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INTERNATIONAL EDUCATIONAL MOBILITY IN ISRAEL AS A FACTOR FOR FORMING THE KNOWLEDGE ECONOMY

SPECIALIZATION 521.03. ECONOMICS AND MANAGEMENT IN THE FIELD OF ACTIVITY

Abstract to the Doctoral Thesis in Economics

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I. THE EMPHASIS OF THE RESEARCH IDEAS

The relevance and significance of the current thesis lies in an in-depth examination of the effects of academic mobility in Israel on the economic knowledge implemented in the State of Israel. The present study will present a clear picture of the academic region in Israel, with an emphasis on the international student movement and the influence of the Israeli student movement on the economy and its causes. At the outset, the current thesis will comprehensively examine the subject of academic mobility, as it exists in the world, with its various definitions, while examining the academic mobility world that characterizes the students of higher education in Israel.

In addition, the author will examine the new innovation of concepts such as educational migration, economic concepts such as gross national product, local product, knowledge economy, employment factors and modern and traditional industry.

The relevance is the result of a systematic investigation of data using the regression model, which is translated into a theoretical-economic model that enables the implementation of the main factors for improving economic knowledge, minimizing the brain drain, and increasing the demand of foreign students. The economic-theoretical model is translated into a schematic model that was issued to the Israeli employment authorities and is suitable for immediate implementation. The ideas of the model are to transform the model into a national mechanism that will be responsible for increasing the knowledge economy in Israel, while integrating external quality human capital, which contributes to the development of the economic knowledge that did not exist before. Moreover, the additional relevance of the present thesis is in the sense that it provides an innovative conception of different concepts and provides an updated, updated version of the existing reality. The author of the thesis explains concepts such as "**knowledge economy**", "**modern/traditional industry**" and "**labor migration**" In addition; the thesis provides a broader and more structured reference to brain drain, which to some extent is the result of these concepts.

The description of scientific research and the Identifying the research problem in the academic space, there are a lot of theses which discuss the efforts of the globalization, academic mobility, and economic contexts in each country. All those are without offering a practical solution. The current research problem is the effort of academic mobility in Israel on the development of economic knowledge in Israel. This issue is very relevant because it provides a comprehensive picture of the global trend, and future observation of influences that already exist but have not been investigated:

- Academic mobility of foreign students to Israel, and their academic integration.
- Analysis of the demand of a foreign student in Israel.
- Analyzing the global effects on traditional industry, increasing the professions of economic knowledge, transition to service professions, adult education.
- The innovation of a model to increase economic knowledge in the country through academic mobility.

This thesis presents a clear and reliable indicator by a theoretical-economic model that includes numerical / quantitative data, demographics, industrial trends and employment, tax revenue. The applied model provides a long-term response to the already existing phenomenon, which requires a response from the Israeli government.

The research goals and objectives of the thesis are to provide depth examination of the effort of this phenomenon. The main goal is to emphasize the effect of the academic mobility on the knowledge economy in the local industry of Israel, and to find the creative actions and implementation of thesis ideas on the modern economic of Israel. Whilst maintaining the focus of the current research, the author has chosen to focus on the following goals:

1. Analyzing the academic mobility and brain drain un-Israel.
2. Identifying the contributing factors from the knowledge economy from the foreign higher education students & researches.

3. Presenting innovative solutions for dealing with the connection between knowledge economy process and the increasing the academic mobility of foreign higher education students to Israel.

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

- Assessing, reviewing and defining the worldwide trend of knowledge economy, academic mobility, and economic factors.
- Reviewing the policies and solutions to the Israeli industry, services, and employment.
- Assessing the existing Israeli policies and accommodating them to the reality of mobility of higher education students.
- Mapping the countries to which sent higher education students to the Israeli economic.
- Providing innovative recommendations to the Israeli Ministry of Education and the political-social-economic establishment in Israel.

The methodology of the thesis includes three chapters, including three chapters with an in-depth analysis of industry data, inflation, GNI level, GNI, taxation level, new definitions of all economic knowledge, academic mobility, the phenomenon of academic mobility presented by the OECD, the European Union , The United Nations Educational, Scientific and Cultural Organization (UNESCO), a graphic analysis of Israel's academic mobility, the transition to a knowledge economy, an innovative industry, and the global need for socio-economic cooperation. In the second chapter, the author analyzes the situation as it is in Israel. And services, employment, workers' wages, vocational training, and the effects of all these on the economy In the third chapter, the author creates a regression model for analysis The model is based on observations of variables such as brain drain, the numbers of international student of higher education in Faculties of engineering and computer, GDP growth, national product, tax collection and the development of industries in Israel (traditional / modern). In the last chapter, the author presents the conclusions and recommendations to the State of Israel. The numerical data and cross-choice of the data will be presented in graphs and diagrams to analyze the findings and conclusions. There is no questionnaire that would not have been helpful for the purposes of the current thesis, and the author of the thesis is responsible for the authenticity of the data, such as well, as their reliability and presentation.

The freshness of the current studies to deal with this ever-increasing of reality economy, the author of the thesis create am theoretical economic model which recommends to the Israeli authorities about policy that should be implement.

The scientific problem was solved includes redefining and identifying characteristics and processes related to academic mobility of international students, and local Israelis, along with minimizing the trend of brain drain from knowledge economy in Israel. In addition, the creation of a renewed strategy and the implementation of ideas and processes based on a multidimensional analysis of the knowledge economy through the proposal of a national mechanism that will manage and supervise the required activities. All this with the aim of developing a stable, competitive, and international knowledge economy designed for the modern economy and industry.

The theoretical meaningfulness of the current study is reflected in the proposal of an innovative scientific methodology based on multidisciplinary analysis that points to indicators that represent the relationship between academic mobility of students in higher education and those with economic – technological professions for the state's economy, industry, employment threshold, and especially accumulation of advanced knowledge. The author seeks to use this model to develop the State of Israel's knowledge economy by calculating the principles for determining them, analyzing methods for increasing the demand for academic mobility and reducing brain drain.

The practical value of the current study is divided into two major fields:

The Author of the thesis believes that the practical value of the current research is divided into four major areas:

1. **The demand level of academic mobility** amongst Israeli higher education students – The practical value in this area will be in the recognition of the extent of this ever-increasing trend. The thesis will present the reasons, personal motives and reality which push them to do so. The thesis will redefine the major concepts, the numbers of students and the major fields of study. The most practical value of this thesis 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 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 operation of the mechanism** shall allow the relevant Ministries and authorities (Education, Finance) to work in collaboration- a collaboration which does not yet exist. The proposed mechanism shall operate in collaboration with the municipalities, Ministry of Tourism, an act which shall assist in turning the educational immigration into a tourist academic project.
3. **The brain drain phenomenon from the State of Israel –** The brain drain phenomenon from 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. The practical value of the establishment of the mechanism shall be evident in the combined goals designed to minimize this trend.
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 relevance of these sources of data provides the Author with the opportunity to present an updated, essential, and fundamental picture of the current trends and mobility of higher education students in and out of Israel.

The presentation of the details – The numerical details and their cross-checking shall be presented in graphs and charts for the analysis of the results and the arrival at conclusions. The Author is hereby responsible for the credibility of these data and stands behind them.

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. as well as based on accounting reports of Israeli universities.

The Publications of the ideas from the thesis are present in the articles of the author, like "*Directional Career and Academic Education in the age of Globalization*" that Provides an overview of the changes and considerations that have occurred around the world. Another article of the Author is about " *The phenomenon of brain drain from Israel*" and "*The Financial budgets of higher education- Reference to the situation in Israel*", the author presents the financial plans which currently exist in Israel today. in addition, Incorporate another two articles.

The thesis shall include four major units, which shall provide an in-depth glance at the researched topic. The units shall present major analyses of results which shall include 14 tables, 27 graphs. In addition, a list of 188 bibliographical sources is included as well as 9 appendixes. Altogether, the length of the current thesis is 148 pages.

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

II. THE CONTENT OF THE THESIS

The Introduction Chapter emphasizes the importance of the topic of the research by presenting the in-depth analysis concerning the economic and social trends which the world economy and the State of Israel undergo [8]. The changes and new definitions to the fields of occupation and vitality in changing the way of thinking and the progression to modern, advanced industries lead the author of the current research to examine the connection, the contribution, and the influence of international issues, such as the influence of academic mobility, such as the influence of academic mobility on the economic knowledge, as it comes about within the Israeli economy [3]. The analysis shall mainly explore the influences of occupational options and the changes in the social-economic policies towards an innovative industrial pattern. The Introduction Chapter emphasizes the timing and the significance of the research, the goals and the objects of the subject of the research, defines new definitions to the terms concerning the academic knowledge and the academic mobility in Israel. The main goal of the research is to examine the influence of the academic mobility of international students to the world of economic knowledge in Israel. The **first** chapter, THEORIES IN ACADEMIC MOBILITY MANAGEMENT AS A FACTOR FOR FORMING THE KNOWLEDGE ECONOMY, begins with the examination of globalization processes as these are expressed within the world of economic knowledge.

There are many definitions to the term "globalization". Some of these definitions connect the meanings and effect that were created by the technological advancement. Its main meaning is in the mobility of information and knowledge to the ends of the world, and from here on, begins a process of economic-social development in each area and continent. The flow of the citizens and the way they search for a source of better quality of life has created a wave of mobility and immigration. There are many reasons for this immigration, and it is characterized, amongst other things, by various contexts such as: Work immigration, cultural immigration, and academic mobility [9]. Alongside the mobility and immigration of various populations, a motion of goods has also begun, and thus, opened a possibility for quick and advanced international, Internet-based trade, and the arbitration between organizations and countries has created business opportunities for cooperation and a basis for the creation of such international organizations such as the OECD and the World Trade Organization (WTO). Many countries all over the world have come to understand that their main source of power lies mainly in their economic power as well as in the competitive advantage of their international institutions over other countries. Countries have competed over trading goods, traditional and advanced industries, and over the last two decades, also over the international trade. The required openness was achieved through the globalization which pushed these countries into making policy changes in all of the international contexts. These changes have led to legislative changes within the import-export fields, in the provision of grants to foreign workers, in professional occupation and nurturance of the abilities of the given countries in the fields of economy and occupation. Such terms as Gross Domestic Product (GDP) and Gross National Income (GNI) are reflected in the way that the economic ability of a given country is measured [12].

The data analysis shows the existence of a connection between the ability to create products and the general employment percentage of a given country. Table 1 presents cross-checking of data from several different countries from all over the world where such a connection was found [4]. These same aforementioned advancement and globalization had begun to advance countries in a more intensive manner when the downfall of international industry, on the one hand, and the growth and development of the modern and innovative industry, on the other hand, came about.

The worldwide trend of mobility had also brought with it a mobility of economic knowledge, as well as a flow of quality work immigration amongst different countries [2]. The economic knowledge is attributed to the job that creation of knowledge and innovation have in the encouragement of productivity and worldwide economic growth. The economic knowledge is based on the selling of knowledge intensive business services. Nowadays, knowledge gets renewed

and changed in a very short period of time. The knowledge economy is characterized by an ever-growing usage of information and communication technologies. Technological innovativeness and new knowledge serve as the leading factor and product of the economic growth. The knowledge is a "product" whose market value derives from the information embodied within it, such as: movies, stock exchange rates, books, data concerning the various groups of customers, etc [6].

The knowledge products possess certain economic qualities which distinguish them from any other type of product. The knowledge economy, in contrast to the industrial economy, is based on the work being performed within the people's "heads" whilst using technology, inclusive of computer files, Internet, presentations, etc. The world is getting closer and closer to the knowledge economy, and, at the same time, the industrial economy is diminishing [14]. The growth of the knowledge economy has led to a situation in which countries saw an opportunity to improve the economic data and allowed flow of quality workers, such as higher education students, even if only in order to encourage the creation of a new industry within their borders. From this point on, the transferal to advanced academic mobility and the possibility to become integrated from the civilian, economic, cultural, and occupational standpoints was quite rapid [11].

There are many reasons for the creation of the knowledge economy. The first of these is the improvement of the prolonged process of the development of the human assets. We currently find advanced thinking abilities which create economic and social opportunities for various crowds, and all of these improve the human knowledge. The developing human asset contributes to the advancement of the technological abilities in each and every country in which there is an undergoing process of developing human assets. This process is undergone through the educational systems and various populations. Alongside this, an extraordinary and accelerated development of all sorts of technology which surround the person and the worker is underway. These changes create a great deal of opportunities and from this point on, the step towards differentiation amongst countries are very short. These changes and processes lead to an economic, occupational, and social contribution in each country. This contribution comes about in the quality of the residents of the State of Israel, the employment and social contributions. Such a contribution comes about in the quality of life of the residents of the country, their occupational opportunities, and the advancement of wide populations. When we investigate the data provided by various countries (through the economic knowledge website of the OECD Organization) we can already find explanations to explain the advantages of certain countries over others.

Table 1. The upgrading of the exports and the economic value from the knowledge economic (in %) 2010- 2020

	Exports of products (by %)			**Value added to the local economy (by%)**		
Country / Year	**2010**	**2015**	**2020**	**2010**	**2015**	**2020**
Canada	9	10.2	13.7	10.2	11.4	14.2
U.S. A	25.9	35.9	38.6	18.2	22.8	25.1
Japan	20	32.7	39.4	16.4	19.8	22.4
Denmark	11.9	16.6	21.4	9.3	12.1	15.7
Netherlands	16	19.8	22.4	15.1	15.8	18.9
United Kingdom	17.1	30.1	33	16.3	20.3	23

Source: Made by the Author from sources [20]

The economic development, in addition to other factors, brings about a global flow entitled "academic mobility". The higher education systems are affected by the economic success of countries since they are funded with a higher budget, where this is possible. Shortly afterwards, these institutions turn into academic institutions which attract large crowds of higher education students [1]. This flow of higher education students is called "Academic Mobility". The academic mobility creates an influential effect which causes an increase in the academic reputation of the absorbing institution, and along with it, occur future economic influences (an academic status,

research budgets, mobility of instructors and researchers, high income). Nowadays, in the year 2018, many higher education institutions compete over the international higher education students very intensively. After the **Bologna Reform** (1999) had begun, the academic mobility began to bloom and prosper, and today, millions of higher education students that study in different countries and not in their homeland. **ERASMUS** [17], the worldwide academic organization, operates dozens of mobility programs of higher education students all over the world, and through this organization, many higher education students get the opportunity to study in various academic programs (semester programs, full academic year programs, research programs).

The academic mobility has several possible advantages and contexts. One of the options was the opening of a path of work immigration. This option was seized by countries who suffer from the brain drain phenomenon [7]. By attracting international higher education students into the academic institutions, a possibility was opened for them to immigrate into the country and to blend in the local employment market. This opportunity provides an answer o assigning jobs in various sectors, such as: Medicine, engineering, advanced services, computer programming, infrastructures etc. This need derives from two main reasons. The first of these is the understanding of the government that it must change the local employment market and renew itself using advanced labor power which shall provide a proper answer to the country's updated needs. The second of these is the concern for future needs. Countries such as Greece, Holland and Germany are current examples of the absorption of massive work immigration.

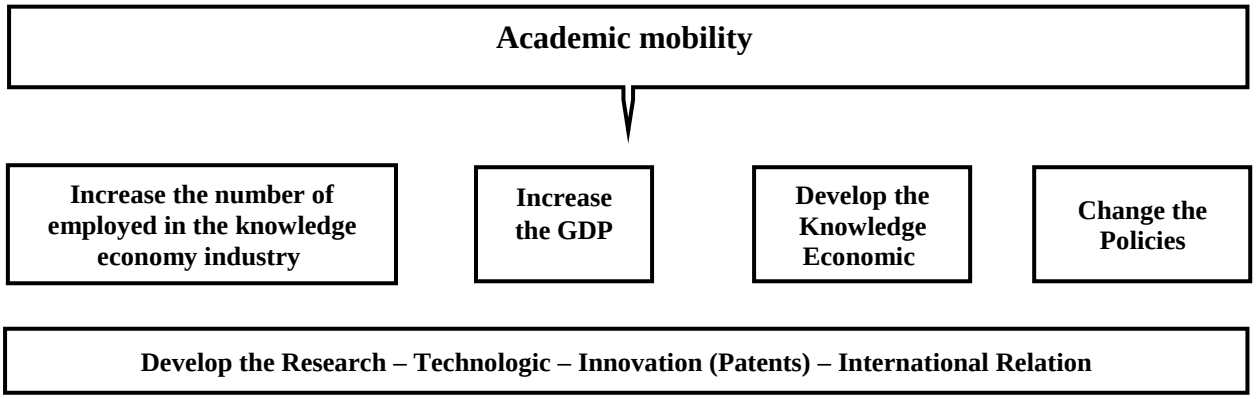

Figure 1. The factor of the academic mobility on Knowledge Economic
Source: Made by the Author from sources [5, 10]

This same academic mobility and its different influences also apply to the State of Israel. The State of Israel had only begun to leverage the idea of academic mobility of international higher education students (except with regards for Jewish students) in the year 2010. The State of Israel had applied twice to join the Bologna Reform but was denied. The Israeli Council of Higher Education was smart enough to adopt the principles of the Bologna Reform and held organizational processes which helped establish the Israeli higher education system in a manner that will make it similar to its fellow European systems. Since the year 2015, the current Israeli government had begun operating a national program which encourages (through enlarged budgets) the academic institutions to accept international higher education students. There are many advantages to the acceptance of the students and these are not just economic advantages. Their acceptance also involves political considerations, market positioning, and influence of the public opinion, trade and import and export of products.

The **second** chapter, entitled MATERIAL AND METHODS OF RESEARCH, describes the thesis methodology process. The whole process the researcher has performed is describes in the chapter, starting with term definition and analysis of global trend indicating the issue of high

education student academic mobility. It is all examined from global link point of view that indicate knowledge economy development in Israel, and its link to decision maker policies in Israel. models and data of many countries who cope with similar economic – social dilemmas are presented in order to have a reliable comparison of the presented data. Later in the research the researcher combines a quantitative questionnaire tool that examines 120 students / researchers / officials' point of view in economy fields to have "shell image" that confirms or refutes the research hypothesis. The researcher used in the thesis in various research tools that include data comparison using t-test, Levene's test, Spearman.

The **third** chapter, entitled ANALYZING THE INTERNATIONAL EDUCATIONAL MOBILITY AS A FACTOR FOR FORMING THE KNOWLEDGE ECONOMY analyzes the current situation in the State of Israel. The academic mobility which refers to the flow of higher education students to the Israeli academic institutions as well as to the Israeli higher education students to the foreign academic institutions [10]. This analysis of comparison to what is being done in other countries is intended to examine the influence of the academic mobility on the economic knowledge in Israel in order to examine its influence on the industry, academy and education, as well as on the Israeli society.

For the purposes of this international comparison, the author of the research brings the case-studies of England, Finland and France. For each of these countries, the higher education student (incoming and outgoing) flow during the period of 2011 – 2018 and provides an analysis of economic data such as the GDP and the GNI. Furthermore, these countries were chosen since they conduct a diverse and widespread activity of the ERASMUS academic organizations in a similar extent to those within the State of Israel. The chapter examines the extent of the academic mobility in Israel as far as the higher education students who leave Israel and who arrive to Israel in order to study in academic institutions are concerned.

The Arrival of International Students to Israel for Purposes of Academic Studies. The flow of international students has received attention mostly since 2010. Until 2010, the entrance of foreign higher education students was based mostly on Jewish students from advanced, established countries. The family and religious background were the crucial factor to the arrival of students. Beginning from 2010, the Israeli government began to see the advantages of absorbing the foreign students even regardless of the religious or family ties. These institutions began to attract higher education students (mostly for M.A. studies) to study in certain academic programs. The necessary accommodations to the Bologna Reform and the way it is implemented in the world have led the decision makers to change their strategy.

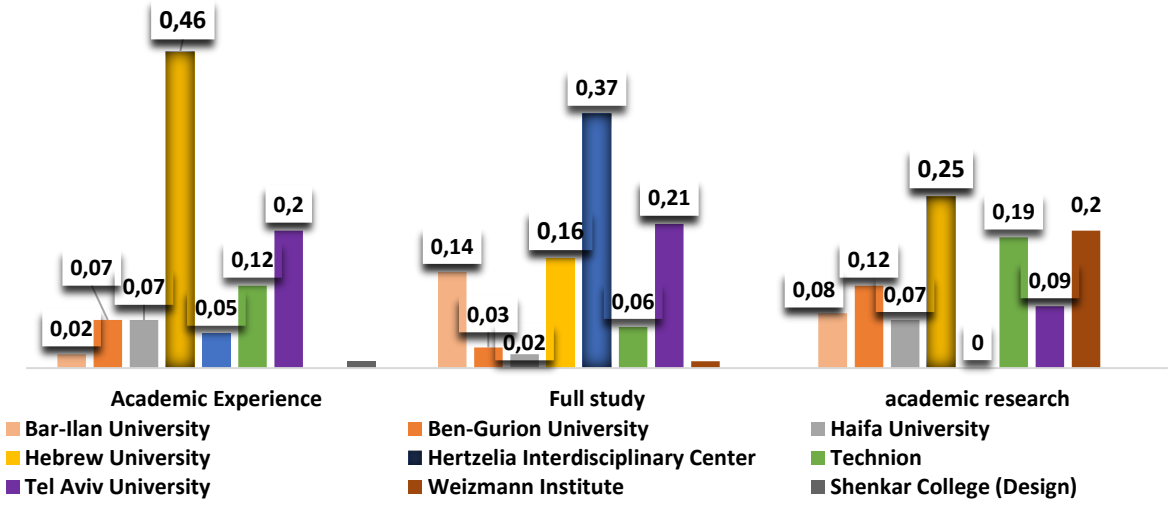

Figure 2. The percent of the foreign student in the international programs In Israel – 2020
Source: made by the Author from source [18]

The ERASMUS organization currently operates a center in Israel which serves as a mediating factor between international students to the various programs within the different academic institutions [17]. The program is divided into three main academic tracks: Semester-long studies ("the academic adventure"), full-length studies (full study, in accordance to the studies of the particular degree) and a research program for M.A. students and researchers. The Ph.D. program is open for registration as well, of course, but only few choose to study it.

In recent years, 10,000 higher education students had arrived (inbound students) annually to Israel for academic studies. The student's study in programs held in all of the academic institutions, such as: DARE, CLEVER, LAHAV, and TEAC HEX [8].

The Outbound Higher Education Students. In recent years, 14,000 higher education students on average left Israel (outbound students). In this chapter, the main reasons leading the Israeli students to choose to study abroad are analyzed. The analysis is done due to the understanding that such a process encourages the problematic trend of brain drain. Most of these Israeli students which comprise of 50% of the medical students, according to the Israeli Bureau of Statistics) **do not** return to Israel once they have graduated. They are absorbed in their life and work in countries that encourage work immigration. The main reasons raised in the thesis are: High academic demands, various fields of study, academic level, quality of education and facilities, as well as occupational opportunities after commencement of studies – work immigration.

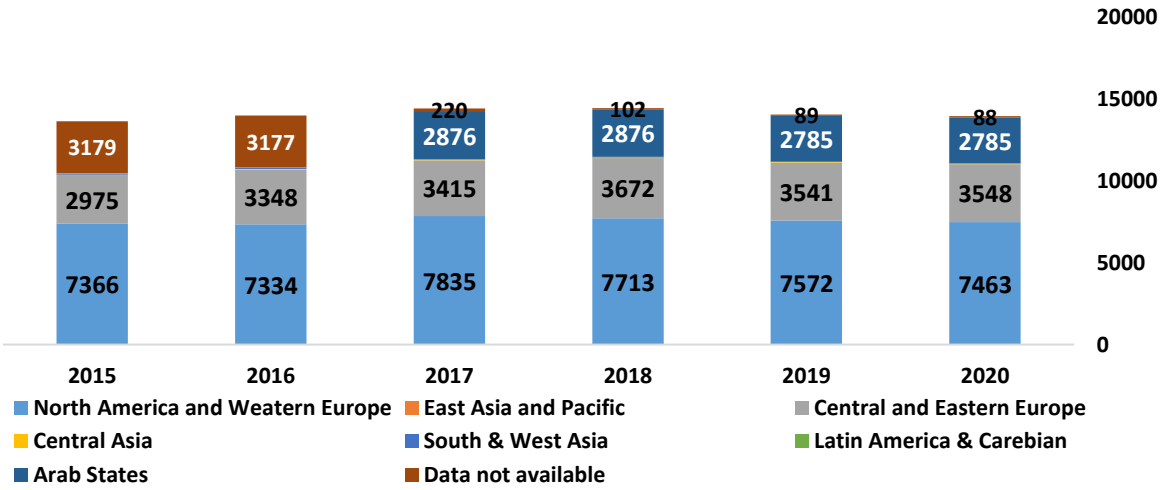

Figure 3. The demand for academic mobility of Israeli students 2013 – 2020
Source: made by the author from source [16]

Statistical findings of students in Israel. As part of an analysis of the findings of students leaving for academic studies in other countries, the study director decided to conduct an in-house study that analyzes authentic and reliable answers to the feelings and decisions regarding academic decision-making in Israel or in other countries. The sample of the questionnaire is attached (in Russian and English translation) as **annex 9**. In this section we will review and analyze the main findings that will contribute to drawing conclusions in this chapter and in the final conclusions and recommendations.

The questionnaire consisted of 15 questions that included gender questions about the gender of the respondent, ages, fields of study, stage of study (high school, academic, practical), academic stage (bachelor's degree, master's or doctorate), And professional preferences regarding the location of the studies, and the reasons for the selection. In total, the survey questionnaire was transferred among 120 students surveyed.

The authors' conclusions are that lots of students and future students leave Israel to get Higher Education outside. Also, the main reasons are economic: the costs of living, the future wages and

the social conditions. Many from the student's believe that studies outside are better from the professional point of view. The majority believes it will not be hard to find a proper employment in Israel, but most of them do not plan to come back. In addition, from the Spearman correlations it was found out that the age is positively correlated with education (p_value<0.001) and negatively - with satisfaction from studies in Israel (p_value<0.001), positively – with considering to study abroad (p_value<0.001).

The age is negatively correlated with the believe it will be a suitable employment in Israel (p_value<0.001). In other words, the older is the respondent, the more education she is and the more interested in studying out of Israel, believing local education is not good enough and proper employment is difficult to find. In addition, the more educated the respondent is, the more she plans to study economic-based studies (p_value<0.03), the less satisfied from the quality of studies in Israel (p_value<0.001) and more considers studying abroad (p_value<0.001).

The author of the thesis concludes that analysis of the data, and the findings of the statistics, shows that the economic-occupational stability prevents the Israeli student (aged 22-30) who has already completed an academic degree or intends to study for an academic degree. The reasons for this are combined and include economic reasons (salary, cost of living, housing), professional reasons (exposure to globalization, desire to engage in economic knowledge, stability in the workplace) and social reasons.

The Influence of Academic Mobility on the Economy. The academic mobility influences the economy of the state in accordance with several rules of data analysis. First of all, the brain drain phenomenon – as more and more quality human assets leave the country, the economic ability of the country decreases. The extent of the quality of human assets leaving the country is the basis for positive or negative changes in each country. Countries who have taken steps to overcome the brain drain phenomenon were successful in establishing stable economies. Over the past two decades another change has begun in the world of economy and industry – the passage from the traditional industry to the modern industry. Alongside the entrance of new occupational roles, far-fetching changes have also begun in occupational branches in which the combination of technology and robotics has created a new reality of occupation. These changes divide the occupational fields into levels of endangerment. The fields of occupation which face a high level of endangerment shall disappear in the upcoming years and be replaced by occupations related to economic knowledge.

Table 2. The economic exchanges (production and export of goods and services) in Israel by 2012-2020

Production and income	Unit	2012	2014	2016	2018	2020	Change In %/USD ▲ ▼
Imports of goods and services	% Of GDP	35.5	36.1	36.4	37.8	38.1	2.6%
Exports of goods and services	% Of GDP	36.1	33.4	30.4	31.5	31.7	4.4%
Imports of goods	Billion USD	72.5	70.2	60	62.3	63.1	16.3 billion USD
Exports of goods	Billion USD	65	62.4	56.4	53.1	51.7	13.3 billion USD
Service trade balance: exports minus imports of services	Billion USD	8.8	13.2	12.3	12.1	11.9	3.1 billion USD
Imports of services	Billion USD	20.5	21.8	24.5	26.8	26.9	6.4 billion USD
Exports of services	Billion USD	29.2	35.0	36.8	37.1	37.3	14.6 billion USD

Source: Made by the Author from source [18]

The academic mobility of foreign higher education students who arrive to study in Israel could serve as "a bank of applicants" which shall cover the gaps created due to the quick passage to modern and innovative economy. Like in similar cases, countries who have seized the opportunity, changed their policies, and built mechanisms which managed the occupational aspects, have been able to achieve economic success and to increase the ability of their local production.

The Israeli economy is known for its rapid passage into the modern economy. The rapid passage has created complex occupational problems. This process has led to various changes in the composure of the work market. With the exception of the downfall of the traditional industry, this had social and economic implications, such as unemployment amongst unqualified personnel, changes in job positions (workers working only part-time) and the increase of "employment agencies" which take advantage of their workers. These phenomena cause an automatic increase in the percentage of the workers who are employed only part-time. They also cause a blurring in the actual data as far as the economic ability of families is concerned. The consequence of this is that workers who have degrees and academic occupations are forced to settle for low wages, on the one hand, whereas on the other hand, the state presents high figures of occupation.

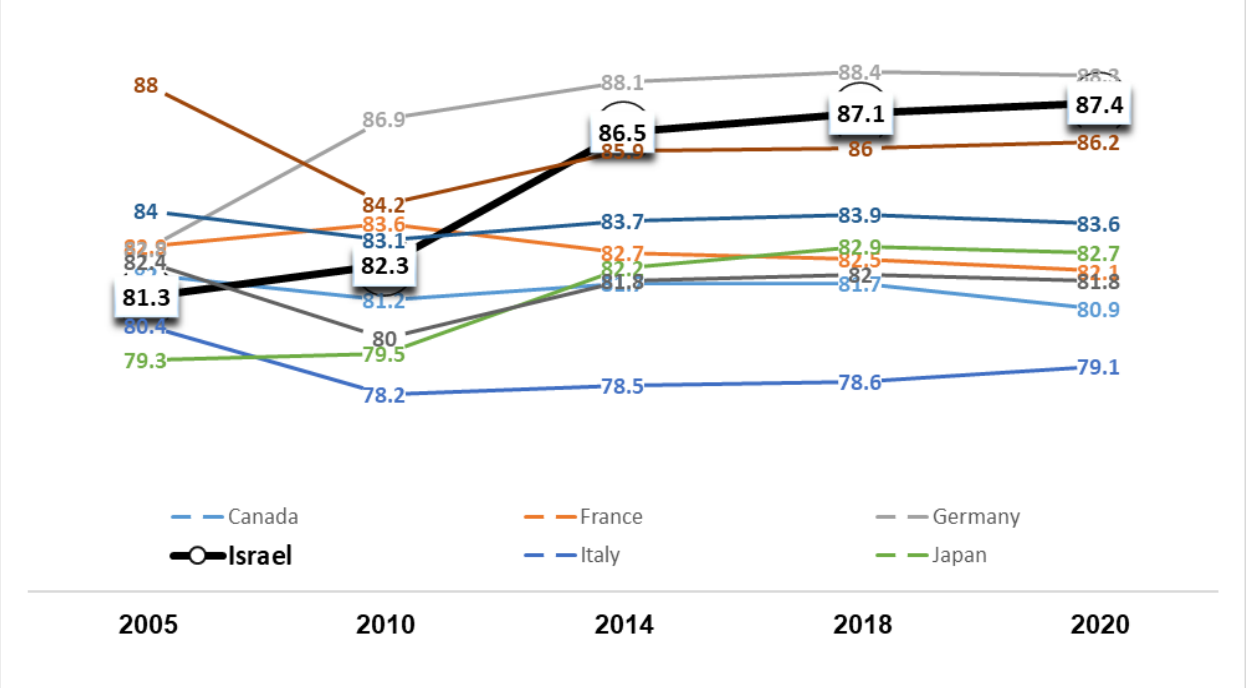

Figure 4. The % of Academic graduates in comparison to the countries who are members the OECD and in comparison, to North American countries – 2005 – 2020
Source: made by the Author from source [16]

This trend, which is constantly increasing and getting stronger, leads to thoughts about moving to other countries, in which the employee who has finished his higher education shall be able to work in better payment and work terms. This process actually strengthens the brain drain phenomenon in Israel.

The Brain Drain Phenomenon from Israel. The brain drain phenomenon had begun as early as the 1970's. This phenomenon has undergone changes of ups and downs in accordance with the economic, social and security reality which occurred in Israel. Nowadays, this phenomenon has been narrowed down to smaller capacities in comparison to the previous decade. However, on the other hand, a renewed and worrisome direction has been created. This process is currently based on an ever-increasing trend of quality human power, most of which arrives from the

professional world of opinions, which is connected in a certain manner to the academy, and mostly leaves a troublesome vacuum of missing professionals in the fields who cause a halt in the necessary development field in the occupation and economic branches [18].

Chapter **four** entitled: WAYS TO IMPROVING THE INTERNATIONAL EDUCATIONAL MOBILITY IN ISRAEL AS A FACTOR FOR FORMING THE KNOWLEDGE ECONOMY analyzes the value of the academic mobility as far as the abilities of the economic knowledge are concerned. In this chapter, the author of the current research mostly attempts to find models and methods which shall improve both factors and lead to the creation of a mutual effect. This mutual effect shall, on the one hand, increase the academic mobility of foreign higher education students into Israel (due to their understanding of the advantages that lie within it), and, on the other hand, shall create a meaningful contribution of the foreign higher education students into the growing zone of economic knowledge in Israel.

Worldwide Applications. In this chapter, the author of the research presents the mechanism for implementation in several countries. This allows the author to present possible mechanisms for the local implementation in the Israeli government. The countries selected are Germany, Australia, and Hungary. These countries have undergone a process of policy changes as per the way they refer to the knowledge industry in the country and to the policy of increasing the demand on the part of foreign higher education students to study within the given countries.

Germany, a country which, on the one hand, a great deal of work immigrants, has developed a government mechanism which manages professionally the academic mobility, and on the other hand, provides an answer, through the German government, to higher education students who wish to remain in Germany after they have finished their studies. This national mechanism is called DAAD and it is operated with a freedom of action and an independent budget. The national mechanism has developed, over the years, a program which annually attracts hundreds of thousands foreign higher education students into the German higher education institutions [13]. The ability of these academic institutions comes about as a result of the investment in pedagogic initiatives, the establishment of innovative faculties, and the obtainment of scholarship budgets to foreign higher education students who excel in certain fields of knowledge and which may, in the future, be absorbed within the local world of employment in Germany. In addition, the mechanism had taken care to ensure the economic ability of the higher education institutions – and, in particular, the research universities – in order to enable them to allow the foreign higher education students to dedicate themselves to their studies, due to economic reasons, if for no other reasons. Alongside the academic activity of these institutions, the mechanism had taken care to ensure the existence of international academic cooperation, integration and connection of the academic world into the world of industrial research, as well as to ensure the connection to the local adult education. All of these actions increase the ability of the country to provide a wide answer to the actual needs as far as the exchange of the work generation who was employed in the traditional industries vs. the new economic knowledge, as it realized in the modern industry [15].

Yet another country who operates in a rather similar manner is **Australia**. In Australia, a government decision was made to establish a national independent mechanism whose actions are measured in accordance to its outputs. The national Australian mechanism was able to successfully lead to major changes in the perception of employment as far as the connection between the foreign higher education and the enlargement of the country's economic knowledge. First of all, within several years, Australia increased the number of foreign higher education students who were accepted into its academic institutions (this same trend is also occurring within the United States) and the income increase to these academic institutions was tremendous.

Another step taken is **changing the policies for professional work immigration.** Thus, the door was opened for thousands of higher education students who were interested in finding their professional future in Australia. The process of changing the legislation had opened a sort of competition for crowds from many countries who wished to immigrate to Australia, providing the

applicants meet the necessary criteria for filling the missing job positions in those areas which are considered a national priority for populating. The academic leadership was able to receive countless living scholarships, establishment of cheap living infrastructure for the absorption of international higher education students, advancement of Australian academic institutions to possessing a well-known and international status, lowering living costs for young people, establishing a variety of faculties, combining advanced technologies, and, of course, providing guidance to potential higher education students who exhibit an interest in work immigration. All of these are done in favor of advancing the national economic and social interests.

The third country analyzed by the author of the research is **Hungary**. Hungary is a relatively small country, located in central Europe. For many years, Hungary was influenced by the spirit of the former USSR. Hungary's local government was quick to understand the necessity of the combination between the advancement brought about by the international foreign students alongside their contribution to the economic knowledge in Hungary. From the moment the possibility was opened, a national mechanism was established. This national mechanism advanced the academic establishment and created possibilities and competitions against countries whose academic establishments are modern and advanced. The highest leverage to the international academy was provided to the medicine and engineering faculties. **In this case, it was found that a large recruitment of teaching staff had occurred within Hungary's academic institutions.** This recruitment served to improve the quality of teaching, to emphasize the accumulating experience and the preceding occupation options. In this case as well, an emphasis was made on advancing the international status of the academic institutions.

To summarize, the author of the research found that several issues serve as a common denominator to all of the surveyed countries. These factors create a significant effect on the local industry in each country. This effect includes the following:

1. A government decision as per the necessity of the mobility of foreign higher education students into the given countries.
2. The establishment of a national mechanism which takes care of the issue of increasing the demands for foreign higher education students and establishes the connections in accordance with various international bodies.
3. The establishment of economic, social, commercial and academic infrastructures for the absorption of international higher education students.
4. The foundation of connections (through the established mechanism) for the advancement of industrial and occupational interests in accordance with the finance officials and the economic knowledge within the given country.
5. The preservation of competitions and attractiveness in relation to other countries from the academic and the occupational-technological standpoints.

The Implementation of the Academic Mobility in Israel. In order for the influence or contribution of the academic establishment to occur, and mostly the academic mobility of international higher education students, an integration of foreign higher education students is necessary [8]. In order for the influence or contribution of the academic establishment to occur, and mostly the academic mobility of international higher education students, an integration of foreign higher education students is supposed to occur in the world of occupation and industry. Based on his analysis of the Israeli economy, the author of the current research has found that there is no actual connection between the economic and academic establishment as far as the contribution of international students to the economic knowledge in Israel is concerned. In principle, there is no intent or thought or straightforward motivation to absorb foreign higher education students into the occupational array in Israel. In Israel, "foreign workers" are characterized as workforce for roles and occupational fields which are not characterized by a high level of demand amongst the working Israeli public. One can see workers (whom are not necessarily skilled workers) within the fields of nursing, agriculture, building construction and

infrastructure. One can also find "private" initiatives in which academic institutions offer students and teaching staffs from foreign countries an opportunity to join teaching staffs or local projects which are connected with the local industry. The reason for this is that Israel **does not have a joint national initiative which combines both factors – academic mobility of international higher education students and enrichment of the economic knowledge within the fields of industry and economy.**

Recently, the Israeli government had begun to advertise large tenders which are mainly related to the building of infrastructure and high industry. It should be noted that these steps are not directly identified with academic mobility but rather to privatization of companies and government organizations in favor of financial execution.

On the other hand, the world of industry and economy was badly hurt as a result of the other aspect of the academic mobility – the leaving of Israeli higher education students, researchers, and high-demand academic jobs to other countries. The brain-drain phenomenon, and, in particular, the leaving of the quality brains, has been going on for several decades now. There is a shortage of professionals from the fields of medicine, advanced industry, engineering and robotics.

The mechanism which is currently in charge of the academic mobility is the Council of Higher Education (CHE). This is the body in charge of the policies determined by the entire Israeli academic establishment as far as plotting the academic plotting, budgeting of institutions, granting academic approval to academic institutions, and maintaining connections with the worldwide academy. The management of the institutions is done by the institutions themselves, just like the connection with the various government ministries. Beginning in 2010, the CHE has understood the value of increasing the demand level of international higher education students and of the exposure of the Israeli academy to the world. All of this has been occurring despite the fact that Israel has applied twice to the Bologna Reform, which had begun in 1999, but was denied.

Since the year 2010, the number of international higher education students has doubled itself and reached an average of approximately 10,000 students per year. The CHE has made suggestions of budgeting joint projects and expansion programs of departments and institutions that shall cooperate with the international aspects of the academy. However, despite this move, as aforementioned, there is no current connection between the academic establishment and the industry with regards to the topic of this research.

A Feasible Economic Model. The author of the research suggests a feasible model which is supposed to serve as a management platform for the integration of the academic mobility (higher education students leaving/entering the academic gates) vs. the expected contribution to the economic knowledge, and mostly to the feasible part, which is expressed in the fields of occupation and industry development. The chosen variables for the model include a wide array of observations which present data related to the reciprocal relations between the two research topics – the academic mobility and the influence on the economic knowledge. The first of these includes the international aspect, the brain drain phenomenon and the training fields for advanced occupations. The second of these includes the pragmatic aspect, as is expressed in the percentages of employees, trends and expected changes in the occupation array as well as in the traditional and advanced industries, as well as the economic products in Israel, such as the GDP and (*international*) GNI. All of these independent variables shall be examined in mathematical models and their influence on the economic knowledge over the years shall be analyzed, in accordance with its characteristics.

After the inclusion of these parameters to the process of analyzing data, the results of the model did not show an existence of a high characteristic as per a great deal of dependent variables. Rather, the results showed a high characteristic mainly around the occupational products, such as the establishment of organizational infrastructure for the absorption of workers, the establishment of facilities of learning and future, relevant training. After the usage of mathematical calculations, it was found that the economic values include mainly demand for employment, wage increases, fluctuations in economic knowledge, production of advanced products, policies to boost exports,

investment in domestic and international industries. All the factors create a positive effect (reduction) on the percentage of outbound.

OUT_PERCENT = -1.19721855723e-05*LABOUR + 0.0963430556533

The conclusions research concludes from the data published by the Bank of Israel that the State of Israel shall face a future problem of decrease in the industrial-economic productivity. In 2016, the Bank of Israel decided to decrease the forecast for 2017-2018 due to the decrease in the occupational productivity in the various industrial fields. For example, the Bank of Israel foresees an annual decrease in the economic growth (GDP – Gross Domestic Product) from 4% in 2016 to 2.8% in 2017 and 3.3% in 2018. The economists of the Bank of Israel explain this forecast by a consecutive decrease in production level, a decrease in export, a lack of knowledgeable and skilled workers, and management and operation problems. In light of these data, the author of the research concludes that there is a need for a genuine process of policy change with regards to the absorption of foreign professional employees (such as in the fields of building houses and agriculture), to the increase of demand of higher education students, and to the narrowing down of brain drain of Israelis (higher education students, researchers, and professionals in their fields) to foreign countries. Nowadays there is no national mechanism which operates to promote these ideas and processes; thus, the author of the research suggests the implementation of the following economic model. The author of the research recommends the implementation of a series of initial steps within the lines of the policies of various Israeli institutions, inclusive of the Immigration and Population, the Ministry of Economy (which deals with the industrial and occupational fields), and the Ministry of Education. Only the change of perception and the appropriation of policy lines shall provide the proper results which are necessary for the issue at-hand – the influence of the academic mobility on the economic knowledge in Israel. The suggested recommendations derive from an in-depth review of models used in other countries. The suggested theoretical economic model is based on the analysis and data, whilst their positioning into a mathematical model of regression which is based on the data relevant to the State of Israel. The first abiding change is the recommendation for **using the terms of obtaining visas to international higher education students wishing to study in Israel.** This is recommended both as far as the bureaucratic process is concerned, as well as in the granting of **rights and future occupational possibilities** (which do not currently exist). At the same time, it is also recommended to simultaneously provide occupational permits for high-demand occupations in order to allow the higher education students to work, in the course of their studies, in companies and establishments whom are interested in their vocational abilities. This is, of course, also relevant for those occupational fields which provide the country with economic results.

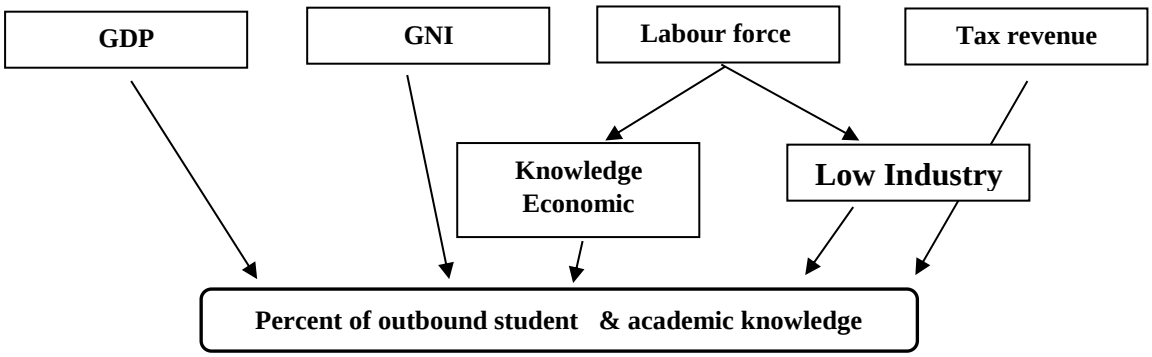

Figure 5. The theoretical economic model
Source: Made by the Author

This recommendation has to do with the narrowing down of the brain drain of professionals which are necessary to Israel and of higher education students wishing to study abroad. The author of the research suggests **an economic model which is supposed to provide a hands-on offer** for combined needs: **The increase of influence of higher education students on the economic knowledge in Israel,** on the one hand, and **an upmost usage of the human resource which exists in Israel.** All of the above is designed to narrow down the extent of the brain drain phenomenon and to prevent the dependency on the human resources abroad.

Of all the variables which were raised in the regression models, the affecting variables had mainly to do with such economic variables as: Gross Domestic Product (GDP), Gross National Income (GNI), taxes revenues, and most of all, the contribution of the various occupations and the traditional and advanced industries.

III. CONCLUSIONS AND RECOMMENDATIONS

The author 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 economic sector in Israel has undergone a great deal of changes, amongst them a constant downfall of the traditional industry. Like most of the western countries, Israel has also begun working with production lines based in the Far East (for products such as textile, paper, metal, plastic, and wood). This global process has created a clear division of occupational jobs which shall be considered "at-risk" due to the changes which the world of occupation is undergoing The modern industry, which includes products and services from the hi-tech, medicine, communications, information, advanced agriculture and highly developed energy, is very advanced in Israel, however, on the other hand, Israel hires a very narrow percentage of employees, in comparison to the rates of available employees on the market.
2. There is a small but quality percentage of scholars amounting at 87.1%. As a result, the State of Israel is heading towards a problem of irrelevant work power. At the same time, a phenomenon (whose average rates vary) exists of academic brain drain. The author of the research concludes from these finding that a major program for the advancement of learning and training of adults to the relevant occupations which are suitable for the innovative knowledge of economy does not exist.
3. The author of the research concludes from the data published by the Bank of Israel that the State of Israel shall face a future problem of decrease in the industrial-economic productivity. In 2016, the Bank of Israel decided to decrease the forecast for 2017-2018 due to the decrease in the occupational productivity in the various industrial fields. For example, the Bank of Israel foresees an annual decrease in the economic growth (GDP – Gross Domestic Product) from 4% in 2016 to 2.8% in 2017 and 3.3% in 2018. The economists of the Bank of Israel explain this forecast by a consecutive decrease in production level, a decrease in export, a lack of knowledgeable and skilled workers, and management and operation problems.
4. In light of these data, the author of the research concludes that there is a need for a genuine process of policy change with regards to the absorption of foreign professional employees (such as in the fields of building houses and agriculture), to the increase of demand of higher education students, and to the narrowing down of brain drain of Israelis (higher education students, researchers, and professionals in their fields) to foreign countries. Nowadays there is no national mechanism which operates to promote these ideas and

processes; thus, the author of the research suggests the implementation of the following economic model.

Recommendations

In light of all of the above, the author of the research advises **the Ministry of Economics and Education** to act as follows:

1. The Ministry of Economic (& industry) and Education

1.1 **Increasing the number of technological institutes which develop products and services in modern industry,** and on the other hand, it is necessary to avoid the selling of these institutes as a business initiative (start-up) to large companies. In addition, it is necessary to increase the government investment in providing benefits for the workers and higher education students of these companies.

1.2 **Establishment of training foundations for unskilled workers in order to assist Their professional conversion and instability** to the innovative industry which is ascribed to the fields of the knowledge economy.

1.3 **Creation of international relations with other countries** in favor of exchange of human capital in the high-demand occupations (such an agreement currently exists with China as per the field of building construction and civil infrastructure).

1.4 An investment and renowned establishment of the **traditional culture with accommodations suitable for the global age.** This is based on the understanding that a given country is unable to give up its basic production abilities and base itself solely on import. This clause also includes the creation of a competitive competition against other world markets and finding the specific fields in which Israel is able to lead (energy consumption, water, ecology, medicine, plastic, high-tech products, and selling of economic knowledge to developing countries).

2. The Economics Ministry

2.1 **Due to the increase of taxes revenues,** the author of the research recommends to divert budgets to providing tax benefits to populations at risk of work immigration. Such tax benefits can include changing lower taxes, providing benefits to the fields of housing, education, health, and academic training for the young generation.

2.2The author of the research recommends that the Ministry of Education **invest a greater amount of resources in the technological education** (via the Ministry of Education) due to a lack of accommodation of the existing curriculums (from the personal experience of the author of the research as a teacher in high school).

2.3 It is recommended that the Ministry **increase its investment in the traditional industry** and to make it a major source of income which develops the commitment of employees. The investment should come about mainly in the way the production workers and the mid-level management are rewarded. **Based on the examined variables a correlation was found between** the increase of salaries in Israel and the narrowing down of the brain drain phenomenon.

2.4 The author of the research recommends combining proper investments between the correlations which are exhibited in diagram (in the thesis) and which will be expressed in the local raw product, the national product, the occupation (the knowledge industry and the traditional industry), and the taxes revenue – all in favor of the enrichment of the economic knowledge in Israel. All of the above should be accompanied by the increase of demand of foreign higher education students to study in Israel, and, at the same time, by the narrowing down of Israeli higher education students to study abroad.

IV. ARTICLES ON THE TOPIC OF THE THESIS

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ANNOTATION

To the thesis to obtain the scientific degree of Doctor in Economics

"International educational mobility in Israel as a factor for forming the knowledge economy"

Masri Bushra, Chisinau, 2022

Specialization: 521.03 – Economics and management in the field of activity

The structure of the thesis: The thesis consists an introduction, four major chapters with conclusions and recommendations. The four chapters include 14 tables, 27 figures and one map. In addition, a list of 188 bibliographical sources, and 9 annexes. Thesis was presented in 16 academic articles which had been circulated in Europe, Israel, and Asia. Altogether, the length of the current thesis is 148 pages.

Key words: knowledge economy, educational mobility, globalization, management theory, international relations, gross domestic product.

Fields of research: The research deals with the issue of the academic mobility of students in higher education as a factor of influence and promoting the fields and subjects of knowledge economy in Israel.

Subject of the thesis: To investigate the interrelationships, effects, and dependencies between the academic mobility of students to and from Israel, and the stabilization of knowledge economy as a future employment-economic factor.

The purpose of the research is to identify the ways in which positive academic mobility, in which the number of international students entering is greater than the number of Israeli students leaving, will affect the field of the Israeli knowledge economy**.**

The scientific challenge of the research lies in the relationship between the factors influencing academic mobility in higher education and the formation and stabilization of knowledge economy as a national development factor in Israel.

The scientific innovation of this study based on the theoretical development of an updated definition of the contribution of the academic mobility of the Israeli economy with an emphasis on employment and the development of the fields of knowledge economy. By calculating the principles of their determination, analyzing methods to increase the demand for academic mobility and reducing brain drain, the author presents a theoretical mechanism based on strategic and applied cooperation with policy changes in academic mobility and the knowledge economy in Israel**.**

The theoretical significance of this study is reflected in the proposal of an innovative scientific methodology based on multidisciplinary analysis that points to indicators that represent the relationship between academic mobility of students in higher education and those with economic-technological professions for the state's economy, industry, employment threshold, and especially accumulation of advanced knowledge. The author seeks to use this model to develop the State of Israel's knowledge economy by calculating the principles for determining, analyzing methods for increasing the demand for academic mobility and reducing brain drain.

The scientific problem solved in thesis includes redefining and identifying characteristics and processes related to academic mobility of international students, and local Israelis, along with minimizing the trend of brain drain from knowledge economy in Israel. In addition, the creation of a renewed strategy and the implementation of ideas and processes based on a multidimensional analysis of the knowledge economy through the proposal of a national mechanism that will manage and supervise the required activities. All this with the aim of developing a stable, competitive, and international knowledge economy is designed for the modern economy and industry.

The implementation of the scientific results is executed through the application of the research ideas, conclusions and recommendations in the higher education mechanisms, the Ministries of Economy and Employment, and local authorities, while emphasizing the required adaptation to the culture of decision-making and the unique characteristics of the State of Israel. The model and research ideas are already being implemented in two local authorities in Israel.

ADNOTARE

La teza pentru gradul de doctor în științe economice

”Mobilitatea academică internațională în Israel, ca factor de formare a economiei cunoașterii”, Masri Bushra, Chișinău, 2022

Specialitatea: 521.03 – Economie și management în domeniul de activitate

Structura tezei: Lucrarea constă din introducere, patru capitole, concluzii și recomandări. Patru capitole includ 14 tabele, 27 grafice și o hartă. Conține de asemenea o listă de 188 surse bibliografice și 9 anexe. Teza a fost prezentată în 16 articole științifice publicate în Europa, Israel și Asia. În total, lungimea actualei teze est de 148 de pagini.

Cuvinte cheie: economia cunoașterii, mobilitatea educațională, globalizarea, teoria managementului, relațiile internaționale, produsul intern brut.

Domeniul de cercetare: Cercetarea tratează problema mobilității academice a studenților din învățământul superior ca factor de influență și promovare a domeniilor și subiectelor economiei cunoașterii în Israel.

Subiectul tezei: Investigarea interrelațiilor, efectelor și dependențelor dintre mobilitatea academică a studenților către și din Israel și stabilizarea economiei cunoașterii ca viitor factor economic de angajare.

Scopul cercetării constă în identificarea modalităților în care mobilitatea academică pozitivă, în care numărul de studenți internaționali care intră este mai mare decât numărul de studenți israelieni care pleacă, va afecta domeniul economiei cunoașterii israeliene.

Provocarea științifică a cercetării constă în relația dintre factorii care influențează mobilitatea academică în învățământul superior și formarea și stabilizarea economiei cunoașterii ca factor de dezvoltare națională în Israel.

Noutatea științifică a acestui studiu se bazează pe dezvoltarea teoretică a unei definiții actualizate a contribuției mobilității academice a economiei israeliene, cu accent pe ocuparea forței de muncă și dezvoltarea domeniilor economiei cunoașterii. Prin calcularea principiilor determinării lor, analizând metode de creștere a cererii de mobilitate academică și de reducere a exodului de creiere, autorul prezintă un mecanism teoretic bazat pe cooperarea strategică și aplicată cu schimbările de politică în mobilitatea academică și economia cunoașterii în Israel.

Semnificația teoretică a acestui studiu se reflectă în propunerea unei metodologii științifice inovatoare bazată pe analize multidisciplinare care indică indicatori care reprezintă relația dintre mobilitatea academică a studenților din învățământul superior și cei cu profesii economico-tehnologice pentru economia statului, industrie, pragul de angajare, și mai ales acumularea de cunoștințe avansate. Autorul încearcă să folosească acest model pentru a dezvolta economia cunoașterii statului Israel, calculând principiile de determinare, analiză a metodelor de creștere a cererii de mobilitate academică și de reducere a exodului de creiere.

Problema științifică soluționată în teză include redefinirea și identificarea caracteristicilor și proceselor legate de mobilitatea academică a studenților internaționali și a israelienilor locali, împreună cu minimizarea tendinței de exod de creiere din economia cunoașterii în Israel. În plus, crearea unei strategii reînnoite și implementarea ideilor și proceselor bazate pe o analiză multidimensională a economiei cunoașterii prin propunerea unui mecanism național care să gestioneze și să supravegheze activitățile solicitate. Toate acestea cu scopul de a dezvolta o economie a cunoașterii stabilă, competitivă și internațională, sunt concepute pentru economia și industria modernă.

Implementarea rezultatelor științifice se realizează prin aplicarea ideilor de cercetare, concluziilor și recomandărilor în mecanismele de învățământ superior, Ministerele Economiei și Ocupării Forţei de Muncă, și autoritățile locale, subliniind totodată adaptarea necesară la cultura decizională și caracteristici unice ale statului Israel. Modelul și ideile de cercetare sunt deja implementate în două autorități locale din Israel.

АННОТАЦИЯ

К диссертационной работе на степень доктора экономики

«Международная академическая мобильность в Израиле как фактор, формирующий экономику знаний», Масри Бушра, Кишинёв, 2022

Специальность: 521.03 – Экономика и менеджмент в сфере деятельности

Структура диссертации: Диссертация состоит из введения, четырех основных глав с выводами и рекомендациями. Четыре главы включают 14 таблиц, 27 рисунков и одну карту. А также список из 188 библиографических источников и 9 приложений. Диссертация была представлена в 16 научных статьях, опубликованных в Европе, Израиле и Азии. В целом объем текущей диссертации составляет 148 страниц.

Ключевые слова: экономика знаний, образовательная мобильность, глобализация, теория управления, международные отношения, валовой внутренний продукт.

Область исследований: Исследование посвящено проблеме академической мобильности студентов в системе высшего образования как фактору влияния и продвижения областей и субъектов экономики знаний в Израиле.

Тематика диссертации: Исследование взаимосвязей, эффектов и зависимостей между академической мобильностью студентов в Израиль и из Израиля и стабилизацией экономики знаний как экономического фактора занятости в будущем.

Цель исследования состоит в том, чтобы определить, каким образом положительная академическая мобильность, при которой количество поступающих иностранных студентов превышает количество уезжающих израильских студентов, повлияет на сферу израильской экономики знаний.

Научный вызов исследования заключается во взаимосвязи факторов, влияющих на академическую мобильность в высшем образовании, на формирование и стабилизацию экономики знаний как фактора национального развития Израиля.

Научная новизна данного исследования основана на теоретической разработке обновленного определения вклада академической мобильности в экономику Израиля с упором на занятость и развитие областей экономики знаний. Рассчитывая принципы их определения, анализируя методы повышения спроса на академическую мобильность и снижения «утечки мозгов», автор представляет теоретический механизм, основанный на стратегическом и прикладном взаимодействии, включающем изменения в политике академической мобильности и экономики знаний в Израиле.

Теоретическая значимость данного исследования выражается в предложении инновационной научной методологии, основанной на междисциплинарном анализе, указывающем на показатели, отражающие взаимосвязь академической мобильности студентов высших учебных заведений и лиц с экономико-технологическими специальностями для экономики государства, промышленности, порог занятости и особенно накопление передовых знаний. Автор стремится использовать данную модель для развития экономики знаний государства Израиль, рассчитывая принципы определения, анализа методов повышения востребованности академической мобильности и снижения «утечки мозгов».

Научная проблема, решаемая в диссертации, включает переопределение и выявление характеристик и процессов, связанных с академической мобильностью иностранных студентов и местных израильтян, а также минимизацию тенденции «утечки мозгов» из экономики знаний в Израиле. А также создание обновленной стратегии и реализацию идей и процессов на основе многомерного анализа экономики знаний посредством предложения национального механизма, который будет управлять и контролировать необходимые мероприятия. Всё это нацелено на развитие стабильной, конкурентоспособной и международной экономики знаний, и рассчитано на современную экономику и промышленность.

Внедрение научных результатов осуществлено путём применения идей исследования, выводов и рекомендаций в механизмах высшего образования, Министерствах Экономики и Занятости и местных органах власти, подчеркивая необходимость адаптации к культуре принятия решений и уникальным особенностям государства Израиль. Модель и исследовательские идеи уже внедряются в двух местных органах власти в Израиле.

MASRI BUSHRA

INTERNATIONAL EDUCATIONAL MOBILITY IN ISRAEL AS A FACTOR FOR FORMING THE KNOWLEDGE ECONOMY

SPECIALIZATION 521.03. ECONOMICS AND MANAGEMENT IN THE FIELD OF ACTIVITY

Abstract to the Doctoral Thesis in Economics

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