain drain is a slang term for a significant emigration of educated or talented individuals. A brain drain can result from turmoil within a nation, from there being better professional opportunities in other countries or from people seeking a better standard of living [11, p. 34]. In addition to occurring geographically, brain drain may occur at the organizational or industrial levels when workers perceive better pay, benefits or upward mobility within another company or industry. The Brain drains is when countries, industries and organizations are losing valuable professionals. The term often describes the departure of doctors, scientists, engineers or financial professionals. When these persons leave, their places of origin are harmed in two ways. First, expertise is lost with each emigrant, diminishing the supply of that profession. In the case of geographic brain drain, the country's economy is harmed as each professional represents surplus spending units. Professionals often earn large salaries, so their departures remove significant consumer spending from the country [19, p. 190].

Brain drain, also known as human capital flight, can occur on several levels. Docquier [43, 126] notes that geographic brain drain occurs when talented professionals flee one country or region within a country in favor of another. Organizational brain drain involves the mass exodus of talented workers from a company, often because they sense instability or lack of opportunity within the company or feel they can realize their career goals more easily at another company. Industrial brain drain happens when skilled workers exit not only a company but an entire industry. Several common causes precipitate brain drain on the geographic level. Political instability, poor quality of life, limited access to health care and a dearth of economic opportunity prompt skilled and talented workers to leave source countries for places that offer better living conditions and greater opportunities. Organizational and industrial brain drain is a byproduct of a rapidly evolving economic landscape in which companies and industries unable to keep up with technological and societal changes lose their best workers to those that can [87, p.66].

The Economic and social implications of brain drain from Israel

- The Financial capability of the employed - it is important to look at changing the decision of the single individual - the citizen and welfare. After all, it is something at the heart of all current classical economic approach [122, p.24]. When a person, more or less educated, asking him the opportunity to emigrate motives for work, then he will choose that will enhance the well-being given the endogenous and exogenous conditions.
- The Injury per employee quality - basically setting the 'brain drain problem'', rather than emigration. It can be assumed that the brain drains entail damage to the top layer of human resources. Once derecognized quality labor inputs, caused by a direct hit on the level of

growth and development. The working assumption is quality personnel, is a reasonable and a greater capacity for portability to other markets. The same people, the highest quality, they are investing in the country's "Running away ", just at the moment when the state teacher reap the rewards of its investment [2, p. 34].

- The Damage to national purchasing power - Macro - The question about the brain drain can likely influence the combined purchasing power of the Israeli consumer. After all, there is a clear correlation between education and wages. And given the working assumption is that for educated people in some areas, is about the possibility of migration for the benefit of Improving welfare. It is assumed that these sectors, which are the upper parts of the salary tables are spending more on goods and services than the average consumer [3, p. 17].
- The injury in the GDP/GNI - the impact on GDP arguments simply the brain drains. The domain of the State of Israel leads to a drop-in income of those employed. Decrease in the income taxes will affects output and growth. A decline in GDP and changes in economic growth forecasts, will lead to future problems concerning the state's financial.
- In Injury on the demographic balance - especially among the secular public. The impression that most of the sweeping of the population that tends brain drain is Jewish, secular, Zionist and liberal when working. Departure of this population segment outside of Israel's borders, exacerbates the problem of burden sharing in Israeli society and in fact increases the burden on the working population and productivity. Therefore, it can be assumed that the increased brain drains - the problematic demographic balance would begin with the State of Israel [100, p. 362].

The Interactions between brain drain, emigration, and educational immigration

The **Emigration of brain drain from Israel is a part of a global phenomenon and apparently is expected to increase in the future**. Based on numbers gathered on the decade of 2008-2015, concentrating on 28 countries including western economies (that are a better comparison with Israel than poor countries), the average measure for college and universities graduate immigrants per 10,000 residents is 12.41 while the Israeli number is higher than three times of this number and he is on 41.45 (Table 3.8). Considering the fact that many of the Israeli emigrants were not born in Israel, it is estimated that these numbers are higher [69, p. 111]. The brain drain from Israel is indeed a part of a global phenomenon; however, the rate of academic emigration from Israel to the U.S. is unparalleled in the western world. Just the number of Israelis in the top 40 American departments in physics, chemistry, philosophy, computer science and economics, as a percentage of their remaining colleagues in Israel, is over twice the overall

academic emigration rates (at all levels) from European countries. The 1,409 Israeli academics residing in the States in 2008-2010 represented 24.9% of the entire senior staff in Israel's academic institutions that year – twice the Canadian ratio and over 5 times the ratio in the other developed countries [120, p. 44]. The Author distinguishes in an "active process" of educational immigration which is a direct result of labor migration. The Israeli government shows no signs of concern, and they explain that emigration (labor migration, educational migration), has a percentage with no different from other countries in Europe and around the world.

Table 3.9. The academic immigrants to US from other countries – 2018 (countries with Similar data to Israel)

Country of origin	Number of immigrants age-30-50	College graduate rate	Collage graduate number	Country of origin population	Immigrants per 10,000 residents	College graduate immigrants per 10,000 residents
Sweden	17,174	56%	9,584	8,876,744	19.35	10.80
Switzerland	17,295	60%	10,300	7,301,994	23.69	14.11
Portugal	100,044	10%	9,700	10,084,245	99.21	9.62
Austria	15,936	43%	11,877	8,169,929	19.51	8.42
Belgium	12,034	53%	16,397	10,274,595	11.71	6.23
Israel	**57,589**	**43%**	**24,994**	**8,029,529**	**95.51**	**41.45**

Source: Made by the Author from sources [169, 197, 172, 165, 161]

The reasons for the brain drain from Israel

Gold and Moav [101, p.4], which made in 2009 a research about the brain drain from Israel, collected the results of a questionnaire attempting to prioritize the reasons for emigration among Israeli's in the U.S. they analyze the data and made a "list" of the factor with the percentage of the decision.

Table 3.10. The relevance factors/reasons for the decision to emigrate from Israel

The factor	highly relevant	relevant	Not relevant
Unemployment in Israel	81%	12%	7%
Job of the partner	71%	6%	23%
Interest in work	34%	28%	38%
Salary	43%	21%	36%
Level of tax	65.6%	15.6%	18.8%
Cost of living	75%	12.5%	12.5%
The Education system	43%	25%	32%
The Quality of school	75%	6%	19%
Political and safety issues	65.5%	21.8%	12.7%
The Regulation situation in Israel	81%	12.5%	6.5%

Source: [101]

If we look at the table, we can see that the main factors for emigrate is Integration between some factors together. The unemployment, job of the partner, the level of tax, the cost of living, and the quality of the children's school. The author understands that key for dealing with those factors become from the salary.

The salary as a factor of brain drain in Israel. The average wage of Israeli academics is not high, and even lower than a large part of the OECD countries. Only in the recent years has the wages of the employee in the economic knowledge jobs and the field of computers (software engineering) has been raised. When comparing the issue of wages, which is not the top priority of brain drain, has a problematic picture, emerges that helps to explain the trend of the transition of academics to other countries.

Table 3.11. The different salary between Israel and developed countries ($ US for a month) - After 7 years of experience (2016 – 2018)

Prof'/ Country	Israel	Canada	United state	Germany	Netherland	Australia
Soft Engineer	5,400 USD	**10,700 USD**	8,200 USD	7,200 USD	5,440 USD	5,800 USD
Physicians	7,300 USD	11,200 USD	**16,700 USD**	8,850 USD	12,782 USD	14,600 USD
Lawyers	4,100 USD	6,300 USD	**6,700 USD**	4,260 USD	4,200 USD	4,950 USD

Source: Made by the Author from sources [158, 161, 165, 169]

As can be seen from the table, the average wage of selected academics is tens of percent lower than that of professional colleagues from developed countries. When employees have working relationships with companies and organizations outside of Israel, companies and organizations offer engineers / doctors / academics mobility for their company.

The phenomenon of Education Brain drain, has a direct impact on the quality of the academia and in fact, it is one of the sectors which most affected by the phenomenon of brain drain [99]. The Israeli Public Academy almost cannot cope with the conditions that offered by other countries for outstanding researchers and professors, and therefore, it is clear that there are a direct and negative implications for the quality of Israeli academia. After all, if the lecturers and the best researchers leaving and teaching institutions abroad, a process of decline in the quality of training of future generations, and vision, Israel has been at the forefront of the late '80s, but today, Israeli researchers still leading the research in many fields and gain world renown, but unfortunately, under the auspices of the world's leading universities, especially in the US, and Israel [130].

The "Taub Center study"[24, p.136] as published in 2018 reveals that there is an Israeli brain drain phenomenon presents a bleak picture of the state of academia and higher education in Israel. According to the researchers, Israel is investing an order of magnitude about $ 17,000 in each student (2018). In the 70, Israel invested A - $ 20,000 each student. Metrics are attributed to brain drain of students choose to study wiping borders of the state, and the transition of faculty

and research academic to work in other countries. The volume of brain drains, particularly academics with advanced degrees pass through the Israeli Academy research institutions abroad is unusual dimensions in Israel. According to the report, Israel experienced the largest brain drain of academics to the United States in the last decade. In recent years, the Israeli government announced its intention several times combat and to restore to Israel the "brains" who have left, but so far there were no significant gains [62, p.126]. Commercialization senior faculty standards, lack of infrastructure and advanced research led to significant wage differentials more and more scientists in Israel to undergo research institutions abroad [68]. Most scholars go abroad to postdoctoral training period, after getting the third degree, essential for research work in Israel, but remain abroad because there are not enough standards in Israel, and because research options and wage differentials. This compares with 25 Israeli personnel in the US every hundred staff members in the country in 2004. US universities, the proportion of staff from Japan, compared to the number in Japan was 1.1%. The French rate was 3.4%, and the proportion of Canadian personnel in the United States totaled 11.5% in relation to the number of faculty in Canada. In 2007, the number of Israelis leading American departments of Physics amounted to 10% of senior staff members in Israel in physics, chemistry 12%, 15% in philosophy. The phenomenon is particularly acute in the economic field, where 29% of the relative number of all senior staff members in the field are employed departments of leading universities in the US, and computer science, where the share of staff Israelis reached 33% in 2007 [95]. Besides the faculty, we find less worrisome data of students that leaving Israel to get study outside the State of Israel (Table 2.12).

Table 3.12. The % of academic graduated who left Israel for more than 3 years (2014 – 2018)

Degree	From all graduates who were out to Israel three years and more (percentage - %)				
	2014	**2015**	**2016**	**2017**	**2018**
B. A	4.3	4.8	5.0	5.2	5.3
M. A	3.8	3.2	3.9	3.9	4
M.A in Medicine	6.9	7.9	8.0	9.2	9.6
PH. D	10.1	10.8	10.9	11	12.3

Source: [177]

Analyzes of the table:

1. We see a steady increase in the percentage of graduates who leave all of degrees.
2. The table present, in particular, which should increase to concern, especially graduate students, especially among the doctors (master's degree in medicine). These signs show that "high-quality brain drain" are looking for their way and their future out of the country.

3. The results of the table "explain" the brain drain of high degrees such a M.A and PH.D. According to the numbers of the Israeli Authorities (CBS, CHI) the percentage of post doctorate are biggest than PH. D programs.
4. The meaning of this numbers is the danger from brain drain of "Quality Brains", which means that qualify employers such as doctors, engineers, researches, Industrialists & Entrepreneurs will immigrate to another country.

When we are looking in-depth to the data which came from the universities, we find differences even there. Prestigious universities, with world-renowned, such as the Technion, are affected a by a brain Degree Graduates. This phenomenon has been prevalent for decades creates a problematic trend both at the academic, training goals are decision-makers, and industry and various fields of employment. We reciprocal some hospitals that are suffering from a shortage of doctors. Industry suffers from a shortage of engineers.

The brain drains of Doctors and Researchers

The latest information about the emigration of Israeli physicians as part of a report published by the Ministry of Health. In 2012, there were 3,747 physicians abroad, representing approximately 11.5% of all licensees by 2011. Indeed, the report notes the migration of Israeli doctors pressed to Israel a significant phenomenon [161]. The rate of doctors licensed in 2008 estimated at 3.6 per thousand inhabitants. It seems that the phenomenon of migration of doctors Israelis abroad is not a new phenomenon. Significant migration of doctors abroad started primarily to physicians who have received their licenses in the seventies and eighties. So, most doctor's immigrant men born abroad and received their licenses in Europe. Apparently, they wave arrival in Israel of the nineties, and opening medical schools. They have changed drastically the number of licensees as well as the number of doctors employed in Israel. However, this trend is over, and starting from the decade the number of doctors dropped again and a number of emigrants increased. This table indicates the trend of licensees, living and employed in Israel [180].

The employment characteristics of Israeli physicians in foreign countries

Characterization of Israelis residing overseas doctors report data of 2015, it was impossible to know when the doctors left Israel. CBS's examination found that more than 94% of physicians who were abroad in 2015, there were still 86% in 2014. Doctors defined as living abroad, where they stayed for a period of three years or more. Starting from 1980 onwards, the number of doctors living abroad is growing as they received their licenses earlier. In other words, the number of doctors abroad has been accumulating over the years [167]. It seems that the characteristics of adult and young doctors who had emigrated abroad is different. The report points that most physicians who are abroad have a field of specialization. Among the areas of specialization in

which there is a high rate of experts abroad are clinical microbiology - clinical chemistry, doctors abroad constitute about 25% of all experts in Israel in this field (anesthesia), 7.12%, psychiatry (7%), (5.6%) and pediatric medicine (8%).

Table 3.13. The number of Israeli Doctors aboard out of Israel -2018

Specialization	Several of Israeli experts	Percentage (%) who lived outside Israel
Clinical Microbiology	11	25
Anesthesia	520	12.7
General Surgery	480	6.5
Psychiatry	860	7
Pediatrics	1244	7.7
Internal	1312	5.8
Pediatric Intensive Care	47	6.4
Gynecology	1034	3.9
Oncology	157	5.7
Pediatric Cardiology	34	5.9
Intensive care	111	4.5
Neonatology	121	4.1
Psychiatry Child and Adolescent	174	1.1
Physical Medicine and Rehabilitation	115	3.5
Pediatric Surgery	52	1.9
Family	1424	2.3
Geriatrics	245	1.6

Source: [110].

Most of these areas suffer from a low percentage of young professionals and / or a high percentage of those aged 65 and over who are defined in Israel as professionals in distress. This is explained by the fact that these areas of specialization are not popular in Israel - usually because they can be treated only within the framework of hospitals) and not in the framework of sick funds or frameworks, and therefore their livelihood is not on their part [180]. It is reasonable to assume that these experts will have a greater desire to travel abroad, because it is possible to earn a decent living by working in a hospital, and the transition to another country enables the development of additional subjects in the doctor's life, such as self-development, knowledge of foreign culture, that there is a family side here that in many places the organization will also take care of the spouse and the family unit (schools for children, residential and car).

The brain drains of Lawyers and Law studies academic

As the fields of medicine and high technology so there is a demand for attorneys and lawyers. Legal professionals like their figures and other needs with academic degrees. Do not find a difference between doctors and lawyers and employees involved in the High- Tech professions [188]. In an editorial, the economic newspaper Globes, specification writing, about the main

reasons and mainly linked the phenomenon to factors that were raised in previous chapters. Many academics in the field of law come from foreign countries to continue their education (master's degree, doctorate, post-doctorate) and find themselves left and pumped into the local employment framework. The largest group of academics already managed to found it coming from the United States, and welcomed the unique and outstanding universities in the country [16].

The Market Israel Bar Association Reciprocal years at a crisis point. There is a huge supply of lawyers against the employment capacity of the local market. Therefore, applying a lot of lawyers find their luck abroad. Usually there are currently 53 thousand lawyers in Israel. About six- thousands of them are those who chose to suspend their licenses or judges [72, p. 99].

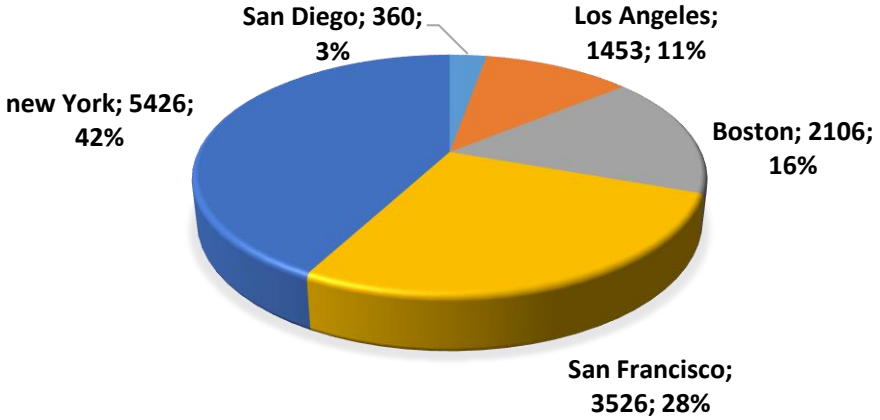
Today there are about one lawyer per 165 residents in Israel. This marks a world record. In the United States, for example, there is one lawyer for 275 residents. Moreover, UK lawyer to about 410 civilians. Germany - one lawyer to -610 people. In France, the ratio is one to 1,200 attorney residents [168]. Japan's ratio is one lawyer to 4,800 residents, and China - Lawyer of 8,000 residents. Almost half of those lawyers in Israel are women. Approximately 55 percent are men. In addition, 60% of lawyers are under the age of forty. In addition, there is a trend of individuals to choose lawyers especially in large offices - divorce, torts, criminal, medical malpractice intellectual property or labor law. In contrast, corporate clients prefer large department office where a comprehensive package of services that be required by the owners of various companies. Advocates Israel usually unincorporated partnerships that build senior partners are the founders of the firm, junior partners and associates. Most Law- firms in Israel are between 2 and 10 lawyers. Fewer contain dozens of individual lawyers are more than a hundred lawyers. Lawyers in Israel charge fees according to supply and demand in the market, competition in the industry, branding firm, and the like. Bar sets are often feeing minimum or maximum different areas. The average wage of a new - lawyer will start with 5,500 ILS (1600$) a month, and after 7 years reaches 18,000 ILS (4500$) [165].

The brain drains of Software engineers and high-tech employee

The trend of demand in the engineering and high technology is representing the demand side in terms of the real and the most critical. In the last decade the Israeli left some 10,000 scientists, most of whom do not rush to return. The rate of brain drain was arrestee somewhat in recent years because of the economic crisis. As soon as the US recovers, is abundant flow of money to scientists and they cannot refuse [137 p- 177]. Israel must think fast how is she prevents the escape of thousands of minds in the next years. And, also to understand that it must address the issue in depth. A professional challenge is not just another faculty, but also support broader establishing companies that belong to the life science industry. This industry is the future of Israel

if it wants the scientists back. To this end, the state must concentrate resources, which include investment funds will return to its coffers through companies which scientists will establish, or by trials will take place [139]. As long as Israel fails creating a suitable option for them, Israel can reach the brain drain crisis extremely problematic. A world of globalization, embracing the world of labor relations, and many high-tech people can see what is happening outside the country. According to a sample survey by Bio Abroad about 10,000 high-tech professionals and engineers left Israel in the last decade. Therefore, Israel decided in cooperation with state bodies and business entities on the establishment of a national administration to encourage the return of engineers and high-tech Israel [162].

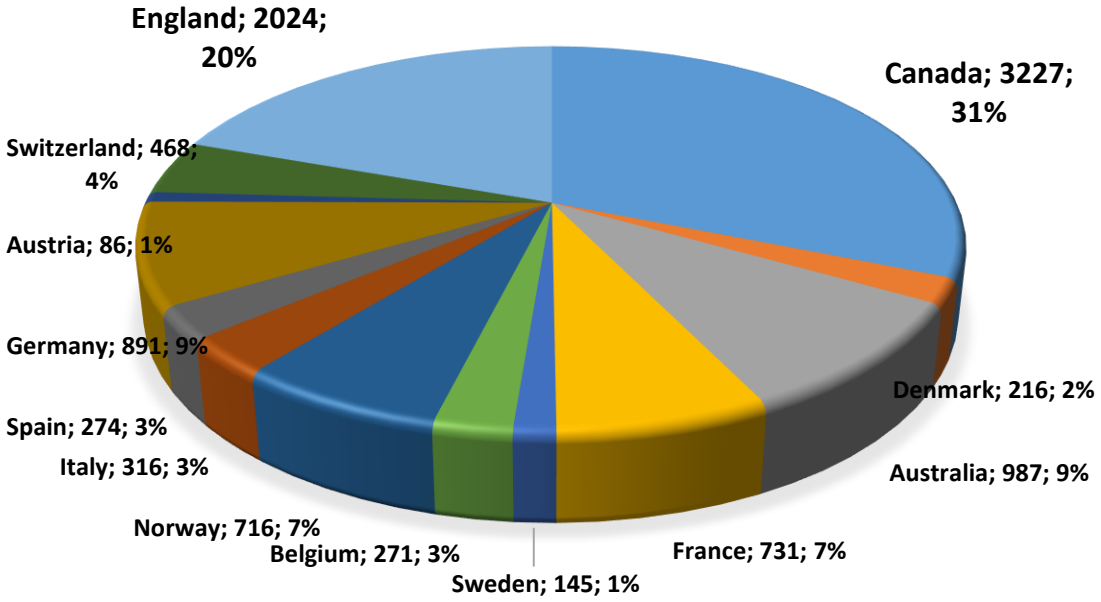
the State of Israel today have all the **relevant information** about the dispersal of engineers in various subjects, and by mapping and targeting each group they trying to achieve results.



Graph 3.9. The numbers of Software Israeli engineers in USA - 2018
Source: [146, 165]

According to a report published by the "**Taub Center for Social Policy Studies**" [165], the extent of the brain drain is exceptional in Israel, compared with the Western countries in the report that experienced the largest brain drain of academics to the United States, In the past decade, it is puzzling that the government has declared its intent to fight the phenomenon and even to return to Israel the "brains" that have left, but on the other hand, through its decisions, further deepens the movement of the minds. Due to the lack of faith in the government's ability to improve their situation in the near future According to the data, despite the continued stagnation in the rise in wages in relocation jobs and the limited possibility of saving money abroad, almost half of those departing to Sri Lanka last year were academics with families. An increase of 10% compared to 2014, with more and more (70% as of 2017) seeing relocation as an option to permanently relocate their center of life abroad. All over the world, high-tech and skilled workers are being pursued. If

there is no significant change in the cultivation and compensation of high-tech workers, the trend of loss of human capital in Israel will become stronger until it creates significant damage to the economy and the return of the Israeli economy decades back.



Graph 3.10. The numbers of Software Israeli engineers in other countries - 2018
Source: [146, 165]

The researchers from the Shalom Teachers Center note the direct connection between the decline of the educated and the significant reduction in budgets: about 20% in higher education and about 35% in research and development. They bring, for example, the budget of the Chief Scientist of the Ministry of Industry, Trade and Labor. In the last four or five years, the budget has fallen from NIS 2 billion to NIS 1.2 billion. "It means less employment for hundreds of scientists who do not have the opportunity to work in Israel. They have completed a doctorate or post-doctorate, and they have to go down. The phenomenon of brain drain has far-reaching effects, not only in the economic aspects, but also in the aspects of loss of elites and loss of ethos.

3.4. Conclusions of the Chapter 3

1. The Bologna Reform, which had clearly begun as a European process, had managed, in some way, to connect itself to the State of Israel. Despite its lack of acceptance to the European "academic zone" (the Israeli Academy has been rejected twice), the State of Israel had continued establishing an academic response which is consistent with the Reform demands in order to keep up with the worldwide progress and to preserve its academic relevance in comparison to other higher education institutions and organizations.

The Israeli Council for Higher Education has made several changes based on the Reform principles, inclusive of the following major principles: Uniform accreditation of B.A. degrees (3 academic years), M.A, PH. D – quality control of the teaching and instruction of curriculum, unification and recognition of curriculums; and a uniform evaluation of accreditation, which enables mobility of higher education students and academic staff. In addition, the Israeli Council for Higher Education has recognized institutions in order to increase the accessibility to education. Furthermore, it has encouraged the advancement of the quality control and the methodological improvement amongst institutions of higher education, similarly to the countries which officially belong to the reform, as well as the development of relevant dimensions in the general higher education system, and, in particular – the curriculum, the cooperation amongst institutions of higher education, training and research.

2. One of the major reasons for this accommodation was the interest of increasing the demand for academic mobility to the Israeli higher education students. Thus, Israel has prepared itself and begun initiating activities designed to increase the demand – but more activities are in order. In accordance to this, the Israeli Council for Higher Education has opened several projects, types of academic programs ("Academic Adventure" / full academic studies) and academic cooperation with China, India and other countries. Within five years, the number of the foreign higher education students has risen to **10,700**, which comprise **5.5**% of the total number of higher education students in Israel. As a part of this cooperation, a communication/linking office was opened for the Erasmus Mundus and tempus programs in the Ben Gurion University. This program promotes academic cooperation amongst universities as far as exchanges of students and teaching and research staff are concerned.
3. Within the framework of operating such international programs in Israel, several programs exist, which are centralized by the Israeli Council for Higher Education (except for the programs held in Ben Gurion University). The following are examples for this program: The DARE Program, held in cooperation with the governments of Georgia, Spain, Latvia, Czech Republic and Romania; The TEACHEX Program, held in cooperation with the Netherlands, Scotland, Poland and Belgium; and the LAHAV Program, held in cooperation with Estonia, Czech Republic, Iceland and the Netherlands. Thus, we can see that there is a great deal of cooperation, but despite of that, it does not bring about much increase in the demand for academic studies in Israel.

4. The Author of the thesis believes that it is worthwhile to have an active, increased management, to be held by exercising the following:

- Initiating an office within each and every university which will deal with the international programs, inclusive of the Tempus and Erasmus Mundus programs. This mechanism will be in charge of the academic ties, on the one hand, and, on the other hand, will also create programs and ideas for the establishment of international ties with various countries and academic institutions within the disciplines which are the expertise of each and every one of these institutions, such as: Developing food sources, utilization of solar energy, biotechnology, medicine etc.
- A mechanism will be established for state-wide assemblage which shall connect the foreign relations and pedagogical aspects with the possibilities to create international relations characterized by economic and tourist relations.
- The uniqueness of every institution of higher education shall be emphasized by the creation of an "expertise" designed to maintain unification of pedagogical standards, on the one hand, whilst making the uniqueness and specialty of each institution of higher education more prominent, on the other hand.
- The implementation of these steps shall lead to the possibility of appealing to a wider and more diverse student population, and thus, to increase the rates of academic migration to Israel.

The way to establish this mechanism shall be elaborated within the conclusions and recommendations of chapter three of this thesis.

1. In 2014, **10,070** foreign higher education students had come to Israel. There is reason for concern since 38% of them (see table 3.1) arrive only for one semester of the "Academic Experience" Program. While it is true that an additional **40%** come to Israel for full-term academic studies, the percentage of higher education students who only enroll into the "Academic Experience" Program makes it problematic to implement long-term programs.
2. The analysis of the data received by the universities which had cooperated with the Author of the thesis (Ben Gurion University, Tel Aviv University, Hebrew University, Haifa University), it appears that there is an increase in the demand of foreign higher education students from North America and Europe to study in Israel. Graph 3.3 shows that there is an annual increase in the number of foreign higher education students who arrive from these areas. The State of Israel invests a great deal of resources in its academic relations as

well as in providing scholarships to students and doctoral students from China and India (the Erasmus Program in Ben Gurion University, Table 3.3). However, despite these efforts, the demand level from countries in Eastern Asia has remained low.

3. In accordance with graph 3.2, the Author of the research concludes that, with the exception of the Weitzman Institute, in all of the academic institutions, the "Academic Experience" is the most popular program. In the universities of Haifa, Tel Aviv and the Hebrew University in Jerusalem, there are high percentages of learners in that one-semester program (25% - 33%).
4. Graph 3.3 presents, in a comparative manner, the rates of demand of foreign higher education students vs. the academic mobility of Israeli higher education students to other countries. The conclusions from this graph are that in accordance with the claims made by the Author of the thesis (which shall be presented in the conclusions and recommendations for chapter 3) that the more proper resources and activities will be invested in order to increase the demand rates of foreign higher education studies, the more the rates of Israeli higher education students who go abroad to study will become more moderate and decrease.
5. Chart 3.2 brings up one of the reasons for the low demand for higher education studies in Israel – the issue of the tuition fee. When calculating the average tuition fee amongst the various programs and universities, one can see that the annual tuition fee s high and unjustified. The regulation which was established in 1965 (!) as per the need to increase the tuition fee for foreign higher education students in comparison to that paid by Israeli higher education students is no longer relevant. A renewed thinking and an actual reform are in order with regards to the tuition costs and other costs which are being imposed on the higher education student.
6. The Author of the thesis raises the conclusion that the tuition fees, in accordance with the selective considerations of the Israeli higher education students who study abroad, are considerably low in comparison to the foreign higher education students who come to study in Israel. The average academic year tuition in Europe costs **$5,000**, inclusive of additional costs (not inclusive of the tuition in prestige American or British universities) vs. **$20,000** annual tuition fee of foreign higher education students who come to study in Israel. In addition, in most countries, as a result of existing economic relations with other countries, the students will be eligible to receive various scholarships which shall decrease the total economic costs.

7. Economic relations – The Author of the thesis concludes that the Israeli academic establishment (the Israeli Council for Higher Education and universities of research) share a willingness to create international economic relations. Although there are examples of projects of cooperation, the Author of the thesis recognizes the existence of a problem deriving from the lack of political patronage which shall bring about "a political-economic umbrella" to these relations. The state patronage should be provided to joint programs of economic and tourist projects, as well as to projects of developing natural resources, industry, commerce and trade. The academic establishment will not be able to create all of this without the contribution of the government's patronage to Israel's international relations.
8. The rates of demand for academic mobility of Israeli higher education students rises steadily every year and has reached, according to the estimations of the Israeli Bureau of Statistics, as many as 14,000 students each year. When one considers the fact that there are seven large academic centers in Israel, and that each one of these, has, on average, 17,000 students, it is clear that nearly an entire university, along with the intellectual and economic property it maintains, study abroad.
9. The analysis and synthesis of the data presented in graphs 3.4 – 3.7 and on graph 3.5 show that there are increasing demands for quality higher education students from exclusive faculties who choose to study outside of the gates of the Israeli academy. The highest preference to academic mobility is provided to the facilities of business and administration, medicine (in its various fields of expertise), engineering, architecture and design. Table 3.7 presents the increase in demand in academic mobility in several selected countries.
10. In order to clarify the changes that have occurred, the Author of the thesis has chosen to present, in graph 3.6 and table 3.6, the meaning of the ever-increasing demand, over the years, to academic mobility in the Republic of Moldova – an increase of thousands of percentages in comparison to the year 2001.
11. The Author of the thesis recognizes the existence of "quality" brain drain, as exemplified by the data presented in chapter 3. This is a distinction of a trend which derives from the analysis of the data presented in this chapter's tables and graphs. The cross-checking of the details exhibited in tables 3.9 and 3.10 show that, in comparison to other countries that bear a similar economic, social and demographic profile, Israel suffers from a major brain drain trend. The percentage of brain drain from Israel reaches a peak of 0.95%, of which 0.47% are university/college graduates – this is a very high percentage in comparison to countries such as Belgium, Austria, Portugal, Switzerland and Sweden.

4. THE INCREASE OF DEMAND FOR HIGHER EDUCATION STUDENTS WITHIN THE ISRAELI ACADEMY

4.1. The Policies and Solutions Offered in Countries all over the World

Most of the European countries were welcome to the "Bologna reform". The Author find many countries which already beginning in the late '90s, look after various reforms, and give new "life and color" to the academic area in their country [66, p.53]. The Author will present some countries and their way of dealing with the policies and solutions to emerging issues in those countries;

United Kingdom

United Kingdom is full member of the Bologna Process / European higher education area since 1999. United Kingdom of Great Britain is a constitutional monarchy that controls across countries Britain, Northern Ireland, Wales and Scotland. Total comes with 61.7 million inhabitants. The Great Britain enjoined to the European Union in 1973, but they are not part of the euro bloc [103, p. 292]. UK NARIC is the National Agency responsible for providing information, advice and opinion on vocational, academic and professional skills and qualifications from all over the world. As the National Agency, managed on behalf of the UK Government, under contract to the Department for Business, Innovation and Skills (BIS), the organization provide the only official source of information on international education and training systems and wide-ranging international qualifications and skills attained from outside the UK [128, p.325].

UK NARIC is part of the NARIC network. This is an initiative of the European Commission and was created in 1984. The network aims at improving academic recognition of diplomas and periods of study in the Member States of the EU, the EEA countries and the associated countries in Central and Eastern Europe and Cyprus. It is also the UK National Agency in the wider **E**uropean **N**etwork of **I**nformation **C**enter**s** (ENICs). There are many international programs in UK. One of them is the partnership with Erasmus +.

Erasmus+ in the UK

Erasmus+ is a European Union program, managed in the UK by the UK National Agency. The UK National Agency is a partnership between the British Council and Emory's UK. We work to deliver the program for the benefit of participating UK organizations, and the individuals who are able to study, train, volunteer or gain work experience abroad through the program. In the UK the Department for Education oversees the Erasmus+ program and the UK National Agency [167]. The British Council for Higher Education (British Council -Education UK) contains 2,743 institutions include universities, colleges and specialized schools, most of them are in England. As

of 2017, the national expenditure on education is 5.9% of GDP and national expenditure on higher education 1.3% of GDP [186].

The Access to higher education in 2015 stood at 66%, with the average in OECD stands at 59%. When UK accession to the Bologna reform, it was a clear division between universities, which provided research and advanced degrees, and the colleges, which gave mainly undergraduate degrees and professional certificates [126, p.17]. Although, the most of the universities was acting - division undergraduate (Bachelor) and graduate (Master, PH.D.), each institute was able to choose the type of training and certificate. Monitoring mechanism for curriculum specific acted alone without a coherent and consistent policy. Consequently, the admission requirements determined in accordance with the institution and the cost of tuition at [135, p. 18]. In 2013 - a decade after accession, says that, Britain has completed the reforms of the Bologna process, and reports the presence highest grade of all the indicators required. Some of the reforms required minor adjustments, such as:

1. Unifying the study circles, since the distribution and the length of the basic school already existed.
2. The quality control system and supervision of training demanded a more thorough job, and now there is a training program for each of the countries.
3. Increased awareness of the advantages of hiring foreign students, wishing to increase academic mobility to the Queen of England.

Britain is committed to fully and actively on the process - participation in studies, conferences and working groups. At the same time, it attaches great importance to the autonomy of its institutions, admission criteria, curriculum and foreign relations. In addition, it seeks to avoid creating a legal framework for EHEA and involvement in areas such as visas, pension benefits and recruiting personnel, stepchildren, her, poet Adjustments of the original treaty [20, p.63].

Table 4.1. The demand of academic mobility in U.K (2014- 2018)

Year	Foreign Student in U. K	Outbound of Britain Students
2014	417,355	28,658
2016	416,693	27,927
2018	439,762	27,332

Source: Made by the Author from source [189]

Analyzes of the table:

1. We identify an increase in demand of foreign students in England from 2014 to 2018 unequivocally clear. An increase of 22,407 students in 4 years. An increase in demand of 4.6% or so.

2. We recognize that there is almost no change in the number of students traveling from England to study abroad, and here we see that the country manages to stop the brain drain from it.

The UK government with the UK NARIC are improve to strengthening the competitiveness of Scotland, strengthening students and staff involvement in improving the quality and achievements of the system and increasing their mobility, and in particular socioeconomic levels low. Another challenge is matching system of demographic changes in the kingdom, while increasing flexibility reception, previous studies and strengthening ties between schools and the business sector [100, p.361].

Netherlands

The EP-Nuffic has set up Netherlands Education Support Offices ("Nuffic Nesos") with funding from the Dutch Ministry of Education, Culture and Science. The offices are located in countries that are strategically important for Dutch higher education: Brazil, China, India, Indonesia, Mexico, Russia, South Africa, South Korea, Thailand, Turkey and Vietnam. The main task of a "Nuffic Neso" is to promote Dutch higher education and to increase student and staff mobility. They also support the Holland Alumni programmer by maintaining local alumni networks and organizing events and training sessions for alumni and alumni officers at Dutch higher education institutions [93]. In addition, the "Nuffic Nesos" offer tailor-made services, for Dutch education institutions as well as others interested in international education marketing.

The Netherlands differentiates between HBO (higher professional or polytechnic education) and WO (scientific education or research universities). HBO [94, p. 115] has become the bachelor's-master's system. It generally requires three years of education to obtain a bachelor's degree; graduates may then apply for a master's program at a university, which generally require one to two years to complete. An HBO bachelor graduate may have to pass one year of pre-master's education to bridge the gap between their HBO study and (research-oriented) WO study to be admitted to a WO Master's programmer, which may grant degrees such as MA, MSc and LLM. There are also HBO master's studies, granting the title "Master of" rather than MA, MSc and LLM [185].

Currently living in the Netherlands about -16.7 million stable economy based on industry and services, and in particular, trade and logistics [4, p. 45]. The growth of the past decade's economic crisis was violated in 2012 (a drop of 3.9% of GDP), but given its best to cope, the state of Netherlands is currently considered one of the strongest countries in Europe. GDP per capita is 39,200 USD [169]. The system Dutch of higher education consists of two ways:

1. vocational education (HBO), which provides theoretical and practical knowledge required fields such as industrial management, health, social services and public administration
2. University education (WO), aimed at granting knowledge and theoretical studies.

In total, there are about 220 institutions [186]. The national expenditure (2016) on education amounts to 5.6% of GDP, while spending on higher education stands at 1.5%. Access system (2015) is 60% [151]. The state of Netherlands, which has declared its desire to become a leader in the consolidation through higher education resources, has created a rapid and thorough implementation of the Bologna reforms [6, p. 88]. Thus, initiatives to change the circuitry separate classes (theoretical and professional education) reinforced.

The further adjustments were applying a reform school circles on HBO institutions, the establishment of a certification system to institutions and staff training centers, changes to the curriculum and admissions criteria and matching labor market needs, such as incentives for young students [135, p. 258].

As of 2009, the Bologna reforms implemented almost full and most of the indicators marking the Netherlands won the "green score". However, in the issue of recognition of previous studies of the students, there is more work is to do the implementation of the system in credits European (currently implemented in about 75% of the plans) and awarding diploma Europe. [100, p.367].

Table 4.2. The demand of academic mobility in Netherlands (2014- 2018)

Year	Foreign Student in Netherlands	Outbound of Netherlands Students
2014	38,367	13,472
2016	68,943	13,035
2018	73,411	13,011

Source: Made by the Author from source [189].

Analyzes of the table:

1. We identify an increase in demand of foreign students in Netherland from 2014 to 2018 unequivocally clear. An increase of 35,044 students in 4 years. An increase in demand of 94%!
2. We recognize that there is almost no change in the number of students traveling from Netherland to study abroad, and here we see that the country manages to stop the brain drain from it.

Poland

Poland enjoined to the EHEA in 1999, and in 2004 became a member of the EU. The Higher Education Institutions (HEIs) in Poland are divided into state (public) and private (non-public) institutions. There are two main categories of higher education institutions: university-type

and non-university institutions. In the university-type HEIs, at least one unit is Authorized to confer the academic degree of Doctor (PhD), i.e. offers at least one doctoral programmer [75, p.33]

The higher education institutions run full-time, extramural, evening and external courses. The full-time courses are defined as the basic type of studies. Poland conforms to the guidelines from the Bologna Process in European higher education. The degree system based on the three-cycle structure has been successfully implemented together with the European Credit Transfer and Accumulation System (ECTS). The European standard in higher education makes it easier for students to obtain recognition of their qualifications in other countries.

1st Cycle - B.A

First-cycle studies (3 to 4 years) leading to the professional title of a licencjat or inżynier (Engineer, in the field of engineering, agriculture or economics). This is the Polish equivalent of the Bachelor's degree. It is focused on preparing students for future employment or for continued education within the Master's degree programmers.

2nd Cycle - M.A

Second-cycle studies – Master's degree program (1.5 to 2 years) following the first cycle studies and leading to the professional title of Master (magister, or an equivalent degree depending on the study course profile). It is focused on theoretical knowledge as well as application and development of creative skills. In artistic disciplines, the focus is on the development of creativity and talents. Master's degree holders may enter a doctoral program (third-cycle studies).

3rd Cycle - PH. D

Third-cycle studies – Doctoral degree program (normally 3 to 4 years) accessible for graduates of Master's degree program, leading to a PhD degree, offered by the university type schools as well as some research institutions (departments of the Polish Academy of Sciences as well as research and development institutions). The PhD degree is awarded to candidates who submit and successfully defend a doctoral dissertation before the thesis committee and pass the doctoral examination.

The accession made possible by the fall of the Soviet bloc in 1989, and Poland's transition to a constitutional republic. Today there are 38.1 million people in the country. The economic acceleration that began with a reinforced regime change in membership, partly due to massive investment commitment [94, p. 131]. GDP per capita stands at $ 17,900, following an average increase of 5% since 2003 [143, p.56]. The education system has undergone many changes in light of history, including world wars and the communist regime. Currently, there are 42 universities, about -211 colleges, and vocational training schools called - Vocational education (Study website Poland in 2010). In 2006, the national expenditure on education was 5.7% of GDP. Spending on

higher education stood at 1.3% of GDP. Access to the system is very high and stands at 78% as of 2007 [151]. Upon completion, were programs such as Tempus infuse life and mobility system, as reflected inter alia an increase in the percentage of applicants to higher education. from 12% in 2003 to 46.3% in 2013 [54]. Today, along with financial strength, Poland is in an advanced state of implementation Reforms of the EHEA and most of the indicators is in the high range of application:

1. Cooperative Housing reform is the move to create three circles almost completed training. In parallel.
2. The program is end with the preparation of full implementation of the framework for national-level training, and is awaiting approval.
3. The intense activity carried out recognition of previous studies. Prescribed procedures and lines for implementation, but they are hardly used in the actual system.
4. A significant increase in the absorption of foreign students.

In the coming years will be Poland challenges of establishing knowledge centers of academic Territorial development tool to evaluate projects of research and teaching [100, p.370].

Table 4.3. The demand of academic mobility in Poland (2014- 2018)

Year	Foreign Student in Poland	Outbound of Poland Students
2014	20,711	28,634
2016	27,770	23,662
2018	29,974	23,372

Source: Made by the Author from source [189].

Analyzes of the table:

1. We identify an increase in demand of foreign students in Poland from 2014 to 2018 unequivocally clear. An increase of 9,263 students in 4 years. An increase in demand of 42%!
2. We recognize that there is almost no change in the number of students traveling from Poland to study abroad, and here we see that the country manages to stop the brain drain from it.

Australia

Australia is an increasingly popular country for students who are choosing to study abroad. Currently, Australia is the third most popular destination for international students in the English-speaking world, behind the United States and the UK [192]. In some countries, Australia is the most popular choice for international study. Australia is a popular destination for international students for a variety of reasons, including the cultural diversity of the country, quality of education available, and friendliness of its inhabitants. Students who choose to study abroad in Australia will

feel comfortable and at home, and be confident that they are receiving a valuable and high-quality education.

The AIE 2025 - The National Strategy for International Education 2025; the Australia Global Alumni Engagement Strategy and the Australian International Education 2025 (AIE-2025) market development roadmap will help the sector take advantage of global opportunities and continue to flourish. International education is now Australia's largest services export and third largest export overall behind iron ore and coal. Last year alone the sector injected $19 billion into national economy and accounted for 130,000 jobs [199].

The National Strategy for International Education 2025 will enable Australia's international education sector to be more adaptive, innovative and globally engaged [124]. It will further strengthen our internationally recognized education system, increase global partnerships and drive collaboration with local communities and global partners. Key themes under the National Strategy include:

- employability – to provide greater opportunities for work, integrated learning and internships for international students
- thematic forums – to progress key issues important to the sector
- data collection and analysis – to inform better policy and practice
- country strategies – for targeted offshore engagement
- highlighting the benefits of international education – to communities
- alumni networks – for ongoing connection with Australia
- borderless education – to identify opportunities for growth
- consortia and partnerships – to compete on a global scale.

Complementing the National Strategy, the AIE2025 roadmap will position Australia to capitalize on new opportunities and markets over the next decade. The Australia Global Alumni Engagement Strategy will seek to leverage our Global Alumni to promote Australia's diplomatic, trade and investment interests. Additionally, the Government will be establishing a council for international education to oversee and drive a combined national effort. As Australia transitions to a knowledge and service-based economy, these strategies will strengthen and grow Australia's international education sector over the coming decade.

The Colombo plans

The New Colombo Plan Mobility Program provides funding to Australian universities and consortia to support Australian undergraduate students to participate in semester-based or short-term study, internships, mentorships, practicums and research in 38 host locations across the Indo-

Pacific region [83, p.17]. The Mobility Program is open to Australian university undergraduates aged 18-28, with capacity to include some students over 28. Under the 2017 funding round, around $20 million in New Colombo Plan mobility grants is expected to be awarded to Australian universities to support students to study and undertake work-based experiences in the Indo-Pacific region between 1 January 2017 and 30 June 2018.

Projects that support longer-term study, internships and language acquisition and that attract private-sector, in-kind or financial sponsorship will continue to be prioritized. Multi-year funding will also be made available to support mobility projects that may be delivered for up to three years.

Table 4.4. The demand of academic mobility in Australia (2014- 2018)

Year	Foreign Student in Australia	Outbound of Australian Students
2014	242,351	10,887
2016	249,868	11,650
2018	267,752	12,162

Source: Made by the Author from source [189].

Analyzes of the table:

1. We identify an increase in demand of foreign students in Australia from 2014 to 2018 unequivocally clear. An increase of 25,401 students in 4 years. An increase in demand of 9.8%!
2. We recognize that there is almost no change in the number of students traveling from Australia to study abroad, and here we see that the country manages to stop the brain drain from it.

The "Brain Drain" problem of Australia

The State of Australia suffers at this time from negative migration and brain drain like many developed countries. There is evidence and data which report about professions and higher education to foreign countries to seek their way and their livelihoods in other countries. The percentage of brain drain is not high, but very important in shaping the image of employment in professions such as doctors, software engineers, technical professionals.

In 2014, a study was conducted by DIMA, which found data that they believe should cause concern and real action by the Australian government. The study shows the brain drain that creates a negative bank employed. In their view, although not a long period of time will begin a huge shortage of skilled roles of this type [200]. As the DIMA research identifies, there are similar reasons for academic mobility worldwide, namely, the desire to improve quality of life, professional development is not only associated with academics from developing countries, but

also in the all world. As the DIMA research identifies, there are similar reasons for academic mobility worldwide, namely, the desire to improve quality of life, professional development is not only associated with academics from developing countries, but also in the all world. Many populations around the world are self-destructing for economic and social reasons. The economic-professional consideration leads to a lot of educated population. Academic mobility in these countries is highly developed and serves as a means of socio-economic advancement by governments.

Table 4.5. The numerical brain drain and brain gain in Australia 2008 – 2018

Criterion	Professionals academics (Brain Drain)	Professionals academics return back (Brain Gain)	Net academics
Managers & administrates	97,466	53,838	**-43,628**
Mathematicians, statisticians & Actuaries	591	305	**-286**
Medical practitioners	8,021	5,969	**-2,152**
Nursing Professionals	21,183	14,646	**-6,537**
School teachers	39,236	25,776	**-13,460**
Universities Lectures	198,059	133,178	**-64,881**
Total Professionals	284,585	189,936	**-94,649**
Associate Professionals	56,827	38,885	**-17,942**
Tradespersons	45,201	33,995	**-11,206**
Total Skilled Occupations	484,079	316,653	**-167,426**
Total	636,426	413,570	**-222,853**

Source: [192, 199]

For understanding of the findings shows that there is a problem in medicine / nurses, hospitals and fields of teaching. The Australian government has taken several measures indeed and established the organization Department of Immigration and Multicultural Affairs (DIMA). Adopting a course of action similar to the way the Israeli government saw fit to deal with them in order to minimize the phenomenon. The action which are required:

1. Strengthening economic organizations academic study and instruction.
2. The allocation of economic resources and enterprise organizations where there is a brain drain by benefits and incentives
3. Organizations of research excellence

Germany

The government in Germany were understood years ago about the benefits from the academic mobility of Foreigners student. They created the DAAD. The Deutscher Akademischer Austauschdienst (DAAD) / German Academic Exchange Service is a private, publicly funded,

self-governing organization of higher education institutions in Germany [200]. DAAD promotes international academic relations and cooperation by offering mobility programs primarily for students and faculty, but also for administrators and others in the higher education realm. DAAD is the German national agency for the support of international academic cooperation. They offer programs and funding for students, faculty, researchers and others in higher education, providing financial support to almost 120,000 individuals per year. We also represent the German higher education system abroad, promote Germany as an academic and research destination, and help build ties between institutions around the world.

The DAAD [143, p. 70] was founded in 1925 by the German student Carl Joachim Friedrich who was able to obtain 13 fellowships from the Institute of International Education for Germans in the social sciences to study in the US. From these early beginnings – and with a re-founding of the organization after World War II – the DAAD currently awards more than 65,000 fellowships a year and is the largest grantor of international academic mobility support in the world. Based in Bonn, DAAD now plays important roles in furthering the international aspects of German academic, cultural, and science policies; supporting the international relations of German colleges and universities through international exchange and programs; and maintaining a worldwide network of offices, guest professors, and alumni who offer information and assistance on a local level [45, p.7]

The mission of the Germany government which present by DAAD institute [200]:

1. To enable young academics and researchers from around the world to become leaders in the fields of science, culture, economics, and politics – as well as friends and partners of Germany.
2. To qualify young German elites to assume positions of leadership in a global environment by providing them with international and intercultural experiences.
3. To enhance the internationalization of German higher education institutions, by way of increasing their attractiveness for the top students and scholars from around the world.
4. To promote scholarship on the German language, literature, and the arts in universities worldwide with a view to increasing the role of German as an important cultural and practical language and creating a better understanding of Germany's rich cultural heritage.
5. To support the process of economic and democratic reform in developing countries and in the transition countries of Middle and Eastern Europe by supporting their academic research and progress. The results of this program are that the country become one of attractive excellent academic center of the world. The demand of academic mobility of student getting increases every year.

Table 4.6. The demand of academic mobility in Germany (2014- 2018)

Year	Foreign Student in Germany	Outbound of Germany Students
2014	187,360	119,795
2016	196,619	116,123
2018	228,758	113,885

Source: Made by the Author from source [189].

Analyzes of the table:

1. We identify an increase in demand of foreign students in Germany from 2014 to 2018 unequivocally clear. An increase of 9,263 students in 4 years. An increase in demand of 42%!
2. We recognize that there is almost no change in the number of students traveling from Germany to study abroad, and here we see that the country manages to stop the brain drain from it.

The phenomenon of Brain Drain from Germany

From the Figures from the European Union show that while many German professionals are able to find work abroad with their well-recognized qualifications, Germany doesn't always extend the same courtesy to foreigners. From 2007 to the end of 2017, Germany topped the list of countries whose professionals have sought to relocate and be accredited in other European countries, with 45,175 licensed professionals trying to establish themselves around Europe, mainly in Switzerland and Austria [103].

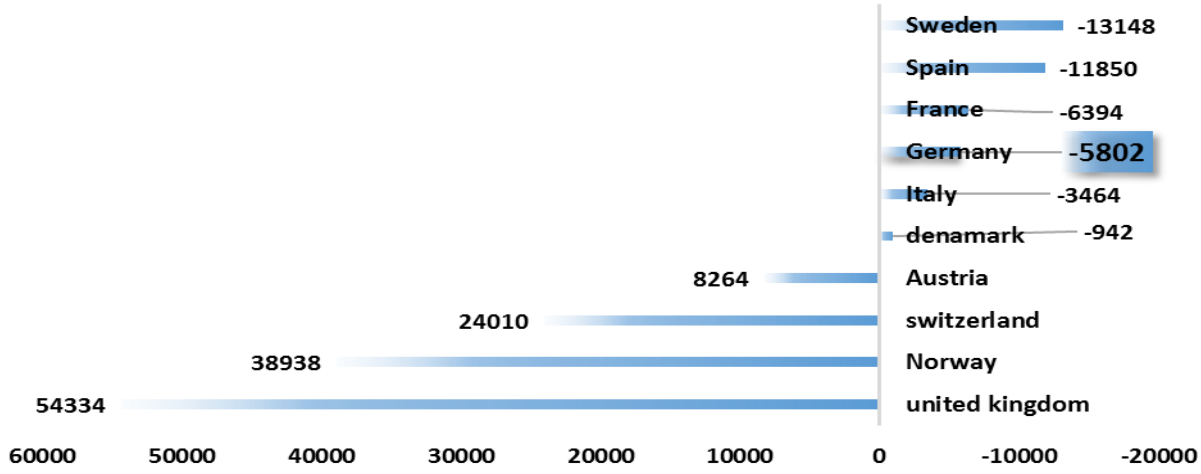
Germans also enjoyed the one of the highest rates of recognition around Europe, with 89 percent of professionals like doctors, nurses, teachers and architects being accredited outside Germany. Still, Germany remained one of the most sought-after destinations for professionals in Europe, after the UK and Norway, though - again - almost half of the professionals Norway attracted came only from Sweden. The UK- and Germany's brain gains were notably more geographically diverse [193].

Overall, however, Germany suffered a brain drain, with nearly 6,000 more accredited workers leaving the country than coming in [85, p.83]. The data does not account for professionals who returned to their home countries. Overall in Europe, doctors were the most mobile (65,259), followed by nurses (58,155) and high-school teachers (55,173).

In Germany, doctors were also the most mobile profession and went overwhelmingly to Switzerland (58%), arguably because of the shared language and the potential for higher salaries.

Switzerland is home to a large pharmaceutical industry, which produces nearly 6 percent of the country's gross domestic product, according to the industry association [157]. The UK came in a distant second as a destination for German doctors. Nurses, Germany's second most numerous

professional expats, went mainly to Switzerland (37%) and Austria (31%). Physiotherapists were the next large group with architects, pharmacists and electricians rounding out the top 10.



Graph 4.1. The number of educated Germany which immigrants 2014 -2018

Source: [193]

The top three exporters of licensed professionals to Germany over the 10-year period were Poland, Austria and Romania. But both Romanian and Austrian professionals had relatively high rates of recognition in Germany, each at about 70 percent, whereas Polish professionals were only approved in 37 percent of cases. High school teachers came in the greatest numbers to Germany over the last 10 years. The three biggest contributor countries were Austria, Poland and Spain. But only about a quarter of those teachers were accredited, with the professional fate of 72 percent still hanging in the balance because of appeals, "adaptation periods" or review processes. The next Graph, will present the number of Germany employment – citizens that left Germany to other countries to get a new job.

4.2. The Policies and Solutions of the State of Israel

The International academic collaborations and the policy for implementation and adaptation are from the Israeli Authorities. The main motivation that drives the Council for Higher Education and government ministries (which responsible for the budgeting process) in promoting international higher education is to raise the level and competitiveness of the Israeli academic system [197]. There is no doubt that international advancement in Israeli academia may have many advantages - for the institutions themselves, for Israeli students and faculty, and for the State of Israel as a whole. In light of this, the question arises as to where academia requires regulation and where it requires structural and organizational change within and outside the academic world, between government ministries. The Council for Higher Education implements this policy [184]:

1. Setting national policy and planning - vision, goals, coordination and follow-up.
2. Activity with academic institutions on issues such as budgetary and academic regulation, the initiation of processes in institutions to formulate a vision, strategies and goals.
3. Initiation of processes for building appropriate infrastructure in institutions, consulting for institutions in building collaborations, international plans and marketing strategy.
4. Marketing activity with the international audience - concentrated marketing and branding efforts for Israeli academia.

Table 4.7. Implementation of the Bologna's principles in Israel

The Bologna reform principles	The activities of the Israeli ministry
Adoption of a system of easily readable and comparable degrees	A system of uniting academic credit points (between academic institutions in Israel and institutions around the world)
Adoption of a system essentially based on two cycles	A system which based on 2 degrees - B.A / M.A
Establishment of a system of credits	Formulation of uniform degree certificates (in accordance with European practice) in favor of continuing studies in another country
Promotion of mobility	Joining the European / International Programs - ERASMUS / TEMPUS
Promotion of European co-operation in quality assurance	Transparency regarding quality assurance and adherence to academic standards of quality
Promotion of the European dimension in higher education	Prioritizing regional cooperation programs with European countries (Eastern Europe / Western Europe)
Focus on lifelong learning	Programs for adults (Program 30+ / "Integration in the Academy").
Greater inclusion of higher education institutions and students in the Bologna Process	The integration of most universities and colleges into "academic experience" programs and academic programs in cooperation with foreign institutions.
Promotion of the attractiveness of the European Higher Education Area	Giving preference to higher education and recognition of European degrees in accordance with an international convention
Doctoral studies and the synergy between the European Higher Education Area and the European Research Area	Academic graduate programs for doctoral and post-doctorate degrees

Source: Made by the Author from source [197, 65, p.36]].

The Israeli academic collaborations can be grouped into three groups - research, teaching, and capacity building. The National research collaborations focus on specific programs and joint research funds. The most prominent research collaborations take place with the European Union, the United States, Germany, India, China, Singapore and Canada. The state of Israel is also a partner in the Erasmus + European program to promote student mobility and staff and to build academic capabilities through international collaborations. For presenting the almost complete

alignment of the actions taken by Israel in order to adapt itself to the Bologna reform, the research editor will present the principles to the actions.

Cooperation with European programs – ERASMUS + / TEMPUS in Israel

Erasmus + Israel assists institutions in submitting project proposals and locating potential partners. The office staff organizes workshops to fill the various forms and gives different emphasis on the process of writing the proposal and the selection process [105, p.83]. On the Erasmus + Israel website, there is a search engine for partners to which projects are submitted from institutions from Israel and abroad who are looking for partners to join the consortium.

In addition, the firm distributes project proposals to entities abroad and to relevant partners in Israel. Erasmus + Israel maintains regular contact with a variety of stakeholders such as the EACEA in Brussels, the EU Delegation to Israel, student organizations, the Ministry of Foreign Affairs, foreign embassies in Israel, the Ministry of Education and more. One of the leading programs is the TEMPUS program [153, p. 166].

Since Israel joined the Tempus program in 2008, **18 projects involving 32 Israeli institutions** were selected for funding; 7 of which were coordinated by Israeli institutions [197]. These projects have succeeded in engendering curriculum reform, developing international relations and advancing university-business cooperation. Overall, a total of 10.33 million Euros was provided to Israeli institutions in the Tempus program. The strong collaboration between higher education institutions in Israel, Europe and the Partner Countries has had an important influence on the quality of higher education in Israel by fostering international collaboration and exposing Israeli institutions to processes and standards implemented in other countries. Furthermore, Tempus projects have strengthened collaboration between institutions from Israel, the EU and Tempus Partner Countries, as well as between different types of Israeli higher education institutions (e.g. universities, academic colleges, teaching colleges), from various geographic areas of Israel and sectors of society.

Tempus gained significant recognition among Israeli higher education institutions and various stakeholders during the period 2008-2013 [167]. All research universities, the Open University and a noteworthy number of colleges and teaching colleges participated in Tempus projects. It is noteworthy that Israeli Ministries, enterprises, and student associations were also active in these projects. In this respect, Tempus projects in Israel succeeded in integrating non-academic partners which furthered the dissemination and sustainability of the projects' results. The most popular academic institutes are: Sapir Academic College - 7 projects, Tel Aviv University – 7 projects, Ben-Gurion University – 6 projects, Interdisciplinary Center Herzliya – 5 projects, Hebrew University of Jerusalem - 4 projects, Technion Israel Institute of Technology with 6

projects. The other Erasmus projects has been present in Chapter 1 [179]. The most universities which make an academic relation with the Erasmus program are: Ben Gurion university, Tel Aviv university end The Hebrew University.

Ben Gurion University - In 2007, Ben-Gurion University of the Negev took a strategic decision to establish the "Office of International Academic Affairs", reporting to the Rector, which will be centrally responsible for coordination of all mobility matters - incoming and outgoing - for the university [173]. The decision to establish the "Office of International Academic Affairs" reflects the university's appreciation of the global changes that have swept the world and a serious institutional commitment to broaden and deepen its international character, incorporating a high degree of academic, scientific exchanges on all levels from undergraduate to postdoctoral and faculty. The international Projects are [173]:

1. Academic Internship Program at BGU – "Academic Experience"
2. Semester and Year Long Programs
3. Undergraduate Programs – B.A
4. Master Programs Taught in English – M.A in 24 faculties.
5. Ph.D. Programs.

The numbers of foreign students in the university (full study) – 718 students (2017 – 2018)
Incoming from tuition fees **– 18,427,000 USD** [91].

Tel Aviv University - Four decades ago Tel Aviv University first opened its gates to accomplished students who came from all over the world to embark on a remarkable personal and academic journey. Tel Aviv University has since consistently ranked as one of the top institutions of higher learning world-wide. As a world-class academic institution, many members of its distinguished faculty have won international recognition and are considered leaders in their fields of research. The University through TAU International (formerly OSP) has enriched the lives of more than 15,000 international students, allowing them to reach new pinnacles of scholarly and personal success. The international Projects are:

1. MA Archeology and History in the Land of the Bible
2. MA Conflict Resolution and Mediation
3. MA Environmental Studies
4. MA Middle Eastern Studies
5. MA Global Migration and Policy
6. M.Sc. Plant Biology with Emphasis in Food Safety and Security
7. MA Political Science & Political Communication
8. MA Security and Diplomacy Studies

9. MA Crisis and Trauma Studies
10. MA TESOL (Teaching English to Speakers of Other Languages)
11. Emergency and Disaster Management EMPH

The numbers of foreign students in the university (full study) – 2118 students (2017 – 2018). The incoming from tuition fees – **31,936,000$** – The American program for Medicine & **17,921,000$** for foreign student [174].

The Hebrew University in Jerusalem – (HUJI International) The Hebrew University of Jerusalem is consistently ranked as the top university in Israel and among the top 100 worldwide. Its Israeli student - 23,000 from Israel, and 90 other countries. The University is actively engaged in international cooperation for research and teaching, and has signed 300 agreements for joint projects with other universities, and over 90 agreements for student exchanges with 27 countries. The Hebrew University is a leader in bringing about change in the global community in many fields, including agriculture, environmental quality and public health. Students from developing countries carry out advanced studies at the Hebrew University and return to their home countries where they apply the knowledge, they gained to improve the lives of their local communities. Global Activity: The Numbers 265·academic agreements with institutions in 45 countries, Student exchange agreements with 90 institutions in 30 countries, 90courses for the study of some 30 languages, 308 post-doctoral researchers from 34 countries. An annual enrolment of almost 2000 students from 80 countries at the Rothberg International School. The international Projects are:

1. Graduate Degree Programs for International Students
2. Medicine
3. Agriculture
4. Natural Sciences
5. Business Studies
6. Humanities
7. Law
8. Social Sciences
9. MA in Global Community Developments Studies

The numbers of foreign students in the university (full study) – 2534 students (2017 – 2018) Incoming from tuition fees – 17,014,000$ [180].

Policies and solutions for the phenomenon of Brain Drain

The national program for the restoration of academics was established following a government decision on the subject and launched in June 2013. The program was established with

an overall view of the needs of the Israeli economy, which today needs more than ever high-tech professionals, scientists, researchers and managers [115, p. 43].

The program is aimed at Israeli academics with a first degree and above who can reside abroad and can integrate into industry, academia and medical institutions in Israel, with a PhD in all fields, doctors and holders of first and higher degrees in exact sciences, engineering and life sciences, and thousands of Israeli academics who are abroad from all fields of activity, industry and academia [120, 64].

According to scheik [119] the program also cooperates with employers in the Israeli economy who need Talents who have accumulated knowledge and experience overseas. Hundreds of employers are registered with the program and cooperate with us on an ongoing basis. The program assists in finding work in industry and academia (in cooperation with the Science Academy's liaison center), accompanying the process of returning the entire family unit, and researching and formulating policies, including the establishment of programs to solve barriers. Personal attention and direct answers - Through a personal contact coordinator, the program provides individual, individualized treatment for each academic who meets the criteria, expressing his desire to return to Israel in the short term [197].

The program has connections with all the institutions and organizations involved in the process of returning to Israel, from the registered employers to the program, through the Communications Center at the Academy of Sciences, the Planning and Budgeting Committee of the National Council for Higher Education, and to various government bodies such as the Ministry of Immigration and Absorption.

The extent of the brain drains - academics and especially those with advanced degrees - who are moving from Israeli academia to research institutions abroad - is at an extraordinary level in Israel. According to the OECD data [107, p.14], Israel has the largest brain drain of American academics in the last decade. In recent years, the government has declared several times that it intends to fight the phenomenon and even return to Israel the "brains" that have left, but to date no significant achievements have been made. The commercialization of senior faculty standards, the lack of advanced research infrastructures and significant wage gaps have led more and more Israeli scientists to move to research institutions abroad, most of whom go abroad for post-doctoral training, since in Israel there are not enough standards, and because of research possibilities and wage differences. In order to cope with the wage differentials in some areas abroad, the Council for Higher Education recently approached the universities in an attempt to provide a pilot for granting differential differentials to a limited percentage of university lecturers. As part of the

policy and solutions proposed by the Government of Israel, it is the establishment of centers of excellence [114, p.179].

"The Centers of Excellence" is an association of outstanding scholars in the field of research is defined, which are members of the faculty and research in various institutions of higher education, in order to promote in-depth research, and innovative breakthrough in this area. The center serves as an anchor of research infrastructures and teams of researchers in the field for use by all members of the center, allowing optimal utilization of the scientific potential of the State of Israel [107].

As part of the idea of cooperation with investigators, research areas of Centers of Excellence that selected in collaboration with a wide range of Israeli academic community in all its diversity, the faithful will reflect the priorities and scientific interest of researchers in Israel. Israeli researchers invited to propose research topics worthy of centers of excellence [136, p. 60]. After screening and evaluation process selected list of issues is limited, and groups of researchers invited to submit proposals for the establishment of these issues' centers of excellence. Eleven of these centers of excellence established during 2013, in a variety of fields - science and engineering, life sciences and medicine, Social Sciences and Law and Humanities.

4.3. The Policies and Solutions to the Israeli World of Occupation

Departure of students and faculty, in addition to, professionals, doctors and engineer's overseas countries are not a new topic. According to the survey conducted by CBS [46] for the National Council for Research and Development in the Ministry of Science. The trend pronounced among graduates in science and engineering - 14.1% of the recipients of the third degree, in social sciences and humanities it is only 3.8%. In total, 4.9% of recipients of academic degrees sometime between the years - 1985-2005 were in 2005 outside Israel for more than three years [165]. No less than 5,000 researchers and lecturers Israelis live and work abroad - according to data from a special database set up by the Ministry of Science and administered by the Ministry of Immigrant Absorption. The inflated number that is the product of a phenomenon, which usually termed abstract "brain drain." In recent years became a struggle for the return to Israel of Israeli researchers combined struggle between several factors, increased budget winners. However, the results are still far from impressive [63, p.5].

There are steps of action which try to return the "brains" to Israel were mounting in recent years and with them also the funding for this problem. However, currently still difficult to see the light at the end of the tunnel linking back to Columbia University Bar-Élan University. In fact, only about 5% of doctoral students from, doctors and professors studying or working abroad to

return to Israel in the last year (2013). Students have replaced them, which be assessed and other researchers departed from Israel [150, p. 64].

The project of the "Centers of Excellence"

Project to set up centers of excellence is part of the implementation of a government decision from 2010 entitled " The Israel Brain Gain Program- Bringing Knowledge." The project includes the gradual establishment of 20 centers of excellence in the coming years in various research fields in the natural sciences, and humanities. Budget construction and operation of centers of excellence will be total of 1.35 billion. However, as a flagship project of the program - is meanwhile a bit disappointing. So far, as part of the construction of the first four centers of excellence, led centers of excellence: the return of only 15 scientists [122, p.316].

The National Program for the restoration of civil engineers and high technology

The National Program for the return of academics established following the government decision on the issue and launched in June 2013. The program founded with the vision-the overall needs of the economy, more than ever, in need of high-tech personnel, scientists, researchers, managers and engineers leading accrued knowledge, education and experience [163].

How the program should work

By addressing Israeli academics, a Bachelor's degree or above, who are abroad and can fit in manufacturing or in the Israeli academy. Ph.D. in all areas, with a bachelor's degree or higher in the exact sciences, engineering and life sciences, and with degrees in other fields, with previous experience and significant industry. Thousands Israeli academics who are abroad variety of occupations, industry and academia have been registered we signed up to the program [158]. The program describes some ideas:

1. assistance in finding a job in industry and academia (in cooperation with the Contact Center of the Academy of Sciences).
2. The personal attention and answers directly - the program provides, through personal contact adapter, personal attention to each individual academic.

This Plan should get connect to all institutions and organizations that involved in the process of return to Israel, from the employers listed in the program, through the Contact Center Academy of Sciences. The Planning and Budgeting Committee (PBC), the National Council for Higher Education to bodies various government ministries such as the Ministry of Immigrant Absorption, Social Security, the Ministry of Education, IDF (Israeli Army).

The Partners in the Program

The program is pooling the resources of the Ministry of Immigrant Absorption, the Ministry of Economy, Ministry of Finance and the Planning and Budgeting Committee (PBC) of

the Council for Higher Education. The program conducted in practice by the office of the Chief Scientist of the Ministry of Economy [24.p;166]. The plan Steering Committee composed of representatives of the ministries Partner program headed going to the chief scientist of the Ministry of Economy.

If the Israeli employee academic will consider returning, The Israel Brain Gain program was created to assist them throughout the entire process. The program has consolidated all the information about opportunities, programs, and benefits of the various government offices, in one convenient place. The program will assist them with:

1. Finding employment through our database of companies and job opportunities that are tailored specifically for returning professionals.
2. Including the option to directly contact employers while still abroad.
3. Learning about the programs and opportunities that will help you find your place in the Israeli Industry and/or Academia.
4. Ensuring easy acclimation to Israel by providing all of the up-to-date information that your family needs, easily accessible

The Israel Brain Gain Program is designated for any Israeli living abroad who is interested in returning to Israel, providing they hold a Bachelor`s degree or above, can return to the Israeli Industry or Academy. The program assists professionals and their families throughout the entire process of returning to Israel; from the early stages of job searching all the way to acclimating to daily life in Israel.

Financial Help in Employing Scientists

The Center for Absorption in Science helps employers during the initial absorption of the immigrant scientist or the returning resident scientist in the job. The assistance will be given in the form of participation in funding the cost of employing the scientist in R&D work. The conditions for Receiving Assistance:

- The scientist fulfills the definition of "scientists"
- The scientist will be employed in research and/or development work.
- The employer will complement government assistance up to the minimum costs, as determined and updated every fiscal year.
- Assistance will be given only for scientific work done in Israel.

It is not possible to receive double governmental assistance for the funding of a scientist's salary. In the public sector (including institutions of higher education) assistance is not available for scientists that are employed in a standard position (e.g. given a "job").

- The assistance for Doctors an R&D

Employment costs that are recognized by the Center for Absorption in Science include the gross salary of the scientist, plus costs obligatory by law (income tax, employers' tax, compensation fund, employers' part of National Insurance) as well as social benefits deposited on behalf of the worker (pension/managers fund, study fund)

The Listed below are the minimum sums of assistance and participation required from employers:

Table 4.8. The financial assistance for Medicine and R&D academic

Degree	Year 1	Year 2	Year 3
Second Degree Employer	13,300 $	9,800$	4950$
MD Degree - Employer	12,800$	12,800$	12,800$
Third Degree Employer	21,600$	16,100$	6650$
Fourth Degree (Post) Employer	22,300$	16,600$	8,300$

Source: [165, 172]

The strategy for the development of legal and legislative policy

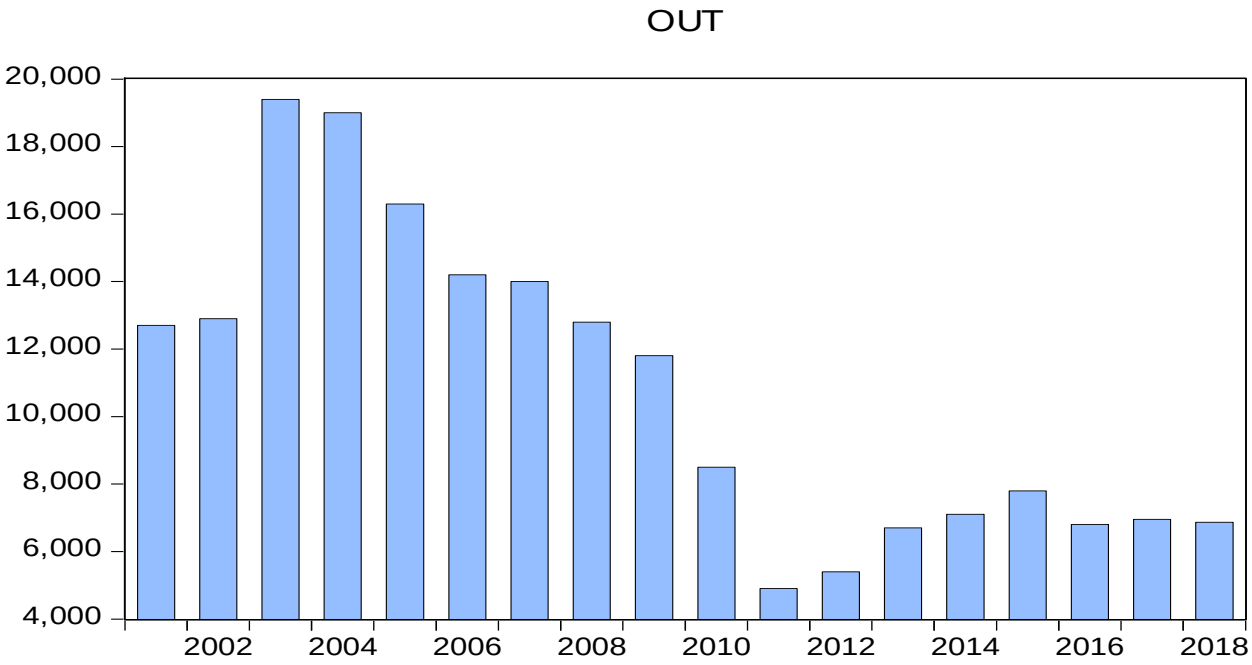
As part of the state's recommendations and the legislation required to stop the demand for Israeli students and academics to study and live outside of Israel, there must be a comprehensive program that will address large-scale and large-scale responses and solutions to Israel's life. In Intent to deal with the appropriate solutions, from which conclusions that will be conclude, the author decided to construct an economic model which based on regression that presents the data presented in Chapter 3. The model will demonstrate the practical importance it provides for future forecasting, and of course the scientific importance of analysis based on systematic data analysis and the creation of a theoretical economic model. Following the completion of the model, a national-organizational mechanism will be presented that will answer the research question, the research hypothesis, and the problem that arises in this research. The selected data of the regression will present the academic mobility (inbound / outbound student) in Israel, the investment in education (which will lead to a reduction in brain drain), the number of academic institutions that offered to the students, and of course the employment productivity that will lead to an increase in gross domestic product.

From the various data, it is possible to measure all the possible components for examining a systematic statistical model. The amount of academic mobility from Israel, various economic data such as Gross Domestic Product, gross domestic product, the amount of brain drain of physicians and academics, the per capita income of the GDP, and investments in education.

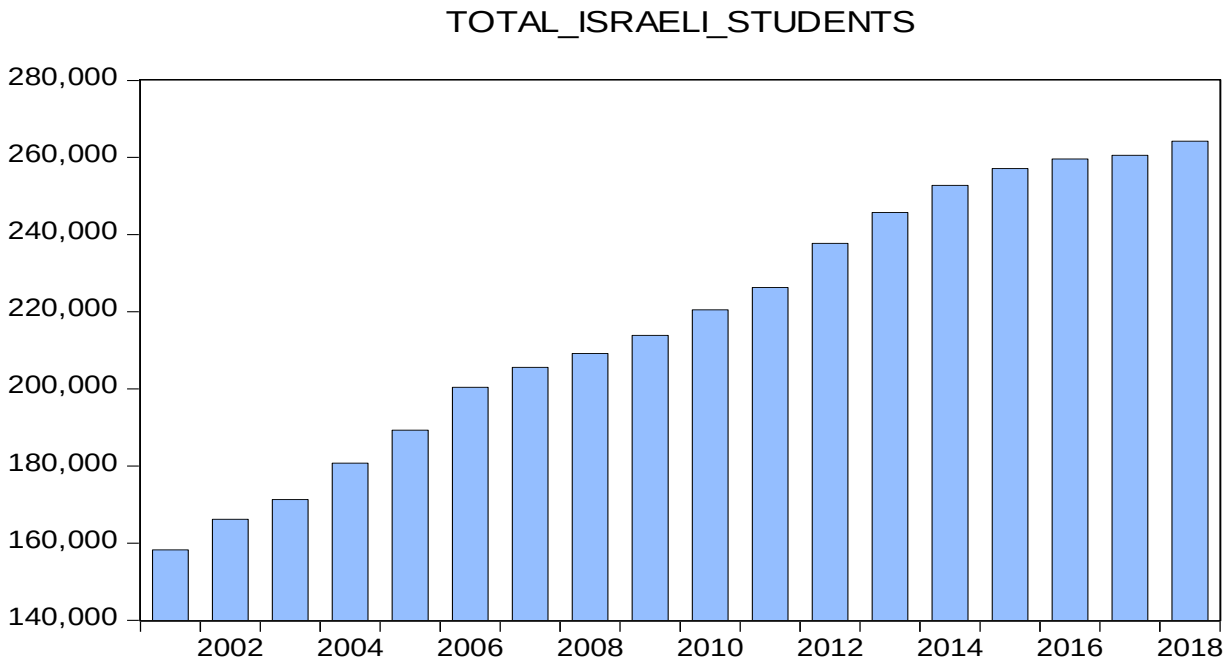
The Model of Data Regression

The following graphs presents the number of students leaving Israel for studies by years, the total number of Israeli students by years, the number of academic institutions by years,

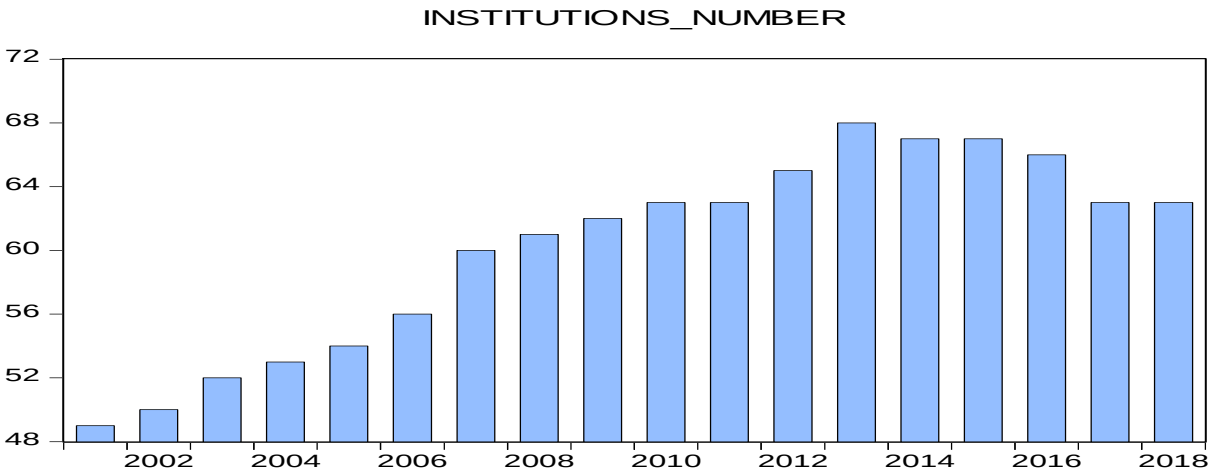
educational investment by years and gross domestic expenditure on research and academic development. We may witness a breakpoint in the 2011 in the leaving students' number and a breakpoint in the education investment in 2010.



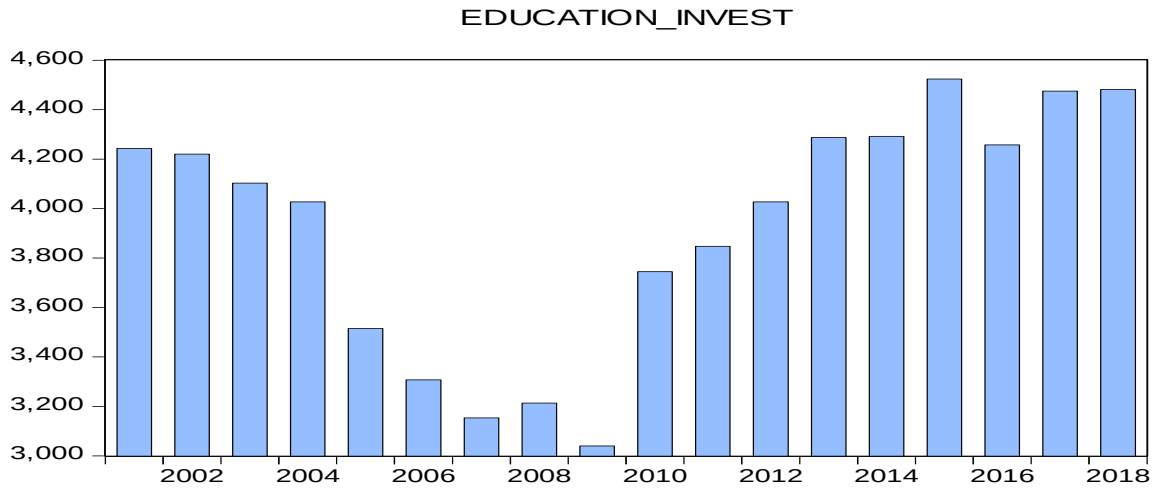
Graph 4.2. Total outbound of Israeli Student (2002 – 2018)
Source: Made by the Author [189]



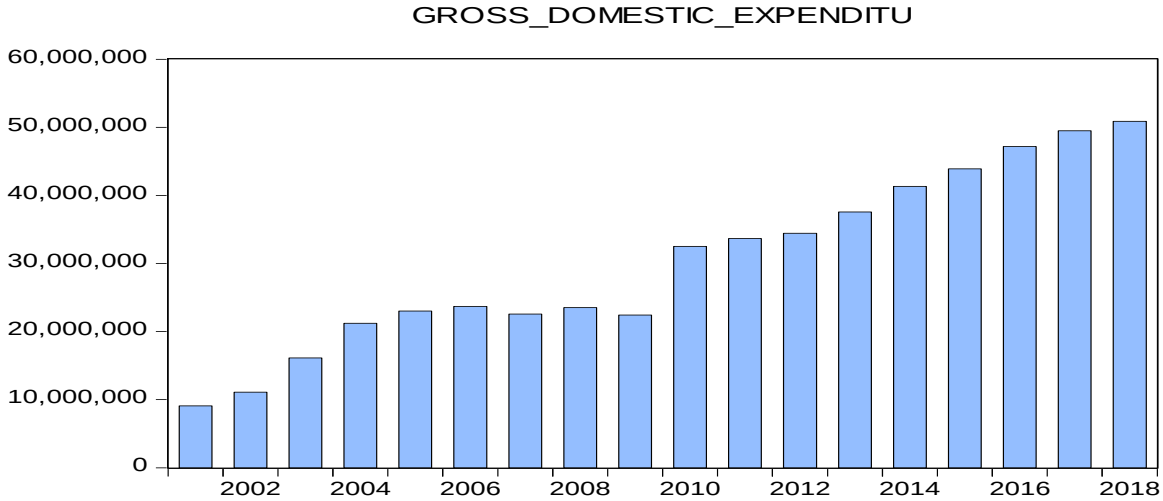
Graph 4.3. Total Israeli student (without free University) 2002 – 2018
Source: Made by the Author [189]



Graph 4.4. Total academic institute (2002 – 2018)
Source: Made by the Author [172]



Graph 4.5. Total investment in academic institute (millions $ / 2002 – 2018)
Source: Made by the Author [165]



Graph 4.6. Gross domestic expenditure on research & academic development (millions $/ 2002 – 2018)
Source: Made by the Author [172]

The data indicates that there is a structural breakdown in 2011, and there is an increase in investment in education, as well as a continued increase in the number of academic institutions. The following table represents the correlation coefficients and their significance for the series above:

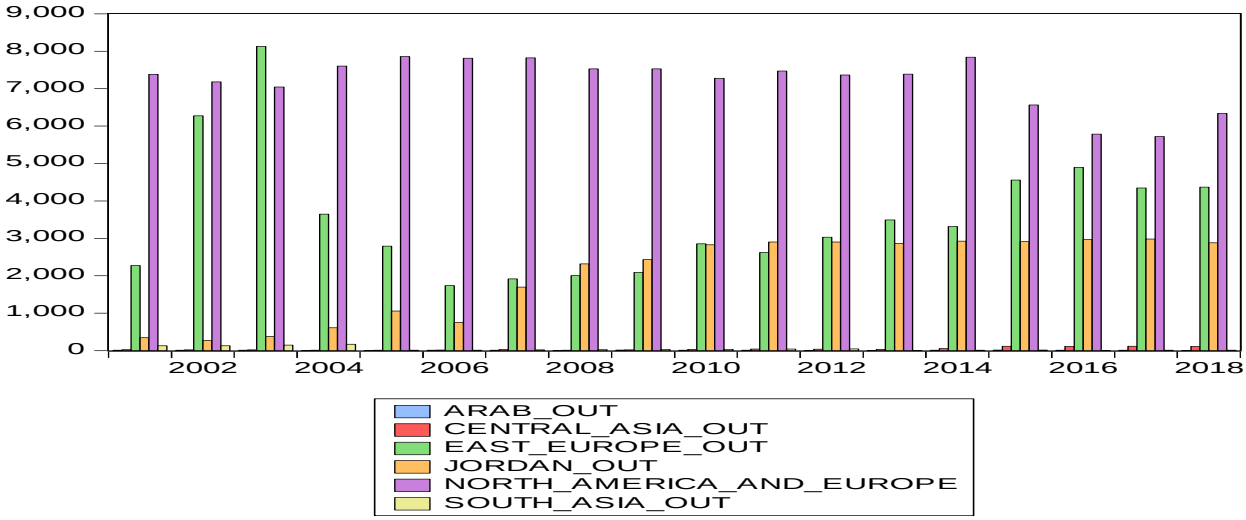
Table 4.9. The correlation between coefficients [I]

Sample: 2001 2018					
Included observations: 18					
Correlation					
Probability	OUT	TOTAL_ISRAELI_STUDENTS	EDUCATION_INVEST	GROSS_DOMESTIC_EXPENDITU	INSTITUTIONS_NUMBER
OUT	1				

TOTAL_ISRAELI_STUDENTS	-0.816568	1			
	0	-----			
EDUCATION_INVEST	-0.404373	0.3639	1		
	0.096	0.1377	-----		
GROSS_DOMESTIC_EXPENDITU	-0.757308	0.972353	0.477025	1	
	0.0003	0	0.0453	-----	
INSTITUTIONS_NUMBER	-0.803493	0.929483	0.166563	0.838696	1
	0.0001	0	0.5089	0	-----

Source: Made by the Author

There is a highly negative and very significant correlation of **-0.816 (p - value<0.0001)** between the total number of Israeli students and the number of leaving out of Israel. The correlation between the number of leaving out and the number of institutions is highly negative of **-0.803 (p - value<0.0001),** the correlation between the number of leaving and the gross domestic expenditure is also highly negative and significant **(p - value<0.001).** The following graph presents the distribution of Israeli students leaving to study abroad by countries:



Graph 4.7. The academic mobility of Israeli student to other countries (2002 – 2018)

Source: Made by the Author [169]

The following table presents the Pearson correlation coefficients and their significance. Highly significant correlations are marked yellow.

Table 4.10. The correlation between coefficients [II]

Probability	ARAB_OUT	CENTRAL_ASIA_OUT	JORDAN_OUT	NORTH_AMERICA_O	SOUTH_ASIA_OUT	WEST_ASIA_OUT	WEST_EUROPE_OUT
ARAB_OUT	1						

CENTRAL_ASIA_OUT	0.222061	1					
	0.3758	----					
JORDAN_OUT	-0.056378	0.604709	1				
	0.8242	0.0078	----				
NORTH_AMERICA_OUT	-0.194317	-0.870391	-0.390354	1			
	0.4397	0	0.1093	----			
SOUTH_ASIA_OUT	0.065445	-0.405992	-0.730612	0.145482	1		
	0.7964	0.0946	0.0006	0.5646	----		
WEST_ASIA_OUT	-0.116534	-0.071096	-0.039978	0.198287	-0.222251	1	
	0.6452	0.7792	0.8749	0.4303	0.3754	----	
WEST_EUROPE_OUT	0.19509	0.304838	-0.201676	-0.508847	0.435988	-0.09835	1
	0.4379	0.2187	0.4223	0.031	0.0705	0.6978	----

Source: Made by the Author

There is a high positive correlation between the number of students leaving to Jordan and the one of leaving to Central Asia. The correlation between number of leaving to North America and the one of leaving to Central Asia is highly negative, suggesting that Central Asia and North America are possible competitors. The same is right for South Asia and Jordan, West Europe and North America. The correlation between the students leaving to West Europe and South Asia is positive.

The regression model:

Stage 1: the explanation variables chosen were institutions number and education invest in the log form.

Dependent Variable: OUT
Method: Least Squares
Date: 07/24/19 Time: 17:06
Sample: 2002-2018
Included observations: 18

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(INSTITUTIONS_NUMBER)	-32793.64	5972.476	-5.490795	0.0001
LOG(EDUCATION_INVEST)	-10711.17	4873.219	-2.197966	0.0441
C	233511.5	44498.79	5.247592	0.0001

R-squared	0.719681	Mean dependent var	10784.44
Adjusted R-squared	0.682305	S.D. dependent var	4610.047
S.E. of regression	2598.426	Akaike info criterion	18.71421
Sum squared resid	1.01E+08	Schwarz criterion	18.86261
Log likelihood	-165.4279	Hannan-Quinn criter.	18.73467
F-statistic	19.25525	Durbin-Watson stat	1.081601
Prob (F-statistic)	0.000072		

The proportion of explaied probability in rather high **(0.72).** The possible problem is autoregression from the first order **(DW<2).** As was mentioned before, there is a possible breakpoint in 2009.

Stage 2: The explanation variable is now only institutions number in the log form and the Cochrane - Orkut fixing the auto regression. There is an improvement in the model since the R-squared grew higher to 79.5% and the DW us close enough to 2.

Dependent Variable: OUT
Method: Least Squares
Date: 07/24/19 Time: 17:41
Sample (adjusted): 2002 - 2018
Included observations: 17 after adjustments
Convergence achieved after 9 iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(INSTITUTIONS_NUMBER)	-42816.54	11499.02	-3.723494	0.0023
C	186561.7	47369.02	3.938474	0.0015
AR(1)	0.438964	0.197573	2.221784	0.0433

R-squared	0.794692	Mean dependent var	10671.76
Adjusted R-squared	0.765362	S.D. dependent var	4726.308
S.E. of regression	2289.396	Akaike info criterion	18.46875
Sum squared resid	73378665	Schwarz criterion	18.61579
Log likelihood	-153.9844	Hannan-Quinn criter.	18.48336
F-statistic	27.09513	Durbin-Watson stat	1.697142
Prob(F-statistic)	0.000015		

Inverted AR Roots	.44

However, there is a problem of breakpoint in the 2011:

Chow Breakpoint Test: 2011.

Null Hypothesis: No breaks at specified breakpoints.

Equation Sample: 2010 - 2018

F-statistic	2.179548	Prob. F(3,11)	0.1481
Log likelihood ratio	7.930694	Prob. Chi-Square(3)	0.0475
Wald Statistic	10.01085	Prob. Chi-Square(3)	0.0185

Stage 3: Dependent Variable: OUT
Method: Least Squares
Date: 07/24/19 Time: 17:47
Sample (adjusted): 2002- 2018
Included observations: 17 after adjustments
Convergence achieved after 12 iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(INSTITUTIONS_NUMBER)	-34780.40	14924.26	-2.330461	0.0380
BREAK_POINT	-190051.8	129737.2	-1.464899	0.1687
BREAK_POINT*LOG(INSTITUTIONS_NUMBER)	44764.68	31323.70	1.429099	0.1785
C	155066.4	60685.58	2.555243	0.0252
AR(1)	0.382822	0.228282	1.676965	0.1194

R-squared	0.879309	Mean dependent var	10671.76
Adjusted R-squared	0.839078	S.D. dependent var	4726.308
S.E. of regression	1895.960	Akaike info criterion	18.17277
Sum squared resid	43135967	Schwarz criterion	18.41783
Log likelihood	-149.4685	Hannan-Quinn criter.	18.19713
F-statistic	21.85683	Durbin-Watson stat	2.114117
Prob(F-statistic)	0.000019		

Inverted AR Roots	.38

Since some of the variables are not significant, they are removed from the model by step by step method.

Stage 4: The optimal model which received

Dependent Variable: OUT

Method: Least Squares

Date: 07/24/19 Time: 17:50

Sample (adjusted): 2002 - 2018

Included observations: 17 after adjustments.

Convergence achieved after 9 iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(INSTITUTIONS_NUMBER)	-42816.54	11499.02	-3.723494	0.0023
C	186561.7	47369.02	3.938474	0.0015
AR(1)	0.438964	0.197573	2.221784	0.0433

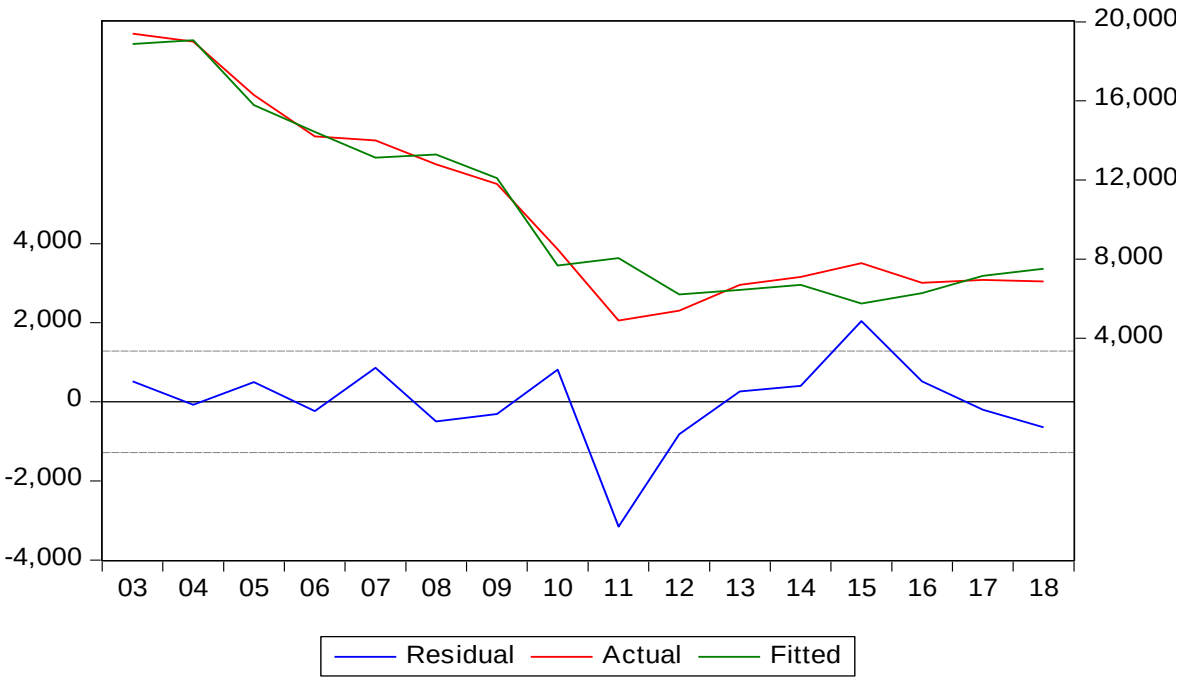
R-squared	0.794692	Mean dependent var	10671.76
Adjusted R-squared	0.765362	S.D. dependent var	4726.308
S.E. of regression	2289.396	Akaike info criterion	18.46875
Sum squared resid	73378665	Schwarz criterion	18.61579
Log likelihood	-153.9844	Hannan-Quinn criter.	18.48336
F-statistic	27.09513	Durbin-Watson stat	1.697142
Prob(F-statistic)	0.000015		

Inverted AR Roots	.44

Substituted Coefficients:

==========

OUT = -42816.540097*LOG(INSTITUTIONS_NUMBER) + 186561.652558



Graph 4.8. The connection between number of academic institutes to outbound student

Source: Made by the Author [165]

The bigger the institutions number, the smaller is the number of leaving students. Actual, Fitted and the residuals graph.

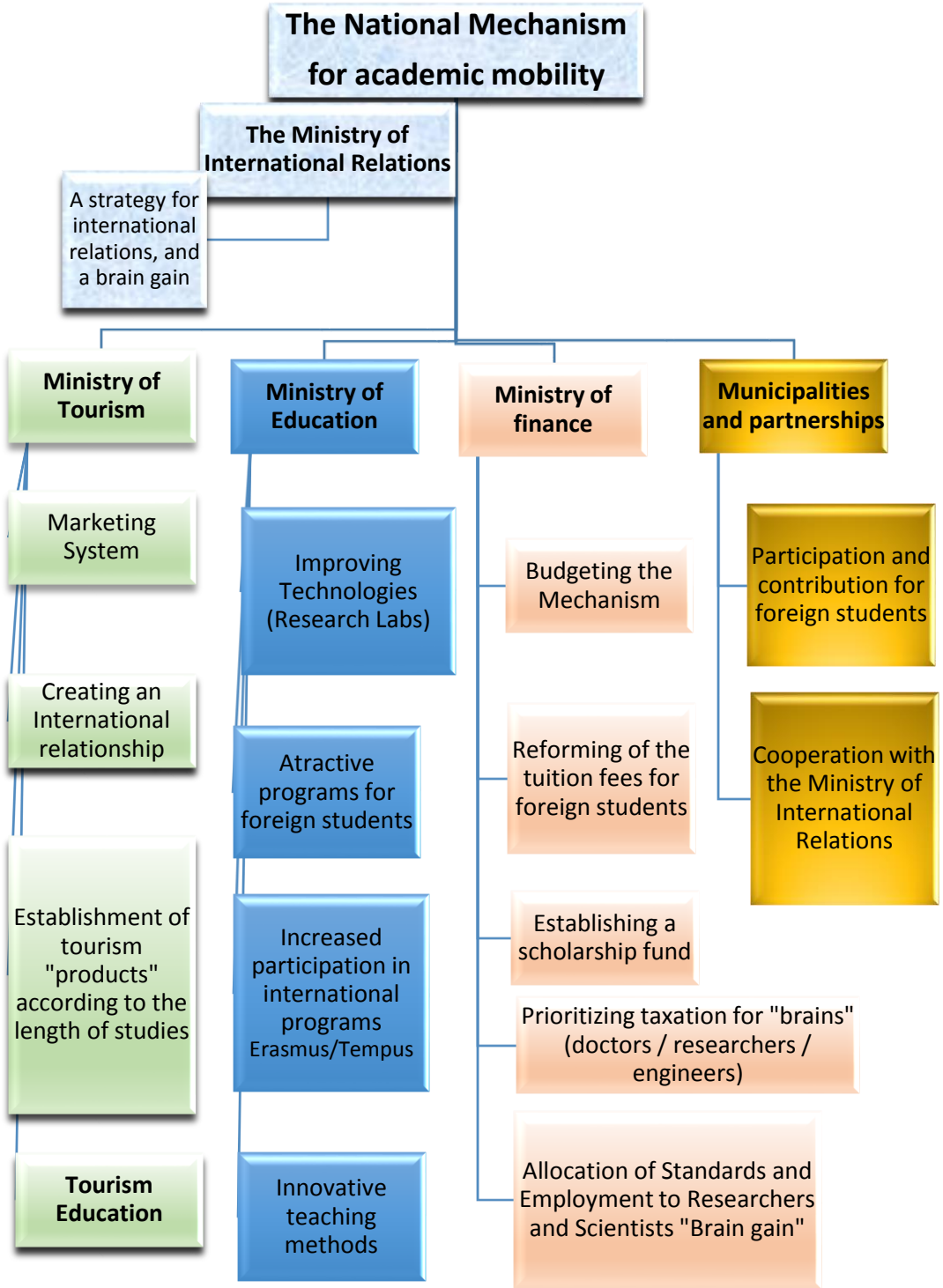
The synthesis of the data from the regression model present data that lead to the following strategic:

1. The number of academic institutions - There is a connection between the number of students going to academic studies and the number of academic institutions. Hence, the study recommends continuing to increase the academic supply to potential students. The variety of faculties and learning options will make the Israeli student study within the borders of the country and not go abroad. The supply of institutions will also attract foreign students from other countries. This conclusion comes from the data appearing from 2018 onwards.
2. The economic model indicates from graph 3.8, that the remainder of the sum is random, ie, there is a direct correlation between the number of students leaving and the number of academic institutions. This fact leads to the need to establish a national mechanism that will supervise all Israeli academic activity in all aspects of academic mobility to Israel and abroad.
3. An Economic recommends - tuition for foreign students: for tuition of international students in the programs, in order to adapt it to European countries with similar academic standards, and in accordance with the Reform countries in Bologna, Europe and the OECD countries. Urgent reform is needed because the State of Israel must establish a "competitive" academic system vis-a-vis academic institution in foreign countries.
4. A Municipalities recommends - to integrate the municipalities as an advisory and supportive partner organization. The city and its residents are residents of the city who will benefit from the arrival of quality human capital to the urban area. In addition, the arrival of foreign students will bring foreign money into the business systems, a step that will contribute to the economic and employment wellbeing of each city.
5. A recommends for academic tourism - to enact new regulations, including tax benefits, for tourism businesses that will establish tourism mechanisms suitable for foreign students. To offer students (especially those with a few months of academic experience) "tour packages" that include a set of services for the entire stay. "Packages" will increase their satisfaction, thus attracting more foreign students. This service has been traveling in Spain and has been very successful.
6. A recommends for International Relations - The idea here is to take advantage of the impact of foreign students in developing ties with their mother countries. Connections that will lead to academic, commercial, technological, industrial, agricultural, transportation and

even political cooperation. The beginning of those relationships can begin with academic cooperation.

Structure of the new mechanism:

Sketch 4.1 presents the National Mechanism, which we recommend as innovation



Sketch 4.1. The National Mechanism for academic mobility

Source: Made by the Author

The policy about the innovation in the mechanism:

1. **Government policy** - The government will allow the establishment of a mechanism funded by the government but operating independently. The Ministries of Education, Economics, the Ministry of Municipalities and the Minister of Tourism will have partial influence. The mechanism will be independent and lead an integrative strategy for the purposes for which the mechanism was established.

   For this goal, the laws relating to budgeting, visas for foreign students, tax breaks for academics, budgeting of employment standards for researchers and academics (reduction of the brain drain) will be changed. The policies that should to be changed: an academic tourism policy, a policy of preventing educational migration (brain drain), tuition policy for foreign students, international relations.
2. **The National Mechanism - An independent organizational mechanism** that will include officials / managers in an organizational hierarchy from all aspects of the mechanism: tourism representatives, the Ministry of Education (higher education), municipalities, the Ministry of Economy, the Ministry of International Relations. The mechanism will be based on the strategy goals:

- Budgeting the activity of all four sub-mechanisms
- Budget management of the mechanism -

  5-7 mechanism Managers **- $ 400,000**

  Secretariat mechanism - **$ 120,000**

  Department of Marketing, External Relations, and Inter-Office Coordination **- $ 200,000**

  Quality Control Department **- $ 250,000**

  Operational control department **- $ 120,000**

  Estimated total cost (excluding construction, infrastructure and technology) - $ **1,100,000** per year [Source: Professor Nahum Finger - Ben Gurion University].

3. **Ministry of International Relation** – this ministry will be one of leader project. The idea to cohabitee between Higher Education, Tourism and political issue is for create an International relationship with a lot of countries. For maximizing the benefit from all those is to create relationship with the countries which the foreign student is came from.

   Interest from Economic – Academically – technological – demographic – cultural Relationship is the future.
4. **Ministry of Tourism –** the ministry will take all responsibility for the marketing activity of the campaign around the world, positioning Israel as a global academic leader, contacting the target countries (in accordance with the strategy by the mechanism), creating

an international relation with marketing academic institute, with academic programs in other countries (Germany, Australia, USA) Creating a "product" of academic tourism for foreign students. The estimated cost of such a project - **1,500,000** USD per year.

5. **Ministry of Education -** the ministry will take all responsibility about Improving the teaching infrastructure - laboratories, classrooms, technology and computerization, cultural halls, cultural spaces. Change, updating and adaptation of academic programs, Increased sharing with international curricula, Innovation in teaching methods, Professional improvement of the teaching staff (returning researchers and lecturers to work in Israel). The estimated cost of this activities - **20,000,000** USD per year.
6. **Ministry of Finance** – the ministry will take the responsibility about Including the funding of the entire mechanism, a significant reform of the high tuition fees currently required from foreign students, and the construction of a system of scholarships for them. Creating tax tables with a preference for the educated population returning to Israel. The granting of housing benefits, preference in employment, concern for the spouse, help with the existence and absorption in places of employment, accompanying the family unit. The estimated cost of this activities **2,500,000** USD per year.
7. **Municipalities and partnerships** - for municipalities This challenge can be a significant advance to the urban space. Developing income of foreign students who pay for trade, employment and municipal services can be an excellent source of financial income. The establishment of the academic infrastructure increases the importance of the municipality and praises the name of the city. There are high quality lecturers, researchers and students, thus increasing the fabric of human capital. The partnership with the Academy has always added a dimension of quality for each municipality. The municipality benefits from advanced libraries, public buildings, construction of large housing solutions for students. In addition, the arrival of foreign students will result in significant momentum in the municipal composition of the residents. Once foreign students arrive, the number of faculty members will rise, and professors, researchers and laboratory experts will arrive in the city. This increase will give financial value to the city's real estate. The estimated cost of this activity **is 1,500,000 USD per year**.

Table 4.11. The financial costs (US $ by department) of the all Mechanism

The government Ministry	The Output required	The total cost
Directors of The National Mechanism	To coordinated and comprehensive management of the four components of the mechanism to increase the demand of foreign students, and to reduce the brain drain.	**$ 1,100,000 per year**
The Ministry of International Relations	Implementing a program of international cooperation with "target countries" for academic, commercial, and industrial cooperation Focus on countries which the foreign students come - on purpose to create international connections.	**$ 1,100,000 per year**
The Ministry of Tourism	Implementation of a strategic plan in the area of academic tourism, and significant assistance on the tourism and marketing side of the mechanism. Creating "tourist products" for foreign students. Implementing a program of international cooperation with target countries for academic, commercial, and industrial cooperation	**$ 1,500,000 per year**
The Ministry of Education	Implementing a strategic plan for higher education, while raising all the required academic indicators in order to create an attractive academic space for foreign students and faculty of university lecturers and research that will return to Israel. Increase the number of foreign students by 100% within 5 years.	**$ 20,000,000 per year**
The Ministry of Finance	Implementation of an economic support program in all departments of the mechanism, a change in taxation policy for academics, reform and a significant reduction in tuition fees for foreign students. Sponsorship and economic control of the mechanism.	**$ 2,500,000 per year**
Municipalities and partnerships	Accompanying the establishment of municipal infrastructures suitable for foreign students, helping them integrate into the municipal community, providing support for projects that promote the return of high-quality human capital (Brain – Gain).	**$ 1,500,000 per year.**
		Subtotal of the investment $27,700,000

Source: Made by the Author from source [186].

The implementation to the Israeli Council of Higher Education (CHE)

The recommendations of the research editor of the Council for Higher Education are primarily to focus on the establishment of the innovative mechanism, which is supposed to increase the demand for academic mobility by foreign students, and on the other hand, to deal with the phenomenon of brain drain. The Council for Higher Education in Israel is supposed to be responsible for the following steps:

1. Attractive program for foreign student – the Board must to creating innovative and attractive learning programs that emphasize Israeli uniqueness and its academic advantages

- desert research, energy sources (electricity / water), innovation in food sources, modern agriculture, high technology, biotechnology and medicine. The Education Council must conduct a comprehensive review of the universities and create cooperation between them by highlighting each institution's advantage and uniqueness. Coordination is critical.

2. The Council for Higher Education must open additional study tracks in sought-after faculties if the ministry wishes to make an Israeli student study in Israel. For example, the number of medical students in Israel is the smallest in the Western world.
3. The right direction for the cooperation - The right way, according to the Author of the thesis, is to create an academic collaboration, with the help of the Ministry for International Relations, with countries where foreign students are in high demand for study in Israel. The common interest of knowledge exchange, joint research projects, an economic relation, are the global norms of the future.
4. The obligation to participate in anonymous programs of student education on a larger scale. Today there are five programs in which Israel participates, but the total number of partner institutions is limited, and all the time it reaches the same institutions (universities of Tel Aviv, Hebrew, Ben Gurion). All this in order to show the presence of academic space and its advantages. The Council for Higher Education must make budgets available to academic institutions by commitment and orientation to the absorption of foreign students. There is a problem today, according to the approval of the Council for Higher Education, that there is almost no cooperation and uniform outlook on the benefits in increasing the demand of foreign students. The only advantage facing true institutionalization is the financial side only.
5. Quality of teaching services and academic methods - The Council for Education must use the regulation at their disposal, which is to enforce and control the quality of teaching. Apart from a small number of faculties (doctor, engineering) there is almost no quality control (as requested by the Bologna Reform). The council should introduce quality controllers, replace irrelevant lecturers and researchers, and offer Israeli researchers and experts to work in Israel. The quality of instruction, research and use of these methods are the primary requirements for foreign students to study in Israel.
6. Appropriate Organizational Structure - Currently, the Council allocates 5 positions of employees and experts who handle all national and international programs together. Not only that, the same team (5 employees) also deals with setting the internal strategic policy of 67 academic institutions, and connecting them to students, delegations and external projects. This allocation is very low, and if this continues, the plan and the mechanism will

not succeed. The Council is committed to assigning higher standards in order to give expression and time to the urgent issue.

The strategy for the Ministry of Education are to enable the innovation of the mechanism, to create a "professional and economic umbrella" for the new mechanism, to maintain its existence from foreign interests (internal politics), and to consider new policy issues for the following issues:

1. Comprehensive reform of the tuition fees of the foreign students - it is unlikely that the tuition will be at a similar cost to tuition in American universities (average of 20,000$ for academic year). So where is the competitive advantage over the United States? Why should foreign students will come? Tuition fees can be higher (like the other countries), but the total cost should be fair, as for the Israeli student.
2. Creating international relations with countries from which there is a demand for academic mobility to Israel. The State of Israel, and the Ministry of Education in particular, have been making a big mistake for several years (since 2010). The Ministry of Education considers academic mobility to Israel to be only an economic interest that will contribute to the financial balance of each institution, and little to the trade surrounding the academic institution (profit to municipalities).
3. The author of the thesis recommends a broader and broader view of the overall contribution of academic mobility and the sharing of international interests with other countries, the basis of which is academic space. Today's financial income for an academic institute is between $ 16,000,000 - $ 18,000,000 per year. If the ministry will do the right policy, the state can increase significantly, and even reduce the brain drain and academic mobility of Israeli students. According to the data, 15,000 students are now enrolled, each subsidizing about $ 15,000 each year, or all the student together - $ 225,000,000 each year.
4. The "Shochat Committee"[164] was convened in 2009 and has already made representations recommendations must start immediately, because the situation is getting worse (brain drain from Israel). A committee set up by the state government of Israel to discuss the future of the academic establishment and subsequent recovery reform proposal recommended the following amendments [164]:

- The addition of NIS 2.5 billion ($641,000,000) budget year universities and colleges in six years, of which 1.5 billion from the state budget
- Streaming 800 million ($200,000,000) for rehabilitation and condensation university research infrastructure; Doubling the budget for the National Science Foundation, will stand at 500 million; 100 million to establish a fund for Biomedical Research; 15 million to establish a fund for research in the humanities.

5. Educational Tourism - Academic - The idea is in cooperation with the Ministry of Tourism. The connection between the Ministry of Education and the Ministry of Tourism will have two aspects:

- Marketing Israeli academia in target countries, in accordance with an understandable strategic plan (by the mechanism). Tourist package for the foreign student, including accommodation, accommodation, tourism and knowledge of Israeli culture, providing full information about domestic tourism centers, assistance in directing religious and traditional sites, laundry services, catering, medicine.
- Each "package" is possible according to the study track - "academic experience", full study, research or academic teaching.

6. Active participation in the absorption process of foreign students, foreign researchers, academic delegations from foreign countries. Providing an infrastructure of tourist assistance.

4.4. Conclusions of the Chapter 4

1. Many countries deal with the academic mobility of students to study in another country. All the countries examining this thesis have provided a solution that has proven to be efficient and includes an academic-economic process. Starting from the UK, which established an independent mechanism (budgeted by the government) named NARIC. The mechanism succeeded in increasing the national expenditure on education by 66% (the OECD average - 59%), the demand of 22,407 foreign students, and the reduction of over 1,000 British students. The Netherlands increased the demand of foreign students by 35,043 (an increase of 94% in 4 years), Poland added 42 academic institutions (since the introduction of the Bologna reform), an increase of 9,263 foreign students (42% increase in 4 years) On education of 5.7% of its GDP. This strategy increased GDP by 5% during these years. Similar positive data were also recorded in Germany, Australia.
2. The academic institutions in Israel have established with the Erasmus organization a comprehensive system of academic study frameworks. The ERASMUS office in Israel funds 3 main programs: semester studies, full academic study, research and MA. In 2016 there are 35 joint projects (Israel - European countries - North America - India and China). The leading universities are: Tel Aviv University, Ben Gurion University, Hebrew University. The total income of the universities reaches $ 85,500,000 per year.
3. The solutions to brain drain should be in a strategy of "integrative treatment" of the issue, not only by providing a temporary solution, or "affirmative action" in taxation or short-

term monetary benefits. A change in the overall policy will be the right solution, and will include various components, starting with the establishment of employment centers with appropriate wage conditions, tax benefits for academics, and self-development and professional development options. That is, a greater investment in the academic employee in Israel. The Center for the Return of Academics in Israel has obtained financial assistance for returning academics in an amount of over $ 40,000 for three years, which can certainly be a first step.

4. With the intention of a reliable solution, the author was decided to incorporate the **regression model in the research**. The regression model enables a practical importance of the results of the thesis by enabling a future forecast for the years of demographic and economic data by analyzing systematic and statistical data. The data of the regression will be provided by the research author to propose a theoretical-economic model whose results will enable the reduction of the exit of Israeli students to study outside of Israel, while simultaneously coping with the phenomenon of brain drain. The dependent variable is chosen to be the number of departures that includes students and the brain drain of professionals and academics (the brain drains). The other variables are actually the independent that explain the dependent variable. The results of the model clearly showed the following data:
    - The year 2011 is the breaking point - from this year, the brain drains from Israel began to diminish. At the same time, we see a significant increase in investment in education (48 million $ - 78%), especially in academic education. This period can be attributed to the significant increase in the number of academic institutions and research institutions. The State of Israel has begun to establish academic institutions in the periphery as well as in the central cities of the country.
    - The model results show a positive relationship, that is, a negative effect -

OUT = -42816.540097 * LOG (INSTITUTIONS_NUMBER) + 186561.652558.

The conclusion from the economic model is that when the government will create more **academic institutions**, such as investing in academic infrastructures (graph 4.8)which include: the establishment of institutions, centers of excellence, positions for researchers and professionals academics, raising the salary (and placing them in competition with salary in developed countries), tax benefits (similar to the OECD countries) Housing solutions, personal and professional development options, the students and brain drain will reduce.

5. The result of the economic model leads to a solution to the problem of brain drain by mutual development of infrastructure in order to increase the demand of foreign students and reduce the exit of local students and academics to other countries. This is an opportunity to create a system of international relations with other countries in order to cooperate with other academic systems in a similar situation. Today, students are losing more than $ 280 million annually to the academic system in Israel (mobility of Israeli students). According to the government decision it was decided to invest about $ 641 million in 2015 in favor of increasing the demand of foreign students.
6. For implement the economic model, a multi-system strategic solution, emphasizes the author of the study that only by establishing a national mechanism for managing the system. The mechanism presented in sketch 4.1 is the innovation of the present thesis and contains all the necessary steps to implement the research topic. The total cost of setting up a national mechanism is 27.7 $ (US) million per year, and is based on the mechanism shown in Table 4.11
7. The mechanism consists of four mechanisms whose cooperation will increase the demand of foreign students to come to Israel for academic studies. The program provides a common solution for the creation of educational tourism products, the marketing of Israeli academia, curriculum development and teaching methods, improvement of foundations and infrastructure of laboratories and research institutes, participation and intervention of local authorities in cooperation with academic institutions within the city. Based on the results of the regression model that presented the number of academic institutions - + ***186561.652558***. The author found that only by providing an accurate answer to the emerging problem (brain drain) will it be possible to deal strategically with the problem that arises in the study.

GENERAL CONCLUSIONS AND RECOMMENDATIONS

Beginning in 1999, when the Bologna Reform was established in Europe, the academic institutions all over the world have undergone major changes and developments. At an age in which technological solutions shorten bounds and processes, we find that the academy has a major part in the steering of the economic-social society towards a better future. One of the trends of the last couple years is the migration of populations. We are witnessing the rise and fall of other countries, and due to the demographic-economic-social-cultural-technological and educational changes, the academic higher education students are now meticulously changing their place of training and their professional track, and do not fear to move to other countries in order to choose their desired quality of life. This is a global issue and Israel, just like other countries, shares difficulties in decision making and dealing with this situation. Nonetheless, within the same world of opportunities and changes in the academic mobility, we are witnessing a trend of brain drain from various, developed and developing countries from all over the world. In the current age, the immigration has received a definition which is entirely different from previous times, and nowadays, it is possible to examine concepts such as educational immigration, work immigration and cultural immigration. The potential immigrants take into account, within their set of considerations, the considerations pertaining to the process of getting an education and the meaning of that process.

The author of the thesis wishes to discuss this problem of outbound students, academic staff and professionals academic (physician's, lawyers, engineers). He has provided the theoretical background, inclusive of various definitions to the major concepts, a presentation of the data and results, an analyzation of the quantitative data, a survey of universities and academic programs from all over the world, and, in addition, an examination of the basis of the changes that have occurred using practical and relevant information. The author of the thesis creates a theoretical economic model, and from the results made a new innovation of national mechanism. now, presented his conclusions, which had been laid out in the three chapters of the thesis. This is followed by several operative recommendations in an attempt to provide a reply to the current situation. This reply consists of the establishment of an independent mechanism, whose establishment is an outcome of the change in the policy and perception of the government as well as of its various institutions.

Conclusions

1. **The social and economic changes and revolutions** have created a worldwide immigration of populations and nations amongst countries. The previous definitions of the concepts of

academic mobility, academic immigration and brain drain have been changed and they no longer represent "a national situation" but rather a social-economic usage and even a major symptom within the global world. The author of the thesis wishes to redefine these concepts and to emphasize that:

1.1 **Immigration** - Educational immigration is the result of utopian integration of populations that move from one country to another, as a result of the students' desire for higher education to develop both professionally and personally. The aspiration for self-realization is the legacy of the present generations of young people, according to which the State of Israel is committed to creating conceptual changes. Immigration is not necessarily a one-way ticket; Instead, it can be changed and only temporary. Educational migration can lead to an increase in employment, because in the framework of their academic training, students are offered employment opportunities, and they also establish contacts and establish a family in the country to which they immigrated. According to the map 1.1, the State of Israel, and many countries in Europe are in demand for migration **of 5% or more**. There are countries (Africa, Central America, Central Asia) which are in demand **of 20% and more**.

1.2 The students' **academic mobility** serves the bilateral goals of the various countries. States benefit from foreign students, and it is their duty, through proper policy, to ensure, through proper policy, that they return to their borders once they have completed their studies. Academic immigration may lead to any other kind of immigration. There are a number of ongoing options for academic mobility, including academic adventure through the various options of ERASMUS programs and full-term studies or postdoctoral research at universities abroad, and academic mobility is an excellent starting point for creating a fabric of international relations between countries for mutual development and quality improvement. Table 1.2, present that there was a change in the correlation between the increase in demand for academic mobility and the gross domestic product (GDP), with countries such as Hungary with improvement of **9.2% ($ 26,446 per capita**), Germany with improvement of **9.4**% (**47,999 per capita**), and Ireland, with maximum improvement of **70.4%** (**$ 68,481 per capita**).

1.3 The brain drain is a worldwide social phenomenon, which even developed countries such as Germany, Australia and China suffer from. This trend is an advanced stage of academic mobility and of processes of educational immigration. Just like the other concepts which have been redefined, it is possible to reduce the brain drain phenomenon, and the State of Israel has to take actual steps to change its economic-

occupational policies with regards to its major target populations (researchers, engineers, medical doctors). the brain drains, with the outbound student's influence on the income of the universities. table 3.4 present the increase of the income tuition up to **22% - 30**% for the 7 years (2025), up to **17,500,000 $ - 22,000,000 $.** also, we see that countries like UK, Poland and other countries success to reduce the number of outbound student (table 3.1; 3.3).

1.4 Educational tourism is a futuristic and successful combination between the academic world with its target populations (students, teaching staff) and the world of tourism, leisure and accommodation, which is constantly renewing itself. The model of educational tourism which exists in Spain is worthy of studying and accommodating to other European countries as well as to the State of Israel.

The author of the thesis request to conclude from these re-new upgraded definitions of terms that sustained economic growth in most of development countries and the development of the information economy led to a considerable increase in migration of highly skilled individuals, especially in science and technology. An economic value for students and professional academic labor force create an employment problem and decline in the human capital. As describe in his article [97], In the context of increasing internationalization of education, academic mobility appears as a potential source of qualified workers from host countries' perspective, either during their studies or through subsequent recruitment. Study abroad can be part of a deliberate immigration strategy from the perspective of students.

2. The rate of academic mobility of Israeli higher education students has become as high as 14,000 students (according to the Israeli Council of Higher Education and the databases of the OECD and UNESCO). These students are spread out in various countries. In some of these countries, the author of the thesis has found evidence of a rise in the demand for mobility, whereas in others, the figure of academic mobility has remained rather stable since 2009. Most of the students wish to study in faculties of medicine, engineering, architecture, business management and design. The author of the thesis has recognized an annual increase in the demand for studies in the countries of Moldova, Romania, Germany, Italy and Eastern European countries, whereas in others, such as the United States and Great Britain, he has detected a decline, due to high tuition and accompanying costs. The estimated economic cost of tuition and living (excluding housing, accommodation and airline travel costs) is about **$15,000** per student, i.e. an annual income loss of **$210,000,000,000.**

3. When studying in Israel, the Israeli higher education student is required to spend about **$4,600 a year on tuition**, excluding accommodations and living (20,000$ for all degree). This is not considered relatively high for Israeli higher education students and the average student can afford it. In addition, there are a great amount of various scholarships which the students are able to take advantage of, if they commit to providing community services. The problem is that the limited availability in the prestigious faculties, such as medicine, pharmaceuticals, veterinary medicine, clinical psychology, and sciences (biotechnology, nanotechnology) leads to a situation in which many students are not accepted and thus, are likely to immigrate for academic or educational purposes.
4. **The State of Israel has not been able to successfully deal with the following three phenomena** – the academic mobility of Israeli higher education students who wish to study abroad, the low demand level of foreign students who wish to study in Israel and the brain drain of quality human assets. The author of the thesis shall suggest, in the Recommendations Chapter, to establish a national organizational mechanism, which does not currently exist, which shall enable, within a period of several years, to provide an answer to the current and future problems which are threatening the relevance of the Israeli academic zone in the world. The study conducted a **regression model**, in which more than 20 observations and 19 variables were inserted. After 4 stages, the study's author reached a **theoretical economic model** that enables **future forecasting**, which based on formula values. The results of the model are of scientific importance based on systematic data analysis (statistical significance of OUT = -42816.540097 * LOG (INSTITUTIONS_NUMBER) + 186561.652558). The model deals with **significant data (0.0023**) and the reasons that explain the brain drain of academics and students, and concludes that the main factor that can stop is investment in academic infrastructures (educational institutions, work positions). Graph 3.2 shows a record of 18,000 mobile students in 2001 and since then a slow decline until 2009, which is the statistical breaking point. Graph 3.5 shows a decrease in the academic investment (until 2009) and an increase in financial investment. This increase of almost 50% leads to a decrease in the percentage of mobility and brain drain. Financial income
5. **The economic-academic relations of the State of Israel** – An analysis of recent sources of information (published from 2012 to 2018) shows that the State of Israel does not have a great deal of economic-academic partnerships with other countries, except for the United States, China, India and Germany. These partnerships are based on a combination of joint mutual interests in the fields of security, medicine, hi-tech and research focusing on energy

sources and food. An analysis of the data provided by sources such as OECD, UNESCO and WTO show that while foreign students are coming to study in Israel, the State does not take advantage of this as far as the creation of economic relations. It is also worthwhile to mention that the limited relations that do exist have been formed due to the initiatives of individual universities (Ben Gurion, Tel Aviv and Hebrew Universities), without any government involvement. the project of Tel Aviv university and Jerusalem University with the ministry of education of China and India create an academic relationship for almost **1000 foreign** student (table 3.3), a Financial income of **20,000,000** $ for a year.

6. The phenomenon of the brain drain from Israel has been in constant development since 1973 (after the October War). Since then, the rate of the brain drain phenomenon rises every several years. The various reasons for the brain drain are connected by a certain reality which places pressure to look for work in other countries. The repetitive reasons which have appeared in every study in this field are: The living expenses (75% relevance), the low salary (64% relevance) the political and security problems (65% relevance), the burdening regulations (81% relevance), the high taxes (65% relevance), the housing problems, the unsatisfying educational level of the Israeli school system (43% relevance), the unemployment or lack of employment success of spouses, the lack of ability to develop professionally or personally (from an academic and/or vocational standpoint) etc. The table 3.10 presented in Chapter 3 demonstrates the reciprocal relations between the changing relevance of the above-mentioned factors to the choice made by many families to leave Israel. An analysis of the studies conducted by the Council of Higher Education and the Israeli Parliament (Knesset) shows that the State is not expressing concern with regards to this phenomenon, and that, in fact, it perceives it as a perfectly "natural" situation. The State claims, and shows this in its official data, that the numbers of students and families who return to Israel causes a significant decrease in the percentage of people who leave the country, and causes to remain stable at a normative 6.5% (tables 3.9; 3.12). The Author of the thesis has shown troubling data concerning the quality of human assets who exit the state and claims that the implications of this may disrupt the State's economic and social stability. The author of the thesis claims that the quality of the human assets (graph 3.9;3.10) whom are leaving the State causes a decline in the abilities and resources of the State. This is evident in that the economic productivity in Israel (as is expressed in the fields of production, export, agriculture and industry) has been declining for three years now [160;171].

The author also requests to express his personal opinion that the Israel's Brain Drain is Getting Worse. from analyzing the data from the Bank of Israel [171] and Central Bureau of Statistic [160] in 2018, for every person with an academic degree that returned to Israel, 2.6 such people left. By 2017, the number of negative emigrants rose to 4.5 to each person returning, a 73% increase. As present in his article [100], Israel is in a uniquely precarious position because out of a population of almost 10 million, only a small group of people, less than 130,000, are keeping the country's economy, healthcare system, and "underlying university bedrock near the pinnacle of the developed world." For example, while only 2.7% of people employed in the public sector are in tech manufacturing fields, in 2015 they accounted for 40.1% of all Israeli exports . The Israel's labor productivity stagnation, its increasing income tax burden on the educated population, and its rising living costs all threaten the country's ability to "to retain its most skilled citizens," as been written, and while the number of emigrants may be objectively small, it disproportionally affects the most educated groups, those who help keep Israel at the technological front.

7. The logical solution is having this government make a significant move, which shall begin with changing the way of thinking and acting of the State, followed by changing the existing policies and legislation, and preceding with the practical aspects – Creating an independent national organization mechanism, which shall be funded by the government, but have the freedom to act independently, without being subject to political fluctuations. This national mechanism will cost over than 27,700,000 $ for a year (table 4.11), but this is the resolution for reduce the brain drain and the loss of financial income.

   The make-up of this mechanism and its method of operation shall be elaborated in the Recommendations Chapter.

Recommendations

1. The first recommendation refers to the new legislation and policies of the relevant ministries of government – The Ministries of Interior(local government), of Economics and Finances, of Education, Tourism and international relation. Each one of these Ministries shall provide a proper response to the two target groups to which the new mechanism is concerned:

   1.1 **Recommends to the Israeli Ministry of Interior Affairs** shall create a fast track of approval visas to higher education students/teachers which shall enable their bearers to study in Israel without experiencing bureaucratic problems throughout their track of studies. It shall also enable Israeli citizens who return to Israel after having lived abroad for several years (brain return) to enter the State without

unnecessary delays and without hurting the absorption process which had been planned for them. In addition, the Ministry, which is in charge of the local authorities, shall provide incentives to those local authorities who shall exhibit willingness to contribute and develop foundations and infrastructures for foreign higher education students (housing accommodations, places for leisure and recreation, and medical, consumer and trade services). The arrival of quality foreign higher education students is likely to lead to a significant cultural-economic gain.

1.2 **Recommends to the Ministry of Economics and Finances** shall provide the mechanism with a budget for at least five years. This is necessary in order to ensure the mechanism will have the **independent** necessary budget it requires, not only for its economic needs, but also in order to cover its costs. Its way of thinking should be long-term, as this is a major change in the way that the academic institutions and the political establishment are being run. The Ministry shall provide an "economic umbrella" to the program, whilst referring to its various components and participating in every economic forum intended to renew the program. In any case, it is important to emphasize, that although the mechanism shall be government-funded, it shall also be independent and free of political considerations.

Furthermore, the Ministry representation shall be in charge of the international relations which shall be established with the destination countries, in order to find mutual economic interests, both on the business and academic aspects.

1.3 **Recommends to the Ministry of Education (inclusive of the Higher Education)** is the government office in charge of the "professional doctrine" of the program and mechanics. At first, an office representation shall be chosen. This representation shall participate full time in the work of the mechanism (and not merely as an additional task, as is the situation today). The ward of the Ministry within the mechanism shall be in charge of the professional contents, shall supervise on the manners in which the strategies are implemented, the reciprocal relations with the various institutions, as well as the professional contents which will be presented in detail hereinafter. In addition, in accordance with the results of the regression and the economic model, the Ministry will have to make increased financial investments that will increase the academic investment in

academia, which will be reflected in the establishment of modern academic institutions that will stop the phenomenon of brain drain.

1.4 **Recommends <u>to the Ministry of Tourism</u>** – The involvement of this Ministry shall focus mainly on marketing of the Israeli academy in other countries. This Ministry, who is charged with selling tourist services to hotels and various tourist attractions, shall open a new marketing campaign designed to advertise, promote and market the Israeli academy to designated audiences. In addition, the policy changes in the Ministry shall enable the creation of a new product service ever-increasing destination groups in Israel (of foreign academic students). The Academic Tourism Program shall provide the needs for temporary housing, leisure, culture and consumerism for foreign students.

2. **Budgeting activities and responsibilities of the mechanism (Sketch No' 4.1)** – This institution, as aforementioned, will be budgeted by the State but have the freedom to make independent decisions. The policies and methods of operation of the program shall be in its full authority, without the possible intervention of political factors. The mechanism shall be composed of representatives of the aforementioned government ministries and shall be responsible for the program in its entirety – its operation, measures of supervision and control, time tables and allocation of the necessary resources. **The management of this mechanism is estimated at $1,100,000** a year. This estimation refers to the expenses of manpower and the ongoing activities of the mechanism's representatives; it does not include the costs of operating the program itself, and of course does not include implementation of the results of the economic model that relate to investment in educational institutions, and an increase in the number of academic institutions. The two superior goals of this mechanism are:

2.1 Increasing the demand of foreign higher education students to study in Israel.

2.2 Balancing the phenomenon of brain drain from Israel, inclusive of decreasing the demand of Israeli higher education students to study abroad.

The structure of the mechanism shall include representatives of the aforementioned ministries, and its policies shall be implemented in each of the following areas: International relations, economy, education and tourism and local municipalities.

Recommendations for a <u>New National Mechanism (by departments)</u>

The goals are hereby presented in accordance with the professional field to which they pertain:

3. The department of Education and for **University Management** – for increasing the demand for foreign higher education students. In the course of the program, the academic institutions shall be obligated to perform a series of actions, inclusive but not limited to the following:
    - Developing innovative and attractive curriculums and adopting advanced teaching methods (such as MOOC) for foreign students (of medicine, hi-tech and engineering).
    - The establishment of innovative research laboratories which shall provide a competition to those countries which have leading and advanced academic systems (the United States, Germany, Australia and Japan).
    - Management of the academic quality control for teaching methods, technology usage, feedback concerning teaching staff, dealing with the foreign students and providing them with proper accommodations (living arrangements, leisure and cultural activities).
    - Enhanced participation in joint programs such as ERASMUS, beyond the five programs which currently exist.
    - A program for the creation of unique and academic differentiation amongst the academic institutions designed for prevention of duplication, on the one hand, and in order to stress uniqueness, on the other hand. A professionalization process for each of the academic institutions.
    - Increasing the numbers of positions for researchers and administrative and teaching staff. (This may be done in cooperation with the staff in charge of returning the scientists and teaching staffs back to Israel).
    - Conditioning the budgeting of academic institutions on their willingness to participate in international programs, as well as on the results and initiatives designed to increase the demand of foreign students to study in these institutions.
    - Accompanying the reform (in cooperation with the Ministry of Economics and Finances) concerning the tuition fee for foreign students, in which it shall be decreased to a level similar to that of parallel academic institutions elsewhere in the world. It is unreasonable that foreign students shall pay $18,500 in tuition per year when Israeli students pay $4,000. It is also worthwhile to offer scholarships to honor students who come to Israel for a full academic track. The tuition cost of

foreign students must be attractive in order for the Israeli academy to maintain a competitive edge in comparison to other countries.

- Accompanying the establishment of housing foundations and infrastructure (in cooperation with the Ministry of Economics and Finances) for foreign students and accommodating the recreation and sports facilities to the foreign cultures of these students.
- The estimated cost of these plans of the Ministry of Education - $20,000,000.

4. The department of Economics and Finances – Financing the various activities of the mechanism and providing a sponsorship in the form of "an economic umbrella" for the program. To this extent, the Ministry shall operate in accordance with the following principles:
    - To establish **additional academic institutions** with advanced human capital infrastructures, which will enable the absorption of scientists and engineers who return to work and live in Israel. In addition, a budget will be allocated to expand the development of existing institutions and to enrich them in faculties that are capable of absorbing foreign students and constitute a unique academic focus.
    - Accompanying and approving the **reform for decreasing the tuition** costs of the academic institutions which are offered to **foreign higher education students**.
    - Accompanying and financing the establishment of foundations and infrastructure of living arrangements, laboratories and lecture halls, investment in technologies and advanced equipment, establishing academic "greenhouse" halls for excelling faculties, investing the budgeting of studies which bear economic and national profitability.
    - Assisting in temporary funding to the Ministry of Tourism for the process of accompanying the marketing of the Israeli academy.
    - Changing the taxing policy for scholars and creating new priority ranks concerning the taxing status of returning Israeli scholars.
5. The department of Tourism – Participating in the program and having representations with permanent positions for participating in the mechanism. During the first years of the mechanism, the office shall place on emphasis on the following goals:
    - **Marketing the Israeli academy in destination countries** in accordance with the strategic marketing plan of the mechanism.

- **Proposing a product of Academic Tourism to students who come to study in Israel** for short periods of time ("Academic Adventure"), whilst comprising the resources for an adventurous stay which shall interest them in participating in a longer academic program (full-term studies). The Academic Tourism must provide for all of the needs of foreign students, inclusive of sleeping arrangements, making good use of leisure time, learning the Hebrew language, getting acquainted with the Israeli culture, going on trips, family visitations to Israel etc.
- The Ministry shall participate **in joint forums with the representatives of the local ministries in order to establish joint foundations and infrastructure.**
- The estimated cost of the participation of the Ministry of Tourism in the mechanism is $1,500,000 a year – not including the operation of the various projects.

6. Recommends to the **department of International Relations** – This office is in charge of the most significant part of the mechanism, as the products of its work are the strengthening of the position of Israel in the academic-economic world, on the one hand, and on the other hand, in its great ability to contribute to each one of the goals of the mechanism:
   - **Forming connections with the countries from which foreign students come to Israel, in order to create a mutual bidirectional academic path**.
   - Finding **economic-social-industrial interests** with other countries who participate in the academic mobility to Israel, as well as academic mobility of students from Israel. An example for this is the political connections that Israel has with Italy, Ukraine, China and India. These relationships are strictly managed by political factors and not by a framework such as the proposed mechanism.
   - By having ongoing international relations (in cooperation with the Ministries of Economics and Finances and Education), one can appeal to Israeli researchers and professionals who live outside of Israel and to suggest that they join the regular job positions within the international activities Israel undertakes in foreign countries.
7. Recommends **to the Municipalities and local institutions** – These organizations shall be partners to the daily activities held for the foreign students within the various cities. The municipalities are likely to fully benefit from the arrival of thousands of foreign students, most of which are quality human capital who has come to Israel for a good cause – to acquire an education. The foundation and infrastructure that shall be built for the benefit of these students shall be operated by the local residents, who shall profit

from the new job openings, as well as from the new services and cultural activities provided within their cities. In order to implement this idea, the municipalities will have to act in accordance with the following policies:

- Budgeting **the hiring of manpower whose job shall be to form connections between foreign students and municipal services.**
- Undertaking the building and operating of student centers (dorms, cultural centers, libraries, sport centers, commercial areas).
- Recruiting external donations for funding of international projects held in cities.
- Participation in the marketing activity of municipal academic centers.

To summarize, **according to the author opinion**, Israel basically has two economies, with one shouldering the burden of the other, because this burden is becoming too heavy, higher-income, higher educated Israelis choose to leave. The author describes in his article [98], that there is the high-tech Israel, the university Israel, the medical sector Israel, the Startup Nation Israel. But there is another Israel, and that other Israel is receiving neither the tools nor the conditions to work in a modern economy. The proposed mechanism is an innovative platform which does not yet exist. The manager of the International Relations Department in the Council of Higher Education [197] has indicated, in the document which summarized the Department's activities during 2016 that the State of Israel is prepared for the establishment of such a mechanism, but that nothing has yet been done for the creation of the national mechanism which shall take care of the various aforementioned issues. Keeping a much larger share of the highest-producing members of the population would put the entire economy on a much steeper growth path.

There is no doubt that such activities, when performed by one, independent mechanism which is free from worrying about budgets and political intervention, shall successfully increase the demand of foreign students, and minimize the extent of the brain drain phenomenon.

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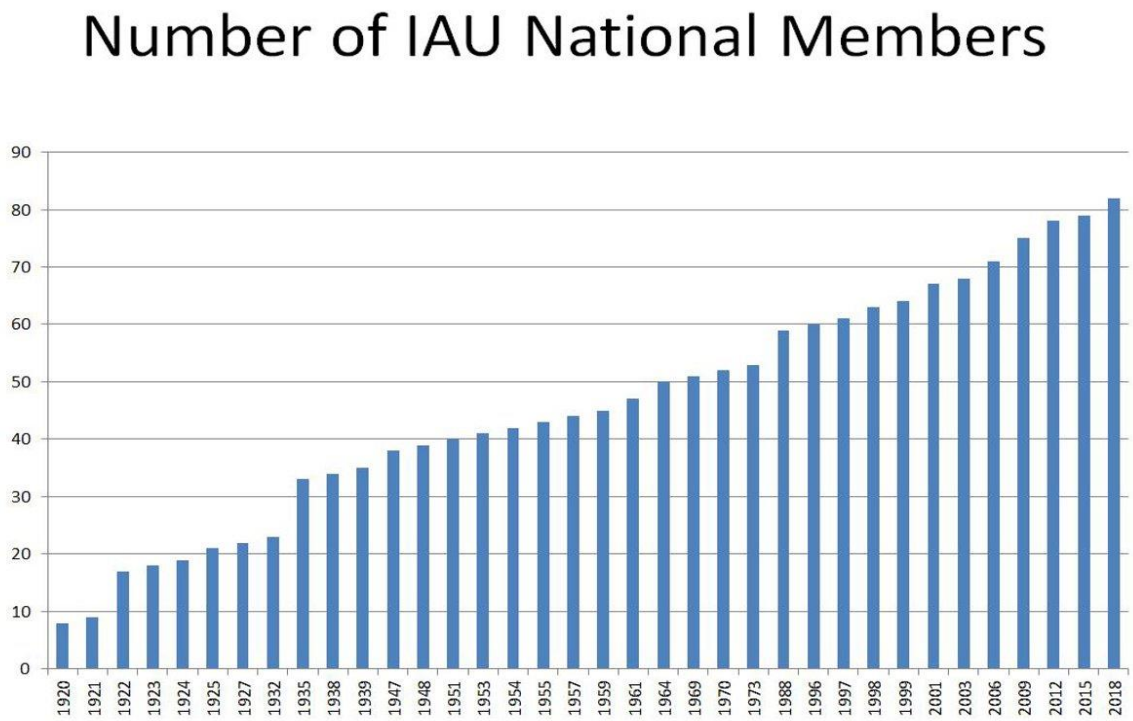
ANNEXES

Annex 1

Countries of IAU National Members



Source: [195]

Annex 2

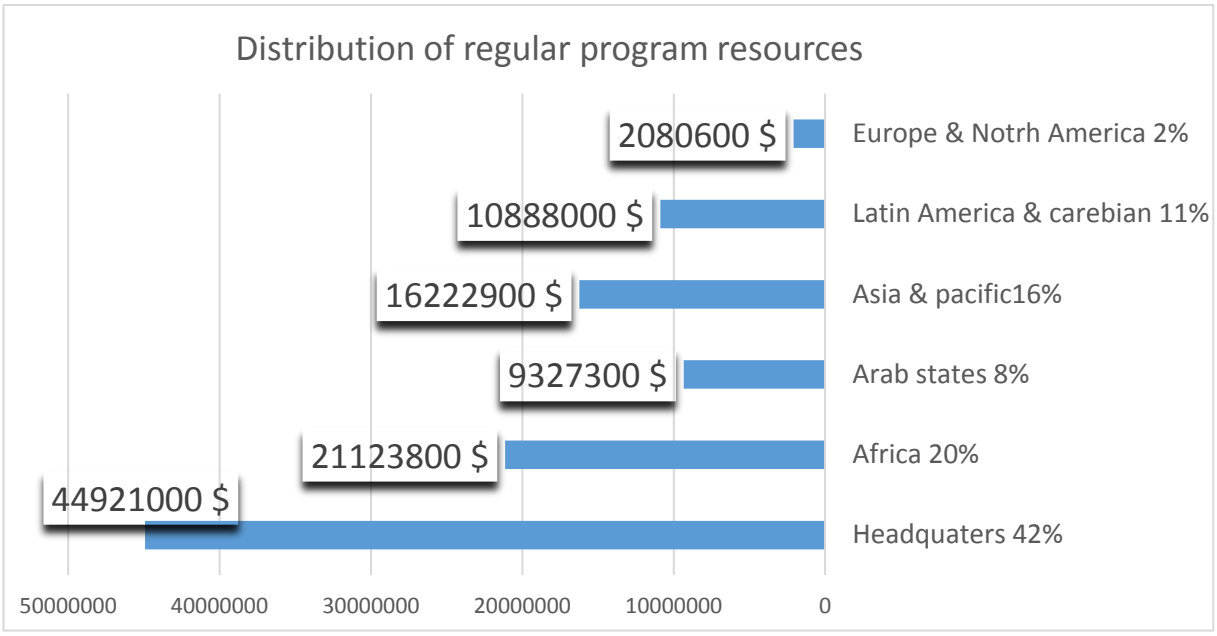
The numbers of dropping student of educational system

Year	Azerbaijan	Bulgaria	Hungary
2008	56,897	7,812	19,348
2009	84,704	4892	16,820
2010	102,011	5,402	14,717
2011	102,629	8,312	14,093
2012	110,026	8,057	19,186
2013	*98,008* The start of implementation of the program	9,096	*20,373* The start of implementation of the program
2014	95,428	17,761	16,393
2015	92,606	21,277	12,498
2016	92,200	*7,196* The start of implementation of the program	8,172
2017	89,321	6,100	6,100
2018	83,655	3,228	3,228

Source: [164,162]

Annex 3

The UNESCO's investment amounts in the countries



Source: [186]

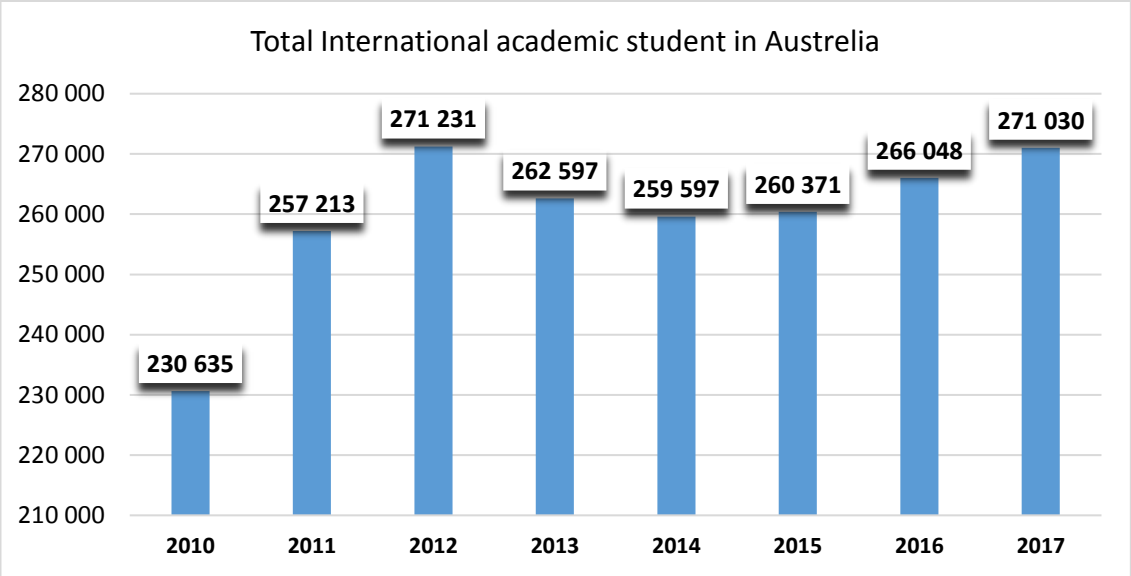
Annex 4

The projects and centers of the EU through the ERASMUS + program (2017):

Source: [174].

Annex 5

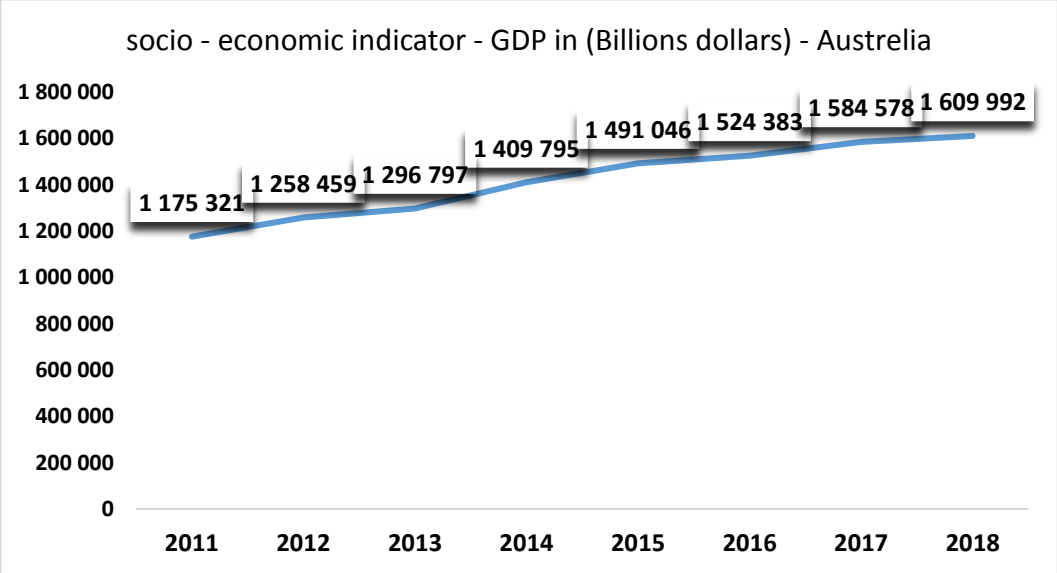
The demand for Academic Mobility in Australia:



Source: made by the Author from source - [186].

Annex 6

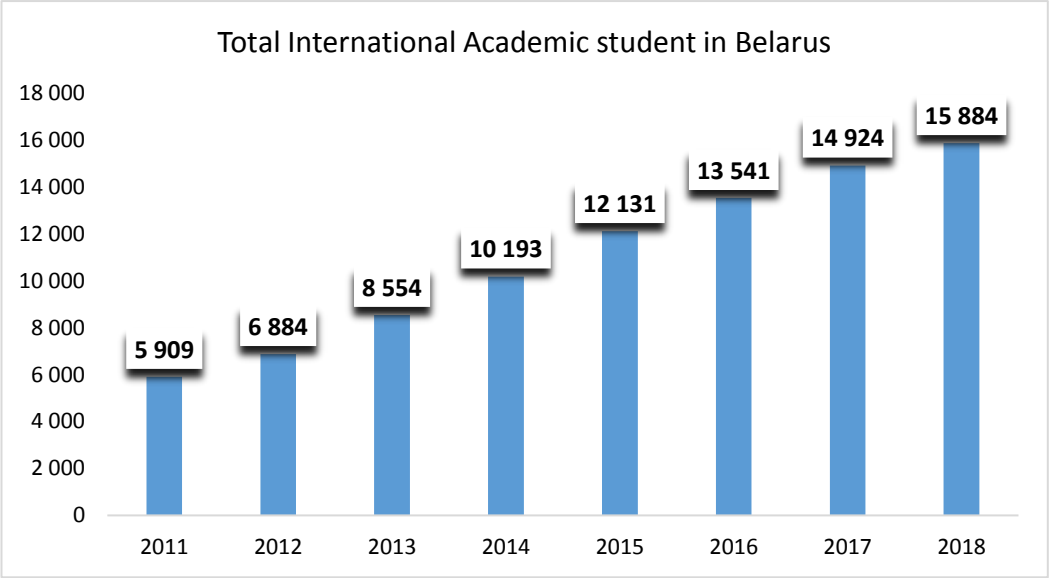
The GDP index in Australia between 2011-2018



Source: [174]

Annex 7

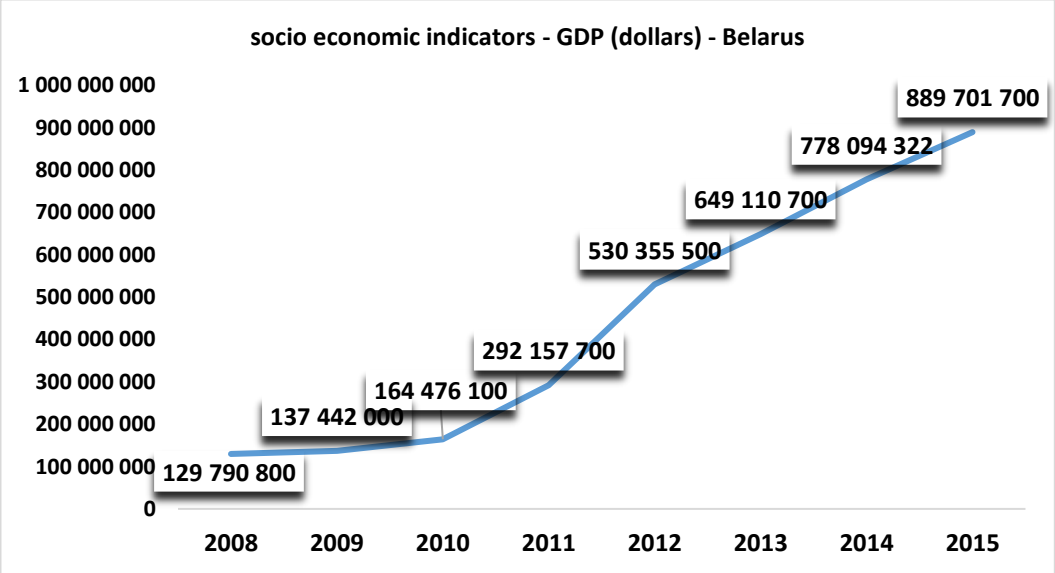
The demand of Academic mobility to the state of Belarus



Source: [186]

Annex 8

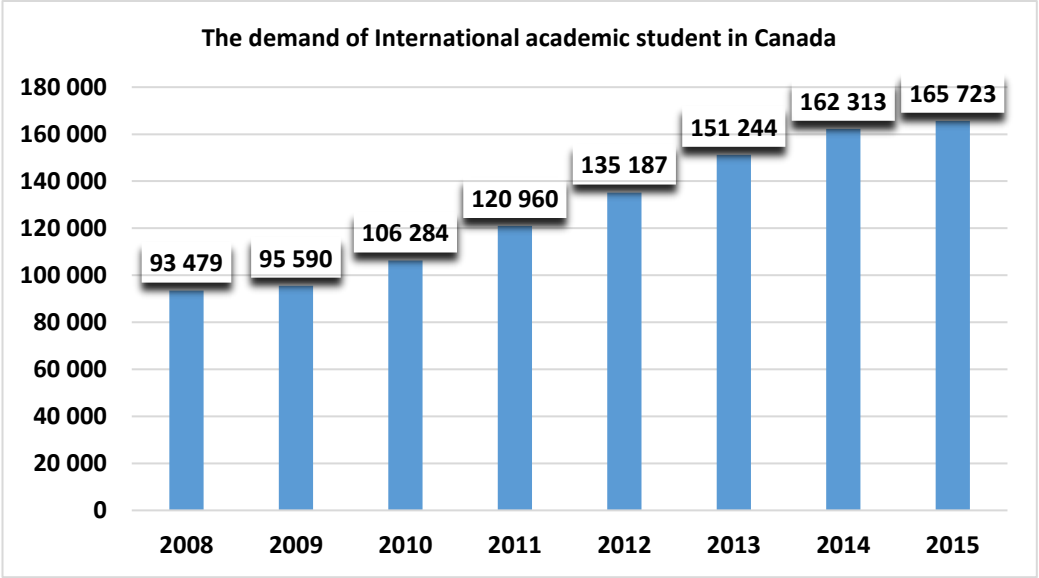
The GDP index in Belarus between 2008-2015



Source: [186]

Annex 9

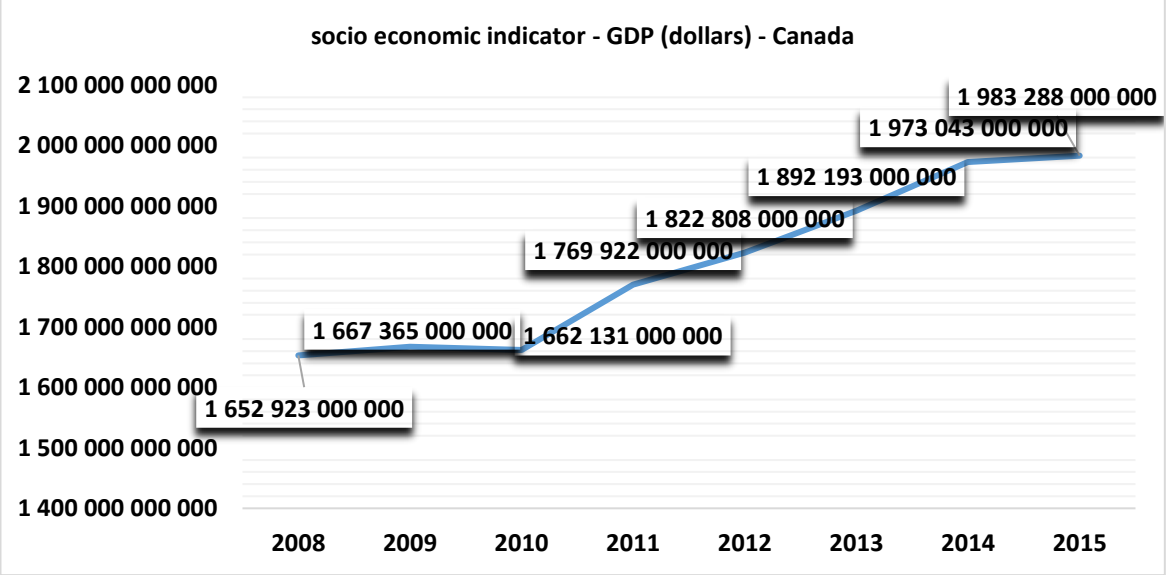
The inbound of international student to Canada



Source: [186, 182]

Annex 10

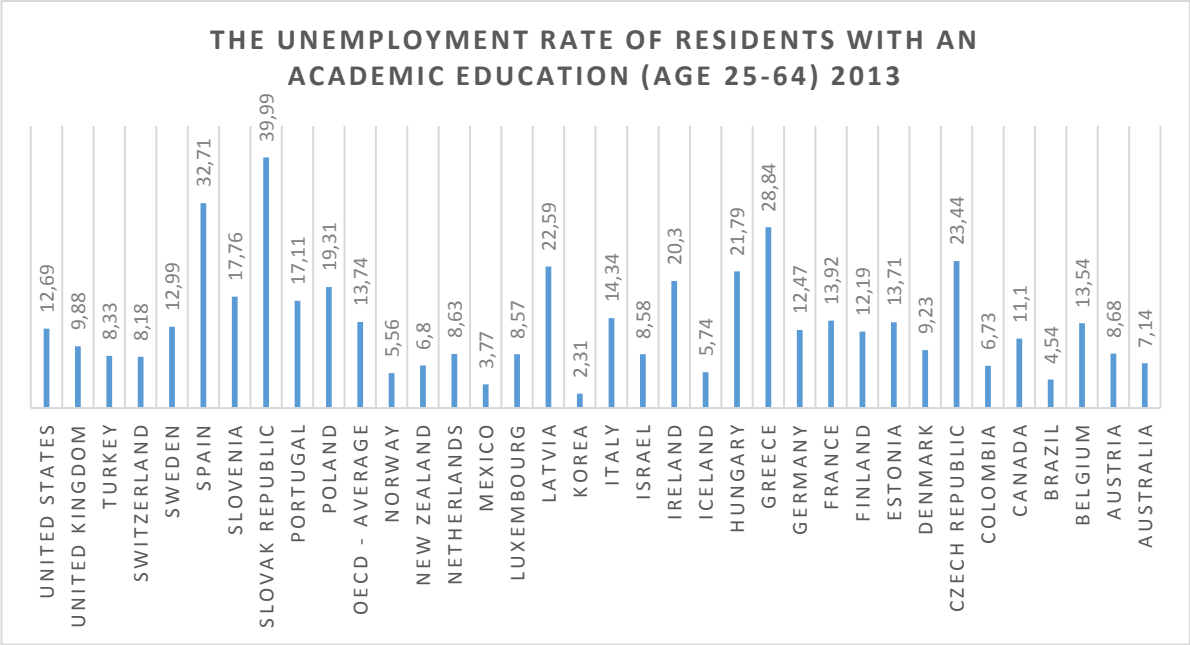
The social economic of GDP of the state of Canada



Source: [186]

Annex 11

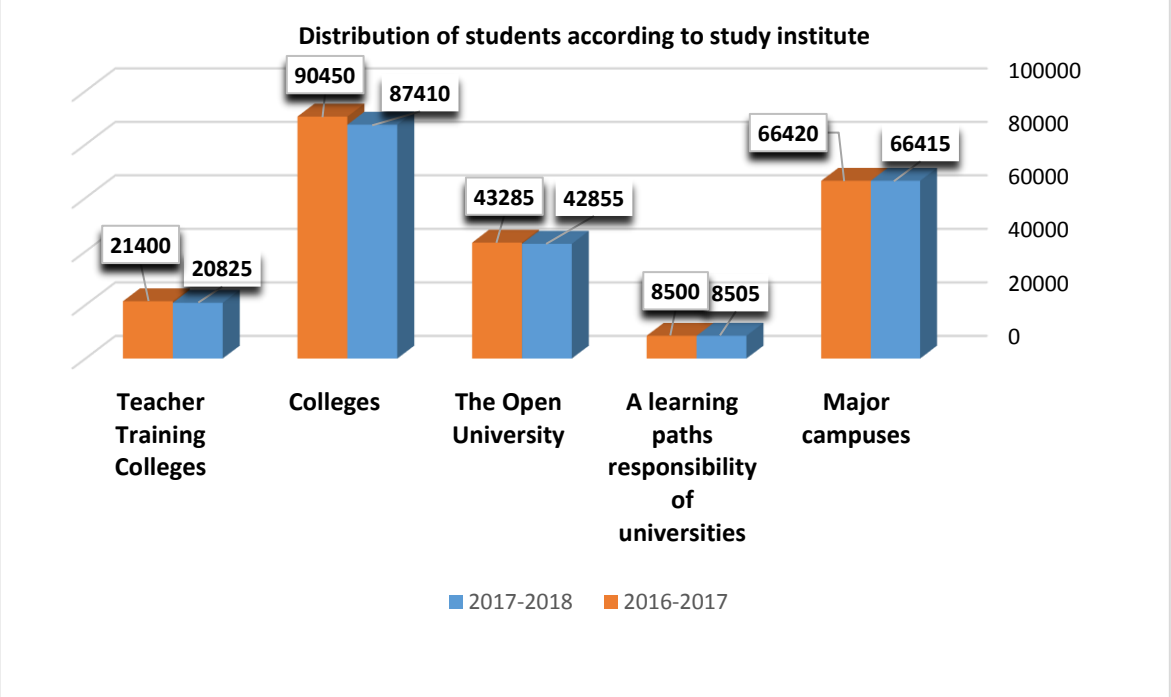
The percentage of academically trained unemployed in Europe



Source: [89]

Annex 12

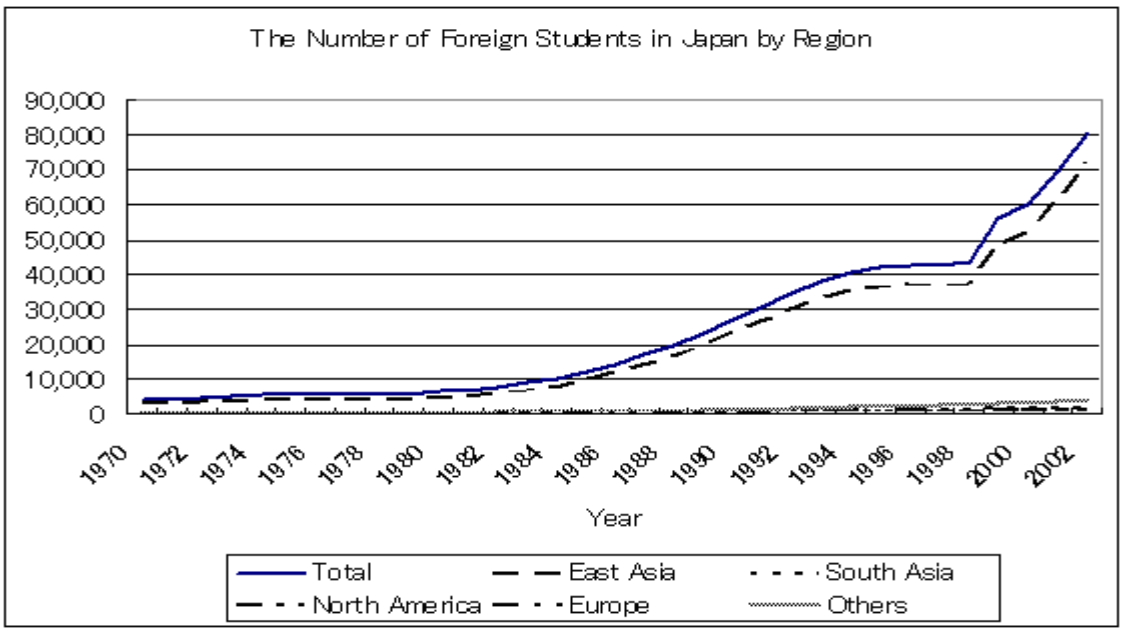
The distribution of students in 2016 - 2018



Source: [190]

Annex 13

The increase in demand of students from East Asia and Europe to Japan



Source: [160]

Annex 14

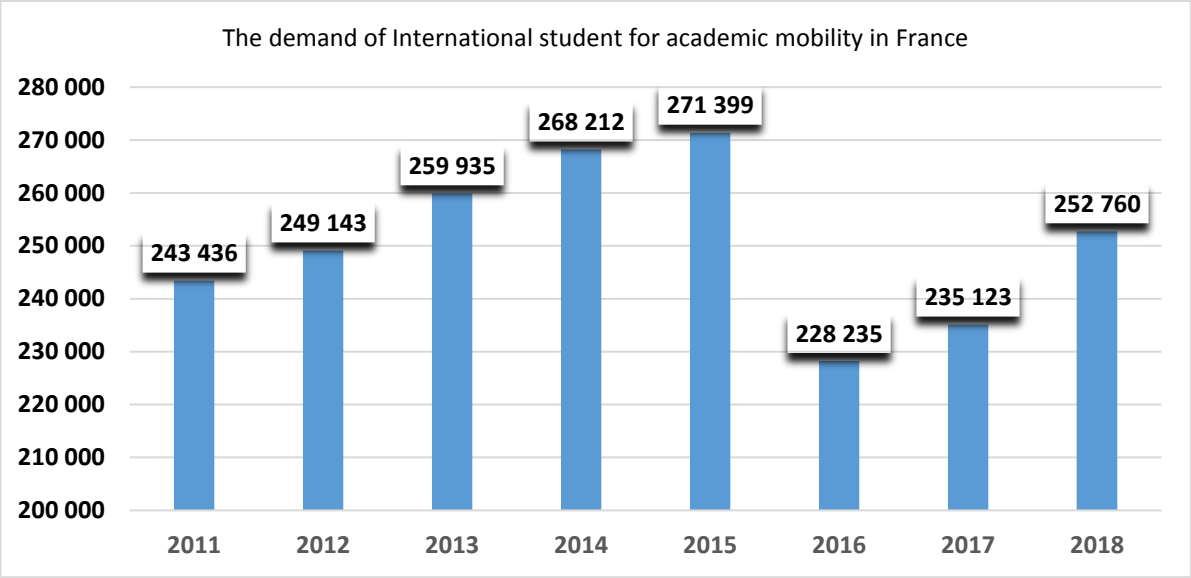
The comparison of data on students demand the Australia - US-Israel

	Israel	Australia	United - State
% Of students enrolled in academic institutions- Top 200	26%	31%	9.5%
% Of foreign students of all students' learners in higher education	2%	20%	3.4%
Average tuition funded in national institutions - in $	$2350	$3850	$5000
Average tuition fees of private academic institutions - in $	$7000	$7500	$14400
Average tuition fees for foreign students in$	10000$	$10000	$14400

Source: [199]

Annex 15

The demand of International student for academic mobility in France



Source: [189]

Annex 16

TIMES newspaper's ranking for 2018 at an academic level

Academic Rating	Overall Rating	Name of Institution	The number of students	Number of foreign students	The percentage of foreign
1.	1	Harvard University	20042	4515	22.5%
2.	5	California institute of technology	2245	552	24.6%
3.	9	Massachusetts institute of technology	11032	3042	27.6%
4.	12	Princeton University	7242	1365	18.8%
5.	17	Stanford University	15073	3751	23.9%
6.	30	Univ of California , Los angles	38128	4704	12.3%
7.	36	Univ of California ,Berkeley	33933	3167	9.3%
8.	13	Johns Hopkins Univ	19505	2635	13.5%
9.	2	Yale University	11416	2026	17.7%
10.	15	Cornel University	19639	3746	19.1%

Source: [193]

Annex 17

A certificate of innovation - minimizing the brain drain from Israel

MINISTERUL EDUCAȚIEI AL REPUBLICII MOLDDOVA

Academia de Studii Economice din Moldova

Centrul de Inovare și Transfer Tehnologic

CERTIFICAT de INOVATOR

Pentru inovația cu titlul

Diminishing the brain drain phenomenon in Israel

Inovația a fost înregistrată la data de 02.03.2017
la Academia de Studii Economice din Moldova

Se recunoaște calitatea de autor(i)

Alon MENIN

Rector ASEM
Dr. hab., prof. univ., academician
Grigore BELOSTECINIC _____

Directorul Centrului
Dr. conf. univ.
Lilia SARGU _____

L.Ș.

Nr.49

Data eliberării:
09.02.2017

Implementations and recommendations letters of professors

Ben – Gurion University Of The Negev
P.O.B. 653, Beer – Sheva 8410501, Israel

אוניברסיטת בן – גוריון בנגב
ת.ד. 653, באר – שבע 8410501

August 8, 2017

Free International University of Moldova –ULIM
Chisinau, Moldova

Dear Sir/Madam,

Re: Menin Alon

On February 18, 2017 I wrote to you regarding the research conducted by Mr. Menin that:

"The international mobility of students is of great importance in planning higher education for the twenty-first century. Therefore, the study planned by Mr. Menin Alon (" Demand Study of Israeli Students for Higher Education for Mobility at the International Academy ") may help to chart the future development of institutions of higher education in Israel. "

In rereading his work, I would like to emphasize its applicability to a variety of organizations, especially institutions of higher learning. In my opinion, the ideas presented in Mr. Menin's research can be utilized by universities, colleges and personal departments in competition for students. I would like to confirm that the thesis has already answered the research problem that arises, and is adapted to the research goals.

Sincerely yours,

Nachum Finger
Professor (Emeritus)

המחלקה להנדסת תעשייה וניהול
Department of Industrial Engineering & Management
אוניברסיטת בן-גוריון בנגב
Ben-Gurion University of the Negev

11.8.2017

To

Free International University of Moldova – ULIM

Re: Endorsement for Alon – Zvi Menin - Ph.D Thesis

I would like to endorse the materials of Alon Zvi Menin's (ID: 059695361) Ph.D thesis - **A Demand Research of Israeli Higher Education Student for International Academic Mobility**, including quality processes and ideas.

The thesis addresses a very important and timely situation in Israel which faces a serious academic brain drain. The thesis' conclusions are worthy of implementation in all faculties of academic institutes, as is the case at Ben-Gurion University of the Negev. The thesis is very relevant and applicable. I hope that policy makers in Israel and various academic institutions will be able to benefit from this research and hopefully take actions to moderated the problem.

I wish Alon all the best.

Sincerely,

Joseph S. Pliskin

Professor Emeritus

email: JPliskin@bgu.ac.il:דוא"ל | Fax: 08-6472958 :פקס | Tel: 08-6472219 :טלפון
אוניברסיטת בן-גוריון בנגב רחובות ומצויות

Responsibility Statement

On my signature, I, Menin Alon, declare under my personal responsibility that materials, which are presented in the doctoral thesis, are the results of my personal scientific research and studies. I am aware that otherwise I will carry the responsibility in accordance with the current legislation.

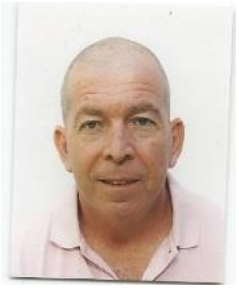
Menin Alon

_____

(signature)

Date: 21.12.2019

CURRICULUM VITAE



Personal Information

Date of birth: July 14, 1965, The state of Israel
Address: 23/2 Bareket St, Pardes Hana, Israel 3702647
Home/fax telephone: 972-77-6275150
Mobile telephone: 972-54-7473383
E-mail: alonmenin@gmail.com
Skype: alon.menin
Nationality: Israel

Academic Education

2013 - Now	Ph.D. thesis in Economic – Free international University of Moldova
2003-2005	M.A in Business Administration from Derby University, England
1993-1995	B.A in physiology stress and physical training of children From North – Umbria - England

Professional Education

2011-2012	Member of an urban forum for managers and professionals from the teaching field
2009	Administrative training in high schools in northern district, State of Israel
1997	Administrative course community centers

Employment History

2014 – Now	Teacher & lecturer in Industrial management \ marketing for practical engineers and students in ORT College.
2003-2014	Principal of a private school for students with learning and behavioral difficulties.
2002-present	Lecturer in a few colleges (courses that improve the employee skills in public administration, management, service and marketing in organizations Instruction).
2000-2003	District manager of computer training company
1997-2000	Director of community centers.

Personal Skills

- Ability for varied and interesting teaching
- Control of Office software
- Effective training ability and achieving results
- Ability to work in a multidisciplinary work team

Knowledge of languages

Hebrew – excellent – Mother Language / English – very good

List of Scientific and Methodological Works

***Scientific Works*:**

1. **MENIN, Alon**. *The processes of management and education in a multicultural zone and globalization*. London: Academic.edu. Vol 1, 2014. 11-13 p. ISSN 1321- 3229. Available at: https://www.academia.edu/13213229/The_processes

2. **MENIN, Alon**. *Directional career and academic education in the age of globalization*. Chisinau: ULIM, Free University of Moldova, Seria Economie, Vol 16, 2015. 177-182 p. ISSN 1857-1468.
3. **MENIN, Alon**. *The phenomenon of "brain drain" from the state of Israel*. Chisinau: Instrumental Bibliometric National, 2015, 157-165 p. ISSN: 1857-4440, ISSN-E 2587-3393.
4. **MENIN, Alon**. *The bologna process - Current Status in Israel*. India: Asian academic journal, 2014. 11-14 p. ISSN: 2321-2454.
5. **MENIN, Alon**. *The impact of internationalization on higher education systems. A brief look at the State of Israel*. India: Asian academic journal Vol 3, No' 5, 2015. 361-365 p. ISSN: 2321 -2454.
6. **MENIN, Alon**. *Tourist trip as a "power full learning"*. Chisinau: USEM, Tourism Conference, 2015. 99-103 p. ISBN: 978-9975-3041-8-4.
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8. **MENIN, Alon**. *The financial budgets of higher education – reference to the situation in Israel*. In International Conference "Dezvolotarea sistemelor economice moderne: provocari si alternative a le secolului xxI", 26-27 April, 2015. 138-142 p. University of Slavona, Chisinau. ISBN: 978-9975-117-36-4
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Copyright certificates for inventions:

1. Certificate of Innovation for Innovation with the title: **"Diminishing the brain drain phenomenon in Israel",** Academy of Economic Studies of Moldova, Center for Innovation and Technology Transfer, 09.02.2017.